MONITORED NATURAL ATTENUATION ANNUAL REPORT

FORMER CHEVRON PERTH AMBOY FACILITY
PERTH AMBOY, NEW JERSEY

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LIST OF ACRONYMS

Acronym	Definition / Description
1Q, 4Q…	First quarter, fourth quarter, etc.
AOC	Area of concern
bgs	Below ground surface
Buckeye	Buckeye Partners, L.P.
CAMU	Corrective Action Management Unit
CEA	Classification exception area
CM	Corrective measure
CMI	Corrective measure(s) implementation
CMS	Corrective Measures Study
COC	Constituent of concern
DO	Dissolved oxygen
EISB	Enhanced in-situ bioremediation
ESS	Ex-situ stabilization
Facility	Former Chevron Perth Amboy Facility
FSAP/QAPP	Field Sampling and Analysis Plan/Quality Assurance Project Plan
GWQS	(NJDEP) Ground Water Quality Standards
HSWA	Hazardous and Solid Waste Amendments
ISCF	In-situ chemical fixation
ISCO	In-situ chemical oxidation
ISS	In-situ stabilization
IWP	Implementation Work Plan
LNAPL	Light non-aqueous phase liquid
LRM	LNAPL remedial measure
MNA	Monitored natural attenuation
NFA	No Further Action
NFB	North Field Basin
NGVD29	National Geodetic Vertical Datum of 1929
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
ORM-2	*Deltaproteobacterium* species ORM-2
ORP	Oxidation reduction potential
PAOC	Potential area of concern
Parsons	Parsons Environment and Infrastructure, Inc.
PBR	Permit-by-Rule
PCOC	Principal contaminant of concern
PVC	Polyvinyl chloride
qPCR	Quantitative polymerase chain reaction

Acronym	Definition / Description
RCRA	Resource Conservation and Recovery Act
SIP	Stable isotope probe
SVE	Soil vapor extraction
SVOC	Semi-volatile organic compound
SWMU	Solid waste management unit
TAL	Target Analyte List
TEA	Terminal electron acceptor
TIC	Tentatively identified compound
USEPA	United States Environmental Protection Agency
VEFR	Vacuum-enhanced fluid recovery
VOC	Volatile organic compound
Work Plan	Revised Monitored Natural Attenuation Implementation Work Plan

Units	
µg/L	Microgram(s) per liter
mg/kg	Milligram(s) per kilogram
mg/L	Milligram(s) per liter

1.0 INTRODUCTION

Parsons Environment and Infrastructure, Inc. (Parsons) has prepared this Monitored Natural Attenuation (MNA) Annual Report for the former Chevron Perth Amboy Facility (Facility) located at 1200 State Street, Perth Amboy, New Jersey (**Figure 1).** MNA was proposed as a corrective measure (CM) in the Corrective Measures Study (CMS) Final Report (Chevron 2008a), either as a stand-alone CM or in combination with other CMs, to achieve the remediation goals for organic contamination in groundwater. This MNA Annual Report updates the design, approach, and details of the MNA CM, which was approved in the 2013 Hazardous and Solid Waste Amendments (HSWA) Permit Renewal and discussed in the MNA Implementation Work Plan (IWP) submitted to the United States Environmental Protection Agency (USEPA) and New Jersey Department of Environmental Protection's (NJDEP) in September 2018 and Revised in December 2019.

MNA is the reliance on natural processes to achieve cleanup criteria. These processes act without human intervention to reduce the mass, toxicity, mobility, volume, and/or concentration of contaminants in soil and/or groundwater. These in-situ processes can be either abiotic or biological and include biodegradation, dispersion, dilution, sorption, volatilization, chemical or biological stabilization, transformation, or the destruction of contaminants. Naturally occurring biological stabilization or destruction of contaminants (also known as intrinsic bioremediation, or just bioremediation) can be a dominant process in the fate and transport of contaminants and can occur either aerobically or anaerobically. It happens when naturally occurring microorganisms consume or otherwise degrade contaminants. The ultimate goal of bioremediation is to transform the contaminants into harmless byproducts such as carbon dioxide and water. MNA requires monitoring procedures to ensure both its effectiveness and that cleanup criteria are being met within a reasonable timeframe.

This MNA Annual Report details the tasks performed as part of the implementation and monitoring of the MNA CM at the Facility. This annual report assesses the first quarter 2022 status of MNA at the Facility as it pertains to benzene. Specifically, the report summarizes available benzene-related MNA data and evaluates if MNA is functioning as expected to reduce Facility contamination. As stated in the IWP, benzene is the regulatory driver for hydrocarbons at this Facility (Chevron 2019e). This is because many other hydrocarbons are preferably targeted for attenuation by biological processes, making benzene a conservative indicator for biodegradation.

An evaluation of MNA at the Facility indicates that natural attenuation processes are reducing contaminant concentrations.

The following regulatory guidelines were considered during the MNA review:

- Resource Conservation and Recovery Act (RCRA) Corrective Action Plan Guidance (USEPA 1994).
- New Jersey Department of Environmental Protection's (NJDEP 2012a) Technical Requirements for Site Remediation (N.J.A.C.[1] 7:26E).

[1] N.J.A.C. – New Jersey Administrative Code

- Administrative Requirements for Remediation of Contaminated Sites, N.J.A.C. 7:26C (NJDEP 2012b).
- New Jersey Department of Environmental Protection's (NJDEP 2018) Ground Water Quality Standards (N.J.A.C. 7:9C).
- New Jersey Department of Environmental Protection's (NJDEP 2022) Monitored Natural Attenuation Technical Guidance.

1.1 Facility Location and Operational History

The Facility lies primarily in the industrial zone of Perth Amboy, New Jersey, occupying approximately 268 acres. It is currently divided into three yards: the Central Yard, East Yard, and Main Yard (**Figure 2**).

Historically, Barber Asphalt Company owned and operated the property beginning in 1911. In 1946, Chevron purchased the property and operated the Facility as a full-scale petroleum refinery from 1946 to 1983, producing liquefied petroleum gas, gasoline, fuel oil, and asphalt. In 1983, Chevron reduced its operations to refining asphalt while also continuing petroleum storage operations. On July 26, 2012, Chevron completed the sale of most of the Facility property to Buckeye Partners, L.P. (Buckeye). Buckeye (operating under Facility-specific entity Buckeye Perth Amboy Terminal, LLC) currently operates the Facility as a petroleum products terminal. A more detailed description of the Facility ownership and its historical operations can be found in the 2008 CMS (Chevron).

1.2 Purpose

This MNA Annual Report summarizes the updated status of MNA implementation as a CM at the Facility through first quarter of 2022. The initial 2008 CMS recommended implementation of MNA to remediate areas with groundwater benzene concentrations between 1 microgram per liter (µg/L, which is the NJDEP Ground Water Quality Standard [GWQS]) and 100 µg/L, which is the CM implementation (CMI) action level (**Table 1**). In Facility source areas with higher benzene concentrations (>100 µg/L), more active remedial activities have been implemented. However, as these active remedial processes achieve their goals of reducing benzene concentrations to below 100 µg/L, MNA either has been or will become the primary CM, as outlined in the 2008 CMS.

Within the Facility, MNA is occurring within the following solid waste management units (SWMUs) and areas of concern (AOCs) (**Figure 3**):

- SWMUs: 5, 6, 8, 10, 11B, 16, 17, 18, 20, 21, 24, 26, 29, 34, 35, 39, 40, 41, and 43
- AOCs: 8, 9A, 9B, 14, 15, 16B, 22, 23, 25, 31, 36, 39, 41, 44, and 50

It should be noted that several areas on the Facility were identified in the 2008 CMS as having exceedances of multiple principal contaminants of concern (PCOCs). The 2008 CMS proposed CMs for each contaminated media based on the individual PCOCs. Where necessary, multiple CMs were implemented in those areas to address the exceedances of PCOCs in accordance with the HSWA Permit Renewal. MNA is proposed as the final CM for each area.

1.3 Report Organization

Following this introduction, this Annual Report is organized as follows:

- Section 2 describes the MNA CM objectives and applicable regulatory requirements.
- Section 3 describes the current CSM.
- Section 4 summarizes the overall s at the Facility.
- Section 5 describes the field implementation approach and methods and the tentative, continued implementation schedule of the MNA CM for the selected SWMUs and AOCs.
- Section 6 summarizes the groundwater data.
- Section 7 describes the molecular microbiological and stable-isotope studies conducted at the Facility to provide direct evidence of MNA.
- Section 8 describes the current state of benzene plumes at the Facility.
- Section 9 summarizes the impact of in-situ chemical oxidation (ISCO) and other source control measures on MNA.
- Section 10 describes other MNA results obtained in conjunction with ISCO activities.
- Section 11 provides conclusions.
- Section 12 provides recommendations for the Facility.
- Section 13 contains references for documents cited in this report.

The report text is followed by supporting tables and figures and Appendices A through E, which contain the following additional information:

- Appendix A – Volatile Organic Compound and Semi-Volatile Organic Compound Results in Groundwater
- Appendix B – Geochemical Parameter Results in Groundwater
- Appendix C – MNA Work Plan, Monitoring Schedule Flowchart, and Well Construction Summary
- Appendix D – Molecular Biological Data
- Appendix E – Detailed Benzene Evaluation Data

2.0 TREATMENT OBJECTIVE AND REGULATORY REQUIREMENT

The following CM objectives were proposed for groundwater in the 2008 CMS for the Facility:

- Prevent exposure of humans to groundwater contaminants at concentrations above regulatory standards,
- Remediate contaminant concentrations in groundwater to below applicable regulatory standards, and
- Prevent or minimize migration of PCOC plumes.

2.1 MNA Corrective Measure Objective

As described in the 2008 CMS, benzene has been determined to be representative of all volatile organic compounds (VOCs) for the Facility. As such, benzene will be discussed in this document as an analog for all petroleum hydrocarbon VOCs present in groundwater. The media-specific cleanup goal for the MNA CM, as established in the CMS, is as follows: reduce dissolved phase benzene concentrations from less than 100 µg/L in groundwater to below the N.J.A.C 7:9:C GWQS for Class-IIA aquifers (1 µg/L benzene). When all active groundwater CMs at the Facility are complete, a Facility-wide classification exception area (CEA) will be established for groundwater with constituents of concern (COCs) exceeding GWQSs (NJDEP 2018).

3.0 CONCEPTUAL SITE MODEL

3.1 Topography

The topography at the Facility has predominantly been shaped by construction activities performed during site development, such as cut and fill grading. The northern, central, and eastern portions of the Facility are relatively flat. Berms (generally 6 to 8 feet high) have been constructed around each petroleum storage tank for spill containment. Sheet piles have been installed to stabilize the fill zones along stretches of the Facility adjacent to the Arthur Kill to the east. The elevation of the ground surface at the Facility generally varies from 2 to 25 feet National Geodetic Vertical Datum of 1929 (NGVD29) in the Main Yard, 2 to 27 feet NGVD29 in the East Yard, and 12 to 45 feet NGVD29 in the Central Yard (**Figure 4**).

3.2 Geology

The general stratigraphy of the Facility consists of six major units overlying the bedrock, including:

- Fill
- Organic clay and peat (Clay Horizon A)
- Glacial till and outwash (till)
- Three members of the Raritan Formation
    - Woodbridge Clay (Clay Horizon B)
    - Farrington Sand (Sand Horizon B)
    - Raritan Fire Clay (Clay Horizon C)

A more detailed description of these units is provided in Section 1.4.1 of the 2008 CMS.

The fill contains varying amounts of sands, silts, and clay. It also contains intermittent lenses of fly ash, catalyst beads and construction debris, which are usually found in the Main Yard and East Yard of the Facility. The fill and Clay Horizon A at the Facility are briefly described below.

- The thickness of the fill varies from 7 to 19 feet in the Central Yard. Beneath the fill is Clay Horizon A, which varies from 3 to 19 feet thick. Sporadic and discontinuous layers of till have been observed within Clay Horizon A.
- The thickness of the fill varies from 4 to 20 feet in the East Yard. Beneath the fill is Clay Horizon A, which varies from less than 1 to 14 feet thick. Clay Horizon A is absent at times, and the fill is observed overlying the till in the northern portion of East Yard.
- The fill varies from 3 to 15 feet thick in the Main Yard. Beneath the fill layer is a discontinuous Clay Horizon A ranging from 1 to 12 feet thick. The fill overlays till where Clay Horizon A is absent.

3.3 Hydrogeology

3.3.1 Shallow Groundwater

Shallow groundwater at the Facility is mainly observed in the unconfined fill, perched on Clay Horizon A, and in till. A semi-annual groundwater gauging program is currently in place to monitor groundwater levels at the Facility. **Figure 5** depicts the fourth quarter (4Q) 2021 groundwater elevation contours for shallow groundwater.

The shallow groundwater flow direction was generally to the northeast in the Main Yard, to the northeast in the East Yard, and to the east to southeast in the Central Yard. The hydraulic gradients measured across the Main Yard, East Yard and Central Yard generally ranged from 0.001 to 0.05 foot per foot.

3.3.2 Deep Groundwater

Chevron is currently monitoring the hydrogeology beneath the fill and Clay Horizon A. Deep monitoring wells and piezometers are primarily screened in the till (i.e., first native water-bearing zone [deep groundwater] beneath the fill and Clay Horizon A).

Figure 6 depicts the 4Q 2021 groundwater elevation contours for deep groundwater. Overall, the groundwater flow direction followed regional projections, east-northeast toward the Woodbridge Creek and the Arthur Kill. The horizontal gradients ranged from 0.0005 to 0.008 foot per foot in the Main Yard, from 0.006 to 0.01 foot per foot in the East Yard, and from 0.006 to 0.026 foot per foot in the Central Yard.

3.4 Nature and Extent of Contamination

The sources of organic contamination in soil and groundwater at the Facility are primarily related to tetraethyl lead burial areas, historical waste management practices, and operational and petroleum storage areas. Currently, the primary source of groundwater contamination is light nonaqueous phase liquid (LNAPL) and hydrocarbons sorbed to soil. Known source areas were the target of CMI activity, as most recently reported in the First Quarter 2022 Progress Report for the Hazardous and Solid Waste Amendment Permit (Chevron 2022a).

3.4.1 LNAPL Impacts

LNAPL has historically been observed at 22 areas in the Facility. The LNAPL observed is weathered petroleum, found at relatively shallow depths (less than 10 feet below ground surface [bgs]) and is relatively immobile in the subsurface. LNAPL is typically found within the more permeable lenses and layers that were placed during various periods of filling and are not continuous. Many of the lenses are located below the water table. The extent of LNAPL impacts have been delineated. The 4Q 2021 data are presented on **Figure 7**, which also compares the footprint of current LNAPL to historical, known LNAPL areas. The LNAPL at these historical areas have been removed or reduced through a variety of CMs to the current LNAPL footprints.

In 4Q 2021, LNAPL was measurable in seven of the historically identified 22 LNAPL areas at the Facility. Ongoing LNAPL recovery measures (LRMs) are occurring in 11 LNAPL areas,

including four areas where LNAPL was not detected in 4Q 2021 (SWMU 40, AOC 25, AOC 31, and EY4a). Of the remaining 11 areas, five are being monitored for LNAPL with no LRMs. In six of the areas where LRMs are no longer occurring, there are approved or pending requests for no further action (NFA) determinations. As of 4Q 2021, at least 4,432 gallons of LNAPL have been recovered through LRMs (Chevron 2022a). In general, remaining LNAPL is highly weathered, resulting in a viscous material with limited remaining soluble constituents (Chevron 2008a).

In the Main Yard, measurable LNAPL was detected in nine monitoring wells during the 4Q 2021 gauging event. LNAPL was measured in:

- MW-339: This well is in the NF2 LNAPL area in the northwestern corner of the Main Yard. A vacuum truck was used to remove LNAPL three times from monitoring well MW-339 in 4Q 2021.
- MW-0059, MW-543R, and MW-544: These wells are in the SWMU 43 area in the northern portion of the Main Yard. The SWMU 43 area underwent active remediation during 4Q 2020, and LNAPL continues to be removed as needed using absorbent socks.
- MW-0072: This well is in the NF3 LNAPL area in the central portion of the Main Yard near SWMU 35. LNAPL was removed from MW-0072 as needed using absorbent socks.
- MW-274, MW-557, and MW-558: These wells are in the AOC 8-NF6 area in the southeastern portion of the Main Yard. Three rounds of vacuum-enhanced fluid recovery (VEFR) events were performed at MW-557 and MW-558 in 4Q 2021, removing groundwater and LNAPL when observed.
- PZ-0012: This well is in the AOC 19 LNAPL area in the southeastern portion of the Main Yard. Three rounds of VEFR events were performed at PZ-0012 in 4Q 2021, removing groundwater and LNAPL when observed.

In the East Yard, measurable LNAPL was detected in two monitoring wells during the 4Q 2021 gauging event:

- MW-306: This well is in the Potential Area of Concern (PAOC 15) area in the eastern portion of the East Yard. Two rounds of VEFR events were performed at MW-306 in 4Q 2021, removing groundwater and LNAPL when observed.
- MW-0051: This well is in SWMU 42, west of Tank 750, in the western portion of the East Yard.

No measurable LNAPL was detected in the Central Yard during 4Q 2021.

3.4.2 Soil Benzene Contamination

Results of historical investigations were used to evaluate the extent of soil benzene impacts above 13 milligrams per kilogram (mg/kg). It should be noted that 13 mg/kg is the CMI action limit for benzene in soil. COCs in soil are primarily found in the fill materials at varying depths near waste management areas or operational areas. The fill material is generally composed of low permeability silts and clays with some discontinuous lenses of sand. Across most of these areas, the fill material is underlain by a naturally occurring layer of low permeability clay (Clay

Horizon A) or a glacial till composed of silts and clay with some sand lenses (Chevron 2008a). Historically, the depth of benzene contamination exceeding 13 mg/kg generally ranged from 1.5 to 14.5 feet bgs in the Main Yard, 1.5 to 12 feet bgs in the East Yard, and 1 to 16 feet bgs in the Central Yard.

ISCO has been the primary remedy to address benzene-impacted soils. However, some benzene-impacted soils overlapped with areas that were already being excavated as part of CMs to address other COCs (such as metals). As of August 2020, Facility soil with benzene impacts above 13 mg/kg have been excavated in several areas of the Facility and disposed in the on-site Corrective Action Management Unit (CAMU). Specifically, excavation was completed in 11 areas within the Main Yard (AOC 9A, AOC 15, AOC 23, AOC 41, and AOC 50 and SWMU 6, SWMU 16, SWMU 17, SWMU 18, SWMU 35, and SWMU 40). Benzene impacted soil was excavated within six areas in the East Yard (AOC 14, AOC 16EY1, AOC 26, AOC 37, AOC 38, and AOC 39). In the Central Yard, excavation of benzene impacts was performed in one area (AOC 22). ISCO injections were completed in AOC 31, SWMU 8, and SWMU 10 in the East Yard and AOC 44 in the Main Yard. ISCO soil mixing was conducted in AOC 16EY1 and AOC 39 in the East Yard, AOC 15, SWMU 6, SWMU 16, SWMU 24, SWMU 40, SWMU 41, and SWMU 43 in the Main Yard. Details of each of these remedial actions were submitted in separate documents.

3.5 Potential Receptors

Potential receptors to benzene-impacted groundwater from the Facility are discussed in the sections below.

3.5.1 Groundwater

In New Jersey, Class II groundwater is considered suitable for the provision of potable water with conventional water supply treatment. NJDEP has classified the groundwater in the Perth Amboy area as Class IIA, a potable water supply. However, groundwater quality in the uppermost water-bearing unit is degraded by various industrial activities and stormwater runoff from streets in this urban area. Near the Facility, the Farrington Aquifer outcrops along Woodbridge Creek. Historical pumping of the Farrington Aquifer caused saltwater intrusion as the saline waters of Woodbridge Creek were drawn into the recharge area of the aquifer. As documented in N.J.A.C. 7:9, Subchapter 6, which covers GWQS, the Farrington Aquifer along the banks of Woodbridge Creek at and near the Facility is designated as Class IIIB groundwater, which is not suitable for conversion to potable uses. Groundwater is not used as a source of water supply within at least two miles of the Facility, because historical pumping from the Farrington Sand has resulted in nearby saltwater encroachment.

The northern portion of Main Yard consists of tidal salt marsh wetlands (also known as North Field Basin [NFB] Wetlands). The surface water bodies, including the Arthur Kill and Woodbridge Creek, are located along the northern and eastern property boundaries. Tidally influenced groundwater level fluctuations and saltwater intrusion into the shallow water-bearing zone have been observed and documented in the areas near Woodbridge Creek. Data from wells in the NFB area have shown a tidally related groundwater elevation fluctuation of up to 1.5 feet. In contrast, the extent of tidal influence has not been fully clarified for monitoring

wells in the East Yard Basin area. This potential tidal influence in the East Yard may subsequently be affected by bulkheads that have been placed along the Arthur Kill (Chevron 2008a).

3.5.2 Human Health

Several structures within the Facility are occupied. A vapor intrusion evaluation was conducted for the on-site structures. It was concluded that the vapor intrusion exposure pathway does not pose a significant risk to potential receptors at the on-site structures (Chevron 2008a; Chevron 2016a).

4.0 CORRECTIVE MEASURE TECHNOLOGY SUMMARY

4.1 Natural Attenuation

USEPA defines natural attenuation as the biodegradation, diffusion, dilution, sorption, volatilization, and/or chemical and biochemical stabilization of contaminants to effectively reduce contaminant toxicity, mobility, or volume to levels that are protective of human health and the environment (USEPA 1999). Typically, MNA is used in conjunction with active remediation. At this Facility, it is implemented as a CM for groundwater with organic contaminant concentrations ranging from 1 to 100 µg/L. Above this concentration, active remediation CMs, such as ISCO, are employed to reduce concentrations. Once benzene concentrations are within this range, however, MNA becomes the primary remedy.

Geochemical data from the monitoring wells located in the Facility's Main Yard, East Yard and Central Yard were analyzed. Approximately 500 existing wells throughout these yards were sampled and analyzed for groundwater geochemical (MNA) parameters between 2012 and first quarter (Q1) 2022. These data were analyzed to confirm that MNA will effectively reduce low levels of organic contamination in the groundwater.

4.2 Source Control

A key component of successful MNA is source control, either through containment, removal, or treatment, to prevent continuing contributions to the dissolved phase. Source control was conducted in select areas of the Facility through the implementation of ISCO or other CM remedies, as described in Section 5.0 below. Progress with CM treatments will continue to be reported in CM-specific documents and communications, as opposed to within this MNA-specific document.

As described in detail within this report, a comparison of benzene concentrations over the last 10+ years shows that areas of elevated concentrations have significantly reduced in size. The remaining areas of low concentration are prime targets for natural attenuation (including biodegradation), and over time will decrease in size as the indigenous microbial population consumes Facility constituents. This suggests that the existing groundwater plumes that still have elevated benzene concentrations are stable to decreasing and have the potential to attenuate after adequate source reduction is accomplished.

4.3 Institutional Controls

Institutional controls may be appropriate to protect human health and the environment in areas where soil and groundwater contaminant concentrations will exceed applicable criteria/standards following the application of a CM. Institutional controls are non-engineering measures, such as administrative and/or legal controls, that help minimize the potential for human exposure to contamination by limiting the land use in the area to which it was applied. Institutional controls include deed restrictions for impacted soil and CEAs for impacted groundwater. CEAs are established to provide notice that the groundwater quality standards for an aquifer classification either are not, or will not, be met in a localized area due to natural

water quality or anthropogenic influences. Designated aquifer uses are suspended in the affected area for the term of the CEA to ensure that the uses of the aquifer are restricted until the GWQSs are achieved, thereby limiting the potential for human exposure.

N.J.A.C. 7:9-6 (New Jersey GWQS) provides the basis for the protection of groundwater quality through the establishment of constituent standards for groundwater pollutants. The standards impact all site remediation cases where groundwater contamination exceeds the standards applicable to the groundwater classification area in which the site is located. Except for a limited area along the banks of Woodbridge Creek, the Facility is in a Class-IIA aquifer. Groundwater quality standards are summarized in **Table 1**.

5.0 SUMMARY OF FIELD ACTIVITIES

The CMI work at the Facility commenced in 2012. As of September 2020, all requirements for remedial construction completion for soil within 49 AOCs and 45 SWMUs have been met. The remaining AOCs and SWMUs were either approved for NFA or were associated with the West Yard/Amboy Field or North Field. CMs completed at the Facility included the following:

- ISCO injections
- ISCO soil mixing
- Soil excavation and CAMU internment
- In-situ stabilization (ISS)/ex-situ stabilization (ESS) soil mixing
- In-situ chemical fixation (ISCF)
- Permeable reactive barrier wall installations
- Arsenic cap installations
- Enhanced in-situ bioremediation (EISB) injections
- Electric resistance heating system installation
- Biosparge system installations
- Air sparge/soil vapor extraction (SVE) system installation
- SWMU 43 cap installation
- Final CAMU closure
- MNA monitoring system for groundwater
- Filing of deed notices

Lead in soil with toxicity characteristic leaching procedure lead levels greater than 5 milligrams per liter (mg/L) and total organic lead concentrations greater than 2 mg/kg has been addressed through excavation, ESS, and disposal in the Facility's CAMU. ISS was completed for toxicity characteristic leaching procedure lead levels less than 5 mg/L and lead levels greater than 800 mg/kg in soil. An ISS/ESS CM was conducted in five AOCs and 13 SWMUs within the Main Yard, three AOCs and three SWMUs within the East Yard, and two SWMUs within the Central Yard.

Benzene concentrations in groundwater greater than 100 µg/L were addressed by ISCO injections in two AOCs within the Main Yard and two AOCs and two SWMUs within the East Yard. Excavation and soil mixing of persulfate and calcium hydroxide was used to address benzene impacts in three AOCs and 11 SWMUs within the Main Yard, two AOCs within the East Yard, and two AOCs and one SWMU within the Central Yard. An air sparge/SVE system was installed within AOC 8 in the Main Yard to remediate benzene impacts in soil and groundwater. The installation and operation of biosparge systems occurred in AOC 31 and AOC 50 to address benzene, and these systems are still operating.

Arsenic concentrations greater than 20 mg/kg in surface soil were addressed through containment consisting of a cap constructed using material similar to the existing ground surface or an existing surface that serves as a cap. This method was used to address arsenic impacts in surficial soil in one AOC and five SWMUs within the Main Yard, eight AOCs and one SWMU within the East Yard, and one SWMU within the Central Yard. Arsenic impacts in groundwater greater than 60 ug/L were addressed by ISCF permeable reactive barrier wall installations in AOC 14/SWMU 26 and AOC 45/46 in the East Yard.

Chlorinated VOCs were identified in AOC 36 in the Central Yard. EISB was used to address these impacts in groundwater. EISB was also used to target benzene in AOC 44 in the Main Yard. Electric resistance heating was conducted in AOC 31 in the East Yard to address LNAPL and benzene impacts in soil and groundwater.

5.1 MNA Monitoring Schedule

The below MNA monitoring schedule has been developed in accordance with the NJDEP Monitored Natural Attenuation Technical Guidance (NJDEP 2022). A minimum of eight rounds of groundwater sampling will typically be needed to demonstrate the applicability and occurrence of MNA. These events will help define seasonal variation in contaminant concentrations, geochemical parameters, and groundwater flow patterns. It should be noted that while historical site investigation or remedial investigation data can be used to fulfill this sampling requirement, the data must represent post-remedial (CMI) conditions in areas where source removal has occurred.

Sampling of Facility monitoring wells in the MNA plan will continue until MNA has been demonstrated for the minimum prescribed eight events discussed above. Once MNA has been demonstrated, and if COC concentrations continue to exist above the NJDEP GWQS, an application for a remedial action permit for groundwater and a proposed CEA will be submitted (NJDEP 2022. MNA evaluation will continue until the NJDEP issues the remedial action permit for groundwater. However, to use Facility resources efficiently, the frequency of monitoring will be reduced. Once the remedial action permit for groundwater is issued, groundwater will be sampled and MNA will be evaluated in accordance with the permit.

A well will be transitioned to a biennial monitoring schedule in accordance with the approved MNA IWP (Chevron 2019e) when two conditions are met:

- The required eight rounds of benzene MNA monitoring have been completed.
- Benzene concentrations remain between 1 and 100 µg/L.

The monitoring events will be scheduled to target the time of year expected to exhibit the highest levels of contamination based on the results of historical groundwater data. Monitoring wells that exhibit concentrations less than or equal to 10 µg/L during a biennial sampling event will be sampled annually thereafter so that achievement of GWQS can be rapidly documented and site closure facilitated. This will continue as long as MNA is demonstrated and until benzene concentrations reduce to below 1 µg/L. If benzene concentrations remain at or below 1 µg/L for two consecutive monitoring events, then the well will be considered for removal from the monitoring program using the criteria listed below.

A monitoring location may be removed from the monitoring program only if the above-mentioned benzene concentration criteria are first met. Then, an evaluation will occur to determine if the well location is critical for determining MNA, such as being a key background, downgradient, or sentinel location. If it is critical, then the well will continue to be monitored in alignment with the approach described above. Furthermore, if other COCs are present in the monitoring well's groundwater above their respective GWQSs, then the well will continue to be monitored on a frequency determined by these non-benzene COCs. However, the monitoring well will be removed from the Facility's monitoring plan if the well is:

- Not critical (as defined above), and
- Does not report other, non-benzene, COCs to be present at concentrations above their respective GWQSs, and
- Reports benzene concentrations that have remained at or below 1 µg/L for two consecutive monitoring events.

The monitoring wells included in the sampling plan is shown in **Appendix C**. This plan lists wells by yard that will be sampled in accordance with the above-mentioned sampling plan. A flowchart outlining this methodology is also outlined in **Appendix C**. Groundwater samples will analyzed for VOCs plus tentatively identified compounds (TICs), semi-volatile organic compounds (SVOCs) plus TICs, MNA parameters, and groundwater stabilization readings. If benzene concentrations remain above the GWQS of 1 µg/L but SVOC results were detected below their respective GWQS for two consecutive monitoring events, SVOCs will not be analyzed.

The current MNA sampling and monitoring program was initiated in the second quarter of 2021. The number of MNA sampling events is being evaluated to determine when the above-discussed required eight rounds has been completed. For wells sampled as part of ISCO long-term monitoring, much of this sampling has already been completed or is currently being completed as part of post-implementation sampling. It should be noted that once ISCO long-term monitoring has been completed and post-remedial conditions achieved, monitoring wells will be transitioned to the MNA monitoring plan as proposed in the plan described above. MNA Monitoring Well Construction Details

Construction details for monitoring wells that are currently on the Facility and are part of the MNA monitoring program can be found in **Appendix C**.

5.2 Deviations from Monitored Natural Attenuation Implementation Work Plan

5.2.1 Deviations from Proposed Sampling Plan

The Revised Monitored Natural Attenuation Implementation Work Plan (Work Plan) (Chevron 2019e) proposed groundwater monitoring locations and frequencies. Monitoring wells have been added and removed from the original plan based on current benzene concentrations.

The monitoring wells listed below were removed from the MNA plan since they are currently being evaluated as part of a CMI performance monitoring sampling plan:

- Main Yard – MW-0029 (SWMU 43), MW-0032 (SWMU 24), MW-118, MW-125 (SWMU 6), MW-158 (AOC 50), MW-233, MW 338 (AOC 44) MW-263, MW 396, MW-397 (SWMU 35), and MW-264, MW-265 (AOC 8)
- East Yard – MP-01R, MW-329R, MW-504 (SWMU 8), MW-317R, MW-331, MW-449, MW-455 (AOC 31), and MW-296, MW-465 (AOC 16 EY1)

The following monitoring wells were removed from the MNA monitoring plan because benzene concentrations in groundwater are consistently below the GQWS of 1 µg/L, and these locations are no longer needed for background or downgradient impact monitoring.

- Central Yard – MW-183, MW-364, MW-513, MW-514, MW-515, MW-518, and MW-531 (all located within AOC 22/36)
- East Yard – MW-476, MW-500, MW-525, and MW-526 (all within AOC 31)

The following monitoring wells were removed from the MNA sampling plan because they either were abandoned or are now inaccessible:

- Main Yard – MW-20, MW-259, and MW-324
- East Yard – MW-115R

Once remedy effectiveness has been demonstrated for a monitoring well, it will be transitioned into the MNA program.

5.2.2 Deviations in Sampling Procedure

The guidelines for the content of this MNA Report were provided in Section 7.2 of the revised and approved Monitored Natural Attenuation Implementation Work Plan (Chevron 2019e). Pursuant to these guidelines, below is a discussion of a noted deviation from the approved IWP strategy for groundwater sampling.

Section 6.2 of the approved IWP discussed the groundwater sample collection methods to be used as part of the MNA CM. The approved IWP specified that, per the NJDEP Field Sampling Procedures Manual (NJDEP 2005), inorganic MNA parameters (target analyzed list [TAL] metals and ferrous iron) will be collected via low-flow sampling. However, other MNA parameters (nitrate, nitrite, sulfate, sulfide, methane, ethane, total Kjeldahl nitrogen, phosphorus, and total organic carbon) will be collected with a bottom-fill Teflon® bailer after a volume average purge.

As discussed in Appendix D of the USEPA/NJDEP approved Field Sampling and Analysis Plan/Quality Assurance Project Plan (FSAP-QAPP) (Chevron 2019b), all CAMU groundwater samples will be collected through the tubing from the bladder pump. To standardize all sampling methods and improve consistency in sample quality, low-flow bladder pump sampling was adopted for all Facility groundwater sample collection at the time that the MNA CM was initiated in 2021. Per chapter 6E, Section 6.9.2 of the NJDEP Field Sampling Procedures Manual (NJDEP 2005), the method of low-flow purging and sampling with a bladder pump is acceptable for all contaminants.

6.0 GROUNDWATER MNA-RELATED DATA OBTAINED

Biological natural attenuation occurs when indigenous microorganisms degrade (consume) contaminants either aerobically (in the presence of oxygen) or anaerobically (in the absence of oxygen). Some contaminants, such as benzene, can also be fully mineralized to carbon dioxide.

The three, typically-accepted lines of evidence for assessing the efficiency of natural attenuation are (ASTM, 2022):

- Groundwater chemistry data showing that geochemical conditions are suitable for natural attenuation and the rate at which natural attenuation processes are active (addressed in this section of the report.
- Data demonstrating the occurrence of a natural attenuation process, typically used to demonstrate that biodegradation is occurring (USEPA 1999). These data can take many forms. Indirect biogeochemical data that are used to monitor bioattenuation can include evidence of depletion of electron acceptors and donors, increased metabolic byproduct concentrations, decreased parent compound concentrations, and increased daughter compound concentrations (Weidemeier et al. 1996; Weidemeier et al. 1999). These are addressed in this section. However, modern direct methods also exist for evaluating the biology associated with bioattenuation, and these are discussed in Section 7.
- Plume stabilization and/or loss of contaminant mass over time are addressed in Section 8.

Section 6.1 provides an overview of groundwater geochemical parameters used to indirectly assess if biological compound attenuation is occurring. This includes a discussion on the data needed to show that Facility conditions are suitable for natural attenuation. Section 6.2 discusses the observed groundwater geochemistry results that are related to MNA.

6.1 Overview of MNA-Associated Data

As stated above, the first line of evidence for assessing the efficiency of natural attenuation involves an evaluation of site geochemistry. For this Facility, this includes an initial evaluation of benzene concentrations alongside an evaluation of those MNA geochemical parameters associated with benzene bioattenuation. To evaluate the potential for MNA, related geochemical data from approximately 500 existing monitoring wells located in the Main Yard, East Yard and Central Yard and groundwater geochemistry were analyzed. The dataset evaluated for MNA covered the period from 2012 to the first quarter 2022 (**Appendices A** and **B**). These data were analyzed to evaluate historical and current biogeochemical conditions, and to determine if MNA is occurring.

MNA parameters such as total alkalinity, pH, oxidation reduction potential (ORP), sulfate, sulfide, dissolved (ferrous) iron, total iron, dissolved oxygen (DO), and nitrates provide useful, if indirect, information on the biodegradation potential of the contaminated media. This process has been summarized in many publications including, but not limited to Talley (2006), Weidemeier et al. (1999), and Young and Mulligan (2003).

There are several field-tested MNA parameters. For example, microbes have minimum and maximum tolerances and optimum levels for both temperature and pH. The ORP value is a measure of electrical current in groundwater, which reflects how oxygenated or reduced an environment is. The ORP value will provide information about which form of microbial metabolism is likely to dominate the area being tested. An increase in alkalinity, which generally reflects the amount of bicarbonate in groundwater, is an indication of the biodegradation of organics. As such, alkalinity can provide indirect insights into whether site contaminants are being fully mineralized, and thus can allow for qualitative comparisons between locations or timepoints.

Every microbe contains a chemical that is referred to as the terminal electron acceptor (TEA). As this TEA scavenges and binds up free electrons, it is transformed from an oxidized form into a reduced form. Depending on the type of TEA used, different amounts of energy are ultimately produced for the microbe. However, a microbial community will metabolize (consume) organic material (including hydrocarbons) in a way that will allow for the greatest resulting energy generation to occur under site conditions. As such, there is a sequential preference for the form of metabolism to be used.

If oxygen is present, aerobic bacteria in a community will conduct aerobic metabolism, generating the most energy (per unit of organic material) of the metabolic processes. If oxygen is not present, or has been consumed, then the active microbial community members will transition to those able to use other electron acceptors, beginning with nitrate. Once nitrate concentrations become depleted, iron-reducing bacteria will dominate the community. As ferric iron concentrations become low, this community will subsequently transition to one dominated by sulfate-reducing bacteria, if sulfate is present. If sulfate becomes depleted, the microbial community will transition to the lowest-energy-producing metabolism of methanogenesis.

Summary of the Sequential Utilization of TEAs in an Environment

Metabolic Degradation Process Name	TEA Utilized	Product of the Reduction of the TEA	Type of Microbe Performing This Metabolism
Aerobic	Oxygen	Water	Aerobes
Nitrate Reduction	Nitrate	Nitrite	Nitrate Reducers
Iron Reduction	Ferric Iron [Fe (III)]	Ferrous Iron [Fe (II)]	Iron Reducers
Sulfate Reduction	Sulfate	Sulfide	Sulfate Reducing Bacteria
Methanogenesis	Carbon Dioxide	Methane	Methanogens

Because of this sequential utilization of TEAs, the resulting groundwater geochemistry can develop a “fingerprint” of biological natural attenuation. Assuming that nutrients (including appropriate TEAs) are not being replenished in the environment fast enough to overcome utilization rates, the above-described process of transitioning from one dominant metabolism to another will occur. Eventually, the environment will reach an equilibrium in which higher concentrations of organic matter will correlate with more reduced environmental conditions.

Thus, in the case of a hydrocarbon plume (for example), the core of the plume will be more reduced relative to the periphery of the plume.

The most impacted core of a hydrocarbon plume may be under the influence of sulfate-reducing to methanogenic conditions. Moving away from this core toward the periphery where hydrocarbon concentrations are lower, conditions often become dominated by iron-reducing conditions, and then nitrate-reducing conditions. If oxygen is present at the plume periphery, aerobic conditions will dominate. This classic fingerprint of more reduced forms of metabolisms dominating in areas of higher hydrocarbon concentrations is a hallmark of biological contaminant degradation.

It is worth noting that, although an overall microbial community can be dominated by a metabolic process, multiple TEA processes can occur simultaneously in a location. Additionally, micro-environments as well as stratified TEA processes with depth can exist. Finally, TEA processes can be dynamic. As such, this classic fingerprint can sometimes be less clear in some locations in comparison to others.

These TEA processes are at work on both naturally occurring organic matter (such as decomposing plant material) and organic contaminants (such as hydrocarbons). This underscores the importance of trying to find upgradient or background groundwater to compare against the geochemical parameters found within the core and periphery of a contaminant plume. However, this ideal situation may not be available at all locations, and less-ideal monitoring wells may have to be accepted as a representation of background conditions. Additionally, the microbial degradation of non-contaminant material possibly found in the subsurface of a site is important to consider because byproducts such as methane can be generated from this innocuous material. Methane is a gas and therefore travels easily from one location to another via preferential pathways. These include along subsurface features such as buried utilities and monitoring well casings that may have perforated a methanogenic pocket. Thus, methane generated in one location can easily travel, and be detected, in a very different location. Together, these variables underscore the importance of looking at multiple lines of evidence when evaluating MNA.

Because this Facility is subdivided into three main areas: the Central Yard, Main Yard, and East Yard with varying historical uses, geography, and geology, it is appropriate to look at MNA within each subdivision. Although historical trends dating back to 2012 are assessed for this report, unless otherwise noted, all data to be discussed were reported for 2020 through 2022. Regarding benzene concentrations, the discussion below follows the trend established by Facility maps: areas of higher benzene concentration will be defined as those exceeding 100 µg/L, and areas of lower concentration will be defined as those having benzene concentrations ranging from 1 through 100 µg/L. This is based on the CMI action level of 100 µg/L. However, any exceptions to these categories are noted in the data discussion in this section.

In addition to considering historical benzene concentration data, wells chosen for discussion in this report also needed to have enough recent MNA geochemistry data for a proper assessment to occur.

Finally, for the purposes of this report, monitoring wells described as “background” are those where benzene concentrations have typically been detected at concentrations below 1 µg/L

and have available and recent MNA data for a proper assessment to be made. At a Facility such as this, it is common to have no available monitoring wells that are truly nondetect for COCs. It is also not unusual to have limited upgradient wells available for assessment because property lines and groundwater flow patterns are complicated by the presence of above-ground and subsurface structures and tidal fluctuations. In these situations, monitoring wells that consistently have low COC concentrations can serve as baseline wells, providing the best available interpretation of conditions away from the bulk of the plume.

For all three Facility yards, benzene and other groundwater VOC data are provided in **Appendix A**. Groundwater biogeochemistry parameters, including the MNA parameter data discussed above, is provided in **Appendix B**.

6.2 Groundwater Geochemistry Sampling Results

An evaluation of groundwater geochemistry and biogeochemistry was presented in the 2019 Work Plan (Parsons 2019e). That data has been updated as reflected below to include data generated since 2020. All of the data relevant to MNA is being evaluated to determine whether natural attenuation (focusing on benzene) is occurring at the Facility.

A much more complete picture of MNA can be produced when general benzene trends and data are coupled with available MNA data. That analysis is provided below. A more detailed evaluation of benzene-specific trends, including using statistical analyses, is reported in Section 8.

Finally, the groundwater benzene and MNA parameter concentration data discussed below are detailed in **Appendix A**. Groundwater field parameter data discussed below, such as DO concentrations and ORP values, are detailed in **Appendix B**.

6.2.1 Central Yard

The Central Yard is the most inland of the three yards, having no waterfront access.

In impacted locations, concentrations of benzene in Central Yard monitoring wells have generally trended downward from 2017 to 2022 (**Figures 8** through **10**). Benzene concentrations were less than 100 µg/L in 2020 and 2021 in Central Yard monitoring wells. The single exception to this was MW-102R (190 µg/L in December 2021). This monitoring well has historically reported benzene concentrations that are higher than what was detected in surrounding monitoring wells, such as in 2008. However, benzene concentrations have also been reported under 100 µg/L multiple times in this location since the well was installed in 2019.

Monitoring wells MW-167 and MW-169R are near AOC 36, in the southern tip of the Central Yard and downgradient of the southern Central Yard plume. MW-167 has been non-detectable for benzene since at least 2010 and benzene concentrations in MW-169R have been below the GWQS for several years. As such, they are good representatives of background conditions for the southern region of the Central Yard. Nitrate concentrations are below detectable levels in both monitoring wells. Ferrous iron concentrations range between 490 and 7,390 µg/L and sulfate concentrations range from 14,000 to 32,000 µg/L. An evaluation of DO concentrations

and ORP values supports that these two monitoring wells are under the influence of microaerophilic to nitrate-reducing conditions.

Benzene concentrations in MW-533 range between 3.1 and 8 µg/L. Nitrate is depleted in this monitoring well, and ferrous iron concentrations are between 340 and 1,100 µg/L. Sulfate concentrations range between 98,000 and 110,000 µg/L. Similar to the above-mentioned background wells, the DO concentrations and ORP values confirm that MW-533 is also primarily under microaerophilic to nitrate-reducing conditions.

Benzene is detected in higher concentrations in MW-386 and MW-369, ranging from 1.2 to 47 µg/L. Nitrate is depleted in both monitoring wells, and ferrous iron concentrations range between 41,000 and 48,000 µg/L. Sulfate concentrations range between 51,000 and 96,000 µg/L. Given the higher concentration of benzene, the typical fingerprint for benzene MNA would predict that these monitoring wells would be dominated by more reduced subsurface conditions. However, DO concentrations and ORP values confirm that these two monitoring wells are instead dominated by aerobic conditions.

As discussed above, benzene concentrations in MW-102R have been historically reported at higher concentrations than found in surrounding monitoring wells. As with other discussed monitoring wells in the Central Yard, nitrate is depleted in this location. Ferrous iron concentrations range from 1,100 to 32,000 µg/L and sulfate concentrations range from 11,000 to 270,000 µg/L. Available DO concentrations and ORP values suggest that this monitoring wells is primarily under the influence of nitrate -reducing to occasionally iron-reducing conditions.

Thus, groundwater geochemistry parameters in and around AOC 36 do not necessarily follow the typical pattern expected for an area under the influence of natural attenuation for hydrocarbons. This typical pattern would reflect more reduced conditions as hydrocarbon concentrations increase (such as near the core of the plume, which would be MW-102R for benzene), and less-reduced conditions where hydrocarbon concentrations are lower (such as at the plume periphery). These environmental conditions are determined by looking at concentrations of groundwater constituents that include nitrate, ferrous iron, and sulfate in addition to DO and ORP values. This pattern generally appears in the 2016 and 2017 data for AOC 36 (Chevron 2019c). However, multiple EISB injections were conducted in the AOC 36 area in 2018. The 2018 EISB injections were composed of a mixture of both a slow- and fast-release carbon source that would drive the subsurface environment to be strongly anaerobic. The goal of these injections was to artificially alter the subsurface environment to facilitate the biodegradation of chlorinated compounds in groundwater (Chevron 2022b). These targeted chlorinated compounds are found near to, if not co-located with, benzene. It is therefore not surprising that this traditional fingerprint for hydrocarbon bioattenuation (where redox conditions are inversely related to hydrocarbon concentrations) is no longer clearly evident in the 2020 to 2022 data. But this does not mean that benzene bioattenuation is not occurring. Instead, the traditional natural attenuation fingerprint has just been masked by the 2018 EISB treatment injections. The topic of AOC 36 is addressed in detail in the Discharge to Groundwater/Permit-by-Rule Monitoring Report for Enhanced In-Situ Bioremediation (EISB), Area of Concern 36, MW216/MW220 and MW-367 Areas, submitted to USEPA in September 2019 (Chevron 2019c).

The second major area of interest is in the northwest corner of the Central Yard. Background conditions in the middle to northern portion of the Central Yard are dominated by nitrate reducing to iron-reducing conditions, as demonstrated in MW-416 (Former PAOC 82) and MW-417 (Former PAOC 82). In these wells, nitrate was continuously below 40 µg/L, indicating that this nutrient and TEA were consistently depleted. However, ferrous iron concentrations were robust, ranging from 88,000 to 1,110,000 µg/L in 2020 and 2021. Sulfate concentrations were also elevated in these two monitoring wells, ranging from 290,000 to 330,000 µg/L in 2020 and 2021. Available ORP and DO values also remained elevated in these two background wells. Together, these data suggest that these two wells were strongly under the influence of nitrate-reducing to iron-reducing conditions.

MW-0054R and MW-0055R have available data for assessing MNA in this area of low benzene concentrations. As with the above-described periphery monitoring wells, nitrate is generally depleted. Sulfate concentrations are relatively high, ranging from 72,000 µg/L to 130,00 µg/L. Ferrous iron concentrations in these two monitoring wells are typically increased compared to background concentrations. This suggests that this region of the Central Yard is primarily dominated by nitrate-reducing to ferrous-iron conditions. This is supported by available DO concentration and ORP value data.

One monitoring well in this region, MW-0056R, has reported higher benzene concentrations, which have ranged from 2.1 to 48 µg/L. Nitrate and ferrous iron concentrations are below detectable levels. Sulfate concentrations in MW-0056R range from between 130,000 to 290,000 µg/L. Available DO concentration and ORP value data reveal that this monitoring wells is strongly under the influence of sulfate-reducing conditions.

Thus, for this region of the Central Yard, areas impacted by benzene are more reduced than background areas. This region of the Central Yard therefore follows the traditional subsurface redox fingerprint for a region where hydrocarbons are being actively bioremediated.

In summary, benzene concentrations in the Central Yard are generally trending downward. In addition, the Central Yard does appear to follow the traditional fingerprint for MNA, where higher benzene concentrations are associated with lower redox conditions. However, this inverse relationship is less clear in AOC 36, likely due to repeated and recent injections of EISB material specifically designed to transform the subsurface geochemical profile. All subsurface geochemistry suggests that conditions found in the Central Yard are favorable for the biological biodegradation of benzene. In addition, available data suggests that the natural attenuation of benzene has been, and continues to be, active in this region of the Facility.

6.2.2 Main Yard

The Main Yard, like the Central Yard, contains regions of both low and high concentrations of benzene. However, more of the Main Yard is impacted with benzene than is the Central Yard (**Figures 8** through **10**). The northern end of the Main Yard is bounded by the Woodbridge Creek. Multiple ISCO CMs have been completed within the Main Yard, targeting some of the areas of higher benzene impact. ISCO processes involve chemicals being injected or mixed into impacted soil to chemically oxidize target contaminants, such as benzene. The indigenous microbiology is also altered during this process by being subjected to sudden and intense oxidizing conditions (Fedrizzi et al. 2017; Polli et al. 2018; Sutton et al. 2015). As such, for the

purposes of the MNA discussion in this section, Parsons has selected wells located outside of areas strongly influenced by the various ISCO CMs within the Main Yard to represent various unaltered biogeochemical states

Monitoring wells still affected by previous ISCO CMIs are sampled and evaluated as part of their performance monitoring/long-term monitoring program. Following a return to baseline conditions, and data supporting a downward or stable trend, the monitoring wells will transition into the MNA program. This is discussed further in Section 10.

Overall, benzene concentrations in the Main Yard are typically trending downward in most areas. The footprint of areas impacted by benzene concentrations above 1,000 µg/L has decreased substantially between 2008 and 2021/2022 as shown on **Figures 8** and **10**. This is discussed in more detail in Section 8. Areas with lower concentrations of benzene have also reported reductions in concentration. For example, benzene concentrations historically reported for MW-0039 were detectable but below 1 µg/L. Since 2016, benzene concentrations at this location have been reported below detection limits. Similarly, benzene concentrations in MW-179 have historically been reported ranging from 4 to 14 µg/L (2012 to 2014), but concentrations have been below detectable levels since 2016.

As in the Central Yard, background wells in the Main Yard are dominated by nitrate-reducing processes, as represented by MW-154 (AOC 24), MW-314 (AOC 33), and MW-373 (Former PAOC 84). Benzene concentrations are below detectable levels in these three monitoring wells. Nitrate remains depleted in all three of these background monitoring wells. Ferrous iron concentrations range from 786 to 13,600 µg/L and sulfate concentrations range from approximately 3,000 to 50,000 µg/L. These data suggest that background conditions in the Main Yard remain dominated by nitrate-reducing to iron-reducing redox conditions.

Monitoring wells located in areas of low benzene concentrations are more reduced than those located outside impacted areas. Represented by MW-118, benzene concentrations have ranged from below detectable levels to 2 µg/L. Detected ferrous iron concentrations are highly variable, ranging from 3,230 to 8,100 µg/L. Sulfate concentrations ranged from 710 to 18,000 µg/L. An examination of available DO and ORP data supports that the overall trend for MW-118 is dominated by iron-reducing conditions, which is more reduced than the above-described background wells.

Monitoring wells located in areas of slightly higher benzene concentrations are more reduced than those with lower impacts. Represented by MW-374, benzene concentrations have ranged from below detectable levels to 22 µg/L. Detected ferrous iron concentrations are highly variable, ranging from below detectable levels to 1,200 µg/L. Sulfate concentrations ranged from 23,000 to 310,000 (estimated) µg/L. An examination of available DO and ORP data supports that the overall trend for MW-374 is dominated by sulfate-reducing conditions, which is more reduced than the above-described background wells or monitoring wells containing lower benzene concentrations.

The geochemistry of areas impacted by high concentrations of benzene, but still outside regions historically targeted for ISCO treatments, are represented by MW-125 and MW-273R. Benzene concentrations for these two monitoring wells range from below detectable concentrations to 570 µg/L. Detected ferrous iron concentrations range from below 10,000

to 29,000 µg/L. Sulfate concentrations ranged from 1,500 to 70,000 to 310,000 µg/L. An examination of available DO and ORP data supports that the overall trend for MW-374 is dominated by sulfate-reducing conditions.

In conclusion, benzene concentrations in the Main Yard are typically trending downward in most areas. The footprint of areas impacted by high benzene concentrations (above 1,000 µg/L) has decreased substantially over time. Subsurface conditions in the Main Yard, outside of known ISCO-impacted areas, appear to follow the traditional MNA fingerprint of there being an inverse relationship between benzene concentrations and subsurface redox conditions. This suggests that natural attenuation has been, and continues to be, active in this region of the Facility. Furthermore, all subsurface geochemistry suggests that conditions found in the Main Yard are favorable for the biological biodegradation of benzene.

6.2.3 East Yard

As in the Main Yard, the East Yard has experienced repeated ISCO events to break down targeted areas of high benzene concentrations. The East Yard also may experience possible tidal influences, since the eastern boundary is the Arthur Kill. Although limited tidal influences on groundwater in the East Yard are suspected, these possible tidal influences have not been quantified. Tidal studies performed in SWMU 8 and in the area surrounding the former East Yard Basin demonstrated that tidal fluctuations in the Arthur Kill had little to no influence on groundwater elevations in the East Yard.

Although the extent of these possible, limited tidal influences on factors other than groundwater elevations is unresolved at this time, these tidal influences can disrupt the typical fingerprint of hydrocarbon MNA because fresh nutrients are regularly washing into an effected area (Chevron 2008a). In addition, non-contaminant organic matter can wash into the system, providing material for the indigenous microbial population to degrade in preference to hydrocarbon contaminants. This will cause depletion of the TEA markers typically used for indirect MNA monitoring (Chevron 2008b).

In general, benzene concentrations are trending downward in many, if not most, monitoring wells in the East Yard (**Figures 8** through **10**). This is discussed in more detail in Section 8. Benzene concentrations in some monitoring wells, such as MW-271 and MW-288, appear to fluctuate over time. Benzene concentrations in MW-271 have continuously exceeded 100 µg/L since 2020, reaching a recent high concentration of 2,500 µg/L in April 2021, but have trended down since then. Benzene concentrations in MW-288 ranged between 160 and 1,600 µg/L in 2021 alone. These two monitoring wells, which reported high benzene concentrations during their latest sampling event, are clustered near one another (**Figures 8** through **10**). It is suspected that fluctuating benzene concentrations in these two monitoring wells may be a result of rebound after the CMs in the area ceased.

Background conditions, where benzene has historically been and continues to remain below detectable concentrations, are located in less tidal areas, as represented by MW-141 (SWMU 42 AOC 38) and MW-145 (AOC 27). Both monitoring wells report concentrations of nitrate that are below detectable levels. Ferrous iron concentrations were also low, ranging from being below detectable levels to 370 µg/L. Sulfate levels were generally elevated in these two monitoring wells for this period, ranging from 37,200 to 93,900 µg/L. This suggests that both

monitoring wells are dominated by nitrate-reducing to very mild iron-reducing conditions, which is supported by field parameter data including DO concentrations and ORP values.

Background monitoring wells that are under a possibly increased level of tidal influence are represented by MW-144 and MW-253 in AOC 14. Nitrate concentrations in both monitoring wells are reported to be below detectable levels. Ferrous iron concentrations remain higher than found in the less tidal background wells, ranging from 5,600 to 1,600,000 µg/L. Similarly, sulfate concentrations remain higher in more tidal background wells in comparison to non-tidal background wells. Sulfate concentrations in MW-144 and MW-253 ranged from 4,100 to 1,600,000µg/L. Thus, the general trend is for background wells to be under the influence of nitrate reducing conditions. However, ferrous iron and sulfate concentrations are higher in those background wells that are more likely under a tidal influence compared to those that are not, suggesting that there may also be an outside influence of iron-reducing conditions in these monitoring wells. The Arthur Kill waterway could be flushing nutrients, such as ferrous iron and sulfate, from other locations to this Facility. This would explain the relatively mild anaerobic conditions, specifically nitrate-reducing conditions, reported by collected field parameter data such as DO concentrations and ORP values. Given that these monitoring wells have historically had, and continue to have, benzene concentrations that are below detectable levels, a dominance of nitrate-reducing conditions would follow the standard fingerprint for MNA.

Monitoring wells in low benzene concentration areas possibly impacted by ISCO are represented by MW-236 (SWMU 10) and MW-245 (SWMU 42). Both monitoring wells report below detectable concentrations of nitrate. Ferrous iron concentrations ranged from 2,300 to 10,000 µg/L. Sulfate concentrations ranged from 600,000 and 1,220,000 µg/L in MW-236 and between 2,000 to 20,000 µg/L in MW-245. Thus, these wells appear to be primarily dominated by iron-reducing conditions. This is supported by available DO concentration and ORP value data.

Benzene concentrations are also low in MW-270 (AOC 31). ISCO was performed in areas surrounding this monitoring well in 2015 and again in mid-2017 into 2018. Nitrate concentrations in MW-270 remain depleted. Ferrous iron concentrations range from 76,700 to 80,700 µg/L, and sulfate concentrations range widely, from 12,300 to 647,000 µg/L. An examination of historical and current field parameters such as DO concentrations and ORP values support that this region of the East Yard is dominated by strongly anaerobic sulfate-reducing conditions. This is unexpected, given the relatively low benzene concentrations. Thus, this monitoring well may represent legacy subsurface geochemistry from repeated ISCO events.

There are two main areas in the East Yard in which monitoring wells have elevated benzene concentrations (100 to 999 µg/L) – one near the western side (represented by MW-296, MW-408R, and MW-447R) and one area near the eastern side (represented by MW-400 and MW-452) (**Figures 8** through **10**). Starting with the cluster of monitoring wells on the western side of the East Yard, benzene concentrations range from 18 to 260 µg/L. Nitrate concentrations are below detectable levels, and ferrous iron concentrations are not available. Sulfate concentrations are very high, ranging from 2,500 to 36,000 µg/L in MW-296 and from 260,000 to 20,000,000 µg/L in the remaining two monitoring wells. Available DO

concentrations and ORP values support that these monitoring wells are dominated by iron-reducing to sulfate-reducing subsurface conditions.

Two monitoring wells located in the eastern half of the East Yard contain elevated benzene concentrations (defined above) that are representative of area conditions. MW-400 and MW-452 report benzene concentrations that range from 5 to 360 µg/L. Nitrate is depleted in both monitoring wells, and ferrous iron concentrations range from below detectable levels to 31,000 µg/L. As with monitoring wells in the western area of the East Yard, sulfate concentrations are relatively high, ranging from 26,00 to 4,900,000 µg/L. Available DO concentration data and ORP values support that MW-400 (located more inland) is dominated by sulfate-reducing conditions. This is anticipated, given the elevated concentration of benzene present. In contrast, groundwater in MW-452 is dominated by mildly aerobic to microaerophilic conditions. More strongly anaerobic conditions would be expected given the benzene concentrations detected in this monitoring well. However, the location of this monitoring well, which is much closer to the Arthur Kill waterbody, likely facilitates artificial aeration of the subsurface and thus inflated DO concentrations and ORP values.

The benzene concentrations detected in monitoring wells MW-271 and MW-288 have been discussed above. Nitrate is depleted in both monitoring wells, and ferrous iron concentrations have ranged from between 711 and 12,600 µg/L in MW-271 in 2020. In MW-288, ferrous iron concentrations ranged between 7,600 and 8,300 µg/L in 2021. Sulfate concentrations have ranged from 930,000 to 8,850,000 µg/L in MW-271 and from 2,900 to 13,000 µg/L in MW-288. Available DO concentration and ORP values report that MW-271 is dominated by strong sulfate-reducing conditions, which follow the trend expected for an area impacted with higher benzene concentrations (**Appendix B**). There is no available, recent field parameter data for MW-288, however, it is anticipated that similar redox conditions dominate this monitoring well.

These factors indicate the classic fingerprint of MNA is not as clear in the East Yard as it is in the Central and Main Yards. Instead, as demonstrated by the background monitoring well data, there may be an influence of tidal forces on the geochemistry detected within the East Yard. If true, these repeated pulses of fresh nutrients into the East Yard could blur the traditional pattern of TEA depletion when microbial processes dominate natural attenuation. Historical ISCO events may also have impacted areas farther from the injection areas than initially thought, affecting the groundwater geochemistry in some of the discussed wells. Furthermore, many of the tank basins within the East Yard are unlined and regularly flood. The impact that this has on MNA parameters is unclear. This is not to say that biological attenuation is not occurring in the East Yard. Instead, the classic fingerprint of hydrocarbon natural attenuation is likely masked by the impacts of other site conditions and activities. Furthermore, all subsurface geochemistry suggests that conditions found in the East Yard are favorable for the biological biodegradation of benzene.

6.3 Summary

Benzene biodegradation can occur across a wide range of environmental conditions. An assessment of groundwater geochemistry at this Facility confirms that, although conditions

are highly variable across the three yards, they are consistently within a range that is conducive for the MNA of benzene.

An evaluation of MNA-related geochemistry parameters versus benzene concentrations in groundwater was conducted for all three yards of the Facility. A typical fingerprint for hydrocarbon bioremediation is one where areas of higher COC concentration are coupled to more highly reduced subsurface conditions. Furthermore, areas of lower COC concentrations are typically associated with less reduced subsurface conditions. Several MNA-related geochemical parameters have been monitored at this Facility, including (but not limited to) pH, ORP values, and groundwater concentrations of DO, nitrate, ferrous iron, and sulfate. The anticipated, classic fingerprint for benzene MNA was observed in various areas of each yard within the Facility, supporting the case that benzene-related MNA has been, and continues to be, active at this Facility.

However, given the complex history of CMs at the Facility, the traditional MNA-parameter fingerprint was not always easy to discern. This was particularly true in areas where ISCO and EISB have occurred, causing significant alterations to subsurface geochemistry that can artificially mask a traditional MNA fingerprint. However, even in these situations, environmental conditions remain within a favorable range for benzene-MNA to occur, and evidence for MNA does exist. Additional lines of direct evidence for the occurrence of benzene MNA are provided in the next section.

7.0 MOLECULAR MICROBIOLOGICAL AND STABLE-ISOTOPE STUDIES

As previously stated, it takes more than one type of data to demonstrate the occurrence of a natural attenuation process (ASTM, 2022; USEPA 1999). Section 6 provides an evaluation of MNA-related geochemical data such as concentrations of nitrate, ferrous iron, and sulfate, which can indirectly provide information about associated subsurface microbiology. However, modern advances in molecular biology and isotopic chemistry have allowed for quantifiable and direct biological assessments. Some of these direct assessments have been performed at this Facility. The various molecular and stable isotope analyses performed at this Facility to assist with evaluating the Facility microbiology responsible for the bioattenuation of benzene are discussed in this section.

7.1 Introduction

Two major classifications of modern, direct-monitoring technologies – molecular and stable-isotope technologies – have been used at this Facility to glean precise information about indigenous microbial populations of benzene-biodegraders.

7.1.1 Molecular Microbiological Tools: An Overview

Two types of analyses within the molecular biology class of technologies were performed at this Facility – a full community metagenomic analysis and various analyses that are an adaptation of a technique called a quantitative polymerase chain reaction (qPCR) (ASTM, 2022).

7.1.1.1 Metagenomic Analysis

A metagenomic analysis is a molecular method of evaluating an entire microbial community within a sample. Whereas qPCR-based technologies use a molecular probe to deliberately target a specific DNA segment (called a "gene"), no such *a priori* targeting is performed with a metagenomic analysis. Instead, a metagenomic analysis evaluates a community's full-population members as well as their functions, activities, and capabilities. A metagenomic assessment can provide insights into how diverse a population is, what organisms make up the total population (as well as relative quantities in relation to one another), and what functions are being conducted in relative amounts to other functions. In short, it is a full-community assessment of who makes up the community and what these community members are doing. This information is important when trying to understand the potential for an indigenous population to conduct an activity such as benzene biodegradation.

To perform metagenomic analyses at this Facility, groundwater was collected from targeted wells (described in more detail below) using standard best practices and shipped overnight to SiREM Laboratory (SiREM) in Knoxville, Tennessee. Once received at SiREM, each groundwater sample had its microbial population filtered, concentrated, collected, and subjected to two metagenomic analyses. The first analysis identified the members of the full community, and the second evaluated the full suite of community metabolic functions being performed.

7.1.1.2 Introduction to qPCR Technology

To directly monitor the indigenous microbiology associated with biodegradation reactions at the Facility, groundwater from each target area was subjected to one or more qPCR analyses. A qPCR analysis is a well-established technique in which a special molecular probe is created to amplify a specific genetic sequence. This genetic sequence can be chosen to target a specific group of microorganisms (such as "all sulfate-reducing bacteria") or specific functions (such as the process of cleaving open the benzene aromatic ring under anaerobic conditions). The target of the molecular probe can also be designed to be either highly specific or more broad-reaching, for genes associated with either microbial population identity or metabolic functions. However, a key component of a qPCR analysis is that each individual molecular probe also has a fluorescent moiety. The concentration of this fluorescent marker is quantified at the end of the qPCR process and is then used to back calculate to the number of gene copies in the original sample. The number of gene copies is then related to the number of target organisms in the initial sample. Thus, in this manner, a qPCR analysis can quantify the population size of organisms in a sample that have the identity or function that the particular probe was designed to target.

7.1.1.3 QuantArray (Petro) qPCR Analysis

Groundwater from targeted wells (described in more detail below) was collected using standard best practices and shipped overnight to the laboratories of Microbial Insights, Inc. (Microbial Insights) in Knoxville, Tennessee. Once received at Microbial Insights, each groundwater sample had its microbial population filtered, concentrated, collected, and subjected to a QuantArray (Petro) analysis. Microbial Insights has bundled together a selection of 22 different qPCR reactions that focus on the biodegradation of benzene and other hydrocarbons. This QuantArray (Petro) analysis included an evaluation of both common metabolic processes involved in the attenuation of these compounds as well as those microbes commonly involved in their breakdown.

Facility-specific questions that can be answered by the QuantArray (Petro) technology include:

- Are benzene-degrading bacteria present?
- If benzene-degraders are present, what is the size of the population?
- Are population sizes different between one area of a site and another (such as within and outside of any excavated areas)?
- Regarding monitoring Facility efforts, has the size of a target population changed because of site modification efforts such as a bionutrient augmentation process?
- Are specific benzene-degrading mechanisms (such as aerobic or anaerobic processes) occurring and to what degree?
- Is the biodegradation of other Facility hydrocarbons competing for microbial resources?

7.1.1.4 The ORM-2 qPCR Assessment

In this analysis, the population size of the *Deltaproteobacterium* species ORM-2 (ORM-2) was quantified via a qPCR assessment. This was performed using a gene probe specifically targeting the ORM-2 microbe, which is a bacterium known to biodegrade benzene under sulfate-reducing to methanogenic conditions.

Although there are multiple metabolic pathways for anaerobic benzene bioattenuation to occur, the exact mechanisms (and thus the genes involved) are still not fully known for most of these pathways. However, studies confirm that benzene is biodegraded in substantial amounts in the presence of the ORM-2 bacterium even though the exact metabolic pathway(s) for the anaerobic biodegradation of benzene by the ORM-2 microbe has not been fully elucidated. Additionally, the population size of ORM-2 often increases in the presence of benzene when the correct geochemical conditions exist. This is important because it means that not only can the ORM-2 microbe break-down benzene, but the microbe can use it as a resource for population growth. Population maintenance and growth is a key element for successful MNA as well as successful enhanced bioremediation.

These studies have provided evidence that the presence of the ORM-2 bacterium, as part of an indigenous microbial population, is highly desirable when benzene is the hydrocarbon that must be biodegraded. These studies have also shown that the ORM-2 organism can be a central part of an enhanced bioremediation program when correct site conditions are present.

To perform the qPCR analysis targeting ORM-2, groundwater from targeted wells (described in more detail below) was collected using standard best practices and shipped overnight to SiREM. Once received at the laboratory, the microbial population in each groundwater sample was filtered, concentrated, collected, and subjected to an ORM-2 qPCR analysis.

7.1.2 Stable Isotopic Analysis: An Overview

7.1.2.1 In-Situ Microcosms (Bio-Traps®)

Bio-Traps® are the proprietary in-situ biological sampler made by Microbial Insights. Each is composed of a perforated polyvinyl chloride (PVC) tube, capped off at each end, and filled with BioSep™ beads. BioSep™ beads (also proprietary to Microbial Insights) are made of an activated carbon and Nomex® mixture, which has been sterilized and heated until all residual biomarkers are burned off. Once the beads have been both sterilized and cleaned of residual biomarkers, they are “baited” with an isotopically labeled target compound (such as benzene, which was the compound used for this Facility).

These beads are then packed into the sterile Bio-Trap® PVC housing, and the resulting sampler is placed into the targeted monitoring well, where indigenous groundwater microbes will enter the bead’s pore spaces. The presence of a carbon source (isotopically-labeled benzene), coupled with the high degree of porosity of the beads, will attract indigenous microbes to enter the beads once the samplers are put into groundwater. These resident benzene-degraders will then start metabolizing the labeled benzene that was sorbed to the beads, and the isotopic label will be subsequently transferred from the benzene into the degrader’s biomass.

After a few weeks, the Bio-Trap® is removed from the monitoring well and sent back to the Microbial Insights laboratory. After opening the Bio-Trap® PVC housing, half of the beads are sent for geochemical assessments including:

- How much isotopically labeled carbon dioxide was captured within the beads (the carbon dioxide having been generated from the labeled benzene being fully mineralized by groundwater microbes); and

- How much of the labeled benzene remains? From this, it can be calculated how much benzene was consumed during the deployment timeframe, and an approximate in-situ degradation rate can thus be calculated.

The other half of the beads taken from the sampler are subjected to biological testing. These beads are first washed, removing all bacteria that had inhabited the beads during deployment (benzene degraders and other non-degraders that were also indigenous to the groundwater). The number of cells containing the isotopic tag are then counted. Because the only way this tag could become present in the microbial biomass is by the bacteria consuming the tagged benzene, the size of the indigenous benzene-degrading population can be calculated. Finally, the laboratory also investigates the total microbial population found to have inhabited the BioSep™ beads, including those bacteria that did not metabolize the target, isotopically labelled compound. Specifically, certain molecules within the cell membranes of these microbes are analyzed. From this assessment, the following information can be learned.

- A full profile of the major groups that make up the indigenous microbial community (fermenters, anaerobes, proteobacteria, and others) is determined. The diversity of the overall indigenous community is related to the health of this community.
- How metabolically stressed is the benzene-degrading microbial community?
- Is this microbial stress because of the presence of something toxic, or is the stress likely due to lack of a required nutrient?

These Bio-Traps® analyses are also often referred to using the more generic term of stable-isotope probe (SIP) assessments.

7.2 Analyses Performed

Multiple molecular microbiological and stable isotope technologies were implemented at the Perth Amboy Facility to assist with the delineation of the subsurface biogeochemical conditions. These assessments have been performed within AOC 36 (Central Yard) and AOC 44 (Main Yard) (**Figure 3**) in accordance with ASTM international standards (ASTM, 2022) and are discussed below.

7.2.1 AOC 44

Multiple molecular microbiological and stable isotope technologies were implemented within AOC 44, which is in the Main Yard (**Figure 3**). These assessments are summarized here, but a much more detailed description of the analyses and the results can be found in the report on the EISB IWP for AOC 44 (Chevron 2019d).

Five monitoring wells were subjected to an in-depth biogeochemical assessment to evaluate current conditions. The overall goal was to determine if benzene biodegradation is likely occurring. Assessing the chances of successful enhanced benzene biodegradation was also a goal. The following analyses were performed for each of the five monitoring wells targeted:

- Metagenomic analyses of full community members, targeting both the community composition and function
- qPCR to target and quantify ORM-2

- SIP analysis
- A broad range of groundwater geochemical analyses to evaluate the concentration of VOCs, and semi-volatile organic compounds (SVOCs). Details can be found in **Appendix A**
- A broad range of groundwater MNA parameters including those discussed earlier and provided in **Appendix B**

Overall, site conditions within AOC 44 were found to be anaerobic and to generally fall into the iron-reducing to possibly sulfate-reducing conditions in some areas. More reduced groundwater conditions are related to higher COC concentrations. This is a common fingerprint at locations where hydrocarbon MNA is occurring.

A diverse microbial population was present in each of the tested monitoring wells. This population ranged from aerobes to anaerobes, likely due to extensive microenvironments within the subsurface. The microbial diversity reported for each of the five monitoring wells was confirmed by the metagenomic community member assessment, the metagenomic community function assessment, and the SIP survey. This diversity is important because it allows for better overall community resilience and health. It is also important regarding the ability for the indigenous microbial population to successfully conduct MNA on site COCs. Taken together, these data revealed that a wide range of microbes made up the total population in each sample, and that a wide range of microbial functions were occurring in each sample. It is important to note that hydrocarbon degraders were found (and were active) in all samples. In addition, *Proteobacteria* bacterial populations were found in all five samples. This class of bacteria is recognized for their ability to biodegrade a wide range of COCs, including but not limited to hydrocarbons, specifically benzene.

The presence of the *Deltaproteobacterium* ORM-2 microbe found in each sample was extremely significant because this microbe is known to specifically biodegrade benzene under the same environmental conditions found in AOC 44. The fact that the ORM-2 microbe was present at a moderate population size at the site strongly supported historical benzene loss trends in the area, likely due to MNA. The presence of the ORM-2 population was also a positive factor because this is the organism that would be used in any enhanced bioattenuation activity at the site. The fact that it was present at a significant population size suggests that any added ORM-2 would successfully thrive and actively biodegrade benzene at the location.

The belief that enhanced benzene biodegradation would be successful within AOC 44 was further strengthened by the fact that the Bio-Trap® samplers confirmed that benzene biodegradation was currently occurring within each of the tested monitoring wells. Benzene biodegradation was confirmed by the incorporation of the ^{13}C-isotopic tag into bacterial biomass in all samples as well as carbon dioxide in most samples. The only way that this isotopic tag could have become incorporated in this manner is from the microbial breakdown of the isotopically labelled benzene into chemical units that could subsequently become incorporated into either biomass or carbon dioxide. The presence of an indigenous, benzene-degrading microbial community in all tested wells was significant because it strengthened the proposition that MNA of this conservative indicator COC is occurring. It also suggested that any enhanced bioremediation activities targeting benzene would be successful.

In summary, groundwater COC geochemistry and MNA parameters indirectly suggested that MNA had been occurring within AOC 44. This was supported by microbial population membership and function data as well as direct evidence of in-situ benzene biodegradation under site conditions. This data also collectively supported the idea that enhanced biodegradation of benzene, a conservative indicator of overall hydrocarbon biodegradation, would also show favorable results.

The subsequent results of the 2020 EISB effort in AOC 44, which targeted benzene, can be found in **Appendix A**. Looking at the three monitoring wells specifically within the EISB treatment zone, benzene concentrations in MW-233 have reduced from 330 to 190 µg/L (a 42.4% reduction). Benzene concentrations in MW-350 have reduced from 190 to 3.3 µg/L (a 98.2% reduction). Benzene concentrations in MP-06R have reduced from 4400 to 0.3 (U) µg/L (a 99.9% reduction).

7.2.2 AOC 36

A QuantArray (Petro) analysis was performed in 2022 within AOC 36, which is in the Central Yard (**Figure 3**). Seven of the eight evaluated locations reported detectable concentrations of genes associated with specific populations and functions associated with benzene biodegradation. Details of the QuantArray (Petro) analysis can be found in **Appendix D**. Most monitoring wells reported multiple possible benzene-biodegrading microbial populations. But as importantly, seven of the eight locations reported detectable concentrations of metabolic functions possibly associated with benzene bioattenuation.

The reason that some genes are said to detect metabolic functions that are "possibly" associated with benzene biodegradation, as opposed to being certain that benzene is being acted upon, is that it is normal for microbial genes to be capable of functioning on multiple substrates. For example, the phenol hydroxylase gene adds a functional group to a benzene ring, helping to cleave it open, which subsequently makes the remaining compound much more sensitive to further breakdown. But this gene also functions similarly on toluene and the various xylene isomers. As such, the detection of the phenol hydroxylase gene in an area where benzene is present is suggestive that benzene is a target of its activity, but it is not certain.

Despite this, there is strong evidence to suggest that the indigenous microbes in AOC 36 are actively biodegrading benzene. This evidence includes the number of both known benzene-biodegrading microbial populations and benzene-related functional genes detected in almost all AOC 36 samples. The detected functional genes are associated with benzene-degrading metabolisms that would be expected to occur under the geochemical conditions found in the AOC 36 subsurface.

In summary, benzene biodegradation by indigenous microbes has been shown to be occurring. This is supported by benzene concentration trends as well as molecular analyses that have directly detected and quantified both benzene-degrading microbes and their functions. However, the geochemistry of AOC 36 does not cleanly follow the typical pattern associated with locations where benzene MNA is occurring. This is because the EISB injections, which have recently occurred in the area to target non-benzene COCs, have interfered with the generation of any MNA fingerprint. However, the above-described molecular data provides additional lines of evidence that strongly support the proposition that benzene MNA is actively

occurring. This molecular data directly evaluates the indigenous microbial community, and the results clearly reflect that multiple benzene-biodegrading microbial populations are active in AOC 36. These populations are known to survive and thrive in the environment created by the EISB injections. This is supported by the number of different functional genes associated with benzene.

7.3 Summary

Multiple molecular microbiological and stable isotope technologies were implemented at the Perth Amboy facility to assist with the delineation of the biogeochemical conditions of the subsurface. These technologies are a modern, scienced-based, regulator-approved, and direct way to determine if desired microbial community members and functions are present and active in an environment.

These evaluations were performed within AOC 36 and AOC 44, respectively, between 2020 and 2022. The results have provided multiple lines of direct evidence that an indigenous benzene-biodegrading microbial population exists and, most importantly, is active in the subsurface of this Facility. The evidence provided by these molecular and stable-isotope assessments has also shown that benzene biodegradation is occurring by multiple different microbial populations and through multiple metabolic pathways. This diversity is significant because it suggests that current benzene biodegradation will continue into the future, even if subsurface geochemical conditions shift over time through natural processes or due to implemented CMs.

8.0 CURRENT STATE OF BENZENE PLUMES

One of the multiple lines of evidence used to demonstrate the natural attenuation of a compound is to assess plume stabilization and/or loss of contaminant mass over time. This is addressed in this section.

8.1 Benzene Plume Behavior

At this Facility, the goal of the MNA CM is to reduce dissolved phase benzene concentrations in groundwater within the selected treatment areas to below 1 µg/L. A primary line of evidence for assessing the efficiency of natural attenuation is to monitor contaminant mass/concentrations over time and distance to establish plume stability. The most complete historical reference available to facilitate this comparison is data from the time of the 2008 CMS.

8.1.1 Historical Distribution of Benzene in Groundwater

Multiple comingled benzene plumes were identified in each of the three yards in the 2008 CMS (**Figure 8**). The plumes were generally associated with a known or suspected source of benzene, either in soil or from LNAPL. The highest concentrations of benzene were generally found near the soil or LNAPL source, with decreasing concentrations extending downgradient (Chevron 2008a). Historical benzene data is presented in **Appendix A**. The discussions in this report are focused on shallow groundwater since benzene impacts are not present in deep groundwater.

Since 2013, the implementation of CMs in all three Yards has effectively reduced both soil and LNAPL sources in several areas, as discussed in detail below. Post-implementation dissolved benzene concentrations indicate that source removal is complete in some areas, and dissolved benzene concentrations have decreased accordingly. The benzene groundwater plumes over time from 2008, Q2 2017 through Q1 2018, and Q2 2021 through Q1 2022, respectively, are shown in **Figures 8, 9,** and **10**. The contemporary data presented in **Figures 8, 9,** and **10** are the highest concentrations reported during each period. As such, the resulting maps represent the most conservative interpretation of current plume conditions. When the 2017-2018 footprint is compared to current data (Q2 2021 through Q1 2022), it is apparent that the total amount of benzene present at the Facility has been significantly reduced (**Figure 10**).

Footprint Size of Dissolved Benzene Concentrations (square feet)

Footprint Size of Dissolved Benzene Concentrations (square feet) Year	MNA Area (>1 µg/L and <100 µg/L)	Remaining CMI Area (>100 µg/L)	Total Footprint	Number of Monitoring Wells
2008	3,287,218.98	289,744.94	3,576,963.92	220
2017-2018	3,291,472.03	215,042.06	3,506,514.09	292
2021-2022	3,012,207.07	205,335.22	3,217,542.29	277

Since 2008, over 84,400 square feet of the Facility have seen a reduction in benzene concentrations from above the CMI action level (100 µg/L) to below this target concentration. CMs were completed in areas where concentrations were historically above 100 µg/L. Areas with benzene concentrations below 100 µg/L but above the GWQS will continue to be remediated through MNA. The total footprint of dissolved benzene above GWQS of 1 µg/L had slightly increased from 2008 until 2018 but has decreased by 279,250 square feet in 2022. Several plumes that were not identified at the time of the 2008 CMS were identified in 2018 and have reduced in 2022.

It was expected that, once source removal/treatment was completed, the decrease in areas of high concentrations would result in an apparent increase in the footprint of low concentrations (1 to 100 µg/L) of benzene. Over time, however, the footprint of these low concentrations will decrease. This is because there has been a reduction in flux to the lower concentrations of dissolved phase contaminants. Additionally, the biodegradation of contaminants, such as hydrocarbons, occurs primarily in the lower-concentration zones of a plume.

There are multiple reasons for bioattenuation to be more active in zones peripheral to a plume core. First, more microbes are adapted to survive in, and then degrade, lower concentrations of a hydrocarbon than higher concentrations. In addition, areas of lower hydrocarbon concentration are often associated with less-reduced geochemical conditions, as seen at the Facility and discussed above. As such, the actual rate of biodegradation is commonly most rapid in areas of lower dissolved-phase hydrocarbon concentrations.

8.1.2 Historical Decreases in Contaminant Concentrations Over Time

Dissolved benzene concentrations in Facility groundwater exceeding 100 µg/L generally extend from a defined source zone, typically petroleum hydrocarbon impacted soil or LNAPL. Once the source zone has been removed or treated through active remediation, concentrations of benzene in groundwater can follow the MNA patterns discussed above. A detailed assessment of all additional Facility COCs is beyond the scope of this report. Instead, this report focuses on benzene, as directed in the 2008 CMS Report (Chevron 2008a).

8.1.2.1 Central Yard

The Central Yard of the Facility has shown a reduction of the footprint of benzene concentrations above 100 µg/L since 2008 (**Figures 8** through **10** and **Appendix A**). Recently reinstalled monitoring well MW-102R is the only well with current benzene concentrations above 100 ug/L. Several source removal events have contributed to the reduction in total contaminant mass in the Central Yard. Details of each of these remedial actions have been included in previous submittals.

Figures 8 through **10** illustrate that the footprint of concentrations below 100 µg/L and 10 ug/L has been substantially reduced in the Central Yard benzene plumes. Small areas remain where MNA will continue to reduce benzene concentrations. Benzene is currently above the GWQS of 1 ug/L in the AOC 25, AOC 36, and SWMU 11B areas in the Central Yard.

In summary, the footprint of impacted groundwater is significantly reduced in the Central Yard (**Figure 11**). As such, the benzene plume in the Central Yard of this Facility is not only stable but shrinking in both benzene mass and footprint size.

For the Central Yard, it should be noted that:

- In the northwestern plume, an excavation to remove LNAPL and hydrocarbon impacted soil from AOC 25 occurred in September 2016. Concentrations prior to excavation were consistently above CMI action limits. Since the excavation CM, benzene concentrations have consistently been less than 10 µg/L.
- Multiple CMs have been employed near AOC 22, AOC 36, and SWMU 34 in the southern plume. The excavation of benzene-impacted soil was completed in 2013 in AOC 22. EISB was conducted in 2014 in AOC 36, and another EISB event (targeting non-benzene compounds) occurred as recently as 2018 in the MW-216/MW-220 area. The footprint of benzene concentrations less than 100 ug/L in the area has reduced, and this is discussed in detail below. Monitoring well MW-102R was recently reinstalled in August 2019. As discussed earlier, benzene concentrations in this well are currently above 100 ug/L.

Details of each of these remedial actions were submitted under separate covers. Based on the latest available data, only monitoring well MW-102R in AOC 22 has benzene concentrations above the CMI action limit of 100 µg/L (**Appendix A, Figure 10**). Benzene is above the GWQS of 1 ug/L in the AOC 25 and AOC 22/36 areas.

8.1.2.2 Main Yard

In 2008, the Main Yard was characterized by several distinct areas where benzene concentrations were elevated (**Figure 8**). The primary plume in this yard extends from SWMU 5/21/43 in the northwest to AOC 15/8 in the southeast. This primary plume includes benzene comingled with other COCs. Other benzene plumes within the Main Yard include those near AOCs 5 and 44 (extending to the northwestern corner of the Facility), AOC 33 near the eastern Facility boundary, and AOC 50 at the Truck Loading Rack east of the Main Yard.

A variety of CMI actions have been completed in the Main Yard. Some benzene impacted soil has been placed in the CAMU. This was because either benzene-impacted soil was collocated with lead or benzo(a)pyrene impacted soil, or this CM was in lieu of ISCO injections when the benzene source zone was identified as a limited volume of soil, indicating excavation was more efficient than ISCO injections.

The following CMI actions have been completed in the Main Yard:

- In the northwest corner of the Facility, near AOC 5 and SWMUs 27/29/30/38/39, soil was excavated for ISS/ESS in 2015 and 2016. An area of elevated benzene concentrations (above 100 µg/L) in groundwater near MW-404R and MW406 was not identified in 2008 but was detected in 2017/2018. Concentrations of benzene had been reduced to below 100 µg/L in 2021/2022.
- In AOC 9A, an excavation to address benzene in soil was completed in 2017. In SWMU 20, located adjacent to AOC 9A, soil was excavated for ISS/ESS in 2016. In 2017/2018, the upgradient extent of this plume was defined as extending farther to the south than in 2008, based on information generated from the installation of

MW376 and MW379. In 2021/2022, concentrations of benzene in MW-376 had reduced to below 100 µg/L, and there was a reduction in the upgradient extent of the plume. Concentrations of benzene in the downgradient extent of the plume had decreased from above 100 µg/L in MW266 in 2008 to less than 10 µg/L in 2017-2022.

- In SWMU 43, located to the north of AOC 9A and SWMU 20, ISS, ISCO, and bioremediation CMs were completed in 2019. An area of elevated benzene concentrations (above 100 µg/L) in groundwater was detected near MW-0062 and MW-207 in 2008 and was noted to have extended to MW-0063 and MW-0029 in 2017/2018. Additional monitoring wells were installed throughout SWMU 43 after the CMs were complete. Concentrations of benzene remained above 100 µg/L in 2021/2022 and are being monitored as part of the SWMU 43 post-implementation groundwater monitoring.
- In SWMU 19, an excavation was completed in 2016 to address lead and benzo(a)pyrene. In 2008, benzene concentrations in SWMU 19 groundwater were detected above the GWQS of 1 µg/L. However, concentrations in this area have decreased since then, and an NFA justification for SWMU 19 benzene in groundwater was approved by NJDEP on December 16, 2016. Additional LNAPL and groundwater monitoring is currently being conducted within PAOC 6, located adjacent to SWMU 19.
- In AOCs 23/41 and SWMUs 17/18, soil was excavated for the purpose of conducting ISS/ESS as well as benzene impacts in soil in 2018. Additional monitoring wells were installed throughout the area after the CMs were implemented. Concentrations of benzene remained above 100 µg/L in 2021/2022 and are being monitored as part of the SWMU 18/AOC 23-41 post-implementation groundwater monitoring.
- In AOC 44, ISCO injections were completed in 2014. After implementation, benzene concentrations continued to be above the CMI action level of 100 µg/L. Excavation and EISB injections were completed in 2019 and 2020, respectively. In 2021/2022, concentrations of benzene were detected below 100 µg/L in multiple monitoring wells within AOC 44. The upgradient and downgradient edges of this plume have reduced since 2017/2018, as shown on **Figure 11**. Concentrations of benzene remained above 100 µg/L in 2021/2022 and are being monitored as part of the SWMU 43 post-implementation groundwater monitoring.
- In SWMUs 6/7/16/40, excavation was completed in 2016 to address benzo(a)pyrene and lead in soil. In 2020, excavation and ISCO soil mixing were implemented to address benzene-impacted soil and groundwater. Benzene concentrations in groundwater were detected above 1,000 µg/L in MW-125 and MW-243 in 2008. These concentrations reduced to less than 1,000 µg/L in MW-125 and less than 10 µg/L in MW-243R in 2017/2018. Monitoring wells MW-603 and MW-604 were installed after the CMs were implemented, and concentrations of benzene are above 1,000 µg/L. This Main Yard Plume area is currently being monitored as part of the post-implementation groundwater sampling.
- In AOC 8, benzene concentrations in MW-265 remained above 100 µg/L between 2008 and 2017/2018. An air sparging/SVE CM was started in January 2021. Additional AOC 8 monitoring wells were installed during the air sparge/SVE CM. Concentrations of benzene are currently above 1,000 µg/L in MW-265R, MW-589, and

MW-598R and are being monitored as part of the AOC 8 performance groundwater sampling.

- In AOC 50, a remedial excavation to address lead and benzene in soil in the southern portion of AOC 50 was completed in 2017. A similar excavation was completed in the northern portion of AOC 50 in January 2019. A biosparge system was started in December 2020, and groundwater is currently being monitored as part of the system operations. Benzene concentrations remain above 100 µg/L in MW-521 in the southern portion of AOC 50. However, they are below 10 µg/L in MW-579 in the northern biosparge area.

Details of each of these remedial actions were submitted under prior reports. . Currently, only three of these areas have benzene concentrations in groundwater above 1,000 µg/L, and nine areas have benzene concentrations above the CMI action limit of 100 µg/L (**Appendix A**, **Figure 10**). Additionally, the area near SWMU 39, east of SWMU 43, and south of SWMU 19 and AOC 44 have shown reductions of benzene concentrations to below GWQS of 1 µg/L (**Figures 10** and **11**). A comparison of benzene concentrations and locations between 2018 and 2022 demonstrates that the plumes in this Yard are stable or shrinking into themselves. A detailed discussion on benzene plume footprints is below.

Based on the latest available data, benzene has been detected above the CMI action level in the following areas within the Main Yard: AOC 8, AOC 9A, AOC 41, AOC 44, AOC 50 South, SWMU 6, SWMU 16, SWMU 18, SWMU 24, and SWMU 43. Benzene is currently above the GWQS of 1 µg/L in the following areas within the Main Yard: AOC 50 North, SWMU 35, and SWMU 39.

8.1.2.3 East Yard

In 2008, the East Yard was characterized by several plumes extending downgradient from six source areas. The following CMI activities have been conducted since 2008:

- SWMU 8, located in the northeastern corner of the East Yard, received two rounds of ISCO injections in 2013. and ESS for lead was completed in 2016. In 2008, benzene concentrations in MW-132 were greater than 100 µg/L. Concentrations in MW-132R had been reduced to less than 10 µg/L in 2017-2022, and the SWMU 8 benzene plume extent is reduced as compared to 2008.
- Two rounds of ISCO injections were completed in SWMU 10 in 2015, and ISS/ESS for lead was completed in 2016. Concentrations of benzene in MW-131 were greater than 100 µg/L in 2008 but had decreased to below the GWQS of 1 µg/L in MW-131R in 20212022. Currently, the benzene concentration in MW-386R is above 1 µg/L.
- In 2016, an ESS CM was completed in SWMU 42 to address lead impacts in soil. Benzene concentrations in the ESS CM area (MW-227) were greater than 100 µg/L in 2008 and reduced to less than 10 µg/L in 2018 and to nondetect in 2021.
- Soils with elevated concentrations of benzene in AOCs 14 and SWMU 26 were excavated in 2017. Dissolved benzene concentrations in this area have decreased to less than 10 µg/L since 2008.
- AOC 31 was the site of electrical resistance heating system operations until 2014. ISCO injections in this area were completed in October 2018. The footprint of

concentrations exceeding 100 µg/L has been reduced (**Figures 8** through **11**), and CMs are ongoing in this area. Additionally, benzene concentrations in the downgradient portion of the plume have decreased to less than the GWQS of 1 µg/L along the northern property boundary.

- AOC 38 and AOC 39 were not identified as having elevated benzene in groundwater in 2008. However, the benzene in soil was excavated within AOC 38 in 2017, and excavation and soil mixing were completed in AOC 39 in 2018. Benzene concentrations in MW-400 remain above 100 µg/L. Benzene concentrations in MW-401 have reduced to below the GWQS of 1 µg/L.
- AOC 46 was treated via ISCO injection in 2015. Concentrations of benzene in MW-347 remain less than 10 µg/L, and the remaining wells in the area have been non-detect.
- AOC 37, located in the western portion of the East Yard, and AOC 16 EY1, located south of AOC 37, were not identified as having elevated groundwater benzene concentrations in 2008. However, excavation of benzene impacted soil in AOC 37 was completed in 2016. Soil mixing was completed in AOC 16 EY1 in 2019. Benzene concentrations in groundwater above 100 µg/L were identified in MW-296 in 2017/2018, and in MW-408R and MW-447R in 2021/2022.
- In the area of the State Street parking lot, in SWMUs 11a and 11b, benzene impacted groundwater was discovered after the 2008 CMS. Data from well TP2-018 indicate that benzene concentrations in this area exceeded 1,000 µg/L in 2009. A remedial excavation was completed in SWMU 11a in 2015, and ISCO soil mixing was completed in SWMU 11b in 2017. Data from post-CM implementation monitoring wells MW-438, MW431R and MW-509 indicate that benzene concentrations have been reduced to less than 100 µg/L in the area.

Details of each of these remedial actions have been or will be submitted under separate cover. Currently, one area of the East Yard has groundwater benzene concentrations over 1,000 µg/L, and four areas have benzene concentrations above the CMI action limit of 100 µg/L (**Appendix A**, **Figure 10**). Benzene concentrations in the AOC 46, AOC 38/39, and AOC 31 areas of the East Yard have reduced to below the GWQS of 1 µg/L since 2017/2018 (**Figure 11**). A comparison of benzene concentrations and locations between 2018 and 2022 demonstrates that the plumes in this Yard are stable or shrinking into themselves (**Figures 8** through **10**). Benzene plume footprints are discussed in detail below.

Based on the latest available data, benzene has been detected above the CMI action level in the following areas within the East Yard: AOC 16 EY1, AOC 31, AOC 38/39, and SWMU 8. These areas are being monitored as part of their area specific long term monitoring program. Benzene is above the GWQS of 1 µg/L in the following areas within the East Yard: AOC 14/26, AOC 46, and SWMU 10.

8.1.3 Summary

Since 2013, the implementation of multiple types of CMs in all three Yards at this Facility has effectively reduced both soil and LNAPL sources in several areas. CMs were chosen based on best practices for the target COC(s) and locations at the Facility. Post-implementation dissolved

benzene concentrations indicate that source removal is complete in some areas, and dissolved benzene concentrations have decreased accordingly.

Regarding the Facility as a whole, the distribution of benzene has reduced over time. This is supported by the decrease in Facility footprint for benzene concentrations above 100 µg/L, which would be under the influence of CMs. This is also supported by the decrease in the Facility footprint for benzene concentrations between 1 to 100 µg/L, which would be driven by MNA. A more detailed spatial analysis of Facility benzene plumes, over time, is provided in Section 8.2 below.

8.2 Benzene Trends in Groundwater: Spatial Analysis

As discussed above, the overall footprint of the Facility impacted by benzene at a concentration above 1 µg/L has decreased steadily over time. The total footprint reported in 2008 was 3,576,964 square feet. By the 2017/2018 monitoring period, the benzene footprint had decreased to 3,506,514 square feet. This footprint had decreased further by the 2021/2022 monitoring period to 3,217,542 square feet. This is a 10% reduction in total footprint between 2008 and 2021/2022. The remaining CMI footprint between 2008 and 2021/2022 has reduced from 289,745 to 205,335 square feet. This is more than a 29% reduction in the CMI area footprint because of various CM activities. The footprint of the total area of the facility subject to MNA has also reduced from 3,287,218 to 3,012,207 square feet during this same period. This is a footprint reduction of more than 8% due to biological attenuation of Facility benzene.

A detailed look at the yard-by-yard spatial distribution of benzene is provided below.

8.2.1 Central Yard

Overall, the spatial trend for the footprint of benzene in the Central Yard follows the trend observed for the entire Facility in that the size of the footprint has decreased substantially over time.

Footprint Size of Dissolved Benzene Concentrations – Central Yard (square feet)

Year	MNA Area (>1 µg/L and <100 µg/L)	Remaining CMI Area (>100 µg/L)	Total Footprint	Number of Monitoring Wells
2008	373,392.67	15,890.69	389,283.36	31
2017-2018	402,673.38	0	402,673.38	58
2021-2022	171,954.10	4,678.74	176,632.84	55

The total footprint for the benzene-impacted area within the Central Yard has decreased from 389,283 to 176,632 square feet between 2008 and 2021/2022. This is a 55% decrease. An evaluation of the footprint of the remaining CMI area appears to show that the footprint was totally removed between 2008 and 2017/2018, with benzene concentrations over 100 µg/L reappearing in 2021/2022. This is not the case. Instead, many additional monitoring wells

were installed in the Central Yard between 2008 and 2017/2018, particularly in the AOC 36 area (**Figures 9** and **10**). These additional monitoring points were installed specifically to target groundwater areas of interest. As a result, benzene was more accurately delineated and reported. As such, assessing the footprint of this portion of the plume in isolation gives the false impression that benzene (at a concentration above 100 µg/L) has returned to the Central Yard. In reality, this is simply an artifact of additional monitoring locations and better plume delineation resulting in a more refined model of benzene location.

Regarding the area of the Central Yard being remediated by natural attenuation, this footprint has decreased from 373,392 to 171,954 square feet (a 54% decrease) between 2008 and 2021/2022. This portion of the benzene footprint is under the influence of MNA as its CM. **Figures 8** through **10** clearly show that the two main benzene plumes in the Central Yard are retracting in towards their respective cores, as would be anticipated when biological benzene biodegradation is occurring. This is because MNA works from the lower-concentration periphery in toward the higher-concentration center of a plume. As such, the spatial trends for benzene in the Central Yard support that MNA is an active and successful contributor toward benzene reduction.

8.2.2 Main Yard

Overall, the spatial trend for the footprint of benzene in the Main Yard follows the trend observed for the whole Facility in that the size has decreased substantially over time.

Footprint Size of Dissolved Benzene Concentrations – Main Yard (square feet)

Year	MNA Area (>1 µg/L and <100 µg/L)	Remaining CMI Area (>100 µg/L)	Total Footprint	Number of Monitoring Wells
2008	2,229,723.82	180,662.35	2,410,386.17	106
2017-2018	1,627,508.72	160,839.75	1,788,348.47	123
2021-2022	2,151,309.27	163,043.21	2,314,352.47	133

Similar to the trends noted above for the Central Yard, the footprints of the MNA area, the remaining CMI area, and the total benzene area in the Main Yard have all decreased between 2008 and 2021/2022 (respectively, 4%, 10%, and 5% reductions in footprints).

Similar to the Central Yard, the Main Yard benzene footprint data over time also creates a false impression that there has been an increase in the footprint of total benzene between 2017/2018 and 2021/2022. However, this appears to be an artifact of the increased number of monitoring wells installed in the Main Yard between 2008 and 2017/2018. This increased monitoring has produced a more refined understanding of where benzene is located. This is likely also why the raw data for the footprint of the Main Yard's CMI area benzene (with a concentration over 100 µg/L) and MNA area benzene (with concentrations between 1 and 100 µg/L) appear to have increased between 2017/2018 and 2021/2022. However, additional

monitoring locations installed between these dates have simply better delineated and modeled the locations and concentrations of benzene in the Main Yard.

As visualized in **Figures 8** through **10**, benzene plumes are clearly shrinking into themselves, as would be expected when MNA is functioning. Furthermore, CMs implemented to address higher concentrations of benzene have left the Main Yard with reduced overall benzene concentrations that would be more amenable to MNA. Thus, as benzene concentrations transition from the CMI area to the lower-concentration MNA area, the overall footprint of the MNA area is expected to increase. The fact that it has actually decreased since 2008 suggests that biological attenuation in the Main Yard is functioning sufficiently to overcome areas of higher benzene concentration transitioning to areas of lower concentration.

8.2.3 East Yard

Overall, the spatial trend for the footprint of benzene in the East Yard follows that for the footprint for the whole Facility in that the size has decrease substantially over time.

Footprint Size of Dissolved Benzene Concentrations – East Yard (square feet)

Year	MNA Area	Remaining CMI Area	Total Footprint	Number of Monitoring Wells
	(>1 µg/L and <100 µg/L)	(>100 µg/L)		
2008	684,102.49	93,191.90	777,294.39	83
2017-2018	1,261,289.93	54,202.31	1,315,492.24	111
2021-2022	688,943.71	37,613.27	726,556.98	89

Similar to the Central Yard and the Main Yard, the overall MNA area footprint in the East Yard appears to have increased substantially between 2008 and 2017/2018. However, this was a time when multiple new monitoring points were established (**Figures 8** through **10**). As discussed above, this reported change in apparent footprint is likely an artifact of better plume delineation and modeling due to an increase in the number of monitoring points. This is also the driver for the apparent (but again, false) "increase" in the overall benzene footprint reported in the East Yard in 2017/2018 in comparison to 2008.

Adjusting for the fact that additional monitoring points have provided for more accurate plume delineation in 2017/2018, there has been a substantial decrease in the MNA area, CMI area, and total yard benzene footprints between 2008 and 2021/2022 (respectively, 45%, 31%, and 45% reductions). This reduction in the footprints of various benzene concentrations is illustrated in **Figures 8** through **10**.

8.2.4 Summary

The addition of more monitoring points in each of the three Yards of the Facility has resulted in more refined plume delineation and modeling. The overall spatial trends for each of the three Facility yards demonstrates that benzene footprints are decreasing over time. Moreover, the fact that footprints are decreasing in areas where MNA is the benzene CM provides a strong

line of evidence that natural attenuation is an effective and significant remedial approach to the degradation of benzene throughout the Facility.

8.3 Benzene Trends in Groundwater Including Graphical Analyses and Statistical Trends

The graphical and statistical trends of benzene concentrations above 1 µg/L in monitoring wells included in the MNA plan is provided below on a yard-by-yard basis. Locations chosen for analysis were in areas currently not in an active remediation monitoring program. In addition, all chosen locations have sufficient data collected over the past 10 years to conduct a proper statistical analysis. Finally, locations were chosen to reflect various benzene concentration ranges. Monitoring wells currently being monitored post active remediation are not included in the trend analysis. A representative number of wells within each yard are discussed below and shown in **Appendix E**.

8.3.1 Central Yard

Benzene concentrations in the Central Yard above the GWQS of 1 µg/L are located within AOC 25 and AOC 22/36. Groundwater quality data were analyzed using the Mann-Kendall statistical method, and the benzene concentrations were graphed over time to determine contamination trends. Monitoring wells MW-0055R and MW-0056R (both within AOC 22) and MW-102R, MW-217, MW-368, and MW-533 (within AOC 22/36) were analyzed, and the results are provided in in **Appendix E**.

Mann-Kendall analyses report decreasing trends for target compound benzene in monitoring wells MW-0055R, MW-0056R, MW-217, and MW-533 and probably decreasing trends in MW-368. Benzene concentrations in MW-102R are currently above 100 µg/L and demonstrates a stable trend with the Mann-Kendall Statistic (S) of -10 and a confidence factor of 78.4% since being reinstalled in 2019. The benzene concentrations plotted over time for MW-102R shows an overall decreasing trend with concentrations ranging between 70 and 240 µg/L. Prior to being abandoned in 2013, monitoring well MW-102 had benzene concentrations over 1,000 µg/L until 2007 and approximately 150 µg/L when abandoned. Soils impacted by benzene was excavated in AOC 22, adjacent to MW-102R.

8.3.2 Main Yard

Benzene concentrations in groundwater in AOC 8, AOC 9A, AOC 41, AOC 44, AOC 50 North, SWMU 6, SWMU 16, SWMU 18, SWMU 24, SWMU 35, and SWMU 43 are being monitored as part of post-remediation sampling. Benzene concentrations in groundwater above the GWQS of 1 µg/L in both AOC 50 South and SWMU 39 as well as outside of the remediation areas were evaluated as part of the MNA program. Groundwater quality data were analyzed using the Mann-Kendall statistical method, and the benzene concentrations were graphed over time to determine the contamination trends. Monitoring wells MW-374 and MW-376 in AOC 9A, MW-378 in AOC 44, MW-404R and MW-406 in AOC 39, and MW-521 in AOC 50 South were analyzed, as shown in **Appendix E**.

Mann-Kendall analyses report decreasing trends for target compound benzene in monitoring wells MW-374, MW-376, MW-378, MW-404R, MW-406, and MW-521. The benzene concentrations plotted over time for these six wells show an overall decreasing trend. Additional rounds of groundwater samples will be collected as part of the MNA sampling program in monitoring wells outside the active remediation areas to obtain enough data points to allow for a more complete trend analysis.

8.3.3 East Yard

Benzene concentrations in groundwater in AOC 14, AOC 16 EY1, AOC 31, SWMU 8, and SWMU 26 are being monitored as part of post-remediation sampling. Benzene concentrations in groundwater above the GWQS of 1 µg/L in AOC 38/39, AOC 46, and SWMU 10, as well as outside of the remediation areas, were evaluated as part of the MNA program. Groundwater benzene concentration data was analyzed using the Mann-Kendall statistical method and then graphed over time to determine the contamination trends. Monitoring wells MW-149 (AOC 14/SWMU 26), MW-292R (AOC 31), MW-347 (AOC 46), MW-386R (SWMU 10), MW-400 (AOC 39), and MW-464 (AOC 16 EY1) were analyzed as shown in **Appendix E**.

Mann-Kendall analyses report decreasing trends for target compound benzene in monitoring wells MW-292R, MW-347, MW-386R, MW-400 and MW-464 and probably decreasing trends in MW-149. Benzene concentrations in MW-149 was detected below the GWQS of 1 µg/L in the last sampling event (March 2022). Benzene concentrations in MW-400, which is located in AOC 39, are currently above 100 ug/L and demonstrate decreasing trends using both the Mann-Kendall statistical method and graphical depictions over time. Excavation of benzene impacted soil and soil mixing to address impacted groundwater was completed in AOC 39 in January 2018.

8.3.4 Summary

Benzene concentrations in groundwater from selected monitoring wells in all three Facility Yards were evaluated by both graphical (concentration versus time) and statistical methods. In general, benzene concentrations are trending downward over time. This is true for all three Facility Yards. This is a result of successful CMs as well as active MNA targeting Facility benzene.

8.4 Benzene Concentrations Over Time: Mass Discharge

Mass discharge involves assessing the movement of contaminant mass of a plume emanating from a site. There is no benzene discharge from the Facility, as visually represented in **Figures 8** through **10**. Groundwater data presented in **Appendix A** also supports this. As such, there is no benzene mass discharge from the Facility to monitor.

8.5 Summary

The implementation of multiple types of CMs in all three Yards at this Facility has effectively reduced both soil and LNAPL sources in several areas. Post-implementation dissolved benzene

concentrations indicate that source removal is complete in some areas, and dissolved benzene concentrations have decreased accordingly, likely through MNA activities.

The addition of more monitoring points in each of the three Yards since 2008 has resulted in more refined plume delineation and modeling. Regarding the Facility as a whole, the distribution of benzene has reduced over time. This trend is also seen in each of the three individual yards. The fact that benzene footprints are decreasing in areas where the benzene CM is MNA provides a strong line of evidence that natural attenuation is effectively degrading benzene throughout the Facility.

Benzene concentrations in groundwater from selected monitoring wells in all three Facility yards were evaluated by both graphical (concentration versus time) and statistical methods. In general, benzene concentrations are trending downward over time. This is true for all three Facility yards. This is a result of successful CMs as well as active MNA targeting Facility benzene.

9.0 SUMMARY OF THE IMPACT OF ISCO AND OTHER SOURCE CONTROL MEASURES ON MNA

There are two major classes of source control CMs used at this Facility: physical removal and destructive methods. Excavation is an example of a physical removal CM, where areas of high benzene concentration have been dug up and relocated. Excavation has occurred in multiple areas of the Facility, and this CM is an effective way to achieve source zone depletion (ITRC 2009). As such, this type of CM facilitates natural attenuation because biological attenuation functions from the periphery of a plume, working inward toward the plume core (Wiedemeier et al. 1999). By removing the higher benzene concentrations found in a plume core (including LNAPL), there is subsequently no longer a source from which the remaining lower concentrations can be replenished. The remaining reduced concentration of target compound is much easier for natural attenuation to address (Wiedemeier et al. 1999). As such, natural attenuation can make accelerate the break- down of remaining product once source material is removed. A detailed discussion on the mechanisms of how source removal facilitates natural attenuation is beyond the scope of this document.

The second major classification of source control used at this Facility includes those CMs that are destructive in nature. Using ISCO as an example, the strategic injection of materials that chemically destroy a target compound in-situ will result in a reduction of COC mass within the targeted area. The targeted area for an ISCO event will commonly include a plume's core. Oftentimes, ISCO events involve the injection of sulfate-based compounds such as sodium persulfate and potassium persulfate to oxidize organic COCs in soil and groundwater. Sodium persulfate readily dissolves to initially oxidize organics over a short time frame. Potassium persulfate, however, dissolves more slowly, and its longer residence time allows for oxidation of organics over longer periods. The intent of oxidant and activator placement is to remediate COCs within the treatment areas as well as in adjacent areas that cannot be accessed for excavation or soil mixing (e.g., beneath above-ground storage tanks, within buffer zones). The persulfate oxidation reaction can also enhance biological degradation of organics by increasing the concentration of sulfate in groundwater, which can then be used by indigenous sulfate-reducing microbes during COC biodegradation processes.

Additionally, as with the above-described excavation process, ISCO and other in-situ destructive CMs typically leave residual target compound with a much lower overall concentration than what existed prior to treatment. This residual material can be more easily addressed by natural attenuation. ISCO and other destructive treatments (including EISB, as was employed in AOC 36 in the Central Yard to target non-benzene COCs) can significantly alter the subsurface geochemistry because of the materials injected during the CM process. However, benzene is known to biodegrade under a wide range of environmental conditions. As such, as long as an indigenous microbial population is able to adjust to the new subsurface environment and re-establish a strong enough population, natural attenuation will be maintained (Wiedemeier et al. 1999).

In summary, source reduction is occurring at this Facility through CMs that function by the physical removal of material or through in-situ material destruction. These source removal CMs have decreased benzene concentrations such that MNA can function more efficiently to further reduce concentrations. Details about specific locations where excavation, ISCO, or other source reducing CMs have been implemented can be found in Section 7.

10.0 SUMMARY OF ANY OTHER MNA RESULTS OBTAINED IN CONJUCTION WITH ISCO ACTIVITIES

When ISCO CMs are proposed for the Facility, a permit-by-rule (PBR) allowing the activity must be issued by the NJDEP. The PBR authorizing the ISCO CM also directs the ISCO-related post-implementation groundwater monitoring that is required to occur. Typically, as part of the PBR, 3- and 6- month remedial effectiveness performance monitoring, sampling occurs following conclusion of the remedy. This monitoring is to confirm reduction of contaminant mass as per the remedial design objective. Following the 2 rounds of performance monitoring, the area transitions to long-term monitoring, which typically includes 8 quarters of data (including the 3- and 6-month data) to evaluate MNA applicability. This will also help determine if groundwater quality has returned to baseline conditions, and some monitoring wells may be transitioned to the MNA program.

As an example of this process, the monitoring of the ISCO CM that occurred in AOC 23, AOC 41, and SWMU 18 (in the Main Yard) will be discussed below (**Figure 3**).

Soil and groundwater in AOC 23, AOC 41, and SWMU 18 treatment areas exceeded the RCRA CMI action levels for benzene in soil (13 mg/kg) and/or groundwater (100 ug/L) (**Appendix A**). As such, it was decided that ISCO was the best treatment option for this area of the Facility. In response to a Facility application, the NJDEP responded in a letter dated September 17, 2020, authorizing the ISCO CM (NJDEP 2020). Section II of this letter described the system operation and monitoring parameters that needed to be maintained during the CM activity. Section III of this letter outlined the post-implementation groundwater monitoring program that would be in place.

Post-implementation monitoring instructions for this area of the Facility included (but were not limited to) the identification of specific groundwater monitoring locations (MW-260RR, MW-261R, MW-267R, MW-551 and MW-550). Additionally, instructions regarding groundwater monitoring were given. For this event, groundwater monitoring was to be performed for VOC+TICs, SVOC+TICs, sulfate, total dissolved solids. In addition, a list of field parameters to be monitored was also provided that included pH, DO, ORP, temperature, turbidity, specific conductivity, and persulfate. Monitoring well sampling was to be performed at 3 months and 6 months after the completion of amendment placement. The results of this post-implementation monitoring can be found in **Appendix A** and **Appendix B**.

Thus, as detailed through the above example, ISCO CM activities are followed by a monitoring program that includes MNA-related parameters such as sulfate and DO concentrations, as well as ORP values. Once required post-remedial conditions have been achieved, the monitoring well will transition into the MNA program.

11.0 CONCLUSIONS

An evaluation of MNA at the Facility indicates that natural attenuation processes are occurring. This is based on the following lines of evidence:

- Benzene has been largely contained on site over decades of time.
- Benzene concentrations and footprint size are decreasing, including in areas not targeted by any active CM reduction methods such as ISCO or excavation.
- MNA geochemical indicators support that Facility conditions are favorable for MNA and demonstrate a clear fingerprint of active MNA.
- Direct molecular analyses in multiple Facility Yards have proven that the indigenous microbial population contains known benzene biodegraders, and these populations have been quantified.
- Direct molecular analyses conducted on groundwater from multiple Facility Yards have quantified multiple metabolic functions associated with benzene bioattenuation.
- Benzene biodegradation is known to occur at the Facility by indigenous subsurface microbes, as demonstrated through SIP analyses.
- Benzene concentrations show decreasing trends demonstrated by graphical analysis and statistical tests.

A comparison of the footprint of various concentrations of benzene since 2008 shows that benzene remains contained at the Facility (**Figures 8** through **10**). As important, benzene concentrations continue to decrease, even in areas where active remediation has not occurred. Furthermore, the actual benzene footprint has decreased since 2008. This is particularly true in areas of mid- to- lower benzene concentrations, which would be the most amenable to biodegradation.

An evaluation of groundwater chemistry shows that conditions present in the subsurface match those that are known to support benzene bioattenuation. Additionally, an assessment of MNA geochemical parameters for each of the three yards shows that a clear fingerprint of biological hydrocarbon degradation is present. The observed, overall trend is that background monitoring wells demonstrated the least reduced environments. The degree of reduction increased as benzene concentrations increased. This was consistently supported by current benzene concentrations as well as multiple MNA geochemical parameters, including concentrations of nitrate, ferrous iron, sulfate, and reported ORP values. This fingerprint would not be seen if only abiotic processes are degrading site contaminants.

A series of analyses have been conducted in multiple yards of the Facility to directly evaluate indigenous microbes potentially involved with the bioattenuation of benzene. The use of stable-isotope analyses has confirmed that benzene bioattenuation by native Facility microbes is actively occurring. In addition, multiple different molecular technologies have identified numerous naturally occurring microbial populations capable of biodegrading benzene as well as their benzene-biodegrading metabolic pathways. Because this stable-isotope and molecular data directly evaluates groundwater microbes, they strongly support the various indirect groundwater geochemical data reflecting that benzene is being naturally degraded at this Facility.

12.0 RECOMMENDATIONS

Two recommended future actions for the Facility were identified during development of this MNA Annual Report.

Because this is the first of two annual reports, it is logical that the first recommendation will be that the list of monitoring wells included in the MNA sampling program be updated in accordance with the sampling plan outline in Section 5.1 above.

Although this report is focused on the MNA of benzene, this hydrocarbon is not the only COC that must be evaluated and tracked at this Facility. Some of these COCs, such as chlorinated ethenes and ethanes, are also amenable to bioattenuation. In fact, many of the same parameters used to indirectly assess the MNA of benzene can also help with an MNA evaluation of these other compounds. In addition, many of these other COCs are co-located in areas of current or historical benzene impacts. As such, a second recommendation is that a single, comprehensive Facility-wide monitoring program be developed covering the COCs relevant to regulatory closure for this Facility. This will provide a more effective and efficient monitoring approach and will help to better identify areas that could qualify for an NFA ruling.

13.0 REFERENCES

ASTM Standard E3354, 2022, "Standard Guide for Application of Molecular Biological Tools to Assess Biological Processes at Contaminated Sites," ASTM International, West Conshohocken, PA, 2022, DOI: 10.1520/E3354–22, www.astm.org.

Chevron. 2008a. Corrective Measures Study Report for the Main Yard, East Yard and Central Yard. November.

Chevron. 2008b. Analysis of Geochemical Parameters for Natural Attenuation of Dissolved Hydrocarbons in Groundwater. December.

Chevron, 2016a. Perth Amboy Facility Corrective Measures Implementation Sampling and Analysis Plan/Quality Assurance Project Plan. January.

Chevron, 2016b. Area of Concern 25 Implementation Work Plan. August.

Chevron, 2017a. Waste Management Plan, Former Chevron Perth Amboy Facility. August.

Chevron, 2017b. Data Management Plan 3.0, Former Chevron Perth Amboy Facility. November.

Chevron. 2018a. First Quarter 2018 Progress Report, May 30.

Chevron. 2018b. Enhanced In-Situ Bioremediation Implementation Work Plan, MW-216/MW-220 and MW-367 Areas, Area of Concern 36, Former Chevron Perth Amboy Facility. May.

Chevron. 2019a. Area of Concern 25 Construction Completion Report. January.

Chevron, 2019b. Field Sampling and Analysis Plan – Quality Assurance Project Plan (FSAP-QAPP). August.

Chevron. 2019c. Discharge to Groundwater / Permit By Rule Monitoring Report for Enhanced In-Situ Bioremediation (EISB) Area of Concern 36, MW-216/MW-220 and MW-367 Areas. September.

Chevron, 2019d. Enhanced In-Situ Bioremediation (EISB) Implementation Work Plan (IWP) for Area of Concern 44 Report. October

Chevron. (Revised) 2019e. Monitored Natural Attenuation Implementation Work Plan. December.

Chevron, 2022. First Quarter 2022 Progress Report for the Hazardous and Solid Waste Amendment Permit. May

Chevron. 2022. Long Term Monitoring Report for Area of Concern 36 Enhanced In-Situ Bioremediation. July.

Fedrizzi, F., D.T. Ramos, H.S. Lazzarin, M. Fernandes, C. Larose, T.M. Vogel, and H.X. Corseuil. 2017. A Modified Approach for In-Situ Chemical Oxidation Coupled to Biodegradation Enhances Light Nonaqueous Phase Liquid Source-Zone Remediation. Environmental Science and Technology. 51(1): 463-472.

ITRC. 2009. Evaluating LNAPL Remedial Technologies for Achieving Project Goals

NJDEP. 2005. NJDEP Field Sampling Procedures Manual.

NJDEP. 2012a. Technical Requirements for Site Remediation. N.J.A.C. 7:26E. May 7.

NJDEP. 2012b. Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C, May 7.

NJDEP. 2018. Ground Water Quality Standards (N.J.A.C. 7:9C).

NJDEP. 2020. Discharge to Ground Water Authorization – AOC 23 AOC 41 SWMU 18 (Letter to the Chevron Perth Amboy Facility). September.

NJDEP. 2022. Monitored Natural Attenuation Technical Guidance. September 20.

Polli, F., D. Zingaretti, S. Crognale, L. Pesciaroli, A. D'Annibale, M. Petruccioli, and R. Baciocchi. 2018. Impact of the Fenton-like treatment on the microbial community of a diesel-contaminated soil. Chemosphere. 191:580-588.

Sutton, N.B., S. Atashgahi, J. van der Wal, G. Wijn, T. Grotenhuis, H. Smidt, and H.H. Rihnaarts. 2015. Microbial dynamics during and after in situ chemical oxidation of chlorinated solvents. Groundwater. 53(2) 261-270.

Talley, J.W. Bioremediation of Recalcitrant Compounds. CRC Press. 2006. Boca Raton.

USEPA. 1994. Resource Conservation and Recovery Act Corrective Action Plan Guidance.

USEPA. 1999. Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action, and Underground Storage Tank Sites. April.

Wiedemeier, T.H., L.A. Benson, J.T. Wilson, D.H. Kampbell, J.E. Hansen, and R. Miknis. 1996. Patterns of Natural Attenuation of Chlorinated Aliphatic Hydrocarbons at Plattsburgh Air Force Base, New York: Platform Abstract of the Conference on Intrinsic Remediation of Chlorinated Solvents. Salt Lake City, UT. April 2.

Wiedemeier, T.H., J.T. Wilson, D.H. Kampbell, R.N. Miller, and J.E. Hansen. 1999. Technical Protocol for Implementing Intrinsic Remediation with Long-Term Monitoring for Natural Attenuation of Fuel Contamination Dissolved in Groundwater; Volume 1. AFCEE; Brooks AFB. San Antonio TX.

Young, R.N. and C.N. Mulligan. Natural Attenuation of Contaminants in Soils. CRC Press, Boca Raton. 2003.

TABLE

Table 1
NJDEP Groundwater Quality Standards
Monitored Natural Attenuation
Chevron Perth Amboy Facility

Constituent	Applicable Cleanup Standard (µg/L)
Volatile Organic Compounds	
1,1 Dichloroethene	1
1,1,1-Trichloroethane	30
1,1,2,2-Tetrachloroethane	1
1,1,2-Trichloroethane	3
1,1,2-Trichlorotrifluoroethane (Freon 113)	20000
1,1-Dichloroethane	50
1,2,4-Trichlorobenzene	9
1,2-Dibromo-3-chloropropane (DBCP)	0.02
1,2-Dibromoethane	0.03
1,2-Dichlorobenzene (o-Dichlorobenzene)	600
1,2-Dichloroethane	2
1,2-Dichloropropane	1
1,2-Diphenylhydrazine	NC
1,3-Dichlorobenzene	600
1,4-Dichlorobenzene	75
2-Butanone (Methyl ethyl ketone)	300
2-Hexanone	40
4-Methyl-2-pentanone	NC
Acetone	6,000
Benzene	1
Benzidine	20
Bromodichloromethane	1
Bromoform	4
Bromomethane (Methyl bromide)	10
Carbon Dioxide	NC
Carbon disulfide	700
Carbon Tetrachloride	1
Chlorobenzene	50
Chloroethane	NC
Chloroform	70
Chloromethane (Methyl chloride)	NC
cis-1,2-Dichloroethene	70
cis-1,3-Dichloropropene	1
Cyclohexane	NC
Dibromochloromethane	1
Dichlorodifluoromethane (Freon 12)	1,000
Ethane	NC
Ethene	NC
Ethylbenzene	700
Isopropylbenzene	700
Methane	NC
Methyl acetate	7,000
Methyl-t-butyl ether	70
Methylcyclohexane	NC
Methylene chloride (Dichloromethane)	3
Styrene	100
Tetrachloroethene	1
Toluene	600
trans-1,2-Dichloroethene	100
trans-1,3-Dichloropropene	1

Table 1
NJDEP Groundwater Quality Standards
Monitored Natural Attenuation
Chevron Perth Amboy Facility

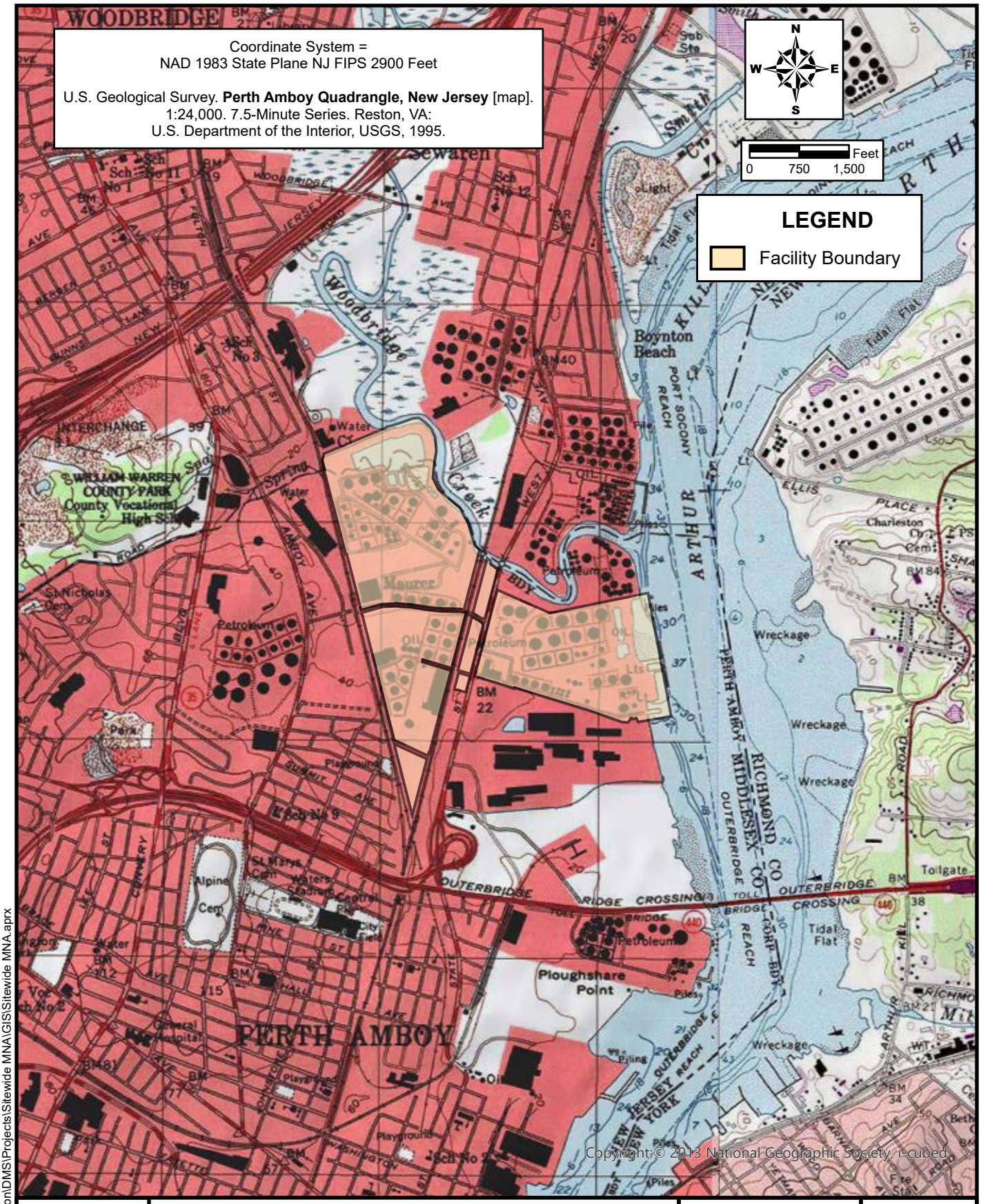
Constituent	Applicable Cleanup Standard (µg/L)
Trichloroethene (Trichloroethylene)	1
Trichlorofluoromethane (Freon 11)	2,000
Vinyl chloride (Chloroethene)	1
Xylene (total)	1,000
Geochemistry	
Ferrous Iron	NC
Iron	300
Iron, Total Recoverable	NC
Methane	NC
Nitrogen, Nitrate as N	10,000
Nitrogen, Nitrite	1,000
Sulfate (SO4)	250,000
Semi-Volatile Organic Compounds	
2,4,5-Trichlorophenol	700
2,4,6-Trichlorophenol	20
2,4-Dichlorophenol	20
2,4-Dimethylphenol	100
2,4-Dinitrophenol	40
2,4-Dinitrotoluene	10
2,6-Dinitrotoluene	5
2-Chloronaphthalene	600
2-Chlorophenol (o-Chlorophenol)	40
2-Methylnaphthalene	30
2-Methylphenol (o-Cresol)	NC
2-Nitroaniline (o-Nitroaniline)	NC
2-Nitrophenol (o-Nitrophenol)	NC
3,3'-Dichlorobenzidine	30
3-Nitroaniline	NC
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-creso	0.7
4-Bromophenylphenylether	NC
4-Chloroaniline	30
4-Chlorophenyl phenyl ether	NC
4-Methylphenol (p-Cresol)	NC
4-Nitroaniline	NC
4-Nitrophenol	NC
Acenaphthene	400
Acenaphthylene	NC
Acetophenone	700
Anthracene	2,000
Atrazine	3
Benzaldehyde	NC
Benzo(a)anthracene	0.1
Benzo(a)pyrene	0.1
Benzo(b)fluoranthene	0.2
Benzo(g,h,i)perylene	NC
Benzo(k)fluoranthene	0.5
bis(2-Chloroethoxy)methane	NC
bis(2-Chloroethyl) ether	7
bis(2-chloroisopropyl) ether	300
bis(2-Ethylhexyl)phthalate	3
Butylbenzylphthalate	100

Table 1
NJDEP Groundwater Quality Standards
Monitored Natural Attenuation
Chevron Perth Amboy Facility

Constituent	Applicable Cleanup Standard (µg/L)
Caprolactam	4,000
Carbazole	NC
Chrysene	5
Di-n-butylphthalate	700
Di-n-octylphthalate	100
Dibenz(a,h)anthracene	0.3
Dibenzofuran	NC
Diethylphthalate	6,000
Dimethyl phthalate	NC
Diphenyl (Biphenyl, Phenyl benzene)	400
Fluoranthene	300
Fluorene	300
Hexachlorobenzene	0.02
Hexachlorobutadiene	1
Hexachlorocyclopentadiene	40
Hexachloroethane	7
Indeno(1,2,3-cd)Pyrene	0.2
Isophorone	40
N-Nitrosodi-n-propylamine	10
N-Nitrosodimethylamine	0.8
N-Nitrosodiphenylamine (Diphenylamine)	10
Naphthalene	300
Nitrobenzene	6
p-Chloro-m-cresol	NC
Pentachlorophenol	0.3
Phenanthrene	NC
Phenol	2,000
Pyrene	200

Notes:
The above values were obtained from the N.J.A.C 7:9C Class II-A Ground
NC - No Criteria

FIGURES



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Chevron

SITE LOCATION ON A USGS MAP

DATE: 7/5/2022	DWN: ADW
	CHKD: JL
PROJECT #: 452874-09200	FIG #: 1

Path: C:\Projects\Chevron\DMS\Projects\Sitewide MNA\GIS\Sitewide MNA.aprx

NOTE:
Aerial photograph dated October 2017 was provided by Parsons.

AERIAL PHOTOGRAPH OF FORMER CHEVRON PERTH AMBOY FACILITY

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	7/5/2022	ADW	JL	2

Path: C:\Projects\Chevron\DMS\Projects\Sitewide MNA\GIS\Sitewide MNA.aprx

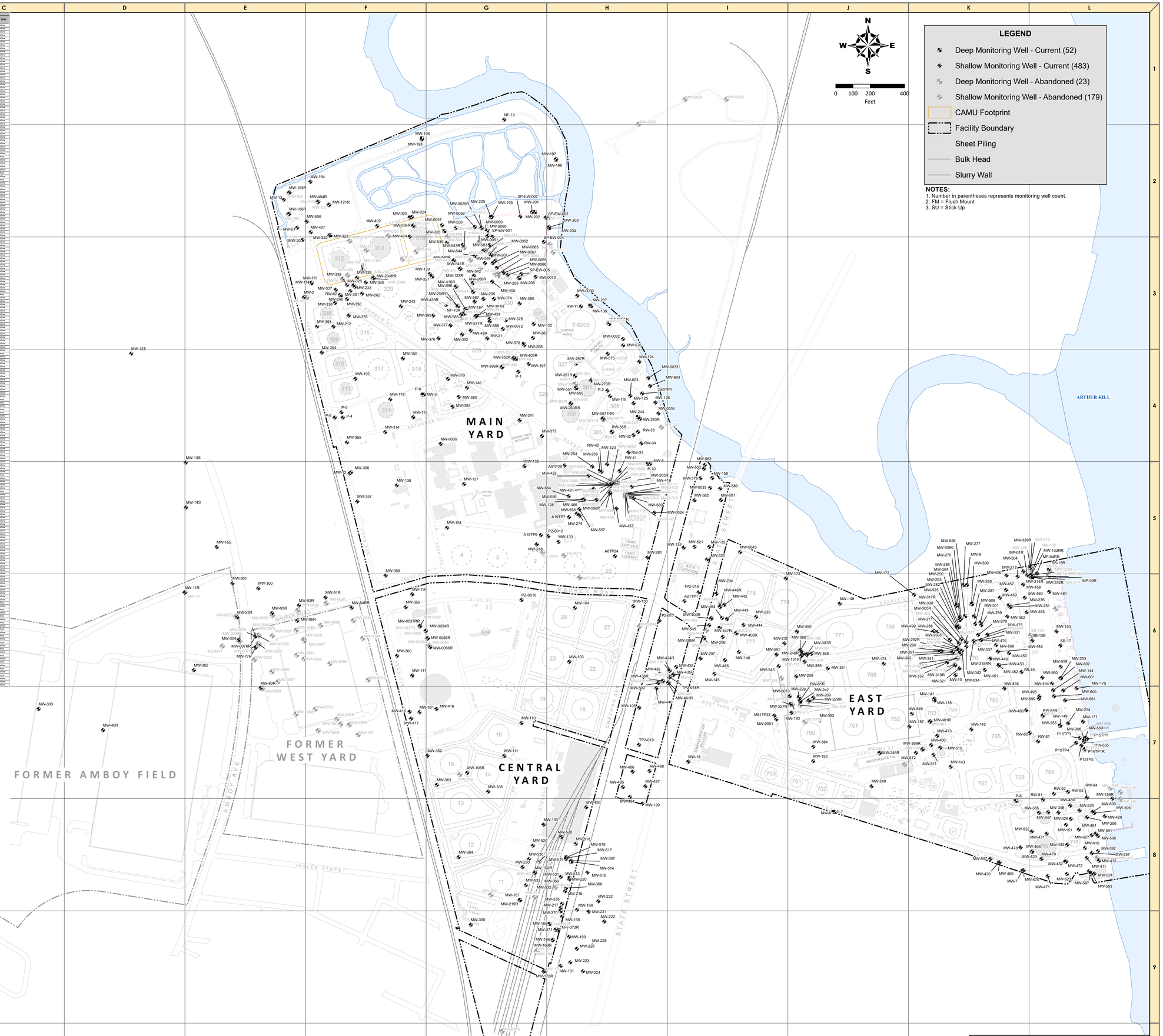
NOTE:
Aerial photograph dated October 2017 was provided by Parsons.

AERIAL PHOTOGRAPH OF FORMER CHEVRON PERTH AMBOY FACILITY WITH AOC AND SWMU BOUNDARIES

Chevron

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	7/5/2022	ADW	JL	3



LEGEND

- Deep Monitoring Well - Current (52)
- Shallow Monitoring Well - Current (483)
- Deep Monitoring Well - Abandoned (23)
- Shallow Monitoring Well - Abandoned (179)
- CAMU Footprint
- Facility Boundary
- Sheet Piling
- Bulk Head
- Slurry Wall

NOTES:
1. Number in parentheses represents monitoring well count.
2. FM = Flush Mount
3. SU = Stick Up

Current Monitoring Wells List

LOCATION ID	GRID COL.	DATE INSTALLED	YARD	CAP. ZONE	TYPE	LOCATION ID	GRID COL.	DATE INSTALLED	YARD	CAP. ZONE	TYPE
A12TP1	J15	11/15/2002	Main Yard	Shallow	FM	MW-367	H8	5/7/2015	Central Yard	Shallow	FM
A12TP2	H5	11/15/2002	Main Yard	Shallow	FM	MW-368	H8	5/8/2015	Central Yard	Shallow	FM
A12TP3	I6	9/30/2002	Main Yard	Shallow	SU	MW-369	H8	5/20/2015	Central Yard	Shallow	FM
A8TP16	H5	11/15/2002	Main Yard	Shallow	FM	MW-370	H8	5/26/2015	Central Yard	Deep	FM
A8TP19	H5	11/7/2002	Main Yard	Shallow	FM	MW-371	H8	5/22/2015	Central Yard	Deep	FM
A9TP24	I6	9/30/2002	East Yard	Shallow	SU	MW-372	I6	6/10/2015	Central Yard	Shallow	SU
MP-01R	K5	8/14/2018	East Yard	Shallow	FM	MW-373	G4	6/2/2014	Main Yard	Shallow	FM
MP-03R	L6	6/17/2016	East Yard	Shallow	FM	MW-374	G3	8/20/2013	Main Yard	Shallow	SU
MP-04RR	L5	6/21/2016	East Yard	Shallow	FM	MW-375	G3	8/22/2013	Main Yard	Shallow	SU
MW-002R	M5	6/14/2005	Main Yard	Shallow	SU	MW-376	G3	8/21/2013	Main Yard	Shallow	SU
MW-003R	H3	3/17/2017	Main Yard	Shallow	SU	MW-378	F3	5/16/2013	Main Yard	Shallow	SU
MW-005R	H3	3/28/2013	Main Yard	Shallow	SU	MW-379	G4	5/15/2013	Main Yard	Shallow	FM
MW-006R	H3	3/27/2013	Main Yard	Shallow	SU	MW-380	G4	8/27/2013	Main Yard	Shallow	SU
MW-007R	H3	3/18/2017	Main Yard	Shallow	SU	MW-381	J6	9/19/2013	East Yard	Shallow	FM
MW-008R	H3	3/28/2013	Main Yard	Shallow	SU	MW-382	J6	9/20/2013	East Yard	Shallow	FM
MW-009R	H3	3/18/2017	Main Yard	Shallow	SU	MW-383	J7	10/4/2013	East Yard	Shallow	FM
MW-0037RR	F4	10/20/2014	Central Yard	Shallow	FM	MW-384	J7	10/4/2013	East Yard	Shallow	FM
MW-0038R	G4	2/20/1998	Main Yard	Shallow	SU	MW-385	J7	9/18/2013	East Yard	Shallow	FM
MW-0043	I5	2/10/1998	East Yard	Shallow	SU	MW-386R	J6	5/11/2016	East Yard	Shallow	SU
MW-0044	I5	2/10/1998	East Yard	Shallow	SU	MW-387R	J6	5/12/2016	East Yard	Shallow	SU
MW-0053	I5	3/10/1997	East Yard	Shallow	SU	MW-388	J6	5/20/2016	East Yard	Shallow	SU
MW-0059R	G6	10/20/2014	Central Yard	Shallow	SU	MW-389	J6	9/18/2013	East Yard	Shallow	FM
MW-0060	G6	11/1/2016	Central Yard	Shallow	SU	MW-390	J6	9/19/2013	East Yard	Shallow	FM
MW-0072	G2	2/21/2000	Main Yard	Shallow	SU	MW-391R	J6	5/11/2016	East Yard	Shallow	SU
MW-0073	G2	2/21/2000	Main Yard	Shallow	SU	MW-392	J6	5/12/2016	East Yard	Shallow	SU
MW-0074	G2	2/21/2000	Main Yard	Shallow	SU	MW-393	J6	5/20/2016	East Yard	Shallow	SU
MW-0075	G2	2/21/2000	Main Yard	Shallow	SU	MW-394R	J6	5/11/2016	East Yard	Shallow	SU
MW-0082	G3	2/24/2000	Main Yard	Shallow	SU	MW-397	G8	1/24/2014	Main Yard	Shallow	SU
MW-0083	G3	2/24/2000	Main Yard	Shallow	SU	MW-398	G8	1/24/2014	Main Yard	Shallow	SU
MW-0084	G3	2/25/2000	Main Yard	Shallow	SU	MW-399R	G8	1/30/2014	Main Yard	Shallow	SU
MW-0085	G3	4/25/2000	Main Yard	Shallow	SU	MW-400	A7	9/30/2014	East Yard	Shallow	FM
MW-0087	G3	3/1/2000	Main Yard	Shallow	SU	MW-401R	A7	10/16/2014	East Yard	Shallow	FM
MW-0091	G3	3/21/2000	Main Yard	Shallow	SU	MW-402	F3	6/11/2014	Main Yard	Shallow	SU
MW-0092	G3	3/21/2000	Main Yard	Shallow	SU	MW-403	F3	6/11/2014	Main Yard	Shallow	SU
MW-0093	G3	3/21/2000	Main Yard	Shallow	SU	MW-404R	G4	5/12/2014	Main Yard	Shallow	SU
MW-0094	G3	4/21/2000	Main Yard	Shallow	SU	MW-405	G3	5/12/2014	Main Yard	Shallow	SU
MW-0095	G3	4/21/2000	Main Yard	Shallow	SU	MW-406	G3	5/8/2014	Main Yard	Shallow	SU
MW-0096	G3	4/21/2000	Main Yard	Shallow	SU	MW-407	G3	5/8/2014	Main Yard	Shallow	SU
MW-0097	G3	4/21/2000	Main Yard	Shallow	SU	MW-408	G7	9/30/1999	Former Yard	Shallow	FM
MW-0098	G3	4/21/2000	Main Yard	Shallow	SU	MW-409	G7	9/30/1999	Former Yard	Shallow	FM
MW-0099	G3	4/21/2000	Main Yard	Shallow	SU	MW-410	G7	4/24/2015	East Yard	Shallow	SU
MW-0100	G3	4/21/2000	Main Yard	Shallow	SU	MW-411	G8	6/3/2014	East Yard	Shallow	SU
MW-0101	G3	4/21/2000	Main Yard	Shallow	SU	MW-412	G8	6/3/2014	East Yard	Shallow	SU
MW-0102	G3	4/21/2000	Main Yard	Shallow	SU	MW-413	G7	6/4/2014	East Yard	Shallow	SU
MW-0103	G3	4/21/2000	Main Yard	Shallow	SU	MW-414	G7	6/4/2014	East Yard	Shallow	SU
MW-0104	G3	4/21/2000	Main Yard	Shallow	SU	MW-415	H7	6/5/2014	East Yard	Shallow	SU
MW-0105	G3	4/21/2000	Main Yard	Shallow	SU	MW-416	F7	4/24/2015	East Yard	Shallow	SU
MW-0106	G3	4/21/2000	Main Yard	Shallow	SU	MW-417	F7	4/24/2015	East Yard	Shallow	SU
MW-0107	G3	4/21/2000	Main Yard	Shallow	SU	MW-418	G7	5/29/2014	Main Yard	Shallow	SU
MW-0108	G3	4/21/2000	Main Yard	Shallow	SU	MW-419	G7	5/29/2014	Main Yard	Shallow	SU
MW-0109	G3	4/21/2000	Main Yard	Shallow	SU	MW-420	G7	6/3/2014	Main Yard	Shallow	SU
MW-0110	G3	4/21/2000	Main Yard	Shallow	SU	MW-421	H5	6/19/2015	Main Yard	Shallow	FM
MW-0111	G3	4/21/2000	Main Yard	Shallow	SU	MW-422	H5	6/19/2015	Main Yard	Shallow	FM
MW-0112	G3	4/21/2000	Main Yard	Shallow	SU	MW-423	H5	6/30/2015	Main Yard	Shallow	SU
MW-0113	G3	4/21/2000	Main Yard	Shallow	SU	MW-424	H5	6/30/2015	Main Yard	Shallow	SU
MW-0114	G3	4/21/2000	Main Yard	Shallow	SU	MW-425	G3	6/19/2015	East Yard	Shallow	SU
MW-0115	G3	4/21/2000	Main Yard	Shallow	SU	MW-426	G3	6/19/2015	East Yard	Shallow	SU
MW-0116	G3	4/21/2000	Main Yard	Shallow	SU	MW-427	G8	8/8/2015	East Yard	Shallow	SU
MW-0117	G3	4/21/2000	Main Yard	Shallow	SU	MW-428	G8	8/8/2015	East Yard	Shallow	SU
MW-0118	G3	4/21/2000	Main Yard	Shallow	SU	MW-429	G8	8/12/2015	East Yard	Shallow	SU
MW-0119	G3	4/21/2000	Main Yard	Shallow	SU	MW-430	H4	8/10/2015	East Yard	Shallow	SU
MW-0120	G3	4/21/2000	Main Yard	Shallow	SU	MW-431	H4	8/10/2015	East Yard	Shallow	SU
MW-0121	G3	4/21/2000	Main Yard	Shallow	SU	MW-432	G8	8/12/2015	East Yard	Shallow	SU
MW-0122	G3	4/21/2000	Main Yard	Shallow	SU	MW-433	G8	8/12/2015	East Yard	Shallow	SU
MW-0123	G3	4/21/2000	Main Yard	Shallow	SU	MW-434	G8	8/12/2015	East Yard	Shallow	SU
MW-0124	G3	4/21/2000	Main Yard	Shallow	SU	MW-435	G3	11/3/2015	Main Yard	Shallow	SU
MW-0125	G3	4/21/2000	Main Yard	Shallow	SU	MW-436	G3	11/3/2015	Main Yard	Shallow	SU
MW-0126	G3	4/21/2000	Main Yard	Shallow	SU	MW-437	G3	11/3/2015	Main Yard	Shallow	SU
MW-0127	G3	4/21/2000	Main Yard	Shallow	SU	MW-438	G3	11/3/2015	Main Yard	Shallow	SU
MW-0128	G3	4/21/2000	Main Yard	Shallow	SU	MW-439	G3	11/3/2015	Main Yard	Shallow	SU
MW-0129	G3	4/21/2000	Main Yard	Shallow	SU	MW-440	G3	11/3/2015	Main Yard	Shallow	SU
MW-0130	G3	4/21/2000	Main Yard	Shallow	SU	MW-441	H6	11/18/2016	Central Yard	Shallow	SU
MW-0131	G3	4/21/2000	Main Yard	Shallow	SU	MW-442	H6	11/18/2016	Central Yard	Shallow	SU
MW-0132	G3	4/21/2000	Main Yard	Shallow	SU	MW-443	H6	8/1/2016	Central Yard	Shallow	SU
MW-0133	G3	4/21/2000	Main Yard	Shallow	SU	MW-444	H6	11/18/2016	Central Yard	Shallow	SU
MW-0134	G3	4/21/2000	Main Yard	Shallow	SU	MW-445	H5	6/6/2016	Main Yard	Shallow	SU
MW-0135	G3	4/21/2000	Main Yard	Shallow	SU	MW-446	H5	6/6/2016	Main Yard	Shallow	SU
MW-0136	G3	4/21/2000	Main Yard	Shallow	SU	MW-447	H5	6/6/2016	Main Yard	Shallow	SU
MW-0137	G3	4/21/2000	Main Yard	Shallow	SU	MW-448	H5	6/6/2016	Main Yard	Shallow	SU
MW-0138	G3	4/21/2000	Main Yard	Shallow	SU	MW-449	H5	6/6/2016	Main Yard	Shallow	SU
MW-0139	G3	4/21/2000	Main Yard	Shallow	SU	MW-450	H5	6/6/2016	Main Yard	Shallow	SU
MW-0140	G3	4/21/2000	Main Yard	Shallow	SU	MW-451	H5	6/6/2016	Main Yard	Shallow	SU
MW-0141	G3	4/21/2000	Main Yard	Shallow	SU	MW-452	H5	6/6/2016	Main Yard	Shallow	SU
MW-0142	G3	4/21/2000	Main Yard	Shallow	SU	MW-453	H5	6/6/2016	Main Yard	Shallow	SU
MW-0143	G3	4/21/2000	Main Yard	Shallow	SU	MW-454	H5	6/6/2016	Main Yard	Shallow	SU
MW-0144	G3	4/21/2000	Main Yard	Shallow	SU	MW-455	H5	6/6/2016	Main Yard	Shallow	SU
MW-0145	G3	4/21/2000	Main Yard	Shallow	SU	MW-456	H5	6/6/2016	Main Yard	Shallow	SU
MW-0146	G3	4/21/2000	Main Yard	Shallow	SU	MW-457	H5	6/6/2016	Main Yard	Shallow	SU
MW-0147	G3	4/21/2000	Main Yard	Shallow	SU	MW-458	H5	6/6/2016	Main Yard	Shallow	SU
MW-0148	G3	4/21/2000	Main Yard	Shallow	SU	MW-459	H5	6/6/2016	Main Yard	Shallow	SU
MW-0149	G3	4/21/2000	Main Yard	Shallow	SU	MW-460	H5	6/6/2016	Main Yard	Shallow	SU
MW-0150	G3	4/21/2000	Main Yard	Shallow	SU	MW-461	H5	6/6/2016	Main Yard	Shallow	SU
MW-0151	G3	4/21/2000	Main Yard	Shallow	SU	MW-462	H5	6/6/2016	Main Yard	Shallow	SU
MW-0152	G3	4/21/2000	Main Yard	Shallow	SU	MW-463	H5	6/7/2016	East Yard	Shallow	SU
MW-0153	G3	4/21/2000	Main Yard	Shallow	SU	MW-464	H5	6/6/2016	East Yard	Shallow	SU
MW-0154	G3	4/21/2000	Main Yard	Shallow	SU	MW-465	I6	10/29/2015	Main Yard	Shallow	SU
MW-0155	G3	4/21/2000	Main Yard	Shallow	SU	MW-466	I6	10/29/2015	Main Yard	Shallow	SU
MW-0156	G3	4/21/2000	Main Yard	Shallow	SU	MW-467	H5	11/4/2015	Main Yard	Shallow	SU
MW-0157	G3	4/21/2000	Main Yard	Shallow	SU	MW-468	I6	11/17/2015	East Yard	Shallow	FM
MW-0158	G3	4/21/2000	Main Yard	Shallow	SU	MW-469	I6	11/17/2015	East Yard	Shallow	FM
MW-0159	G3	4/21/2000	Main Yard	Shallow	SU	MW-470	I6	11/17/2015	East Yard	Shallow	SU
MW-0160	G3	4/21/2000	Main Yard	Shallow	SU	MW-471	I6	11/17/2015	East Yard	Shallow	SU
MW-0161	G3	4/21/2000	Main Yard	Shallow	SU	MW-472	I6	11/17/2015	East Yard	Shallow	SU
MW-0162	G3	4/21/2000	Main Yard	Shallow	SU	MW-473	I6	11/18/2015	East Yard	Shallow	SU
MW-0163	G3	4/21/2000	Main Yard	Shallow	SU	MW-474	I6	11/18/2015	East Yard	Shallow	SU
MW-0164	G3	4/21/2000	Main Yard	Shallow	SU	MW-475	H6	9/16/2016	East Yard	Shallow	SU
MW-0165	G3	4/21/2000	Main Yard	Shallow	SU	MW-476	H6	9/16/2016	East Yard	Shallow	SU
MW-0166	G3	4/21/2000	Main Yard	Shallow	SU	MW-477	H6	9/16/2016	East Yard	Shallow	SU
MW-0167	G3	4/21/2000	Main Yard	Shallow	SU	MW-478	H6	9/16/2016	East Yard	Shallow	SU
MW-0168	G3	4/21/2000	Main Yard	Shallow	SU	MW-479	H6	9/17/2016	East Yard	Shallow	SU
MW-0169	G3	4/21/2000	Main Yard	Shallow	SU	MW-480	H6	9/17/2016	East Yard	Shallow	SU
MW-0170	G3	4/21/2000	Main Yard	Shallow	SU	MW-481	I8	8/16/2016	East Yard	Shallow	SU
MW-0171	G3	4/21/2000	Main Yard	Shallow	SU	MW-482	I8	8/16/2016	East Yard	Shallow	SU
MW-0172	G3	4/21/2000	Main Yard	Shallow	SU	MW-483	I8	8/17/2016	East Yard	Shallow	SU
MW-0173	G3	4/21/2000	Main Yard	Shallow	SU	MW-484	I7	7/6/2016	Central Yard	Shallow	FM
MW-0174	G3	4/21/2000	Main Yard	Shallow	SU	MW-485	I7	7/5/2016	Central Yard	Shallow	FM
MW-0175	G3	4/21/2000	Main Yard	Shallow	SU	MW-486	I7	7/5/2016	Central Yard	Shallow	FM
MW-0176	G3	4/21/2000	Main Yard	Shallow	SU	MW-487	I7	7/6/2016	Central Yard	Shallow	FM
MW-0177	G3	4/21/2000	Main Yard	Shallow	SU	MW-488	I7	7/6/2016	Central Yard	Shallow	FM
MW-0178	G7	5/11/2015	East Yard	Deep	SU	MW-489	I7	7/6/2016	Central Yard	Shallow	FM
MW-0179	G8	5/19/2015	Main Yard	Shallow	FM	MW-490	I7	7/6/2016	Central Yard	Shallow	FM
MW-0180	G8	5/5/2016	Central Yard	Shallow	FM	MW-491	I7	7/6/2016	Central Yard	Shallow	FM
MW-0181	G8	5/5/2016	Central Yard	Shallow	FM	MW-492	I7	7/6/2016	Central Yard	Shallow	FM
MW-0182	G8	5/12/2016	Central Yard	Shallow	SU	MW-493	I7	7/6/2016	Central Yard	Shallow	FM
MW-0183	G8	5/12/2016	Central Yard	Shallow	SU	MW-494	I7	7/6/2016	Central Yard	Shallow	FM
MW-0184	G8	5/20/2016	Central Yard	Shallow	SU	MW-495	I6	6/9/2016	Main Yard	Shallow	SU
MW-0185	G8	5/20/2016	Central Yard	Shallow	SU	MW-496	I7	6/9/2016	Main Yard	Shallow	SU
MW-0186	G8	5/20/2016	Central Yard	Shallow	SU	MW-497	I7	6/9/2016	Main Yard	Shallow	SU
MW-0187	G8	5/20/2016	Central Yard	Shallow	SU	MW-498	I7	6/9/2016	Main Yard	Shallow	SU
MW-0188	G8	5/20/2016	Central Yard	Deep	SU	MW-499	I7	6/9/2016	Main Yard	Shallow	SU
MW-0189	G8	5/20/2016	Central Yard	Shallow	SU	MW-500	I7	6/9/2016	Main Yard	Shallow	SU
MW-0190	G8	5/20/2016	Central Yard	Shallow	SU	MW-501	I7	6/9/2016	Main Yard	Shallow	SU
MW-0191	G8	5/20/2016	Central Yard	Shallow	SU	MW-502	I7	6/9/2016	Main Yard	Shallow	SU
MW-0192	G8	5/20/2016	Central Yard	Shallow	SU	MW-503	I7	6/9/2016	Main Yard	Shallow	SU
MW-0193	G8	5/20/2016	Central Yard	Shallow	SU	MW-504	I7	6/9/2016	Main Yard	Shallow	SU
MW-0194	G8	5/20/2016	Central Yard	Shallow	SU	MW-505	I7	6/9/2016	Main Yard	Shallow	SU
MW-0195	G8	5/20/2016	Central Yard	Shallow	SU	MW-506	I7	6/9/2016	Main Yard	Shallow	SU
MW-0196	G8	5/20/2016	Central Yard	Shallow	SU	MW-507	I7	6/9/2016	Main Yard	Shallow	SU
MW-0197	G8	5/20/2016	Central Yard	Shallow	SU	MW-508	I7	6/9/2016	Main Yard	Shallow	SU
MW-0198	G8	5/20/2016	Central Yard	Shallow	SU	MW-509	I7	6/9/2016	Main Yard	Shallow	SU
MW-0199	G8	5/20/2016	Central Yard	Shallow	SU	MW-510	I7	6/9/2016	Main Yard	Shallow	SU
MW-0200	G8	5/20/2016	Central Yard	Shallow	SU	MW-511	I7	6/9/2016	Main Yard	Shallow	SU
MW-0201	G8	5/20/2016	Central Yard	Shallow	SU	MW-512	I7	6/9/2016	Main Yard	Shallow	SU
MW-0202	G8	5/20/2016	Central Yard	Shallow	SU	MW-513	H8	6/12/2017	Central Yard	Deep	FM
MW-0203	G8	5/20/2016	Central Yard	Shallow	SU	MW-514	H8	6/12/2017	Central Yard	Deep	FM
MW-0204	G3	10/17/2016	Main Yard	Shallow	SU	MW-515	H8	5/7/2017	Central Yard	Deep	SU
MW-0205	G3	10/17/2016	Main Yard	Shallow	SU	MW-516	H8	5/7/2017	Central Yard	Deep	SU
MW-0206	G3	11/16/2016	East Yard	Shallow	SU	MW-517	H8	5/7/2017	Central Yard	Shallow	SU
MW-0207	J6	12/15/2016	East Yard	Shallow	SU	MW-518	H8	6/5/2017	Central Yard	Shallow	FM
MW-0208	J6	12/15/2016	East Yard	Shallow	SU	MW-519	H8	6/5/2017	Central Yard	Shallow	FM
MW-0209	G3	11/30/2017	Main Yard	Shallow	SU	MW-520	H8	6/5/2017	Central Yard	Shallow	FM
MW-0210	G3	11/30/2017	Main Yard	Shallow	SU	MW-521	I5	9/18/2017	Main Yard	Shallow	FM
MW-0211	G3	11/30/2017	Main Yard	Shallow	SU	MW-522	I5	9/18/2017	Main Yard	Shallow	FM
MW-0212	G3	11/30/2017	Main Yard	Shallow	SU	MW-523	I8	9/13/2017	East Yard	Shallow	SU
MW-0213	G3	11/30/2017	Main Yard	Shallow	SU	MW-524	I8	9/13/2017	East Yard	Shallow	SU
MW-0214	G3	11/30/2017	Main Yard	Shallow	SU	MW-525	I5	9/18/2017	Main Yard	Shallow	FM
MW-0215	G3	11/30/2017	Main Yard	Shallow	SU	MW-526	I5	9/18/2017	Main Yard	Shallow	FM
MW-0216	G3	11/30/2017	Main Yard	Shallow	SU	MW-527	I8	9/13/2017	East Yard	Shallow	SU
MW-0217	J7	12/11/2014	East Yard	Shallow	FM	MW-528	I8	9/13/2017	East Yard	Shallow	SU
MW-0218	J7	12/11/2014	East Yard	Shallow	FM	MW-529	I8	9/13/2017	East Yard	Shallow	SU
MW-0219	J7	12/11/2014	East Yard	Shallow	FM	MW-530	I8	9/13/2017	East Yard	Shallow	SU
MW-0220	J7	12/11/2014	East Yard	Shallow	FM	MW-531	I8	9/13/2017	East Yard	Shallow	SU
MW-0221	J7	12/11/2014	East Yard	Shallow	FM	MW-532	I8	9/13/2017	East Yard	Shallow	SU
MW-0222	J7	12/11/2014	East Yard	Shallow	FM	MW-533	I8	9/13/2017	East Yard	Shallow	SU
MW-0223	J7	12/11/2014	East Yard	Shallow	FM	MW-534	I8	9/13/2017	East Yard	Shallow	SU
MW-0224	J7	12/11/2014	East Yard	Shallow	FM	MW-535	I8	9/13/2017	East Yard	Shallow	SU
MW-0225	J7	12/11/2014	East Yard	Shallow	FM	MW-536	I8	9/13/2017	East Yard	Shallow	SU
MW-0226	J7	12/11/2014	East Yard	Shallow	FM	MW-537	I8	9/13/2017	East Yard	Shallow	SU
MW-0227	J7	12/11/2014	East Yard	Shallow	FM	MW-538	I8	9/13/2017	East Yard	Shallow	SU
MW-0228	J7	12/11/2014	East Yard	Shallow	FM	MW-539	I8	9/13/2017	East Yard	Shallow	SU
MW-0229	J7	12/11/2014	East Yard	Shallow	FM	MW-540	I8	9/13/2017	East Yard	Shallow	SU
MW-0230	J7	12/11/2014	East Yard	Shallow	FM	MW-541	I8	9/13/2017	East Yard	Shallow	SU
MW-0231	J7	12/11/2014	East Yard	Shallow	FM	MW-542	I8	9/13/2017	East Yard	Shallow	SU
MW-0232	J7	12/11/2014	East Yard	Shallow	FM	MW-543	I8	9/13/2017	East Yard	Shallow	SU
MW-0233	J7	12/11/2014	East Yard	Shallow	FM	MW-544	I8	9/13/2017	East Yard	Shallow	SU
MW-0234	J7	12/11/2014	East Yard	Shallow	FM	MW-545	I8	9/13/2017	East Yard	Shallow	SU
MW-0235	J7	12/11/2014	East Yard	Shallow	FM	MW-546	I8	9/13/2017	East Yard	Shallow	SU
MW-0236	J7	12/11/2014	East Yard	Shallow	FM	MW-547	I8	9/13/2017	East Yard	Shallow	SU
MW-0237	J7	12/11/2014	East Yard	Shallow	FM	MW-548	I8	9/13/2017	East Yard	Shallow	SU
MW-0238	J7	12/11/2014	East Yard	Shallow	FM	MW-549	I8	9/13/2017	East Yard	Shallow	SU
MW-0239	J7	12/11/2014	East Yard	Shallow	FM	MW-550	I8	9/13/2017	East Yard	Shallow	SU
MW-0240	J7	12/11/2014	East Yard	Shallow	FM	MW-551	I8	9/13/2017	East Yard	Shallow	SU
MW-0241	J7	12/11/2014	East Yard	Shallow	FM	MW-552	I8	9/13/2017	East Yard	Shallow	SU
MW-0242	J7	12/11/2014	East Yard	Shallow	FM	MW-553	I8	9/13/2017	East Yard	Shallow	SU
MW-0243	J7	12/11/2014	East Yard	Shallow	FM	MW-554	I8	9/13/2017	East Yard	Shallow	SU
MW-0244	J7	12/11/2014	East Yard	Shallow	FM	MW-555	I7	11/18/2016	East Yard	Shallow	FM
MW-0245	J7	12/11/2014	East Yard	Shallow	FM	MW-556	I7	11/18/2016	East Yard	Shallow	FM
MW-0246	J7	12/11/2014	East Yard	Shallow	FM	MW-557	I7	11/18/2016	East Yard	Shallow	FM
MW-0247	J7	12/11/2014	East Yard	Shallow	FM	MW-558	I7	11/18/2016	East Yard	Shallow	FM
MW-0248	J7	12/11/2014	East Yard	Shallow	FM	MW-559	I7	11/18/2016	East Yard	Shallow	FM
MW-0249	J7	12/11/2014	East Yard	Shallow	FM	MW-560	I7	11/18/2016	East Yard	Shallow	FM
MW-0250	J7	12/11/2014	East Yard	Shallow	FM	MW-561	I7	11/18/2016	East Yard	Shallow	FM
MW-0251	J7	12/11/2014	East Yard	Shallow	FM	MW-562	I7	11/18/2016	East Yard	Shallow	FM
MW-0252	J7	12/11/2014	East Yard	Shallow	FM	MW-563	I7	11/18/2016	East Yard	Shallow	FM
MW-0253	J7	12/11/2014	East Yard	Shallow	FM	MW-564	I7	11/18/2016	East Yard	Shallow	FM
MW-0254	J7	12/11/2014	East Yard	Shallow	FM	MW-565	I7	11/18/2016	East Yard	Shallow	FM
MW-0255	J7	12/11/2014	East Yard	Shallow	FM	MW-566	I7	11/18/2016	East Yard	Shallow	FM
MW-0256	J7	12/11/2014	East Yard	Shallow	FM	MW-567	I7	11/18/2016	East Yard	Shallow	FM
MW-0257	J7	12/11/2014	East Yard	Shallow	FM	MW-568	I7	11/18/2016	East Yard	Shallow	FM
MW-0258	J7	12/11/2014	East Yard	Shallow	FM	MW-569	I7	11/18/2016	East Yard	Shallow	FM
MW-0259	J7	12/11/2014	East Yard	Shallow	FM	MW-570	I7	11/18/2016	East Yard	Shallow	FM
MW-0260	J7	12/11/2014	East Yard	Shallow	FM	MW-571	I7	11/18/2016	East Yard	Shallow	FM
MW-0261	J7	12/11/2014	East Yard	Shallow	FM	MW-572	I7	11/18/2016	East Yard	Shallow	FM
MW-0262	J7	12/11/2014	East Yard	Shallow	FM	MW-573	I7	11/18/2016	East Yard	Shallow	FM
MW-0263	J7	12/11/2014	East Yard	Shallow	FM	MW-574	I7	11/18/2016	East Yard	Shallow	FM
MW-0264	J7	12/11/2014	East Yard	Shallow	FM	MW-575	I7	11/18/2016	East Yard	Shallow	FM
MW-0265	J7	12/11/2014	East Yard	Shallow	FM	MW-576	I7	11/18/2016	East Yard	Shallow	FM
MW-0266	J7	12/11/2014	East Yard	Shallow	FM	MW-577	I7	11/18/2016	East Yard	Shallow	FM
MW-0267	J7	12/11/2014	East Yard	Shallow	FM	MW-578	I7	11/18/2016	East Yard	Shallow	FM
MW-0268	J7	12/11/2014	East Yard	Shallow	FM	MW-579	I7	11/18/2016	East Yard	Shallow	FM
MW-0269	J7	12/11/2014	East Yard	Shallow	FM	MW-580	I7	11/18/2016	East Yard	Shallow	FM
MW-0270	J7	12/11/2014	East Yard	Shallow	FM	MW-581	I7	11/18/2016	East Yard	Shallow	FM
MW-0271	J7	12/11/2014	East Yard	Shallow	FM	MW-582	I7	11/18/2016	East Yard	Shallow	FM
MW-0272	J7	12/11/2014	East Yard	Shallow	FM	MW-583	I7	11/18/2016	East Yard	Shallow	FM
MW-0273	J7	12/11/2014	East Yard	Shallow	FM	MW-584	I7	11/18/2016	East Yard	Shallow	FM
MW-0274	J7	12/11/2014	East Yard	Shallow	FM	MW-585	I7	11/18/2016	East Yard	Shallow	FM
MW-0275	J7	12/11/2014	East Yard	Shallow	FM	MW-586	I7	11/18/2016	East Yard	Shallow	FM
MW-0276	J7	12/11/2014	East Yard	Shallow	FM	MW-587	I7	11/18/2016	East Yard	Shallow	FM
MW-0277	J7	12/11/2014	East Yard	Shallow	FM	MW-588	I7	11/18/2016	East Yard	Shallow	FM
MW-0278	J7	12/11/2014	East Yard	Shallow	FM	MW-589	I7	11/18/2016	East Yard	Shallow	FM
MW-0279	J7	12/11/2014	East Yard	Shallow	FM	MW-590	I7	11/18/2016	East Yard	Shallow	FM
MW-0280	J7	12/11/2014	East Yard	Shallow	FM	MW-591	I7	11/18/2016	East Yard	Shallow	FM
MW-0281	J7	12/11/2014	East Yard	Shallow	FM	MW-592	I7	11/18/2016	East Yard	Shallow	FM
MW-0282	J7	12/11/2014	East Yard	Shallow	FM	MW-593	I7	11/18/2016	East Yard	Shallow	FM
MW-0283	J7	12/11/2014	East Yard	Shallow	FM	MW-594	I7	11/18/2016	East Yard	Shallow	FM
MW-0284	J7	12/11/2014	East Yard	Shallow	FM	MW-595	I7	11/18/2016	East Yard	Shallow	FM
MW-0285	J7	12/11/2014	East Yard	Shallow	FM	MW-596	I7	11/18/2016	East Yard	Shallow	FM
MW-0286	J7	12/11/2014	East Yard	Shallow	FM	MW-597	I7	11/18/2016	East Yard	Sh

LEGEND

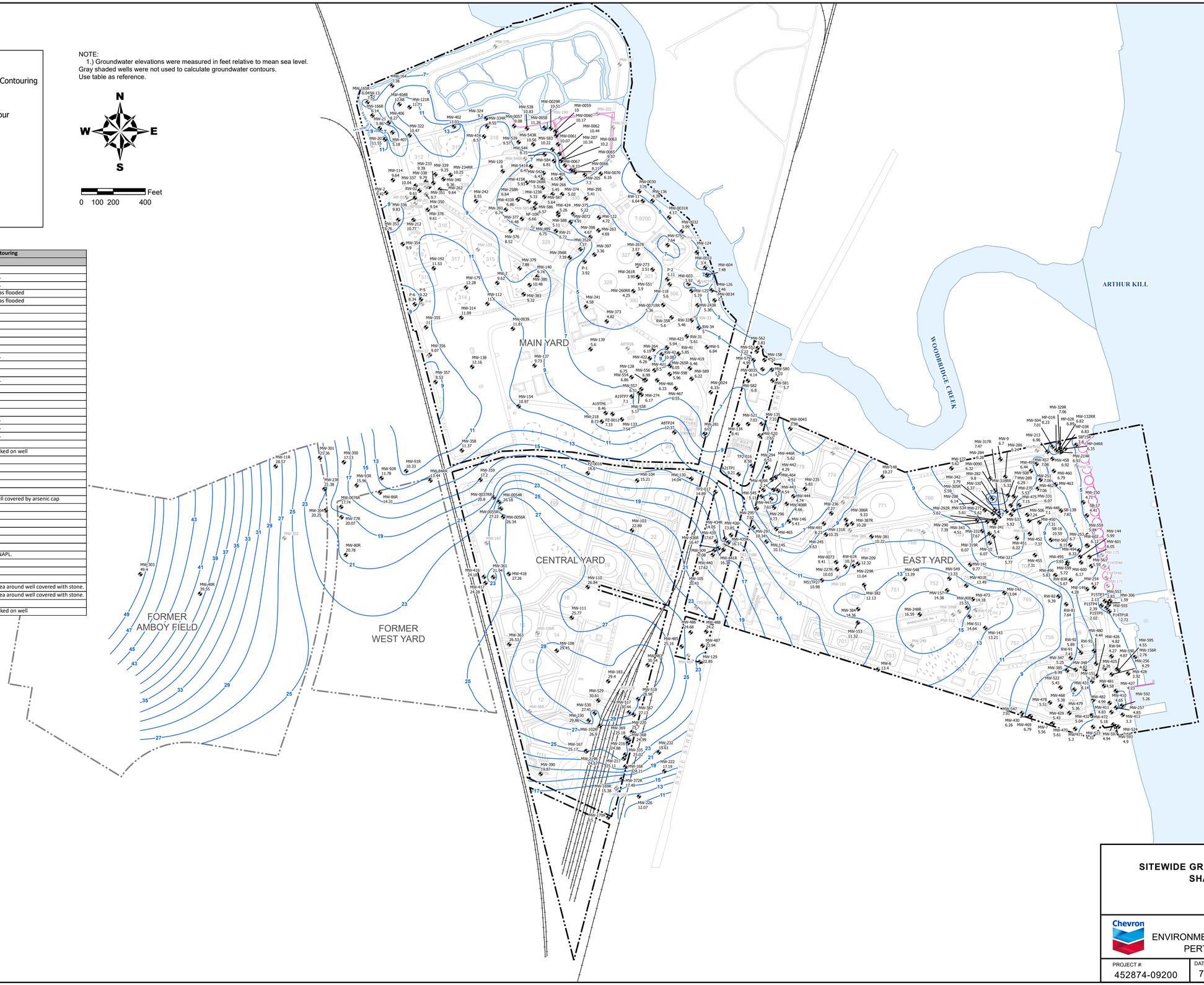
- Shallow Monitoring Well Not Used in Contouring
- Shallow Monitoring Well
- Shallow Groundwater Elevation Contour
- Property Line
- Former Property Line
- Sheet Piling
- Bulk Head
- Slurry Wall
- Water Bodies

NOTE:
1.) Groundwater elevations were measured in feet relative to mean sea level.
Gray shaded wells were not used to calculate groundwater contours.
Use table as reference.

N
W E
S

Feet
0 100 200 400

Wells Not Gauged or Not Used for Contouring	
Well ID	**Observations**
A8TP26	Well was dry.
EY4TP48	Well is hydraulically isolated within sheetpile wall.
EY4TP49	Well is hydraulically isolated within sheetpile wall.
MP-05	Did not gauge well. Well was inaccessible. Well was flooded
MP-06R	Did not gauge well. Well was inaccessible. Well was flooded
MP-07	Did not gauge well. Well could not be located.
MP-08	Did not gauge well. Well could not be located.
MW-106R	Did not gauge well. Well could not be located.
MW-12	Did not gauge well. Well could not be located.
MW-147	Did not gauge well. Well was inaccessible.
MW-159	Did not gauge well. Well was inaccessible.
MW-171	Well is hydraulically isolated within sheetpile wall.
MW-173	Did not gauge well. Well could not be located.
MW-174	Did not gauge well. Well could not be located.
MW-175	Well is hydraulically isolated within sheetpile wall.
MW-186	Did not gauge well. Well could not be located.
MW-193	Did not gauge well. Well could not be located.
MW-195	Elevation is anomalous.
MW-197	Elevation is anomalous.
MW-199	Well is hydraulically isolated within sheetpile wall.
MW-201	Well is hydraulically isolated within sheetpile wall.
MW-203	Well is hydraulically isolated within sheetpile wall.
MW-249	Did not gauge well. Well could not be located.
MW-302	Did not gauge well. Well was inaccessible. Car parked on well
MW-364	Did not gauge well. Well was inaccessible.
MW-389	Did not gauge well. Well could not be located.
MW-392	Did not gauge well. Well could not be located.
MW-399R	Well needs a new ID tag.
MW-449	Flooded
MW-456	Did not gauge well. Well could not be located. Well covered by arsenic cap
MW-461	Did not gauge well. Well could not be located.
MW-484	Did not gauge well. Well could not be located.
MW-490	Did not gauge well. Well could not be located.
MW-510	Well needs a new ID tag.
MW-512	Did not gauge well. Well could not be located.
MW-528	Did not gauge well. Well could not be located.
MW-540R	Could not measure depth to water due to thick LNAPL.
MW-576	Missed
MW-585	Missed
P-4	Did not gauge well. Well was inaccessible.
RW-33	Did not gauge well. Well could not be located. Area around well covered with stone.
S40TP1	Did not gauge well. Well could not be located. Area around well covered with stone.
TP2-018R	Elevation is anomalous.
TP2-019	Did not gauge well. Well was inaccessible. Car parked on well



SITEWIDE GROUNDWATER CONTOUR
SHALLOW ZONE
11/16/2021

Chevron

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	7/5/2022	ADW	JL	5

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LEGEND

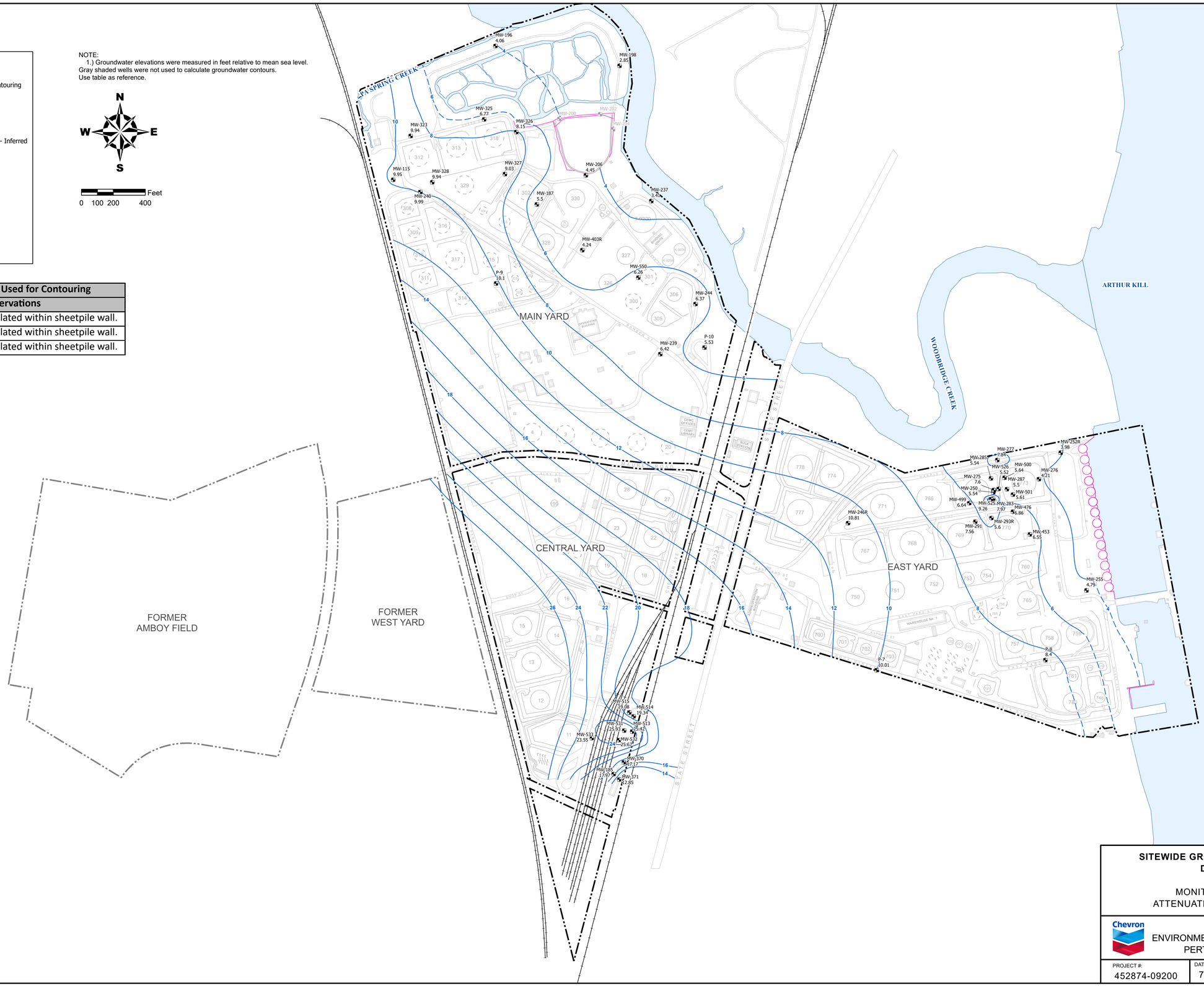
- Deep Monitoring Well Not Used in Contouring
- Deep Monitoring Well
- Deep Groundwater Elevation Contour
- Deep Groundwater Elevation Contour - Inferred
- Property Line
- Former Property Line
- Sheet Piling
- Bulk Head
- Slurry Wall
- Water Bodies

NOTE:
1.) Groundwater elevations were measured in feet relative to mean sea level.
Gray shaded wells were not used to calculate groundwater contours.
Use table as reference.

N W E S

0 100 200 400 Feet

Wells Not Gauged or Not Used for Contouring	
Well ID	**Observations**
MW-200	Well is hydraulically isolated within sheetpile wall.
MW-202	Well is hydraulically isolated within sheetpile wall.
MW-204	Well is hydraulically isolated within sheetpile wall.



SITEWIDE GROUNDWATER CONTOUR
DEEP ZONE
11/16/2021
MONITORED NATURAL
ATTENUATION ANNUAL REPORT

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	7/5/2022	ADW	JL	6

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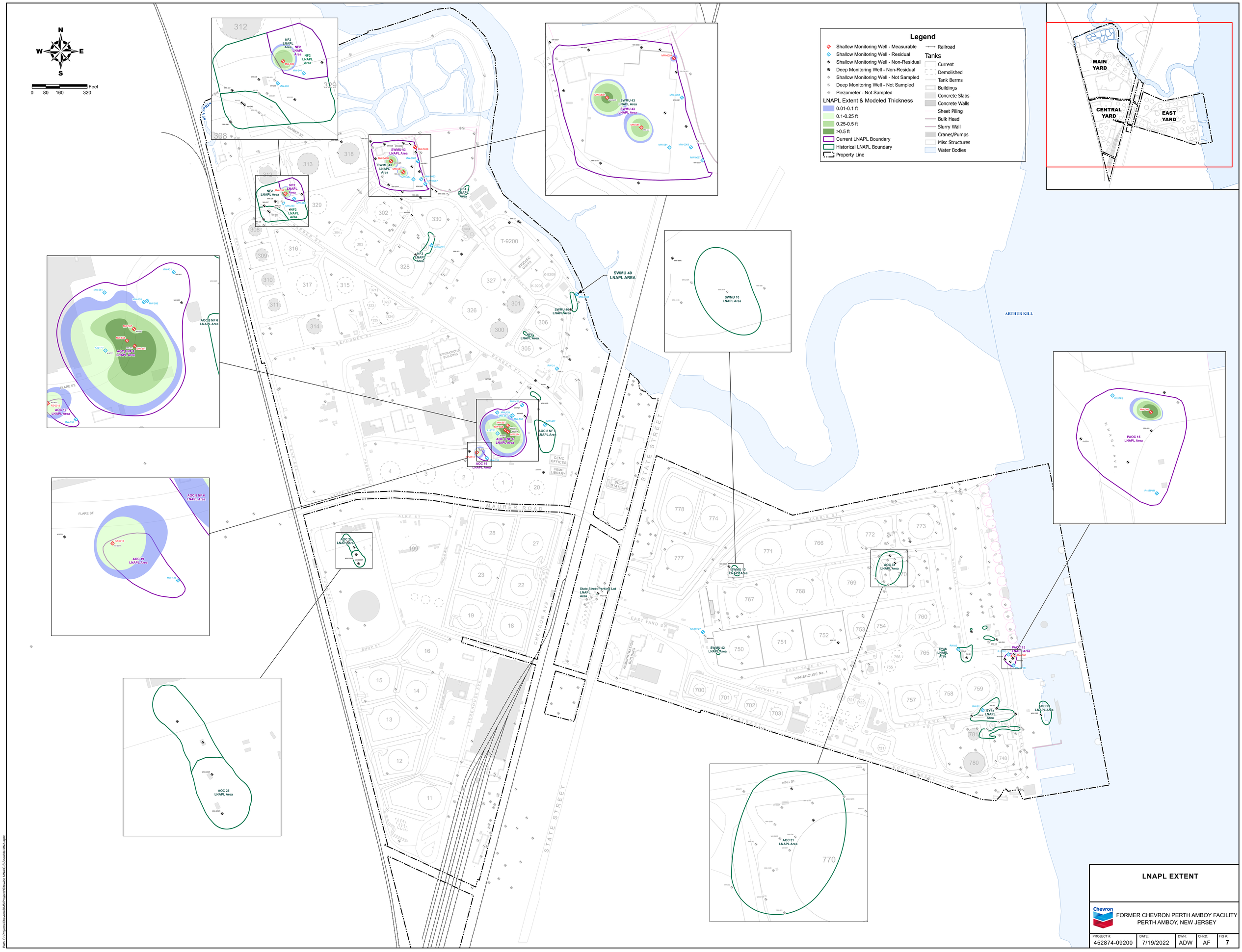
N
W
E
S
Feet
0 80 160 320
Legend
Shallow Monitoring Well - Measurable
Shallow Monitoring Well - Residual
Shallow Monitoring Well - Non-Residual
Deep Monitoring Well - Non-Residual
Shallow Monitoring Well - Not Sampled
Deep Monitoring Well - Not Sampled
Piezometer - Not Sampled
LNAPL Extent & Modeled Thickness
0.01-0.1 ft
0.1-0.25 ft
0.25-0.5 ft
>0.5 ft
Current LNAPL Boundary
Historical LNAPL Boundary
Property Line
Railroad
Tanks
Current
Demolished
Tank Berms
Buildings
Concrete Slabs
Concrete Walls
Sheet Piling
Bulk Head
Slurry Wall
Cranes/Pumps
Misc Structures
Water Bodies
MAIN YARD
CENTRAL YARD
EAST YARD
ARTHUR KILL
SWMU 40 LNAPL AREA
SWMU 10 LNAPL Area
SWMU 43 LNAPL Area
NF2 LNAPL Area
NF4 LNAPL Area
NF3 LNAPL Area
NF5 LNAPL Area
AOC 8 NF 6 LNAPL Area
AOC 19 LNAPL Area
AOC 8 NF 5 LNAPL Area
AOC 22 LNAPL Area
AOC 25 LNAPL Area
State Street Parking Lot LNAPL Area
SWMU 42 LNAPL Area
AOC 31 LNAPL Area
PAOC 15 LNAPL Area
EY4b LNAPL Area
EY4a LNAPL Area
AOC 23 LNAPL Area
STATE STREET
MAURER ROAD
CHEVRON AVE
WHARF AVE
HARRIS ST
KING ST
EAST YARD ST
ASPHALT ST
DOCKS ST
WAREHOUSE No. 1
BARBER ST
REFORMER ST
FLARE ST
ALKY ST
SHOP ST
STOREHOUSE AVE
CREEK ST
BIODISC UNITS
OPERATIONS BUILDING
CEMC OFFICES
CEMC LIBRARY
BULK STATION
ADMINISTRATION BUILDING
T-9200
LNAPL EXTENT
Chevron
FORMER CHEVRON PERTH AMBOY FACILITY
PERTH AMBOY, NEW JERSEY
PROJECT #: 452874-09200
DATE: 7/19/2022
DWN: ADW
CHKD: AF
FIG #: 7
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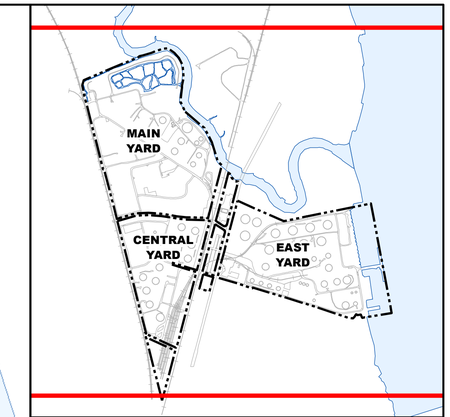

Legend

- Shallow Monitoring Well - Benzene < 1 ug/L
- Shallow Monitoring Well - Benzene >= 1 ug/L
- Shallow Monitoring Well - Benzene > 10 ug/L
- Shallow Monitoring Well - Benzene > 100 ug/L
- Shallow Monitoring Well - Benzene > 1000 ug/L
- Groundwater Benzene > 1 ug/L
- Groundwater Benzene > 10 ug/L
- Groundwater Benzene > 100 ug/L
- Groundwater Benzene > 1000 ug/L
- Railroad
- Buildings
- Sheet Piling
- Bulk Head
- Slurry Wall
- Property Line

GENERAL NOTE:
Benzene groundwater plumes were created using the Inverse Distance Weighting interpolation method.

SITEWIDE 2008
SHALLOW MONITORING WELL
BENZENE RESULTS

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	6/30/2022	ADW	JL	8

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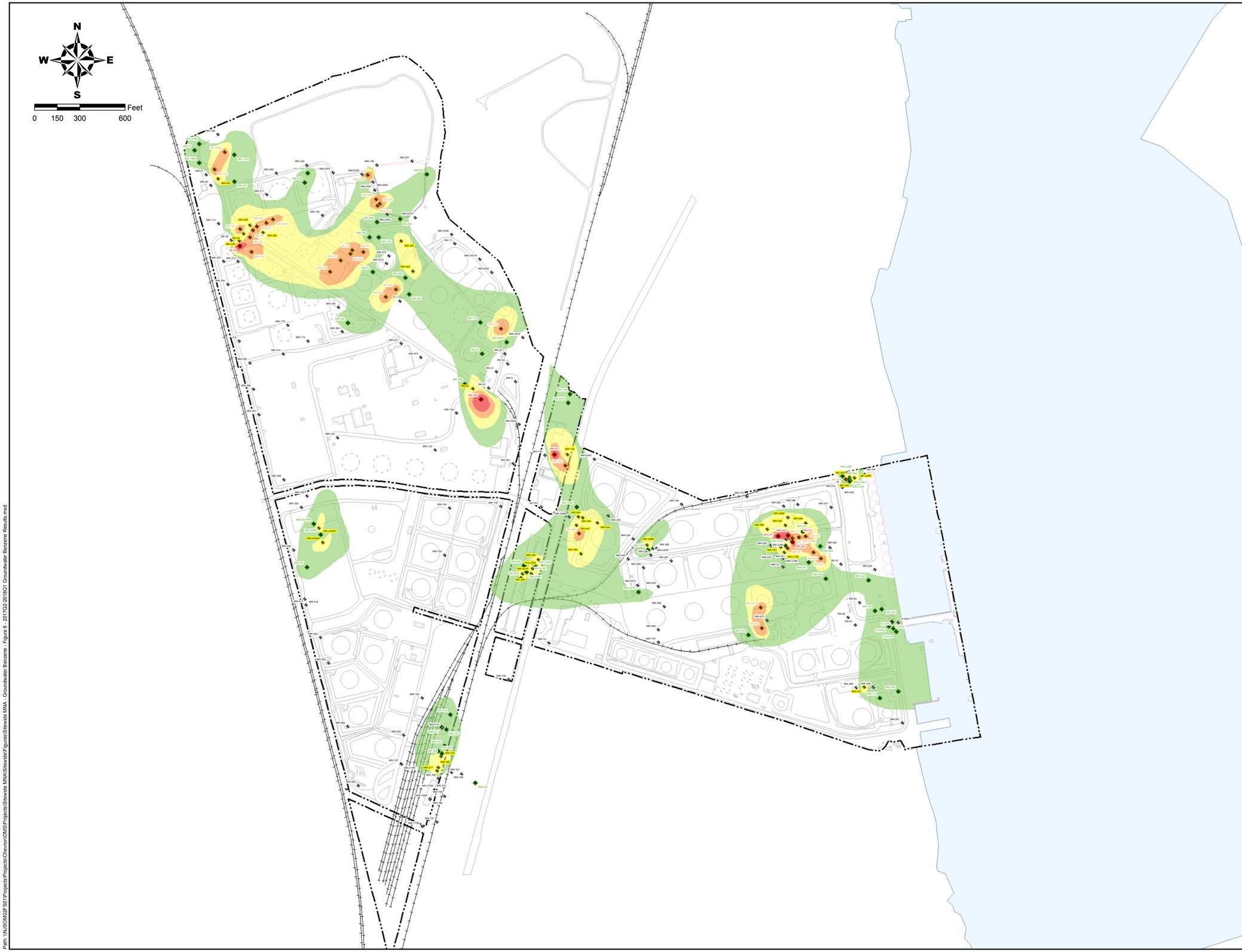

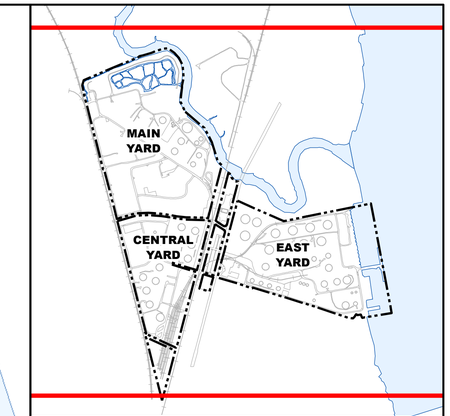

Legend

- Shallow Monitoring Well - Benzene < 1 ug/L
- Shallow Monitoring Well - Benzene >= 1 ug/L
- Shallow Monitoring Well - Benzene > 10 ug/L
- Shallow Monitoring Well - Benzene > 100 ug/L
- Shallow Monitoring Well - Benzene > 1000 ug/L
- Groundwater Benzene > 1 ug/L
- Groundwater Benzene > 10 ug/L
- Groundwater Benzene > 100 ug/L
- Groundwater Benzene > 1000 ug/L
- Railroad
- Buildings
- Sheet Piling
- Bulk Head
- Slurry Wall
- Property Line

GENERAL NOTE:
Benzene groundwater plumes were created using the Inverse Distance Weighting interpolation method.

SITEWIDE 2017Q2-2018Q1
SHALLOW MONITORING WELL
BENZENE RESULTS

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	8/23/2018	ADW	JL	9

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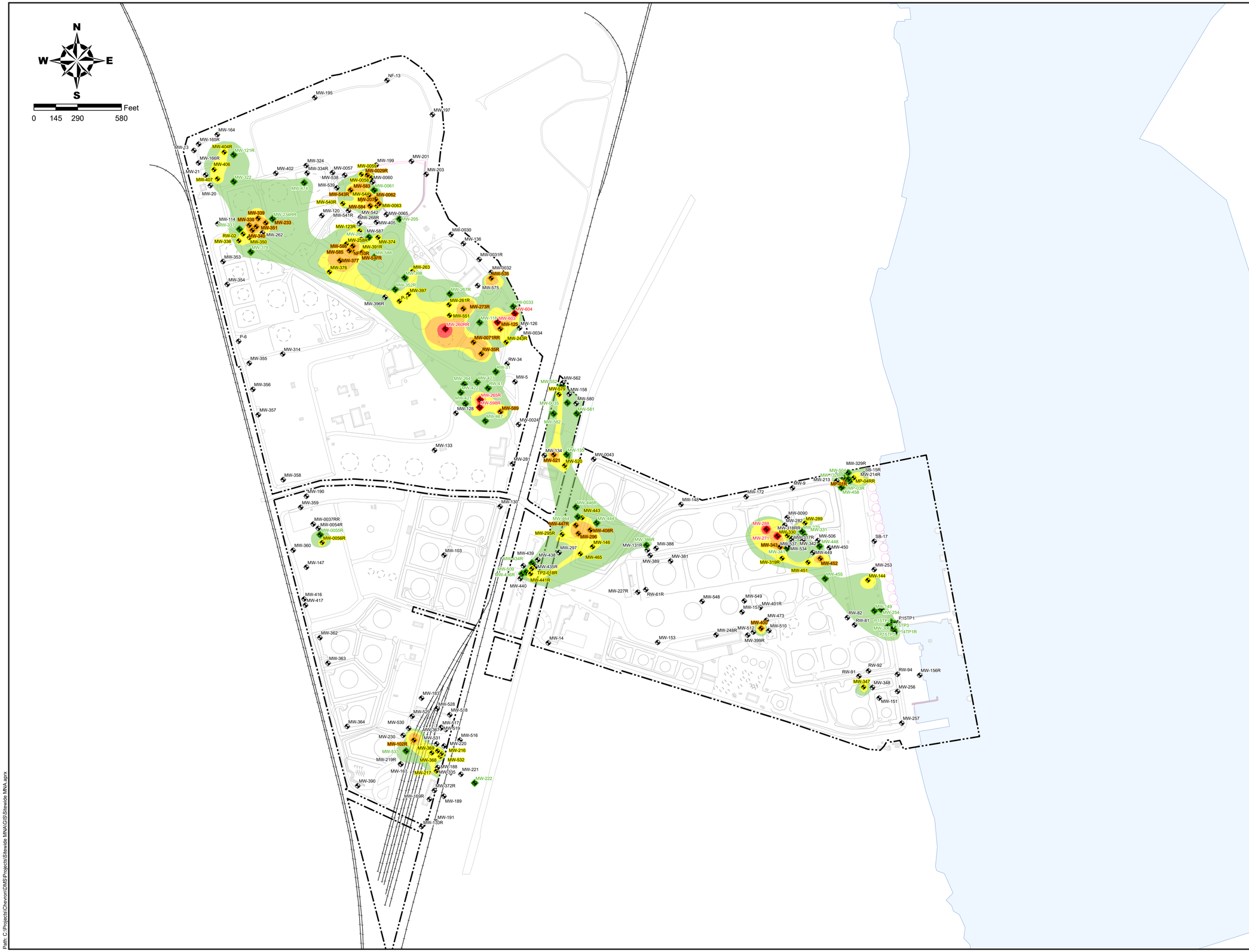

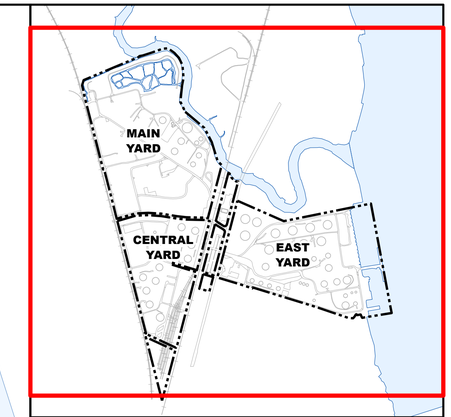

LEGEND

- Shallow Monitoring Well - Benzene < 1 ug/L
- Shallow Monitoring Well - Benzene >= 1 ug/L
- Shallow Monitoring Well - Benzene >= 10 ug/L
- Shallow Monitoring Well - Benzene >= 100 ug/L
- Shallow Monitoring Well - Benzene > 1000 ug/L
- Groundwater Benzene >= 1 ug/L
- Groundwater Benzene >= 10 ug/L
- Groundwater Benzene >= 100 ug/L
- Groundwater Benzene > 1000 ug/L
- Railroad
- Buildings
- Sheet Piling
- Bulk Head
- Slurry Wall
- Property Line

GENERAL NOTE:
Benzene groundwater plumes were created using the Inverse Distance Weighting interpolation method.

SITEWIDE 2021Q2-2022Q1 SHALLOW MONITORING WELL BENZENE RESULTS

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	7/18/2022	ADW	JL	10

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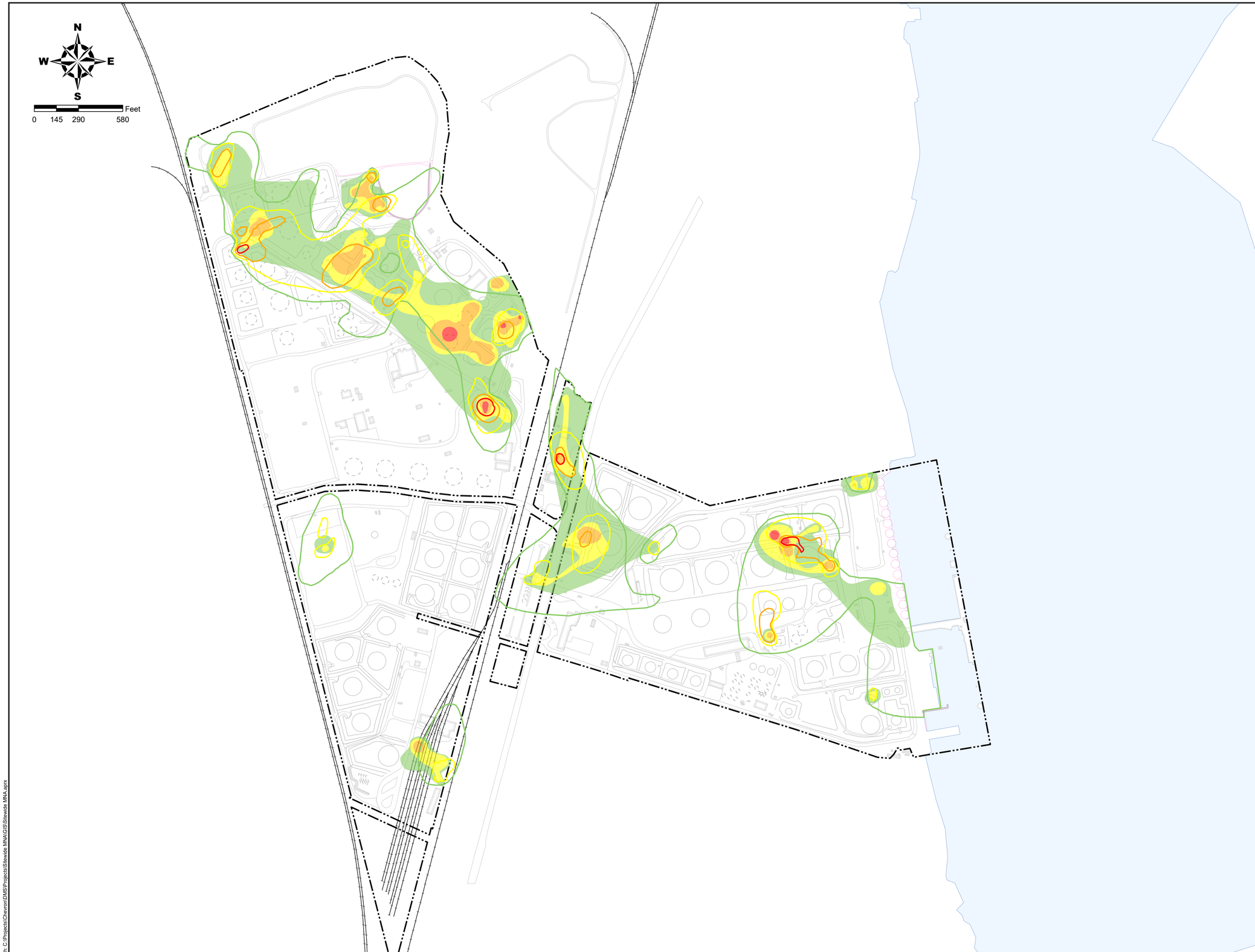

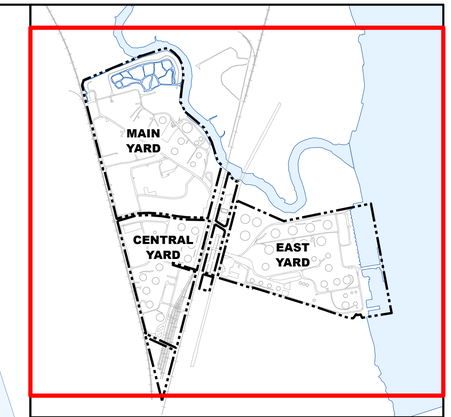

LEGEND

Outline of Sitewide 2017Q2-2018Q1 Benzene Results

- Groundwater Benzene > 1 ug/L
- Groundwater Benzene > 10 ug/L
- Groundwater Benzene > 100 ug/L
- Groundwater Benzene > 1000 ug/L

Sitewide 2021Q2-2022Q1 Benzene Results

- Groundwater Benzene >= 1 ug/L
- Groundwater Benzene >= 10 ug/L
- Groundwater Benzene >= 100 ug/L
- Groundwater Benzene > 1000 ug/L

- Railroad
- Buildings
- Sheet Piling
- Bulk Head
- Slurry Wall
- Property Line

GENERAL NOTE:
Benzene groundwater plumes were created using the Inverse Distance Weighting interpolation method.

SITEWIDE 2017Q2-2018Q1 AND 2021Q2-2022Q1 SHALLOW MONITORING WELL BENZENE RESULTS

CHEVRON
ENVIRONMENTAL MANAGEMENT COMPANY
PERTH AMBOY, NEW JERSEY

PROJECT #:	DATE:	DWN:	CHKD:	FIG NO.:
452874-09200	7/18/2022	ADW	JL	11

Path: C:\Projects\Chevron\DMS\Projects\Sitewide MNA\GIS\Sitewide MNA.aprx

APPENDIX A

Volatile Organic Compound and Semi-Volatile Organic Compound Results in Groundwater

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0037R	MW-0037R	MW-0037R	MW-0037R	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR	MW-0037RR
			Field Sample ID	M037RA1	M037RA2X	M037RA3X	M037RA3X	M037RRA4X	M037RRA5X	M037RRA6X	M037RRA7X	M037RRA8X	D0208188	M037RRA9X	M037RRB1X	M037RRB2X	M037RRB3X	M037RRB4	M037RRB5X	M037RRB6X	M037RRB7X	M037RRB8	M037RRB9X
			Sample Date	08/20/2013	08/20/2014	04/12/2016	04/12/2016	11/21/2016	02/17/2017	05/04/2017	07/25/2017	11/14/2017	02/08/2018	02/08/2018	04/30/2018	08/08/2018	11/05/2018	02/26/2019	05/22/2019	08/16/2019	10/31/2019	02/10/2020	05/22/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	4 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.7 J	1 U	0.6 J	0.5 J	0.7 J	0.6 J	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	4 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	6 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	1 J	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	6 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	6 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	12 U	8 J	6 U	7 J	7 J	30 U	6 U	6 U	6 U	6 U	4 UJ	0.7 U	2 J	6 J	1 J	0.7 U	0.7 U	1 J
Benzene	ug/L	N	1	0.6 J	1	1 U	0.7 J	**16**	**14**	**9**	**8**	**2**	**3**	**3**	**3**	1	0.5 J	0.5 J	0.6 J	0.4 J	0.7 J	0.7 J	0.2 J
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	4 U	2 U	11	4 J	2 U	10 U	2 U	2 U	2 U	2 U	0.2 U	0.6 J	0.3 J	0.4 J	1 U	1 J	1 J	1 U
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	1 U	0.5 U	1 J	0.5 J	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	2 U	1 U	8	5 J	3 J	5 U	2 J	2 J	2 J	3 J	3 J	3 J	1 J	0.9 J	1 J	3 J	2 J	0.6 J
Methane	ug/L	N	NA	3500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	2 U	1 U	23	12	5 J	5 U	2 J	1 U	1 U	1 U	1 J	0.2 U	0.2 U	0.4 J	1 J	1 J	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	4 U	2 U	2 U	2 U	2 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.7 J	0.7 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.5 U	1 U	0.8 J	1	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	1 U	0.5 U	5	1	0.8 J	3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TICs	ug/L	N	NA	0 U	-	72 J	-	700 J	400 J	310 J	110 J	170 J	140 J	140 J	100 J	140 J	120 J	41 J	52 J	100 J	100 J	160 J	43 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0037RR	MW-0037RR	MW-0037RR	MW-0044	MW-0044	MW-0044	MW-0044	MW-0045	MW-0045	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054
			Field Sample ID	M037RRC1X	M0037RRC2X	M037RRC3	M044B9X	M044B9X	M044C1X	M044C2X	M045B9X	M045C1X	M054B2X	D08151312	M054B3	M054B3X	M054B4X	D1203148	M054B5X	M054B6X	M054B7X	M054B8X	M054B9X	M054C1X
			Sample Date	08/07/2020	02/08/2021	05/13/2021	04/03/2012	04/03/2012	06/13/2012	08/06/2013	06/28/2012	08/08/2013	06/26/2012	08/15/2013	08/15/2013	08/28/2013	08/20/2014	12/03/2014	12/03/2014	04/07/2015	05/07/2015	06/04/2015	12/11/2015	04/11/2016
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	**25**	1 J	**15**	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	-	**59**	4 J	**38**	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	-	-	2 U	2 U	20 U	2 U	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	-	8	1 U	6	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	-	-	2 U	2 U	20 U	2 U	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	1.1 J	0.3 U	-	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	-	-	3 U	3 U	30 U	3 U	3 U	-	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	-	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	-	-	3 U	3 U	30 U	3 U	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	-	-	3 U	3 U	30 U	3 U	3 U	-	3 U
Acetone	ug/L	N	6000	0.79 UJ	1.6 J	0.7 U	-	6 U	6 U	6 U	6 U	6 U	-	6 U	6 U	-	-	6 U	6 U	60 U	6 U	6 U	-	9 J
Benzene	ug/L	N	1	0.26 J	0.34 J	0.23 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**9**	**64**	**81**	**120**	**110**	**48**	**47**	**110**	**130**	**84**	**130**	**270**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 UJ	0.5 UJ	5 U	0.5 U	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	23000	12000 J	45000	55000	86000	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 UJ	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 UJ	0.5 UJ	5 U	0.5 U	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	3 J	-	-	2 U	2 U	20 U	3 J	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	1 U	0.043	-	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	0.061	-	1.0 U	1.0 U	1.0 U	1.0 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	5	6	3 J	4	2	2	7 J	9	10	13	3
Isopropylbenzene	ug/L	N	700	1.2 J	1.2 J	0.4 J	-	1 U	1 U	1 U	1 U	1 U	-	1 J	2 J	-	-	1 U	1 U	10 U	2 J	1 J	-	3 J
Methane	ug/L	N	NA	-	-	1900	9.5	-	5.0 U	3.0 U	5.0 U	3.0 U	-	10000	12000	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	0.75 J	0.77 J	0.5 U	-	1 U	1 U	1 U	1 U	1 U	-	11	11	-	-	4 J	3 J	10 U	12	5 J	-	4 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.31 J	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	-	-	2 U	2 U	20 U	2 U	2 U	-	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	1 U	1 U	10 U	1 U	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	**3J**	0.8 U	**3J**	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	-	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	2 J	2 J	2 J	1	0.8 J	0.7 J	5 U	3	2	2	1
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.8 U	0.8 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	**2J**	1 U	**2J**	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	-	-	0.5 U	0.5 U	5 U	0.5 U	0.5 U	-	0.5 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10	10	6	4	1	1	5 U	3	5	4	2
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	510 J	490 J	-	-	340 J	330 J	140 J	510 J	440 J	-	440 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0054R
			Field Sample ID	M054RC2X	M054RC3X	M054RC4X	M054RC5X	M054RC6	M054RC7X	M054RC8X	M054RC9X	D1106188	M054RD1X	M054RD2	M054RD3X	M054RD4X	M054RD5X	M054RD6	M054RD7X	M054RD8X	M054RD9	M054RE1	M054RE2	M054RE3
			Sample Date	11/22/2016	02/17/2017	05/04/2017	07/25/2017	11/10/2017	02/08/2018	04/30/2018	08/08/2018	11/06/2018	11/06/2018	02/26/2019	05/22/2019	08/16/2019	10/31/2019	02/11/2020	05/22/2020	02/08/2021	05/14/2021	07/30/2021	12/28/2021	02/01/2022
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	20 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1	0.5 U	0.5 U	5 U	0.7 J	0.5 U	0.5 U	0.2 U	0.2 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	20 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.8 J	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	30 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	30 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	30 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 J	8 J	6 U	60 U	6 U	6 U	6 U	2 UJ	0.7 U	0.7 U	0.7 U	2 J	0.7 U	0.7 U	0.7 U	2 J	0.7 U	0.7 U	1.3 J	0.7 U	0.7 U
Benzene	ug/L	N	1	**27**	**3**	**12**	**10**	**6**	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	20 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	0.5 U	1	5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 J	0.4 U
Isopropylbenzene	ug/L	N	700	1 J	1 U	4 J	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37	15	-	3.4 J
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	2 J	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	20 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	10 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.6 J	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1	0.5 U	0.7 J	5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	240 J	72 J	280 J	0 U	51 J	0 U	0 U	0 U	0 U	0 U	0 U	5 J	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0055	MW-0055	MW-0055	MW-0055	MW-0055	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R
			Field Sample ID	M055A1	M055A3X	M055A2X	M055A4X	M055A5X	M055RA6X	M055RA7X	M055RA8X	M055RA9X	M055RB1	M055RB2	M055RB3X	M055RB4X	M055RB5X	M055RB6	M055RB7X	M055RB8X	M055RB9X	M055RC1	M055RC2X	M055RC3X	M055RC4X
			Sample Date	08/14/2013	11/13/2014	12/03/2014	12/11/2015	04/12/2016	11/22/2016	02/22/2017	05/05/2017	07/25/2017	11/10/2017	02/02/2018	05/01/2018	08/08/2018	11/06/2018	02/26/2019	05/22/2019	08/16/2019	10/31/2019	02/11/2020	05/22/2020	08/11/2020	11/10/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	10	8	6	9	3	1	0.8 J	10 U	0.9 J	0.8 J	0.5 U	0.3 J	0.9 J	0.8 J	0.8 J	0.7 J	2 U	0.7 J	0.6 J	0.77 J	0.47 J
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 J	3 U	3 U	60 U	3 U	3 U	3 U	0.6 J	0.3 U	0.6 U	1 J	2 J	3 U	0.3 U	0.9 J	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	60 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	60 U	3 U	3 UJ	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 J	6 U	10 J	6 U	31	6 U	6 U	120 U	6 U	6 U	6 U	7 UJ	0.7 U	8 J	7 J	13 J	7 U	0.7 U	8 J	3.2 UJ	5.3 J
Benzene	ug/L	N	1	**28**	1	**5**	**21**	**15**	**3**	**4**	**2**	10 U	**4**	**5**	**2**	1 J	**5**	**5**	**5**	**5**	**4J**	**5**	**4**	**2.3**	**2**
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	1 U	10 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	0.2 U	0.2 U	0.4 U	0.2 U	1 U	10 U	1 U	1 U	1 U	1 UJ
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	2	4	2	10 U	1	1	0.5 U	0.4 U	0.4 J	0.8 U	0.4 U	0.4 J	6 J	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	2 J	1 U	1 U	3 J	4 J	1 J	2 J	1 J	20 U	1 U	1 U	1 U	0.2 U	0.6 J	0.4 J	0.4 J	0.7 J	2 U	0.5 J	0.3 J	0.2 U	0.26 J
Methane	ug/L	N	NA	9200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	3 J	1 U	1 U	6	8	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	2 J	0.5 U	0.5 U	1	1	0.5 J	0.6 J	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 J	2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	4 J	0.8 J	1	4	3	5	6	4	10 U	1 J	1 J	0.5 U	1 U	1 U	2 U	1 U	1 U	29 J	1 U	1 U	1.4 U	1.4 U
Total TICs	ug/L	N	NA	870 J	-	680 J	-	2800 J	270 J	400 J	250 J	0 U	300 J	340 J	160 J	110 J	410 J	330 J	350 J	320 J	130 J	400 J	360 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R
			Field Sample ID	M055RC5X	M055RC6	M055RC7	M055RC8	M055RC9	D0626121	M056B2X	M056B2	M056B3X	M056B4X	M056B5X	D0411168B	M056B7X	M056RB8X	M056RB9X	D0505178	M056RC1X	M056RC2X	M056RC3	M056RC4	D0501188	M056RC5X
			Sample Date	02/08/2021	05/14/2021	07/30/2021	12/21/2021	02/01/2022	06/26/2012	06/26/2012	08/14/2013	08/28/2013	08/20/2014	12/11/2015	04/11/2016	04/11/2016	11/22/2016	02/22/2017	05/05/2017	05/05/2017	07/25/2017	11/10/2017	02/02/2018	05/01/2018	05/01/2018
Parameter Name	Report Units	Filtered	CMI GW Action Limit	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
1,1 Dichloroethene	ug/L	N	1	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	2 U	0.2 U	0.68 J	0.8 J	0.77 J	-	-	1 U	-	-	-	2	2	0.5 J	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	-	-	3 U	-	-	-	3 U	5 J	5 J	6 J	3 U	3 U	30 U	3 U	3 U	4 J	4 J
2-Hexanone	ug/L	N	40	3 U	0.3 U	0.4 UJ	0.4 U	0.4 U	-	-	3 U	-	-	-	3 U	3 U	3 U	3 J	3 U	3 U	30 U	3 U	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	3 U	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	7 U	0.77 J	2.9 J	0.7 U	0.7 U	-	-	6 U	-	-	-	6 U	13 J	8 J	28	6 U	6 U	60 U	6 U	6 U	12 J	13 J
Benzene	ug/L	N	1	2 U	**2.1**	**1.2J**	0.8 J	**1.1**	**5J**	**140J**	**4J**	**11**	**4**	**15**	**29**	**33**	**52**	**56**	**25**	**30**	**46**	**40**	**32**	**24**	**22**
Bromodichloromethane	ug/L	N	1	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	10 U	1 U	1 UJ	1 U	1 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	10 U	1 U	1 UJ	1 U	1 U	-	-	2 U	-	-	-	2 U	2 U	8	7	5	5 J	20 U	8	9	7	7
Dibromochloromethane	ug/L	N	1	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	1.2 J	1.8 J	1.7 J	2 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.8 UJ	30 J	0.8 U	1 J	0.5 U	0.9 J	4 J	3 J	9	30	25	22	16	18	29	18 J	49 J
Isopropylbenzene	ug/L	N	700	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	3 J	3 J	8	9	8	8	10 U	11	11	10	10
Methane	ug/L	N	NA	-	420	560	810	800	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	0.5 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	1 U	-	-	-	7 J	4 J	20	16	18	14	14 J	24	25	22	23
Methylene chloride (Dichloromethane)	ug/L	N	3	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	ug/L	N	100	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.7 UJ	7 J	0.7 U	0.7 U	0.5 U	0.5 U	0.6 J	0.6 J	5	7	6	5	5 U	3	4	2 J	5 J
trans-1,2-Dichloroethene	ug/L	N	100	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.8 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	14 U	1.4 U	0.4 UJ	0.4 U	0.4 U	0.8 UJ	42 J	0.8 U	0.8 U	0.5 U	0.6 J	2	2	15	33	23	19	5 U	10	24	12 J	39 J
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	130 J	-	-	-	1600 J	1200 J	1800 J	2600 J	1600 J	1700 J	1600 J	1900 J	2200 J	1700 J	1900 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102R	MW-102R	MW-102R
			Field Sample ID	M056RC6X	M056RC7X	M056RC8	M056RC9X	M056RD1X	M056RD2X	M056RD3	M056RD4X	M056RD5X	M056RD6X	M056RD7X	M056RD8	M056RD9	D0403123	M102B9X	M102B9X	M102C1X	M102C2X	M102C4X	M102RA1X	M102RA2X	M102RA3
			Sample Date	08/08/2018	11/07/2018	02/27/2019	05/15/2019	08/19/2019	11/06/2019	02/11/2020	05/21/2020	08/11/2020	11/10/2020	02/08/2021	05/13/2021	12/21/2021	04/03/2012	04/03/2012	04/03/2012	06/13/2012	04/29/2013	08/13/2013	08/21/2019	11/21/2019	01/22/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	**5**	**22**	**300**	**360**	**580**
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 J	-	5 J	0.8 U	4 J	7	**750**	**590**	**830**
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	0.8 U	0.8 U	2 U	1	0.4 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	10 U	-	10 U	2 U	2 U	2 U	2 U	0.2 U	0.4 U
1,1-Dichloroethane	ug/L	N	50	0.6 J	0.7 J	0.8 J	0.5 J	0.7 J	0.9 J	1	0.5 J	0.2 U	0.33 J	0.2 U	0.48 J	0.3 U	**56**	-	**58**	1 U	**66**	31	**2100**	**2000**	**2000**
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	3 U	0.3 U	0.6 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	-	10 U	2 U	2 U	2 U	3 U	0.3 U	0.6 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	**0.4J**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	2	0.3 J	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.75 J	0.3 U	0.3 U	0.3 U	5 U	-	5 U	1 U	2 J	**5J**	**6J**	0.3 U	**3**
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	**2**	0.4 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	4 J	4 J	5 J	2 J	2 J	0.3 U	2 J	0.3 U	0.3 U	1.5 J	1.7 J	2.5 J	0.5 U	24 J	-	23 J	3 U	3 U	3 U	3 U	10	0.6 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	15 U	-	15 U	3 U	3 U	3 U	3 U	4 J	0.6 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.7 J	0.5 U	0.6 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 U	-	15 U	3 U	3 U	3 U	5 U	0.5 U	1 U
Acetone	ug/L	N	6000	13 UJ	8 J	13 J	5 J	3 J	1 J	2 J	0.7 U	8.6 UJ	12 J	4.5 UJ	1.6 J	0.7 U	43 J	-	50 J	6 U	6 U	6 U	7 U	38	11 J
Benzene	ug/L	N	1	**37**	**57**	**38**	**35**	**45J**	**38**	**40**	**23**	**48**	**29**	**2.1**	**28**	**30**	**360**	-	**370**	0.5 U	**150**	**110**	**170**	**240**	**170**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1.8**	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	-	5 U	1 U	1 U	1 U	10 U	1 U	2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	3 UJ	0.3 U	0.6 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40000	4000 U	-	39000	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.6 J	0.4 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	0.8 U	0.8 U	2 U	0.2 U	0.4 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	90	-	91	1 U	50	54	510	660	600
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	0.8 U	0.8 U	6 J	0.2 U	0.4 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	0.8 U	0.8 U	35	56	60
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
Cyclohexane	ug/L	N	NA	10 J	11	10	8 UJ	8 J	9	11	8	11	1 UJ	1 U	8.1	5.4	68	-	71	2 U	24	23	79	100	85
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	-	10 U	2 U	2 U	2 U	2 U	0.2 U	0.4 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1.4 J	1.2 J	-	3.4	-	1.0 U	-	3.8 J	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.34	-	1.0 U	-	1.0 U	-	-	-
Ethylbenzene	ug/L	N	700	7	10	13	12	14 J	7	8	10	7.2	12	1.4	8.7	8.2	**1000**	-	**1100**	0.8 U	310	120	**1300**	**1100**	**1000**
Isopropylbenzene	ug/L	N	700	12	14	13	12	13 J	14	14	9	13	9.3	0.81 J	9.4	8.2	65	-	68	1 U	23	21	130	130	100
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	5800	8700 J	-	2500	-	5.2 J	-	1600	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.6 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	-	3 U	0.5 U	0.5 U	0.5 U	2 U	0.2 J	0.4 U
Methylcyclohexane	ug/L	N	NA	23	30	30	26	24 J	27	35	21	26	21	5.6	17	15	42	-	43	2 J	10	16	110	95	110
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.7 J	0.3 U	1 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	-	10 U	2 U	2 U	2 U	3 U	2	0.6 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	0.8 U	0.8 U	**6J**	**8**	**7**
Toluene	ug/L	N	600	2	5	3	3	3 J	3	4	2	3.4	2.5	0.23 J	2.2	2.5	560	-	590	0.7 U	100	19	220	230	130
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	4 U	-	4 U	0.8 U	0.8 U	0.8 U	2 U	0.2 J	0.4 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	1 U	1 U	2 U	0.2 U	0.4 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	-	5 U	1 U	1 U	**3J**	**7J**	**6**	0.4 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	-	10 U	2 U	2 U	2 U	2 U	0.2 U	0.4 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	-	5 U	1 U	**3J**	**7**	**77**	**90**	**77**
Xylene (total)	ug/L	N	1000	4 J	10	9	8	8 J	10	11	5 J	9.1	4.7 J	1.4 U	6.2	4.2	**7000**	-	**7600**	6	**1200**	250	**6000**	**3800**	**2800**
Total TICs	ug/L	N	NA	1600 J	1900 J	1500 J	1700 J	2100 J	1900 J	2200 J	1900 J	-	-	-	-	-	-	-	-	-	2100 J	-	9000 J	9100 J	1100 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-102R	MW-102R	MW-102R	MW-102R	MW-102R	MW-102R	MW-102R	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103
			Field Sample ID	M102RA4X	M102RA5X	M102RA6X	M102RA7X	M102RA8	M102RA9	M102RB1	M103B2X	M103B3X	M103B4X	M103B5X	M103HS	M103B6X	M103B7X	M103B8X	M103B9X	M103C1X	M103C2X	M103C4X	M103C5X	M103C6X	M103C7X
			Sample Date	05/13/2020	08/07/2020	11/13/2020	02/25/2021	05/21/2021	09/30/2021	12/28/2021	06/22/2012	08/27/2013	08/21/2014	07/16/2015	02/02/2016	02/12/2016	08/19/2016	02/23/2017	09/12/2017	02/28/2018	08/14/2018	03/11/2019	09/18/2019	03/11/2020	09/23/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**490**	**260**	**260**	**300**	**610**	**160**	**120**	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	**1100**	**420**	**290**	**800**	**1700**	**210**	**150**	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.4 U	0.4 U	0.2 U	**21**	**6.1**	0.3 U	0.6 U	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.4 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	**2700**	**2800**	**2800**	**2500**	**2900**	**2000**	**1700**	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.6 U	**5**	**3.1**	**2.4**	**2.9**	**4.3**	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.4 U	0.4 U	0.2 U	**2.3**	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.6 U	8.2 J	5.8 J	0.3 U	0.3 U	0.5 U	1 U	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	0.6 U	0.6 U	0.3 U	1.9 J	0.3 U	0.4 U	0.8 U	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	1 U	1 U	2.1 J	0.5 U	0.5 U	0.5 U	1 U	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	8 UJ	6.2 J	0.7 U	0.7 U	0.7 U	0.7 U	12 J	71	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	**90**	**180**	**140**	**91**	**70**	**120**	**190**	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 UJ	0.2 U	0.2 U
Bromodichloromethane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	2 U	2 U	1 U	1 U	1 U	1 U	2 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	550	870	1200	590	560	1400	1100	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	41	32	30	30	**130**	25	22	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	79	80	83	82	42	42	110	5 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	4.3 J	4.7 J	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	**1000**	**1100**	**1100**	**830**	300	**780**	**840**	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 UJ	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	120	120	85	110	43	100	98	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	320	810	1900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	110	100	98	130	35	100	91	2 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.6 U	2.5	1.3	0.3 U	0.3 U	1.7	0.6 U	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	**6**	**2**	**2.3**	**2.5**	**11**	**1.3**	**1.7J**	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	49	88	92	110	21	56	100	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.6 J	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 U	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	**4**	0.4 U	**1.2**	**1.4**	**7.7**	0.3 U	0.6 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	**58**	**85**	**96**	**54**	**48**	**100**	**110**	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	**3000**	**3100**	**2800**	**2700**	770	**1800**	**2300**	0.8 U	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	3 UJ	1 U	1.4 U
Total TICs	ug/L	N	NA	9400 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-103	MW-103	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-106R
			Field Sample ID	M103C8	M103C9	M104B2X	M104B3X	M104B4X	M104B5X	M104B6X	M104B7X	M104B8X	M105B3X	M105B4X	M105B5X	M105B6X	D020316HS7	M105HS	D0212161	M105B7X	M105C2X	M105C4X	M105C5X	M105C6X	M106RB4X
			Sample Date	06/24/2021	12/17/2021	06/22/2012	08/27/2013	08/21/2014	09/21/2016	02/23/2017	02/28/2018	03/19/2019	06/29/2012	08/27/2013	08/22/2014	12/09/2015	02/03/2016	02/03/2016	02/12/2016	02/12/2016	02/17/2017	03/27/2018	03/18/2019	06/25/2020	06/15/2012
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	3 U	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	3 U	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	0.7 U	0.89 J	8 J	-	-	-	-	-	-	6 U	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	1 U	1 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	1 U	3.5 J	2 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.42 J	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	1000	2900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	0.5 U	1.2 J	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.4 U	0.8 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
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MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-129	MW-129	MW-129	MW-129
			Field Sample ID	M108B5X	M108B6X	M108B7X	M108B8X	M108B9X	M108C1X	M108C2X	M108C3X	M108C4X	M111B5X	M111B6X	M111B7X	M111B8X	M111B9X	D0301181	M111C1X	M111C2X	M111C3X	M129C1X	M129C3X	M129C4X	M129C5X
			Sample Date	06/15/2012	08/15/2013	08/21/2014	12/20/2016	02/17/2017	03/01/2018	03/05/2019	02/17/2020	03/31/2021	06/19/2012	08/15/2013	08/21/2014	09/23/2016	02/17/2017	03/01/2018	03/01/2018	02/28/2019	02/26/2020	06/29/2012	08/22/2014	07/16/2015	04/26/2016
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.2 U	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11000 J	25000	16000	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0 U	1.0 U	1.0 U	1.2 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2700	1500	980	6300
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.8 U	0.5 U	0.8 J	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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			Field Sample ID	M129D1X	M129D2X	M129D3X	M129D4X	D0617191	M129D9X	D1204191A	M129D6X	D0616201	M129E1X	M129E2X	M130B2X	M130B3X	M130B4X	M130B5X	M130B6X	M130B7X	M130B8X	M130B9X	M130C3	M147B4X	M147B5X
			Sample Date	06/16/2017	12/19/2017	06/14/2018	12/03/2018	06/17/2019	06/17/2019	12/04/2019	12/04/2019	06/16/2020	06/16/2020	12/09/2020	06/26/2012	08/27/2013	08/22/2014	06/15/2016	05/03/2017	05/23/2018	05/21/2019	05/07/2020	05/25/2021	06/22/2012	08/28/2013
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	0.8 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	1 U	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	3 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	3 U	-
Acetone	ug/L	N	6000	6 UJ	7 J	6 U	4 U	2 J	2 J	2 J	2 J	1.8 J	1.8 J	1 J	-	-	-	-	-	-	-	-	-	6 U	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	1 U	-
Carbon Dioxide	ug/L	N	NA	27000	26000	24000	17000	13000 J	15000 J	18000 J	21000 J	12000 J	13000 J	21000 J	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	2 U	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	-	-	-	-	-	-	-	-	-	2 U	-
Ethane	ug/L	N	NA	2.8 J	1.0 U	0.20 U	2.4 J	1.4 J	1.3 J	1.7 J	1.7 J	1 U	1 U	1.5 J	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	1.0 U	1.0 U	0.20 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Methane	ug/L	N	NA	4500	760	100	9000	7600	7600	7800	8100	2400	2500	6800	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	1 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.5 U	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	2 U	-
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	0.8 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	1 U	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U
Total TICs	ug/L	N	NA	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147	MW-147
			Field Sample ID	M147B6X	M147B7X	M147B8X	M147B9X	M147C1X	D0725178	M147C2X	D1113178	M147C3X	M147C4X	M147C5	M147C6	M147C7	M147C8X	M147C9X	M147D1X	M147D2X	M147D4X	M147D5X	M147D6X	M147D7X	D062820211A
			Sample Date	08/26/2014	03/15/2016	11/22/2016	02/17/2017	05/09/2017	07/25/2017	07/25/2017	11/13/2017	11/13/2017	02/28/2018	05/23/2018	08/21/2018	11/30/2018	02/25/2019	05/22/2019	08/19/2019	11/06/2019	05/21/2020	08/12/2020	11/06/2020	02/09/2021	06/28/2021
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	10 U	10 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	0.6 J	0.5 U	0.5 U	3 U	3 U	0.5 J	0.5 U	0.5 U	0.5 U	0.6 J	0.2 U	0.2 U	0.2 U	1 UJ	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	1 U	1 U	1 U	5 U	5 U	1 UJ	1 UJ	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	2 U	2 U	2 U	10 U	10 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	3 U	3 U	3 U	15 U	15 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	-	-	3 U	3 U	3 U	15 U	15 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	3 U	3 U	3 U	15 U	15 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	6 U	6 U	6 U	30 U	30 U	6 U	6 U	6 U	6 U	0.7 UJ	0.7 U	0.7 U	6 J	4 UJ	0.7 U	3 UJ	0.7 U	2.4 J	0.7 U	2.6 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Bromodichloromethane	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	5 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	2 U	2 U	2 U	10 U	10 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	2 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.25 J	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
Methyl acetate	ug/L	N	7000	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	2 U	2 U	2 U	10 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	7 UJ	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TICs	ug/L	N	NA	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 UJ	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-147	MW-147	MW-147	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-168
			Field Sample ID	M147D8	M147D9	M147E1	M167B8X	M167B9X	M167C1X	M167C2X	M167C3X	M167C4X	M167C5X	M167C6X	M167C7X	M167C8X	M167C9X	D1024195	M167D1X	M167D2X	M167D3	M167D4	M167D5	M167D6	M168B7X
			Sample Date	06/28/2021	10/22/2021	02/01/2022	07/03/2012	08/06/2013	08/12/2014	12/03/2015	04/28/2016	06/15/2017	05/09/2018	06/14/2018	12/12/2018	04/16/2019	06/21/2019	10/24/2019	10/24/2019	04/27/2020	07/01/2021	10/01/2021	12/28/2021	02/17/2022	06/19/2012
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	-	**5**	**4J**	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.49 J	0.32 J	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	-	3 J	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	-	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	-	**73**	31	0.6 J	0.8 J	5 U	0.5 U	0.6 J	0.5 U	2 U	0.3 J	0.5 J	0.3 J	0.3 J	0.4 J	1.3	4.3	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.33 J	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	30 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	-	3 U	3 U	3 U	3 U	30 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	30 U	3 U	3 U	3 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	1.8 UJ	0.7 U	-	6 U	6 U	6 U	6 U	60 U	6 U	6 U	6 U	7 U	1 J	0.7 U	1 J	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-
Benzene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 UJ	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	45000	120000	72000	56000	47000	51000	42000	49000	35000	20000	53000 J	-	50000 J	40000 J	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	-	1 U	1 UJ	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	-	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 UJ	-	62	2 J	23	4	8 J	6	3	5	2 U	1	2	1	1	1	2.1	15	0.75 J	0.31 J	-
Chloroform	ug/L	N	70	0.3 U	0.3 U	-	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	7 J	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	-	0.9 J	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 J	0.69 J	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	1 U	1 U	-	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	-	2 U	2 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	1 U	1 U	-	3.0 J	1.0 U	13	3.8 J	5.7	8.9	-	11	-	-	7.5	-	-	-	1.7 J	6.1	3.3 J	1 U	-
Ethene	ug/L	N	NA	-	-	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	-	0.20 U	-	-	1 U	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methane	ug/L	N	NA	24	22	-	3300	250	4000	760	1000	2100	-	2800	-	-	5100	-	-	-	2500	5000	4000	560	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	20 U	2 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	-	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	-	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	-	2 U	2 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 UJ	-	1 U	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.51 J	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	10 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Total TICs	ug/L	N	NA	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R
			Field Sample ID	M168B8X	M168B9X	M168C1X	M168C2X	M168C4X	M168C5X	M168C6X	M168C7X	M169RC1X	M169RC2X	M169RC3X	M169RC4X	M169RC5X	M169RC5X	M169RC7X	M169RC7X	M169RC9X	M169RC9X	M169RD1X	M169RD1X	M169RD2X	M169RD2X
			Sample Date	06/12/2013	08/01/2013	08/13/2014	12/02/2015	06/16/2017	06/13/2018	06/19/2019	09/10/2020	06/28/2012	06/14/2013	08/01/2013	06/24/2014	08/26/2014	08/26/2014	10/27/2014	10/27/2014	01/14/2015	01/14/2015	04/27/2015	04/27/2015	07/13/2015	07/13/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	-	-	-	-	-	-	-	**67**	**49**	**54**	**20**	**20**	**22**	-	**7**	-	**5**	-	**3**	-	**4**
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	-	-	-	-	-	-	-	23	21	21	12	11	12	-	5	-	3	-	2	-	3
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 U
2-Hexanone	ug/L	N	40	3 U	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 U
Acetone	ug/L	N	6000	6 U	-	-	-	-	-	-	-	6 U	6 U	6 U	76	51	43	-	7 J	-	6 U	-	6 U	-	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 J	0.8 J	0.7 J	0.7 J	0.9 J	0.9 J	-	0.7 J	-	0.8 J	-	0.7 J	-	0.8 J
Bromodichloromethane	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 UJ	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	97000	130000	130000	160000	180000	230000	-	220000	-	170000	-	110000	-	110000
Carbon disulfide	ug/L	N	700	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	2	5	4	-	3	-	3	-	1	-	1
Chloroform	ug/L	N	70	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	-	-	-	-	-	-	-	**110**	**130**	**99**	**140**	**160**	**150**	-	**86**	-	**86**	-	**71**	-	**76**
cis-1,3-Dichloropropene	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	2.6 J	3.7	2.6 J	17	-	30	8.30	8.3	17.00	17	36	-	42	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	1.0 U	0.71	1.1 J	11	-	11	2.40	-	0.7	-	1.4	-	1.8	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	730	860	550	10000	-	17000	16000	-	15000.00	-	12000	-	12000	-
Methyl acetate	ug/L	N	7000	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U
Styrene	ug/L	N	100	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	-	-	-	-	-	-	-	0.9 J	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	-	0.5 J	-	0.5 J	-	0.5 U	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	-	-	-	-	-	-	-	5	5 J	5 J	3	4	3	-	2	-	3	-	2	-	2
trans-1,3-Dichloropropene	ug/L	N	1	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	-	-	-	-	-	-	-	**630**	**480**	**490**	**120**	**130**	**140**	-	**57**	-	**43**	-	**9**	-	**5**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	-	-	-	-	-	-	-	**19**	**17**	**14**	**19**	**24**	**24**	-	**9**	-	**9**	-	**15**	-	**16**
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-170	MW-170	MW-170
			Field Sample ID	M169RD3X	M169RD3X	M169RD4X	M169RD5X	M169RD6X	M169RD7X	M169RD8X	M169RD9X	M169RE1X	M169RE2X	M169RE3X	M169RE4X	D1217191	M169RE5X	M169RE6X	M169RE7	M169RE8	M169RE9	M169RF1	M170C3X	M170C4X	M170C5X
			Sample Date	10/13/2015	10/13/2015	02/04/2016	05/13/2016	08/08/2016	11/04/2016	05/25/2017	11/07/2017	05/08/2018	12/06/2018	04/18/2019	10/28/2019	12/17/2019	12/17/2019	04/27/2020	06/30/2021	09/30/2021	12/15/2021	02/03/2022	06/28/2012	09/11/2012	08/08/2013
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	**2**	**4**	1	1	**2**	**9**	**3**	**5**	**10**	**5**	**8**	**9**	**9**	**8**	**5.4**	**1.2**	**5.4**	0.30 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	2	2	1	0.8 J	2	6	2	3	5	3	4	4	4	4	2.5	0.5 J	2.6	0.30 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.6 J	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 UJ	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.50 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.40 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.70 U	6 U	6 U	6 U
Benzene	ug/L	N	1	-	0.5 U	0.9 J	0.7 J	0.5 U	0.7 J	0.9 J	0.6 J	0.7 J	0.8 J	0.7 J	0.7 J	0.7 J	0.7 J	0.7 J	0.48 J	0.3 U	0.55 J	0.30 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	95000	120000	110000	110000	110000	95000	83000	75000	64000	70000	67000 J	80000 J	78000 J	72000 J	-	-	-	-	75000	120000	89000
Carbon disulfide	ug/L	N	700	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	-	0.5 U	1	0.6 J	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	30	52	27	14	29	**87**	39	58	**97**	65	**87**	**93**	**89**	**86**	**73**	13	**79**	3.4	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	31	-	-	-	-	-	-	-	-	-	-	-	13	13	-	4.8 J	1 U	6.7	1.0 U	1.0 U	1.0 U	1.0 U
Ethene	ug/L	N	NA	1.6	-	-	-	-	-	-	-	-	-	-	-	6.2	5.8	-	-	-	-	-	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	N	700	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Methane	ug/L	N	NA	9400	-	-	-	-	-	-	-	-	-	-	-	1400	1300	-	1500	710	720	52	5.0 U	5.0 U	3.0 U
Methyl acetate	ug/L	N	7000	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	1 J	2	1	0.6 J	1	2	1	1	1	0.8 J	1	1	1	0.9 J	0.54 J	0.3 U	0.3 J	0.30 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	**2**	**3**	0.6 J	1 J	**2**	**6**	1	**2**	**7**	0.8 J	**9**	**12**	**10**	**8**	0.3 U	0.42 J	0.3 J	0.51 J	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	**7**	**13**	**8**	**4**	**15**	**31**	**18**	**20**	**26**	**20**	**24**	**26**	**25**	**22**	**20**	**3.2**	**24**	0.30 J	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.40 U	0.8 U	0.8 U	0.8 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	0 U	0 U	0 U	0 U	0.0 U	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-170	MW-170	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R
			Field Sample ID	D1101131	M170C6X	M170RA1X	M170RA2X	M170RA3X	M170RA4X	M170RA5X	M170RA7X	M170RA8X	D0328191	M170RA9X	D0916191	M170RB1X	M170RB2X	M170RB3X	D062120211A	M170RB4	M170RB5	M170RB6	M170RB7
			Sample Date	11/01/2013	11/01/2013	12/10/2015	03/17/2016	09/15/2016	04/05/2017	09/12/2017	04/25/2018	10/16/2018	03/28/2019	03/28/2019	09/16/2019	09/16/2019	04/30/2020	10/29/2020	06/21/2021	06/21/2021	09/30/2021	12/30/2021	02/17/2022
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.42 J	0.40 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	4 UJ	5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.70 U	0.70 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Bromodichloromethane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	110000	110000	130000	120000	140000	86000	150000	46000	160000	57000	55000	91000 J	96000 J	120000 J	120000 J	110000 J	110000 J	-	91000 J	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1.0 U	1.0 U	1 U	1 UJ	1 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	1 U	1 U	1 U
Ethene	ug/L	N	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	-	1 U	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	3.0 U	3.0 U	81	53 J	3.0 U	3.0 U	53	3.0 U	86	7.7	8.8	410	410	76	230	44	53	72	120	130
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	0.48 J	0.20 U	0.20 U	0.21 J	0.2 U	0.22 J
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.50 U	0.5 U	0.5 UJ	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.30 U	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	0.40 U	0.40 U	0.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	-	0.0 U	0.0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-183	MW-183	MW-183	MW-183	MW-183	MW-183	MW-183	MW-183	MW-183	MW-183	MW-184	MW-184	MW-184	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185
			Field Sample ID	M183B6X	M183B7X	M183B8X	M183B9X	M183C1X	D0614191	M183C2X	M183C3X	M183C4	M183C5	M184B7X	M184B8X	M184B9X	M185B8X	M185C1X	M185C1X	M185C3X	M185C4X	M185C5X	M185C6X	M185C7X	M185C8X
			Sample Date	06/19/2012	08/08/2013	09/15/2016	06/15/2017	06/14/2018	06/14/2019	06/14/2019	06/12/2020	06/28/2021	10/22/2021	06/27/2012	06/16/2013	08/08/2013	06/16/2013	10/21/2015	10/21/2015	02/09/2016	05/13/2016	08/09/2016	11/09/2016	05/24/2017	11/10/2017
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	**4J**	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	8	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	0.3 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	0.3 U	0.4 U	0.4 U	-	3 U	-	3 U	-	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	0.7 U	0.7 U	0.7 U	-	7 J	-	6 U	-	34	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**3J**	**2J**	**2J**	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	1 U	1 U	1 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 UJ	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	310000	-	-	-	6500 J	4000 U	4000 U	4000 U	4000 U	4000 U	4000 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 UJ	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	33	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	1 U	1 U	-	19	-	-	0.05J	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	0.59	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	16	12	-	7500	-	-	320	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	2 J	-	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.3 U	0.3 U	-	**10**	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 UJ	-	**16**	-	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-188	MW-188	MW-188
			Field Sample ID	M185C9X	M185D1X	M185D2X	M185D3X	M185D5X	M185D6	D092420211C	M185D7	M185D8	M185D9	M186B8X	M186B9X	M186C1X	M186C2X	M186C4X	M186C5X	D0620191	M186C6X	M186C7X	D1018126	M188B2X	M188B3X
			Sample Date	05/10/2018	12/07/2018	04/19/2019	10/25/2019	05/01/2020	06/21/2021	09/24/2021	09/24/2021	10/22/2021	01/13/2022	06/28/2012	08/01/2013	08/13/2014	12/02/2015	06/16/2017	06/13/2018	06/20/2019	06/20/2019	05/01/2020	10/18/2012	10/18/2012	12/13/2012
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	**31**	**32**	**24**
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	43	42	31
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 UJ	0.3 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	5 J	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	0.7 U	1 J	1 J	1 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	25	28	6 UJ	6 U	1 J	1 J	0.7 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	**4J**	**4J**	**3J**
Bromodichloromethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	2600 U	2600 U	2600 U	2600 UJ	2600 UJ	-	-	-	-	-	6100 J	8800 J	240000	35000	12000	8700 J	3400 J	2900 J	2600 UJ	-	100000	97000
Carbon disulfide	ug/L	N	700	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	3 J	3 J	3 J
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	1 U	1 U	1 U	-	2.1	1.5
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 J	1 U	1 U	1 U	-	3.2	1.6
Ethylbenzene	ug/L	N	700	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	3.8 UJ	17	17	110	39	85	50	17000	2100	240	89	160	160	4.7 J	-	2500	1600
Methyl acetate	ug/L	N	7000	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 J	1 J	0.6 J
Methylcyclohexane	ug/L	N	NA	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	5	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 J	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	**26**	**27**	**24**
Xylene (total)	ug/L	N	1000	0.5 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	0.8 U	0.8 U	0.8 U
Total TICs	ug/L	N	NA	0 U	-	-	-	-	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188
			Field Sample ID	M188B4X	M188B5X	M188B6X	M188B7X	M188B8X	M188B9X	M188C1X	M188C2X	M188C2X	M188C3X	M188C3X	M188C5X	M188C5X	M188C6X	M188C6X	M188C7X	M188C8X	M188C9X	M188D1X	M188D2X	M188D5X	M188D7X
			Sample Date	02/14/2013	04/22/2013	06/12/2013	09/20/2013	01/10/2014	04/10/2014	06/19/2014	09/04/2014	09/04/2014	10/29/2014	10/29/2014	09/09/2015	09/09/2015	10/20/2015	10/20/2015	02/11/2016	05/24/2016	08/10/2016	11/09/2016	05/26/2017	05/12/2018	02/09/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**20**	**20**	0.8 U	**28**	1 J	**19**	**13**	-	0.5 U	-	**40**	-	**6**	-	**2**	0.5 U	**9**	**6**	**5**	0.8 J	**2**	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	35	32	1 U	40	2 J	32	21	-	0.5 U	-	**51**	-	8	-	2	1	13	7	5	2	3	0.6 J
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 UJ	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3 UJ	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3 UJ	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3 UJ	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	-	6 U	-	6 UJ	-	7 J	-	6 U	6 U	6 U	6 U	6 U	6 U	6 U	2 J
Benzene	ug/L	N	1	**4J**	**3J**	0.5 U	**3J**	0.5 U	**3**	**2**	-	0.5 U	-	**3**	-	0.6 J	-	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 UJ	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	120000	120000	6000 J	100000	10000 J	93000	85000	-	13000	-	94000	-	20000	-	99000	11000 J	72000	43000	12000	13000	41000	33000
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 UJ	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	3 J	3 J	0.8 U	3 J	0.8 U	3	2	-	0.5 U	-	4	-	0.7 J	-	0.5 U	0.5 U	1	0.6 J	0.5 J	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	-	0.5 U	-	1 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	2	2.3	0.015J	2.7	0.098	2.3	2	0.09	-	3	-	1.7	-	1.1	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	2	2.1	0.036	2.5	0.14	1.5	0.89	0.20	-	2.40	2.4	1.4	-	1.2	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	3600	3000	9.8	2600	92	1800	1800	320.00	-	1800.00	1800	1100	-	620	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.7 J	0.7 J	0.5 U	0.7 J	0.5 U	0.5 J	0.5 U	-	0.5 U	-	0.8 J	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 U	-	0.8 J	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**20**	**20**	1 U	**25**	1 U	**19**	**14**	-	0.5 U	-	**25**	-	**5**	-	1	0.5 J	**10**	**5**	**2**	0.5 U	0.9 J	0.5 J
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Total TICs	ug/L	N	NA	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189
			Field Sample ID	M188E1X	M188E2X	M188E3X	M188E4X	M188E5X	M188E6X	M188E7X	M188E8	M188E9	M188F2	M189B2X	M189B3X	M189B4X	M189B5X	M189B5X	M189B6X	M189B6X	D0909155	M189B8X	M189B8X	M189B9X	M189B9X
			Sample Date	05/04/2019	07/27/2019	11/02/2019	01/25/2020	05/02/2020	07/25/2020	03/27/2021	06/19/2021	09/22/2021	03/15/2022	10/17/2012	06/12/2013	06/19/2014	09/04/2014	09/04/2014	10/29/2014	10/29/2014	09/09/2015	09/09/2015	09/09/2015	10/20/2015	10/20/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**2**	0.2 U	0.6 J	**5**	**5**	**8.6**	**3.1**	**2**	**1.8**	**3.7**	**71**	**4J**	**35**	-	**19**	-	**41**	**50**	-	**50**	-	**51**
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	2 U	-	2 U	-	2 UJ	2 U	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	3	0.2 U	0.7 J	7	6	12	4	2.5	1.9	4.2	25	1 J	11	-	7	-	13	16	-	15	-	16
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 U	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	-	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1 J	0.3 U	0.3 U	0.3 U	0.6 J	1.9 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	-	3 U	-	3 UJ	3 U	-	3 U	-	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	1.1 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	-	3 U	-	3 UJ	3 U	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	-	3 U	-	3 UJ	3 U	-	3 U	-	3 U
Acetone	ug/L	N	6000	0.7 UJ	12 J	5 J	1 J	7 J	5.4	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	-	6 U	-	6 UJ	6 U	-	6 U	-	6 U
Benzene	ug/L	N	1	0.5 J	0.2 U	0.2 U	0.9 J	1	**1.3**	0.55 J	0.3 U	0.3 U	0.68 J	0.9 J	0.5 U	0.5 J	-	0.5 U	-	0.7 J	0.8 J	-	0.8 J	-	0.8 J
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.5 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	84000	17000 J	29000 J	78000 J	140000 J	110000 J	110000 J	-	-	-	150000	100000	110000	-	120000	-	120000	-	-	110000	-	160000
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	-	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.94 J	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.4 J	0.2 U	0.2 U	0.8 J	1	1.6	0.2 U	0.3 U	0.31 J	0.76 J	37	3 J	21	-	13	-	25	29	-	28	-	29
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	0.2 U	2 U	1 U	1 U	1 U	0.32 U	1 UJ	1 U	1 U	1 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 U	-	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	-	0.5 U	-	1 UJ	0.5 U	-	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	1.3 J	1.7 J	2.7 J	0.94	0.13	0.55	0.0080J	-	1.10	1.1	-	1.6	-	1.6	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2.2	0.56	1.4	0.02J	-	2.20	2.2	-	2.2	-	2.1	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	1900	4300	4000	1000	2400	720	1.10	-	920	-	-	1600	-	1200	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.47 U	0.21 J	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 U	-	2 U	-	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 U	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 J	0.5 U	-	0.5 U	-	0.5 J
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.31 U	0.2 U	0.3 U	0.3 U	0.3 U	**11**	1 J	**4**	-	**3**	-	**4**	**7**	-	**7**	-	**8**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**4**	0.2 U	0.5 J	**5**	**6**	**11**		**3.2**	**2.8**	**3.6**	**52**	**4J**	**31**	-	**18**	-	**33**	**37**	-	**37**	-	**34**
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190
			Field Sample ID	M189C1X	M189C2X	M189C3X	M189C4X	M189C5X	M189C7X	M189C9X	M189D1X	M189D2X	M189D3	M189D4	M189D5	M189D6	M190B5X	M190B6X	M190B7X	M190B8X	M190B9X	D0216178B	M190C1X	M190C2X	M190C3X
			Sample Date	02/11/2016	05/24/2016	08/10/2016	11/09/2016	05/26/2017	05/12/2018	05/04/2019	11/02/2019	05/02/2020	06/19/2021	09/22/2021	12/17/2021	03/15/2022	06/20/2012	08/28/2013	08/20/2014	03/15/2016	11/22/2016	02/16/2017	02/16/2017	05/08/2017	07/24/2017
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**16**	**46**	**18**	**37**	**2**	**36**	**9**	**16**	**15**	**15**	**10**	**11**	**14**	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	5	13	5	10	0.5 U	7	2	3	3	3.2	2.5	2.7	3	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.4 U	0.4 U	0.4 U	0.4 U	-	-	-	-	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	0.9 UJ	0.7 U	0.7 U	0.7 U	4.8 J	0.7 U	0.7 U	-	-	-	-	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.4 J	0.4 J	0.3 U	0.3 U	0.3 J	0.37 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	91000	120000	170000	140000	130000	140000	110000	97000 J	160000 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	11	28	12	23	0.9 J	26	10	25	24	26	24	25	29	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	1 U	1 U	1 U	1 U	1 UJ	1 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	1.3 J	1.1 J	2 J	2.3 J	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	1200	270	1500	1300	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 J	0.5 U	0.5 J	0.5 U	1	0.8 J	2	2	2.5	1.9	2.6	2.7	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**3**	**5**	**2**	**5**	0.5 U	**5**	**2**	**3**	**3**	**2.7**	**2.3**	**2.5**	**3.8**	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**10**	**28**	**14**	**17**	1	**22**	**3**	**6**	**6**	**7.9**	**4.7**	**5.1**	**5.3**	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	-	-	-	-	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-191	MW-191	MW-191	MW-191
			Field Sample ID	M190C4X	M190C5X	M190C6	M190C7	M190C8	M190C9X	M190D1X	M190D2X	M190D3X	D0212201X	M190D4X	M190D5X	M190D6X	D0503211	M190D7	M190D8	M190D9	M191B2X	M191B3X	M191B4X	M191B4X
			Sample Date	11/13/2017	02/28/2018	05/23/2018	08/21/2018	11/28/2018	02/25/2019	05/24/2019	08/19/2019	11/13/2019	02/12/2020	02/12/2020	05/21/2020	01/27/2021	05/03/2021	05/03/2021	10/27/2021	03/25/2022	10/17/2012	06/11/2013	09/09/2015	09/09/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 UJ	0.2 UJ	0.3 U	-	1 U	1 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 UJ	0.2 U	-	-	-	-	-	2 U	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	1 U	0.2 J	0.2 J	0.3 J	0.2 J	0.4 J	0.4 J	0.2 J	0.3 J	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	-	2 U	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 UJ	0.3 UJ	0.3 U	-	1 U	1 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.5 U	-	3 U	3 U	-	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.4 U	-	3 U	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	3 U	3 U	-	3 U
Acetone	ug/L	N	6000	6 U	6 U	12 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	-	0.7 U	0.7 U	0.7 U	-	6 U	6 U	-	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.9 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	-	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	-	1 U	1 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120000	-	76000
Carbon disulfide	ug/L	N	700	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	-	2 U	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	2 U	2 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	2.9	2.8	2.5	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.018J	0.0030U	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	9.5	9.7	15	-	12000	11000	12000	-
Methyl acetate	ug/L	N	7000	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	1 U	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	-	2 U	2 U	-	2 U
Styrene	ug/L	N	100	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	-	1 U	1 U	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	2 U	2 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	0.5 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M191B5X	M191B5X	M191B6X	M191B7X	M191B8X	M191B9X	M191C1X	M191C3X	M191C5X	M191C6X	M191C7X	M191C8	M191C9	M191D1	M191D2	M216B5X	M216B5X	M216B6X	D1213128	M216B8X	M216B9X
			Sample Date	10/20/2015	10/20/2015	02/11/2016	05/24/2016	08/10/2016	11/09/2016	05/26/2017	05/12/2018	05/04/2019	11/02/2019	05/02/2020	06/19/2021	09/22/2021	12/17/2021	03/15/2022	04/04/2012	04/04/2012	06/15/2012	12/13/2012	12/13/2012	02/13/2013
Parameter Name	Report Units	Filtered	CMI GW Action Limit	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
1,1 Dichloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**470**	**430**	**400**	**400**	**460**
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**190**	**260**	**160**	**150**	**170**
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 J	1 J	1 J	1 J	1 J
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**180**	**190**	**160**	**160**	**150**
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.7 J	0.3 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 UJ	0.4 U	0.4 U	0.4 U	0.4 U	-	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	6 U	12 J	6 U	6 U	6 U	6 U	6 U	200 J	0.7 U	230	49	250	1.5 J	0.75 J	-	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**120**	**110**	**84**	**84**	**81**
Bromodichloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	150000	88000	87000	100000	150000	130000	89000	82000	66000 J	120000 J	-	-	-	-	-	160000	180000	-	240000	250000
Carbon disulfide	ug/L	N	700	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 J	0.3 U	0.3 U	0.41 J	0.3 U	-	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.42 J	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	73	79	85	83	69
Chloroform	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	7	7	7	7	6
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	-	8	7	4 J	4 J	5 J
Dibromochloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	2.1	-	-	-	-	-	-	-	-	-	-	1.1 J	1 U	1 U	2.1 J	14	-	15	-	20	12
Ethene	ug/L	N	NA	0.0040U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.0	-	2.1 J	-	2.2	1.5
Ethylbenzene	ug/L	N	700	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	3 J	3 J	2 J	2 J	2 J
Methane	ug/L	N	NA	7800	-	-	-	-	-	-	-	-	-	-	6900	5100	3000	12000	3700	-	4500	-	4900	3600
Methyl acetate	ug/L	N	7000	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	3 J	2 J	1 J	2 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 J	2 J	2 U	2 U	2 J
Styrene	ug/L	N	100	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**9**	**8**	**6**	**7**	**8**
Toluene	ug/L	N	600	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**31**	**32**	**26**	**26**	**27**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	**24**	**26**	**26**	**24**	**22**
Xylene (total)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	-	2 J	1 J	1 J	1 J	1 J
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M216C1X	M216C2X	M216C3X	M216C4	M216C5X	D0312145	M216C6X	M216C7X	M216C8X	D0828145	M216C9X	M216C9X	M216D1X	M216D1X	M216D3X	M216D3X	M216D4X	M216D4X	M216D5X	M216D5X	M216D5X	M216D6X	M216D6X
			Sample Date	04/15/2013	06/04/2013	07/30/2013	09/19/2013	12/18/2013	03/12/2014	03/12/2014	06/24/2014	08/12/2014	08/28/2014	08/28/2014	08/28/2014	10/31/2014	10/31/2014	01/19/2015	01/19/2015	04/23/2015	04/23/2015	07/09/2015	07/09/2015	10/12/2015	10/12/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**460**	**420**	**390**	**350**	**210**	**280**	**270**	**220**	**89**	**6J**	-	**5J**	-	**15**	-	**11**	-	**35**	-	**66**	-	**19**
1,1,1-Trichloroethane	ug/L	N	30	**190**	**180**	**170**	**180**	14	**41**	**39**	28	17	8 J	-	9 J	-	2	-	3	-	9	-	9	-	17
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	1 J	1 J	1 J	1 J	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	**160**	**140**	**130**	**140**	**120**	**160**	**150**	**140**	**80**	20 J	-	17 J	-	33	-	28	-	42	-	**69**	-	32
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 UJ	-	1 U	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 J
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	14	21	22	6 J	4 J	3 UJ	-	3 UJ	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	-	3 UJ	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	-	3 UJ	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U
Acetone	ug/L	N	6000	6 U	6 U	9 J	6 U	120	2700	2700	310	59	44 J	-	35 J	-	26	-	20 J	-	13 J	-	15 J	-	6 U
Benzene	ug/L	N	1	**96**	**83**	**64**	**80**	**35**	**40**	**38**	**44**	**20**	**3J**	-	**3J**	-	**12**	-	**16**	-	**23**	-	**29**	-	**12**
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	270000	240000	230000	200000	230000	-	400000	250000	290000	-	-	63000	-	170000	-	160000	-	250000	-	260000	-	91000
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	62	52	52	53	35	45	43	43	38	6 J	-	5 J	-	33	-	55	-	59	-	88	-	45
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	2 J	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	6	5	5 J	5	4 J	5 J	4 J	14	6	0.5 UJ	-	0.5 UJ	-	0.9 J	-	0.9 J	-	1	-	2	-	1
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	6	5	4 J	7	2 U	2 U	2 U	3 J	2 U	2 UJ	-	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	18	-	9.9	13	8	-	12	7.8	24	-	1.40	-	3.40	3.4	7.9	-	11	-	9.7	-	7.7	-
Ethene	ug/L	N	NA	2	-	1.1 J	1.3	1.4	-	2.1	6.1	23	-	3.20	-	21.00	21	10.00	10	7.4	-	5.1	-	2.2	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	3 J	3 J	2 J	3 J	1 U	1 U	1 U	1 J	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methane	ug/L	N	NA	4500	-	5300	4200	2100	-	4300	9900	18000	-	9000.00	-	12000.00	-	16000.00	16000	18000	-	18000	-	18000	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.7 J	0.6 J	0.6 J	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	2 J	2 J	1 J	2 J	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 J	2 U	2 U	2 U	2 J	2 J	2 U	2 U	2 U	2 UJ	-	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	**8**	**7**	**6**	**6**	0.8 U	**3J**	**3J**	1	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 J	-	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.7 J	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**31**	**26**	**24**	**25**	**4J**	**14**	**13**	1	0.8 J	0.5 UJ	-	0.5 UJ	-	0.8 J	-	1	-	**3**	-	**5**	-	**2**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**23**	**18**	**18**	**20**	**18**	**9**	**9**	**21**	**18**	**2J**	-	1 J	-	**10**	-	**13**	-	**17**	-	**18**	-	**10**
Xylene (total)	ug/L	N	1000	1 J	1 J	0.8 U	0.9 J	0.8 U	0.8 U	0.8 U	0.5 J	0.5 U	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M216D7X	M216D9X	M216E1X	M216E2X	M216E3X	M216E4X	M216E5X	M216E6X	M216E7X	D0222195	M216E8X	M216E9X	M216F1X	M216F2X	M216F3X	D0121205	M216F4X	M216F5X	M216F6X	M216F7X	M216F8	M216F9
			Sample Date	02/09/2016	08/05/2016	10/31/2016	05/23/2017	08/28/2017	11/07/2017	02/22/2018	05/18/2018	12/17/2018	02/22/2019	02/22/2019	04/23/2019	07/17/2019	10/29/2019	12/16/2019	01/21/2020	01/21/2020	04/28/2020	07/27/2020	04/06/2021	06/24/2021	09/30/2021
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**25**	**37**	**68**	**270**	**300**	**170**	**320**	**470**	**3J**	**65J**	**65J**	**82**	**110J**	**61**	**170**	**180**	**180**	**260**	**230**	**280**	**380J**	**370**
1,1,1-Trichloroethane	ug/L	N	30	2	10	9	**260**	**280**	**170**	**370**	**690**	0.3 UJ	6	6	**86**	**130J**	**91**	**210**	**220**	**220**	**300**	**260**	**320**	**490J**	**570**
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.3 UJ	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.7 J	1	1	0.2 UJ	0.2 U	0.2 U	0.4 J	0.4 J	0.3 J	0.8 J	0.9 J	0.9 J	0.9 J	0.82 J	1.4	1.6 J	1.5
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	40	47	**81**	**200**	**190**	**160**	**300**	**280**	16 J	**120**	**120**	**160**	**170J**	**110**	**250**	**250**	**260**	**300**	**270**	**280**	**300J**	**280**
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 UJ	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 UJ	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 UJ	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 UJ	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.8 J	0.5 U	0.8 J	1	0.5 U	1	1	0.5 U	0.3 UJ	2	2	**3**	2 J	2	1	2	2	0.3 U	1.3	0.3 U	**2.9J**	1.5
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.3 UJ	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.3 UJ	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 UJ	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	52 J	7 J	8 J	2 J	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.4 J	1.9 U	0.3 U	0.5 UJ	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	5 J	0.3 U	0.4 J	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.4 UJ	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 J	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 UJ	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	**7700J**	280	230	42	16 J	4 J	1 UJ	0.7 U	0.7 U	2 J	13	0.7 U	0.7 UJ	0.7 U
Benzene	ug/L	N	1	**28**	**39**	**25**	**49**	**42**	**43**	**34**	**47**	**40J**	**50**	**51**	**55**	**57J**	**55**	**54**	**51**	**51**	**62**	**64**	**63**	**70J**	**67**
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 UJ	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.54 U	1 U	1 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U
Carbon Dioxide	ug/L	N	NA	270000	260000	220000	220000	-	180000	200000	190000	230000	-	240000	190000	250000 J	270000 J	240000 J	-	210000 J	230000 J	170000 J	190000 J	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 J	0.2 U	0.2 U	0.2 U	0.3 J	0.82 U	0.2 U	0.3 UJ	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.3 UJ	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.3 UJ	0.3 U
Chloroethane	ug/L	N	NA	93	62	82	100	82	120	130	97	180J	280	270	220	240J	210	160	170	170	150	84	73	85 J	70
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 J	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.3 UJ	0.3 UJ	0.3 J	0.33 U	0.47 UJ	0.59 J	0.6 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 UJ	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	2	2	3	6	5	4	7	8	0.9 J	5	5	4	5 J	3	8	7	7	9	9.9	9.7	15 J	17
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 UJ	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	4 J	3 J	2 J	4 J	5	0.6 J	0.5 J	0.7 J	1 J	0.8 J	1 U	2 J	3 J	3 J	4 J	7.3	5.6	6.5 J	6.4
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 UJ	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	-	-	-	-	-	21	19
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 J	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	1 J	1	1	1	0.59 J	0.55 J	0.4 UJ	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 J	1 J	2 J	2 J	1 J	1 J	2 J	0.4 UJ	1 J	1 J	2 J	2 J	1 J	2 J	2 J	2 J	3 J	2.7	4.1 J	3.3 J	3.2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18000	-	-	-	-	-	14000	13000
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 UJ	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.3 J	0.3 J	0.3 J	0.2 J	0.3 J	0.3 J	0.3 J	0.3 J	0.3 J	0.47 U	0.2 U	0.2 J	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 J	1 U	1 J	2 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.5 U	0.5 U	0.9 J	0.9 J	1 J	1.4	2.5 J	2.1 J	1.6 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.9 J	1	1	0.3 UJ	0.7 J	0.8 J	0.8 J	1 UJ	0.7 J	1	1	0.3 U	2	0.97 J	1.2	0.3 UJ	1.1
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.3 UJ	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	**2**	**2**	1	**3**	**4**	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 J	0.4 J	1	1	1	**2**	**1.6**	**4**	**4J**	**4.4**
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.8 J	0.9 J	0.9 J	1	1 J	2	1	0.9 J	0.9 J	0.8 J	0.64 J	0.5 J	0.52 J	0.4 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.24 U	0.2 U	0.3 UJ	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 UJ	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**3**	**4**	**6**	**18**	**17**	**10**	**16**	**24**	0.3 J	**3**	**3**	**5**	**5J**	**4**	**11**	**11**	**11**	**15**	**9.7**	**20**	**17J**	**15**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**14**	**18**	**27**	**44**	**31**	**28**	**41**	**39**	**2J**	**26**	**26**	**24**	**31J**	**14**	**38**	**41**	**42**	**52**	**65**	**68**	**130J**	**120**
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.6 J	0.6 J	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.66 J	1.4 U	0.4 UJ	0.46 J
Total TICs	ug/L	N	NA	-	-	-	-	-	-	120 J	-	-	-	-	-	-	-	-	-	-	86 J	-	-	-	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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Chevron Perth Amboy Facility

			Location ID	MW-216	MW-216	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
			Field Sample ID	M216G1	M216G2	M217B3X	M217B3X	M217B4X	M217B6X	D0214135	M217B7X	D0416135	M217B8X	M217B9X	M217C1	D1217135	M217C2X	M217C3X	D0620145	M217C4X	M217C5X	M217C6X	M217C7X	M217C7X	M217C8X
			Sample Date	12/28/2021	03/29/2022	04/04/2012	04/04/2012	06/15/2012	12/14/2012	02/14/2013	02/14/2013	04/16/2013	04/16/2013	07/30/2013	09/19/2013	12/17/2013	12/17/2013	03/13/2014	06/20/2014	06/20/2014	08/13/2014	01/15/2015	04/21/2015	04/21/2015	07/06/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**360**	**430**	-	**820**	**640**	**570**	**4J**	**4J**	0.9 J	1 J	**2J**	1 J	1 J	**2J**	**2J**	0.5 U	0.6 J	**2**	**7**	-	**10**	-
1,1,1-Trichloroethane	ug/L	N	30	**460**	**540**	-	11	17	6	1 J	1 J	0.8 J	1 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
1,1,2-Trichloroethane	ug/L	N	3	1.2	1.7	-	**4J**	3 J	3 J	2 J	2 J	2 J	2 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-
1,1-Dichloroethane	ug/L	N	50	**290**	**330**	-	**190**	**190**	**230**	**190**	**210**	**190**	**170**	**58**	10	5 J	6	4 J	3	3	3	6	-	6	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
1,2-Dichloroethane	ug/L	N	2	**2.7**	0.3 U	-	**3J**	**3J**	**3J**	**4J**	**5J**	1 UJ	1 UJ	1 U	**3J**	2 J	2 J	1 J	2	2	2	2	-	2	-
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	-	3 U	3 U	22	43	52	88 J	70 J	36	46	5 J	4 J	3 U	3 U	3 U	3 U	3 U	-	3 U	-
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	-	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	-
Acetone	ug/L	N	6000	0.7 U	0.7 U	-	6 U	6 U	4200	4900	**6200**	**8200**	**9000**	4100	3700	170	160	6 U	6 U	6 U	6 U	10 J	-	6 U	-
Benzene	ug/L	N	1	**59**	**52**	-	**45**	**44**	**79**	**62**	**67**	**68**	**61**	**46**	**56**	**51**	**46**	**32**	**39**	**43**	**43**	**33**	-	**29**	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Bromoform	ug/L	N	4	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	160000	130000	270000	-	280000	-	320000	260000	230000	-	210000	280000	-	200000	300000	200000	-	290000	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Chloroethane	ug/L	N	NA	56	62	-	3 J	3 J	4 J	9	9	21	21	61	110	74	67	57	80	87	93	56	-	54	-
Chloroform	ug/L	N	70	0.69 UJ	0.3 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
cis-1,2-Dichloroethene	ug/L	N	70	16	17	-	14	14	65	1 J	1 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.6 J	1	-	1	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Cyclohexane	ug/L	N	NA	7.1	6.9	-	6	6	5 J	6	6	5 J	4 J	2 J	4 J	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	-	2 U	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Ethane	ug/L	N	NA	21	20	12	-	12	6.3	-	6	-	10	4.7 J	3.2	-	19	26	-	45	100	68	74	-	63
Ethene	ug/L	N	NA	-	-	4.3	-	3.8 J	2.7	-	230	-	310	270	64	-	39	20	-	4.4	23	5.4	4.5	4.5	5.3
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	-	0.8 U	0.8 U	0.8 U	2 J	1 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Isopropylbenzene	ug/L	N	700	3.5 J	3.7 J	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
Methane	ug/L	N	NA	9700	11000	5400	-	5700	4200	-	5300	-	16000	25000	16000	-	17000	14000	-	12000	24000	15000	14000	14000	13000
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
Methyl-t-butyl ether	ug/L	N	70	0.2 J	0.2 U	-	1 J	1 J	1 J	0.9 J	0.9 J	1 J	0.9 J	0.7 J	0.9 J	0.8 J	0.8 J	0.5 J	0.7 J	0.8 J	0.8 J	0.6 J	-	0.6 J	-
Methylcyclohexane	ug/L	N	NA	2 J	2.2 J	-	1 J	1 J	1 J	1 J	1 J	1 J	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	1.1	1.1	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-
Styrene	ug/L	N	100	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-
Tetrachloroethene	ug/L	N	1	**4.2**	**5**	-	**2J**	**2J**	1 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Toluene	ug/L	N	600	0.42 J	0.37 J	-	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	**14**	**14**	-	**58**	**58**	**32**	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	**87**	**77**	-	**47**	**45**	**120**	**7**	**7**	**2J**	**2J**	1 U	**2J**	**3J**	**3J**	**5J**	**2**	**2**	**5**	**11**	-	**10**	-
Xylene (total)	ug/L	N	1000	0.59 J	0.61 J	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-219	MW-219	MW-219
			Field Sample ID	M217C8X	M217C9X	M217C9X	M217D1X	M217D2X	M217D3X	M217D4X	M217D5X	D0524175	M217D6X	M217D7X	M217D8X	M217D9X	M217E1X	M217E2X	M217E3X	M217E4X	M217E5	M217E6	M219B2X	M219B2X	M219B3X
			Sample Date	07/06/2015	10/09/2015	10/09/2015	12/02/2015	02/08/2016	05/17/2016	08/09/2016	11/03/2016	05/24/2017	05/24/2017	11/07/2017	05/08/2018	12/07/2018	04/22/2019	10/25/2019	12/20/2019	04/28/2020	06/29/2021	08/31/2021	04/03/2012	04/03/2012	06/13/2012
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**7**	-	**3**	1	**10**	**16**	**13**	**12**	**5**	**4**	**4**	**3**	**9**	**11**	**12**	**22**	**11**	**26**	**38**	-	**5J**	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	6	-	2	0.5 U	5	6	6	4	3	2	2	3	5	8	10	11	18	22	21	-	11	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	2	-	2	2	2	0.5 U	2 J	1	1	1	1	2	0.8 J	0.3 U	0.3 UJ	0.3 J	2	1.1	1.1	-	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	3 U	3 U	3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 J	0.5 U	0.5 U	-	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	-	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U
Acetone	ug/L	N	6000	6 U	-	6 U	12 J	6 U	6 U	12 U	6 U	6 U	6 U	6 U	6 U	1 UJ	0.7 U	0.7 U	0.7 U	2 J	0.7 U	0.7 U	-	6 U	6 U
Benzene	ug/L	N	1	**33**	-	**46**	**52**	**38**	**18**	**29**	**24**	**26**	**27**	**29**	**34**	**15**	**21**	**17**	**7**	**34**	**25**	**20**	-	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U
Carbon Dioxide	ug/L	N	NA	300000	-	250000	240000	280000	320000	230000	270000	-	150000	120000	150000	83000	110000	100000 J	140000 J	140000 J	-	-	-	33000	4000 U
Carbon disulfide	ug/L	N	700	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	59	-	90	96	51	22	37	24	26	31	36	32	3	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	1	-	0.7 J	0.5 U	1	1	1 J	1	2	1	2	1	2	2	2	3	3	3.5	3.6	-	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
Cyclohexane	ug/L	N	NA	2 U	-	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	0.5 J	0.6 J	1 U	1 U	2 J	1 U	1 UJ	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U
Ethane	ug/L	N	NA	-	92	-	95	-	-	-	-	-	-	-	-	-	-	-	14	-	33	30	2.7	-	1.0 U
Ethene	ug/L	N	NA	-	9.5	-	26	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	0.12	-	1.0 U
Ethylbenzene	ug/L	N	700	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	-	1 U	1 U
Methane	ug/L	N	NA	-	16000	-	20000	-	-	-	-	-	-	-	-	-	-	-	6300	-	7900	7800	750	-	6.4 J
Methyl acetate	ug/L	N	7000	1 U	-	1 U	1 U	1 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.7 J	-	0.7 J	0.7 J	0.7 J	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.23 J	0.23 J	-	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U
Styrene	ug/L	N	100	1 U	-	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U
Toluene	ug/L	N	600	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 J	0.7 J	1 U	0.6 J	0.6 J	0.5 J	0.5 J	0.6 J	0.7 J	0.8 J	1 J	0.8 J	**2**	**1.6**	**1.7**	-	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**9**	-	**5**	**2**	**7**	**7**	**12**	**8**	**9**	**8**	**9**	**9**	**10**	**15**	**15**	**15**	**28**	**35**	**39**	-	1 U	1 U
Xylene (total)	ug/L	N	1000	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	-	0.8 U	0.8 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	14 J	0 U	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
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			Location ID	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R
			Field Sample ID	M219B5X	M219B6X	M219B7X	M219B8X	M219B9X	D0918135	M219C1	D0420155	M219RA5	M219RA1X	M219RA1X	M219RA3X	M219RA3X	M219RA4X	M219RA6X	M219RA6X	M219RA7X	M219RA7X	M219RA8X	M219RA9X	M219RB2X	M219RB3X
			Sample Date	12/12/2012	02/13/2013	04/15/2013	06/03/2013	08/06/2013	09/18/2013	09/18/2013	04/20/2015	04/22/2015	10/28/2014	10/28/2014	01/13/2015	01/13/2015	04/20/2015	07/06/2015	07/06/2015	10/08/2015	10/08/2015	12/03/2015	02/01/2016	05/10/2016	08/08/2016
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	**6**	**6**	**4J**	**2J**	**2J**	**2J**	**5**	-	-	**10**	-	**10**	**6**	-	**11**	-	**6**	**10**	**8**	0.5 U	**3**
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1	-	-	3	-	2	1	-	2	-	0.8 J	1	1	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	4 J	20	16	9	4 J	3 J	3 J	**87**	-	-	**160**	-	**140**	**92**	-	**170**	-	**100**	**140**	**120**	3	29
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.6 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	-	-	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	-	-	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	-	-	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	-	-	6 U	-	6 U	6 U	-	6 U	-	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	-	-	0.8 J	-	0.7 J	0.5 J	-	1	-	0.8 J	0.9 J	0.7 J	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	18000	65000	62000	47000	54000	56000	50000	-	-	-	86000	-	90000	49000	-	100000	-	55000	130000	120000 J	7500 J	54000
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	23	-	-	15	-	10	24	-	62	-	6	1	0.5 U	0.5 U	1 J
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.9 J	-	-	1	-	1	0.9 J	-	2	-	0.9 J	1	1	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	-	0.5 U	-	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	3.7	1	1.1	-	1.1 J	0.69	0.86	-	16	5.80	-	12	-	-	8.4	-	0.35	-	10	-	-	-
Ethene	ug/L	N	NA	0.2	0.072	0.081	-	1.0 U	0.042	0.066	-	0.71	0.34	-	0.38	-	-	0.49	-	0.07J	-	1.0 U	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	680	240	250	-	270	260	280	-	1400	490	-	1100.00	1100	-	700	-	25	-	630	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 J	1 J	1 U	1 U	1 U	1 U	0.8 J	-	-	**2**	-	**2**	0.8 J	-	1	-	0.9 J	1	1	0.5 U	0.5 J
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**4**	-	-	**3**	-	**5**	**4**	-	**9**	-	0.6 J	**5**	**4**	0.5 U	1
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	1 J	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
			Field Sample ID	M219RB4X	M219RB5X	M219RB6X	M219RB7X	M219RB8X	M219RB9X	M219RC1X	M219RC2X	M219RC3X	M219RC4	D0826211	M219RC5	M219RC6	M219RC7	M220A6X	M220A6X	M220A7	M220A9X	M220B1X	M220B2X	M220B2X	M220B3X
			Sample Date	11/07/2016	05/25/2017	11/08/2017	05/09/2018	12/11/2018	04/16/2019	10/24/2019	12/20/2019	04/28/2020	06/21/2021	08/26/2021	08/26/2021	10/22/2021	02/18/2022	04/04/2012	04/04/2012	07/09/2012	06/04/2013	06/23/2014	08/28/2014	08/28/2014	10/28/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**4**	0.5 U	1	**2**	0.7 J	**2**	0.2 U	1	1	**1.7**	**1.5**	**1.7**	**1.8**	**1.5**	-	**290**	**200**	**300**	**35**	-	**38J**	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**300**	**160**	**310**	5	-	2 J	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.9 J	0.8 U	1 J	0.5 U	-	0.5 UJ	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U	2 U	-	2 UJ	-
1,1-Dichloroethane	ug/L	N	50	**57**	5	20	39	8	23	0.7 J	11	8	7.1	6.9	7.4	5.7	5.4	-	**290**	**140**	**260**	**74**	-	**140J**	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 UJ	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	-	2 UJ	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 J	1 U	1 J	0.5 U	-	0.5 UJ	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 U	66	-	76 J	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	3 U	3 U	3 U	3 U	-	4 J	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 U	3 U	-	4 J	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	0.7 U	0.8 J	0.7 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-	6 U	6 U	6 U	120	-	260 J	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**6**	**4J**	**2J**	0.8 J	-	**2J**	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Carbon Dioxide	ug/L	N	NA	100000	7500 J	130000	120000	21000	50000	8600 J	71000 J	33000 J	-	-	-	-	-	-	110000	-	150000	210000	-	430000	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 UJ	-
Chloroethane	ug/L	N	NA	0.7 J	0.5 U	0.5 U	0.5 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	84	46	70	23	-	91 J	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 UJ	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
cis-1,2-Dichloroethene	ug/L	N	70	0.7 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	13	6	10	2	-	2 J	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	2 U	2 U	2 U	2 U	-	2 UJ	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	0.5 U	-	0.5 UJ	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	2.5 J	-	6.1	5.4	5.3	5.2	3.1 J	10	-	-	10	2.1	3.00	-	1.50
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	4.7	-	-	3.8	3.9	11.00	-	1.60
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 UJ	-
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	390	-	900	400	390	1100	650	6300	-	-	4300	7200	6000.00	-	10000
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 UJ	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 J	1 J	2 J	1 U	-	1 UJ	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 U	2 U	-	2 UJ	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U	1 U	-	1 UJ	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	**4J**	**2J**	**4J**	0.5 U	-	0.7 J	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 J	0.7 U	0.8 J	3	-	5 J	-
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 UJ	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U	0.5 U	-	0.5 UJ	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.8 J	0.5 U	0.5 U	0.5 J	0.2 U	0.6 J	0.2 U	0.4 J	0.4 J	0.3 U	0.51 J	0.61 J	0.55 J	0.48 J	-	**16**	**9**	**17**	**2**	-	**2J**	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	0.5 U	-	0.5 UJ	-
Vinyl chloride (Chloroethene)	ug/L	N	1	**2**	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	**23**	**13**	**20**	**4**	-	**5J**	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 UJ	-
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
			Field Sample ID	M220B3X	M220B5X	M220B5X	M220B6X	M220B6X	M220B7X	M220B7X	M220B8X	M220B8X	M220B9X	M220C1X	M220C2X	M220C3X	M220C4X	M220C5X	D02191815	M220C6X	M220C7X	M220C8X	M220C9X	M220D1X	D0717195
			Sample Date	10/28/2014	01/16/2015	01/16/2015	04/22/2015	04/22/2015	07/10/2015	07/10/2015	10/13/2015	10/13/2015	02/02/2016	05/11/2016	08/05/2016	11/02/2016	05/22/2017	11/10/2017	02/19/2018	02/19/2018	05/10/2018	12/13/2018	02/25/2019	04/23/2019	07/17/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**26**	-	**2**	-	1 J	-	**2**	-	0.6 J	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.2 U	0.3 J	0.4 J
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	1	0.3 U	2	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	**74**	-	1	-	0.9 J	-	0.6 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	2	0.2 U	0.6 J	2 J
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 J	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	130	-	18	-	4 J	-	11	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	0.9 J	0.3 U	0.4 J	0.3 U
2-Hexanone	ug/L	N	40	3 U	-	3 U	-	3 UJ	-	3 U	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 U	-	3 UJ	-	3 U	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	250	-	89	-	23 J	-	77	-	9 J	6 U	6 U	6 U	46	6 U	6 U	6 U	6 U	6 U	24	13 J	6 UJ	5 J
Benzene	ug/L	N	1	**2**	-	**2**	-	**4J**	-	**3**	-	**3**	**2**	**5**	**6**	**3**	**6**	**2**	1 J	0.7 J	0.9 J	1	0.2 U	0.9 J	0.3 J
Bromodichloromethane	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	-	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	410000	-	230000	-	340000 J	-	340000	-	330000	190000	340000	300000	330000	290000	130000	-	95000	100000	140000	37000	140000	-
Carbon disulfide	ug/L	N	700	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	45	-	150	-	160J	-	130	-	76	36	94	58	39	130	37	15	12	46	28	5	21	18 J
Chloroform	ug/L	N	70	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	2	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.5 U	-	0.5 UJ	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	1.5	0.31	-	0.58	0.58	0.06J	-	0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	1.6	1.10	1.1	0.94	-	0.18	-	0.04J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	13000.00	13000	14000	-	12000	-	11000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 J	0.2 U	0.8 J	0.3 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 U	-	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.5 UJ
Styrene	ug/L	N	100	1 U	-	1 U	-	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	10	-	3	-	3 J	-	3	-	2	0.5 J	0.9 J	1	1	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**2**	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**3**	-	1	-	0.9 J	-	1	-	0.7 J	0.5 U	0.5 U	0.5 U	0.8 J	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	-	0.6 J	-	0.5 J	-	0.5 U	-	0.5 U	0.5 U	0.6 J	0.5 J	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 J	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221
			Field Sample ID	M220D2X	M220D3X	M220D4X	M220D5X	M220E6X	M220E7X	M220E8	M220E9	M220F1	M220F2	M221B1X	M221B2X	M221B3X	M221B4X	M221B5X	M221B6X	D0607191	M221B8X	M221B9X	M221C1	M221C2
			Sample Date	07/17/2019	10/29/2019	01/21/2020	05/04/2020	07/27/2020	03/25/2021	06/22/2021	09/23/2021	11/22/2021	03/17/2022	06/21/2012	08/30/2013	08/14/2014	04/26/2016	06/20/2017	06/15/2018	06/07/2019	06/07/2019	06/05/2020	06/16/2021	10/21/2021
Parameter Name	Report Units	Filtered	CMI GW Action Limit	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
1,1 Dichloroethene	ug/L	N	1	0.3 J	**2**	**10**	0.6 J	**1.4**	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	**3J**	**3J**	**2**	**2**	**2**	**2**	0.8 J	0.8 J	0.99 J	0.3 U	0.52 U
1,1,1-Trichloroethane	ug/L	N	30	1	20	**100**	3	9	1.3	0.3 U	0.3 U	0.3 U	0.65 J	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 J	0.8 J	0.5 J	0.7 J	0.7 J	0.5 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 UJ	0.2 UJ	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 J	9	14	2	5.9	0.57 J	1.2	0.41 J	0.3 U	3.7	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.5 J	0.43 U	0.3 J	0.59 J	0.61 J	0.39 J	0.5 J	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 J	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	1 J	0.7 J	0.3 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	3 J	1 J	0.7 U	1 J	4.4 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	2 J	2 J	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.6 J	0.2 U	0.41 J	0.56 J	0.49 J	0.44 J	0.38 J	0.7 J	0.5 J	0.5 J	0.5 J	0.5 J	0.7 J	0.3 J	0.3 J	0.31 J	0.3 U	0.3 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	58000 J	27000 J	62000 J	220000 J	93000 J	160000 J	-	-	-	-	62000	80000	89000	-	80000	76000	44000 J	46000 J	48000 J	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	9 J	0.2 U	18	260	20	140	350	280	220	240	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	1	0.2 U	0.22 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	**820**	**770**	**660**	**710**	**760**	**640**	**300**	**300**	**290**	**90**	**210**
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	1 U	1 UJ	0.32 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 J	0.5 J	1 UJ	1 U	1 UJ
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	11	10	9.8	11	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	1 U	1 U	1 U	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	1 U	1 U	1 U	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 J	0.34 U	0.25 J	0.26 J	0.25 J	0.24 J	0.25 J	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	22000	18000	17000	19000	14 J	24	11	12	3.0 U	3.0 U	10	8.4	19	7	41
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	3 J	2	1	2	1	0.5 J	0.5 J	0.4 J	0.2 U	0.34 J
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 U	0.5 U	2 J	0.28 J	0.63 J	0.72 J	0.67 J	0.7 J	0.74 J	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.4 UJ	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	31	0.2 U	0.2 U	0.2 U	0.22 J	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	7	7	11	5	7	5	2	2	2.2 J	0.87 J	1.5
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	**160**	**290**	**210**	**210J**	**190**	**170**	**60**	**58**	**75**	**18**	**25**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.36 J	0.38 J	0.2 UJ	0.85 J	**34**	**25**	**21**	**20**	**29**	**34**	**14**	**14**	**25**	**2.7**	**5.8**
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	0.65 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-230	MW-230	MW-230	MW-230	MW-230
			Field Sample ID	M222B2X	M222B3X	M222B4X	M222B5X	M222B6X	M222B7X	M222B8X	M222B9X	M222C1	M222C2	M226B3X	M226B4X	M226B5X	M226B6X	D1213191	M226B7X	M230A7X	M230A8X	M230A9X	M230B1X	M230B2X
			Sample Date	06/21/2012	08/29/2013	08/14/2014	04/26/2016	06/20/2017	06/15/2018	06/07/2019	06/05/2020	06/16/2021	10/21/2021	06/21/2012	08/30/2013	08/14/2014	12/13/2019	12/13/2019	12/09/2020	06/13/2012	08/06/2013	08/12/2014	12/03/2015	04/28/2016
Parameter Name	Report Units	Filtered	CMI GW Action Limit	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
1,1 Dichloroethene	ug/L	N	1	**14**	**10J**	**15**	**8**	**9**	**8**	**7**	**4.6**	**7.7**	**6.9**	0.8 U	0.8 U	0.5 U	0.2 U	0.2 U	0.2 U	**300**	**14**	**1400**	**1700**	**1400**
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	2 U	0.5 U	1 U	1 U	3 U	0.6 U	0.6 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.3 U	0.3 U	0.3 U	**610**	21	**5300**	**5000**	**5300**
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
1,1,2-Trichloroethane	ug/L	N	3	2 J	2 U	1	1 J	1 U	3 U	0.7 J	0.48 J	0.67 J	0.63 J	0.8 U	0.8 U	0.5 U	0.2 U	0.2 U	0.2 U	1 J	0.8 U	3 J	5 U	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	4 U	2 U	4 U	4 U	10 U	0.4 UJ	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U	-	2 U	2 U	10 U	20 U	20 U
1,1-Dichloroethane	ug/L	N	50	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	**130**	7	**890**	**1000**	**920**
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	2 U	1 U	2 U	2 U	5 U	0.6 U	0.6 U	0.3 U	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	5 U	10 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	4 U	2 U	4 U	4 U	10 U	0.6 U	0.6 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	10 U	20 U	20 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	5 U	10 U	10 U
1,2-Dichloroethane	ug/L	N	2	1 U	2 U	0.5 U	1 U	1 U	3 U	0.6 U	0.6 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	5 U	5 U
1,2-Dichloropropane	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	5 U	10 U	10 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	5 U	10 U	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	6 U	3 U	6 U	6 U	15 U	2 J	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	15 U	30 U	30 U
2-Hexanone	ug/L	N	40	3 U	6 U	3 U	6 U	6 U	15 U	0.6 U	0.6 U	0.4 U	0.4 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	15 U	30 U	30 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	6 U	3 U	6 U	6 U	15 U	1 U	1 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	15 U	30 U	30 U
Acetone	ug/L	N	6000	6 U	12 U	6 U	12 U	12 U	30 U	1 U	1.4 U	0.7 U	0.7 U	6 U	6 U	6 U	2 J	1 J	0.7 UJ	6 U	6 U	30 U	60 U	60 U
Benzene	ug/L	N	1	**2J**	**2J**	**3**	**2J**	**2J**	3 U	1 J	0.92 J	**1.2**	**1.1**	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.6 J	0.5 U	3 U	5 U	5 U
Bromodichloromethane	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
Bromoform	ug/L	N	4	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	2 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	2 U	0.5 U	1 U	1 U	3 U	0.6 U	0.6 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	5 U	5 U
Carbon Dioxide	ug/L	N	NA	61000	92000	84000	-	92000	92000	59000 J	73000 J	-	-	60000	57000	52000	88000 J	87000 J	110000 J	92000	71000	190000	170000	140000
Carbon disulfide	ug/L	N	700	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 J	0.2 U	0.2 U	1 U	1 UJ	5 U	10 U	10 U
Carbon Tetrachloride	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
Chlorobenzene	ug/L	N	50	0.8 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	3 U	5 U	5 U
Chloroethane	ug/L	N	NA	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 J	1 U	18	31	28 J
Chloroform	ug/L	N	70	0.8 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	3 U	5 U	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	6 J
cis-1,2-Dichloroethene	ug/L	N	70	**1900**	**1700**	**2100**	**1600**	**1300**	**1600**	**1200**	**970**	**1100**	**1100**	0.8 U	0.8 U	0.5 U	1	1	1.8	2 J	0.8 U	7	23	26
cis-1,3-Dichloropropene	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
Cyclohexane	ug/L	N	NA	12	5 J	7	4 U	4 U	10 U	1 J	2 UJ	1 U	1 UJ	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	10 U	20 U	20 U
Dibromochloromethane	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	4 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	2 U	3 U	5 U	5 U
Ethane	ug/L	N	NA	1.2 J	1.8 J	2.0 J	1.9 J	1.0 U	1.4 J	1.5 J	1.6 J	1.6 J	1.4 J	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1.0 U	1.0 U	4.3 J	5.7	4.6 J
Ethene	ug/L	N	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J	1 U	1 U	-	-	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	ug/L	N	700	0.8 U	2 U	0.5 U	1 U	1 U	3 U	0.8 U	0.8 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	3 U	5 U	5 U
Isopropylbenzene	ug/L	N	700	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	5 U	10 U	10 U
Methane	ug/L	N	NA	38	32	26	29	4.4 J	10	27	24	35	29	5.7 J	3.0 U	3.0 U	8.9	7.3	23	190	470	470	680	590
Methyl acetate	ug/L	N	7000	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.6 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	1 U	1 U	5 U	10 U	10 U
Methyl-t-butyl ether	ug/L	N	70	0.9 J	1 U	0.7 J	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.3 J	11	2 J	2	12	12	20	3 J	0.5 U	3 U	5 U	5 U
Methylcyclohexane	ug/L	N	NA	3 J	2 U	1 U	2 U	2 U	5 U	0.4 U	1 U	0.5 U	0.5 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	1 U	1 U	5 U	10 U	10 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	4 U	2 U	4 U	4 U	3 U	0.6 U	0.6 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	10 U	20 U	20 U
Styrene	ug/L	N	100	1 U	2 U	1 U	2 U	2 U	5 U	0.4 U	0.4 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	5 U	10 U	10 U
Tetrachloroethene	ug/L	N	1	0.8 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.2 U	0.2 U	0.2 U	**4J**	0.8 U	**19**	**26**	**21**
Toluene	ug/L	N	600	0.7 U	1 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	3 U	5 U	5 U
trans-1,2-Dichloroethene	ug/L	N	100	14	8 J	14	8	10	9	7	6.7 J	8.1	7.2	0.8 U	0.8 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	3 U	5 U	5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	2 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**840**	**770**	**1100**	**760J**	**670**	**750**	**570**	**440**	**540**	**610**	1 U	1 U	0.5 U	**3**	**3**	**1.5**	**53**	**5J**	**130**	**150**	**110**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	4 U	0.5 U	1 U	1 U	3 U	0.4 U	0.4 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	2 U	3 U	5 U	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**53**	**29**	**37**	**35**	**21**	**30**	**26**	**19**	**31**	**23**	1 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	**2J**	1 U	**13**	**15**	**14**
Xylene (total)	ug/L	N	1000	0.8 U	2 U	0.5 U	1 U	1 U	3 U	2 U	2.8 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	3 U	5 U	5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	0 U	0 U	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335
			Field Sample ID	M230B3X	M230B4X	M230B5X	M230B6X	D0417195	M230B7X	M230B8X	M230B9X	M230C1X	M230C2	M230C3	M230C5	M335A1X	M335A2X	M335A3X	M335A4X	M335A5	M335A6X	M335A7X	M335A8X	M335A9X	M335A9X
			Sample Date	06/15/2017	05/09/2018	06/14/2018	12/10/2018	04/17/2019	04/17/2019	06/21/2019	10/25/2019	04/28/2020	06/22/2021	09/23/2021	03/28/2022	10/18/2012	12/14/2012	02/15/2013	04/18/2013	09/20/2013	12/18/2013	03/12/2014	06/20/2014	01/19/2015	01/19/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**650**	**190**	**3**	**49**	**140**	**120**	**150**	**11**	**150**	**290**	**380**	**360**	**450**	**46**	**33**	**74J**	**14**	**8**	**3J**	3 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	**2200**	**360**	5	**76**	**220**	**180**	**200**	17 J	**180**	**490**	**550**	**680**	19	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	1	0.5 U	0.5 U	0.2 U	0.3 J	0.3 J	0.3 J	0.2 U	0.4 J	0.87 J	1.3	1.4	2 J	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	10 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	**590**	**150**	3	39	**110**	**88**	**100**	10	**110**	**400**	**500**	**560**	**170**	19	3 J	5 J	1 U	1 U	1 J	3 U	-	2
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	5 U	-	1 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	10 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.7 J	0.9 J	0.5 U	1	0.7 J	0.3 U	0.7 J	0.3 UJ	0.6 J	0.88 J	0.3 U	0.76 J	**3J**	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	7 J	3 U	3 U	0.4 J	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	**620**	**340**	280 J	110	46	15	15 U	-	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	15 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	9 J	8 J	7 J	3 U	3 U	3 U	15 U	-	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	0.7 U	1 J	3 J	0.7 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	6 U	**54000**	**35000J**	**29000J**	5000	570	170	30 U	-	11 J
Benzene	ug/L	N	1	0.6 J	0.6 J	0.5 U	0.5 J	0.4 J	0.3 J	0.5 J	0.4 J	0.5 J	0.54 J	0.75 J	0.76 J	**41**	**5**	**10**	**29J**	**28**	**24**	**17**	**10**	-	**21**
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	180000	170000	140000	150000	-	130000	150000 J	120000 J	150000 J	-	-	-	290000	360000	370000	480000 J	450000	400000	370000	190000	-	220000
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
Chloroethane	ug/L	N	NA	8	8	0.5 U	6	3 J	2 J	3	2	2	9.4	12	15	7	3 J	24	45 J	29	23	24	19	-	24
Chloroform	ug/L	N	70	0.5 J	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 J	0.45 J	0.56 UJ	0.69 UJ	0.8 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	9	6	0.5 U	3	4 J	3 J	4	1	5	13	18	20	12	2 J	4 J	7 J	6	3 J	2 J	3 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	5 J	2 U	2 U	2 UJ	2 U	2 U	2 U	10 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	3 U	-	0.5 U
Ethane	ug/L	N	NA	2.4 J	-	0.74 J	-	-	-	1.5 J	-	-	1.7 J	1.7 J	2.4 J	8.9	0.36	0.0024J	0.19	0.1	0.35	0.46	0.3	2.50	2.5
Ethene	ug/L	N	NA	1.0 U	-	0.20 U	-	-	-	1 U	-	-	-	-	-	3.4	1.3	0.02U	4.4	4	6.4	4.3	2.3	0.67	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 J	1 U	0.2 U	0.9 J	0.9 J	0.3 J	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	1 J	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
Methane	ug/L	N	NA	300	-	330	-	-	-	850	-	-	590	390	310	4600	8200	150	13000	17000	12000	11000	8900	15000	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.7 J	2	0.5 U	0.7 J	2 J	1 J	1	0.2 U	2	1	1	0.74 J	0.9 J	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.6 J	0.5 U	0.3 U	0.6 UJ	0.6 UJ	0.7 UJ	0.3 U	0.8 J	1.5	0.3 U	1.9	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	10 U	-	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	5 U	-	1 U
Tetrachloroethene	ug/L	N	1	**5**	**4**	0.5 U	1	1	1	1	0.5 J	1	**2.9**	**3.4**	**4.5**	**6**	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	3 U	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 J	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**30**	**42**	0.9 J	**33**	**26**	**21**	**35**	**13**	**41**	**48**	**48**	**42**	**50**	**2J**	**3J**	**7J**	**3J**	1 J	1 U	3 U	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	3 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**3**	**3**	0.5 U	**3**	1	1	**2**	**2**	**2**	**5.1**	**8.5**	**4.6**	**92**	**7**	**4J**	**14J**	**4J**	**3J**	**3J**	3 U	-	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 UJ	0.8 U	0.8 U	0.8 U	3 U	-	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-359
			Field Sample ID	M335B1X	M335B1X	M335B2X	M335B2X	M335B3X	M335B3X	M335B4X	M335B5X	M335B6X	M335B7X	M335B8X	M335B9X	M335C1X	M335C2X	M335C3X	M335C4X	M335C5X	M335C6	M335C7	M335C8	M335C9	M359A1X
			Sample Date	04/22/2015	04/22/2015	07/08/2015	07/08/2015	10/08/2015	10/08/2015	02/02/2016	05/17/2016	08/09/2016	11/03/2016	05/25/2017	11/07/2017	05/08/2018	12/07/2018	04/19/2019	10/28/2019	05/06/2020	06/21/2021	10/04/2021	12/27/2021	03/18/2022	06/06/2013
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.6 J	**4**	1 J	1 UJ	**2**	**2**	**2**	**2**	1	1	0.8 J	**1.2**	1	0.3 U	1	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 UJ	-	2 U	-	2 U	2 U	2 U	4 U	4 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	-	3 J	-	6	-	7	3	5	3	1 J	2	2	2	2	1	3	2	1.4	5	1.2	2.3	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.3 U	0.3 U	3 J	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 UJ	-	2 U	-	2 U	2 U	2 U	4 U	4 UJ	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.5 J	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 UJ	-	0.5 U	-	0.7 J	0.7 J	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 J	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 UJ	-	3 U	-	3 U	3 U	3 U	6 U	6 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U
2-Hexanone	ug/L	N	40	-	3 UJ	-	3 U	-	3 U	3 U	3 U	6 UJ	6 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 UJ	-	3 U	-	3 U	3 U	3 U	6 UJ	6 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	-	6 UJ	-	6 U	-	14 J	7 J	8 J	12 U	12 UJ	9 J	60	7 J	7 J	8 J	0.7 U	1 J	0.70 U	0.7 U	0.7 U	3.9 J	6 U
Benzene	ug/L	N	1	-	**24J**	-	**27**	-	**31**	**30**	**18**	**19**	**17J**	**13**	**9**	**6**	**5**	**6**	**6**	**3**	0.30 U	0.3 U	0.3 U	0.55 J	0.5 U
Bromodichloromethane	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
Bromoform	ug/L	N	4	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
Carbon Dioxide	ug/L	N	NA	-	290000 J	-	25000	-	140000	190000	290000	210000	13000	160000	91000	84000	60000	74000	92000 J	93000 J	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
Chlorobenzene	ug/L	N	50	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	0.8 U
Chloroethane	ug/L	N	NA	-	31 J	-	30	-	33	31	12	25	14 J	16	7	2	1 J	0.9 J	0.6 J	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
Chloroform	ug/L	N	70	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 UJ	-	0.5 U	-	0.5 U	0.6 J	0.6 J	1 U	1 UJ	0.9 J	0.6 J	0.8 J	0.8 J	0.7 J	1	0.9 J	1.0	1.1	0.9 J	1.5	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	-	2 UJ	-	2 U	-	2 U	2 U	2 U	4 U	4 UJ	2 U	2 U	2 U	0.2 U	0.2 UJ	1 U	1 U	1.0 U	1 U	1 U	1 U	2 U
Dibromochloromethane	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	2 U
Ethane	ug/L	N	NA	5	-	7.5	-	7.8	-	-	-	-	-	-	-	-	-	-	-	-	2.0 J	1.6 J	3 J	4.4 J	-
Ethene	ug/L	N	NA	0.48	0.48	0.8	-	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.3 J	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
Methane	ug/L	N	NA	14000	-	15000	-	13000	-	-	-	-	-	-	-	-	-	-	-	-	1300	1400	1700	2100	-
Methyl acetate	ug/L	N	7000	-	1 UJ	-	1 U	-	1 U	1 U	1 UJ	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 UJ	-	0.5 J	-	0.5 U	0.5 J	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 UJ	-	2 U	-	2 U	2 U	2 U	4 U	4 UJ	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	-	1 UJ	-	1 U	-	1 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	0.8 U
Toluene	ug/L	N	600	-	0.5 UJ	-	0.5 U	-	0.5 J	0.7 J	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	1	1 U	1 UJ	0.9 J	0.8 J	0.9 J	0.9 J	0.6 J	0.5 J	0.2 U	0.30 U	0.3 U	0.3 U	0.3 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	**3**	1 J	1 UJ	**3**	**3**	**3**	**3**	**2**	**5**	**4**	**3.3**	**2.9**	**2.3**	**5.8**	1 U
Xylene (total)	ug/L	N	1000	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.40 U	0.4 U	0.4 U	0.4 U	0.8 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	0.0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359
			Field Sample ID	M359A2X	M359A3X	M359A4X	M359A5X	M359A6X	M359A7X	M359A8X	M359A9X	D0818151	M359B1X	D1027151	M359B2X	M359B3X	M359B4X	M359B5X	M359B6X	M359B7X	M359B8X	M359B9X	M359C1X	M359C2X	M359C3X
			Sample Date	09/13/2013	11/19/2013	01/29/2014	04/04/2014	07/01/2014	11/26/2014	04/07/2015	05/13/2015	08/18/2015	08/18/2015	10/27/2015	10/27/2015	05/06/2016	11/01/2016	03/31/2017	09/20/2017	04/20/2018	11/01/2018	05/02/2019	11/18/2019	05/04/2020	11/23/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	1	10	0.3 J	9	0.2 U	0.6 J	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1 J	2 J	0.7 U	14 J	4.9 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 UJ
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	0 U	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-359	MW-359	MW-359	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360
			Field Sample ID	D0219211	M359C4X	M359C5	M360A1X	M360A2X	M360A3X	M360A4X	M360A5X	M360A6X	M360A7X	M360A8X	M360A9X	M360B1X	M360B2X	M360B3X	M360B4X	M360B5X	M360B6X	M360B7X	M360B8X	M360B9X	M360C1X
			Sample Date	02/19/2021	02/19/2021	09/15/2021	06/06/2013	09/16/2013	11/21/2013	01/29/2014	04/04/2014	07/01/2014	11/26/2014	04/07/2015	05/13/2015	08/18/2015	10/27/2015	05/06/2016	11/01/2016	03/31/2017	09/20/2017	04/20/2018	11/01/2018	05/02/2019	11/05/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	2.1	2.1	1.2	4 J	16	17	4 J	4	5	8	5	5	7	8	8	10	7	9	8	3	5	6
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.89 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1 J	1 J	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.2 UJ	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U
Total TICs	ug/L	N	NA	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-360	MW-360	MW-360	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362
			Field Sample ID	M360C2X	M360C4X	M360C6	M361A1X	M361A2X	M361A3X	D0131141	M361A4X	M361A5X	M361A6X	M361A7X	M361A8X	M361A9X	M361B1X	M361B2X	M361B3X	M362A1X	M362A2X	D1121131	M362A3X	M362A4X	M362A5X
			Sample Date	05/04/2020	02/09/2021	10/06/2021	06/06/2013	09/16/2013	11/21/2013	01/31/2014	01/31/2014	04/08/2014	07/01/2014	02/12/2015	05/15/2015	08/18/2015	11/04/2015	05/10/2016	11/01/2016	06/06/2013	09/19/2013	11/21/2013	11/21/2013	01/31/2014	04/17/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	4	2.1	2	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	**8**	**7**	**5J**	**5**	**5**	**5**	**3**	**3**	**3**	**5**	**3**	**3**	2	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	19 J	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	1 UJ	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Total TICs	ug/L	N	NA	-	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-363	MW-363	MW-363	MW-363
			Field Sample ID	M362A6X	M362A7X	M362A8X	M362A9X	M362B1X	M362B2X	M362B3X	M362B4X	M362B5X	M362B6X	M362B7X	M362B8X	M362B9X	M362C1X	M362C2X	M362C3X	M362C4	M362C5	M363A1X	M363A2X	M363A3X	M363A4X
			Sample Date	07/25/2014	11/26/2014	04/01/2015	06/16/2015	08/20/2015	11/04/2015	05/10/2016	11/02/2016	04/06/2017	09/21/2017	05/03/2018	11/26/2018	05/10/2019	11/22/2019	05/08/2020	11/20/2020	05/03/2021	10/28/2021	06/06/2013	09/19/2013	11/26/2013	01/31/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	7 J	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 U	1 U	1 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.9 UJ	3 U	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	0 U	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-364	MW-364
			Field Sample ID	M363A5X	M363A6X	M363A7X	M363A8X	M363A9X	M363B1X	M363B2X	M363B3X	M363B4X	M363B5X	D0503181	M363B6X	M363B7X	M363B8X	M363B9X	M363C1X	D1120201	M363C2X	M363C3	M363C4	M364A1X	M364A2X
			Sample Date	04/04/2014	07/01/2014	04/02/2015	06/16/2015	08/20/2015	11/04/2015	05/10/2016	11/02/2016	04/06/2017	09/21/2017	05/03/2018	05/03/2018	11/26/2018	05/10/2019	11/22/2019	05/08/2020	11/20/2020	11/20/2020	05/03/2021	10/28/2021	06/19/2013	09/19/2013
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	7 J	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 U	1 U	1 U	1 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.8 U	0.8 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	9 J	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-365	MW-367	MW-367
			Field Sample ID	M364A3X	M364A5X	M364A6X	M364A7X	M364A8X	M364A9X	M364B1X	M364B2X	M364B4X	M364B5X	M364B6X	M364B7X	M364B8X	M364B9X	M364C1X	M364C2X	M364C3X	M364C4	M364C5	M365A1X	M367A1X	M367A2X
			Sample Date	11/26/2013	04/08/2014	07/01/2014	04/09/2015	06/25/2015	09/03/2015	10/30/2015	05/10/2016	11/11/2016	04/06/2017	09/21/2017	05/03/2018	11/30/2018	05/09/2019	11/07/2019	05/07/2020	11/24/2020	06/25/2021	10/29/2021	06/27/2013	06/14/2013	10/21/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**37**	0.8 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	8	0.8 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	-
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	13	1 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	98000	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	-
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.9 J	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 J	0.8 U	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1 U	2 U	2 U	-
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	0.04J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.24
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6 J	7.7	-	-	21
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	-
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.8 U	0.8 U	-
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	-
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**3J**	1 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1J	1 U	-
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	0 U	-	-	-	-	0 U	0 U	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367
			Field Sample ID	M367A2X	M367A3X	M367A4X	M367A5X	M367A6X	M367A7X	D1114175	M367A8X	M367A9X	M367B1X	M367B2X	M367B3X	M367B4X	M367B5X	M367B6X	M367B7X	M367B8X	M367B9X	M367C1X	M367C2	M367C3	M367C4
			Sample Date	10/21/2015	02/04/2016	05/09/2016	08/05/2016	11/02/2016	05/25/2017	11/14/2017	11/14/2017	02/19/2018	05/11/2018	12/17/2018	02/22/2019	04/26/2019	07/19/2019	10/31/2019	01/28/2020	05/06/2020	07/30/2020	03/25/2021	06/29/2021	09/22/2021	12/20/2021
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**45**	**120**	**130**	**200**	**240**	**180**	**110**	**99**	**120**	**96**	**6J**	**4J**	10 UJ	**16**	**20**	**13**	**4**	0.59 J	**12**	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	**250**	**930**	**890**	**690**	**1600**	**1400**	**690**	**590**	**640**	**420**	3 UJ	0.3 U	15 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**170**	0.5 J	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 J	1 U	0.8 J	0.8 J	1	1 J	1	1	1 J	1	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	4 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	7	16	25	36	**51**	**71**	24	24	36	29	5 J	0.2 U	10 UJ	0.4 J	0.6 J	10	12	1.8	47	25	19	22
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	3 UJ	0.3 U	15 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	4 U	2 U	2 U	2 U	4 U	2 U	2 U	2 UJ	2 U	3 UJ	0.3 U	15 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.3 U	15 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	6 U	3 U	3 U	3 U	6 U	3 U	3 U	3 UJ	3 U	48 J	13	15 UJ	15	19	5 J	5 J	1.2 J	0.6 J	0.5 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	6 U	3 U	3 U	3 U	6 U	3 U	3 U	3 UJ	3 U	5 J	4 J	15 UJ	1 J	4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	6 U	3 U	3 U	3 U	6 U	3 U	3 U	3 UJ	3 U	5 UJ	0.5 U	25 UJ	0.5 UJ	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	12 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U	6 U	4000 J	540	600 J	490	440	120 J	89	24	11 J	2.6 J	0.94 J	1.1 J
Benzene	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Bromodichloromethane	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.3 U	15 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	80000	77000	80000	110000	78000	80000	-	64000	80000	82000	560000	130000	220000	200000 J	310000	180000 J	490000 J	340000 J	170000 J	-	-	-
Carbon disulfide	ug/L	N	700	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 J	0.3 J	0.5 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.8 J	0.6 J	0.8 J	0.5 J	2 UJ	0.2 U	10 UJ	0.3 J	0.3 J	0.3 J	0.3 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	12 J	4	33 J	19	19	34	42	31	31	9	20	30
Chloroform	ug/L	N	70	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 J	1 U	0.6 J	0.5 U	0.6 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	1	1	0.7 J	0.2 J	0.2 U	0.43 J	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	4 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 UJ	0.2 U	10 UJ	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	4 UJ	0.4 U	20 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4500	24000	22000
Methyl acetate	ug/L	N	7000	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	4 U	2 U	2 U	2 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.3 U	15 UJ	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	2 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	**2**	**5**	**6**	**4**	**8**	**5**	**4**	**4**	**5**	**4**	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.3 J	10 UJ	0.9 J	1	0.6 J	0.7 J	0.9 J	0.42 J	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**5**	**11**	**11**	**10**	**18**	**15**	**11**	**10**	**10**	**9**	2 UJ	0.5 J	10 UJ	0.8 J	0.5 J	0.2 U	0.2 U	0.2 U	**1.7**	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.2 U	10 UJ	1	**2**	**4**	**5**	0.93 J	**4.7**	0.2 U	0.2 U	0.31 J
Xylene (total)	ug/L	N	1000	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	10 UJ	1 U	50 UJ	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	0 U	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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			Location ID	MW-367	MW-367	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368
			Field Sample ID	D0225221A	M367C5	M368A1X	M368A2X	M368A4X	M368A4X	M368A6X	M368A6X	M368A7X	M368A7X	D07091515	M368A8X	M368A8X	M368A9X	M368A9X	M368B1X	M368B2X	M368B3X	M368B4X	M368B5X	M368B6X	M368B7X
			Sample Date	02/25/2022	02/25/2022	06/06/2013	06/24/2014	10/30/2014	10/30/2014	01/16/2015	01/16/2015	04/23/2015	04/23/2015	07/09/2015	07/09/2015	07/09/2015	10/12/2015	10/12/2015	02/01/2016	05/10/2016	08/05/2016	10/31/2016	05/23/2017	08/28/2017	11/15/2017
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.6 J	0.44 J	**420**	**15**	-	0.5 U	-	0.5 U	-	0.5 U	**5**	-	**5**	-	**2**	**10**	**22**	**13**	**13**	**160**	**180**	**170**
1,1,1-Trichloroethane	ug/L	N	30	1.4	0.84 J	**240**	2	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.6 J	1	0.8 J	0.9 J	**75**	**120**	**170**
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	1 J	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.8 J
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	12	18	**200**	**140**	-	1	-	11	-	8	18	-	18	-	32	47	**62**	**93**	**120**	**380**	**420**	**390**
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 J	0.5 U	-	0.6 J	-	0.5 U	-	0.5 U	0.5 U	-	1 J	-	0.9 J	0.5 U	0.5 U	0.9 J	0.9 J	0.5 U	0.5 U	1
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	3 U	17	-	10	-	10	-	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	3 U	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	2.1 J	0.7 U	6 U	850	-	360	-	200	-	38	17 J	-	14 J	-	11 J	6 U	6 U	6 U	6 U	8 J	16 J	64
Benzene	ug/L	N	1	0.3 U	0.3 U	**120**	**9**	-	**12**	-	**13**	-	**13**	**10**	-	**11**	-	**9**	**5**	**7**	**5**	**5**	**7**	**10**	**9**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	210000	220000	-	260000	-	230000	-	360000	-	-	320000	-	170000 J	260000 J	250000	210000	210000	210000	-	140000
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.8 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	8.6	15	78	64	-	130	-	170	-	170	170	-	180	-	140	110	110	110	200	180	170	160
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.8 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	8	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 J	-	0.5 U	1	2	2	2	6	6	6
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	8	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	1 U	1 U	17	6.5	5.6	-	8.1	-	7	-	-	5	-	11	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	2.8	32	0.26	-	0.003U	-	1.1	1.1	-	0.63	-	3	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	3 J	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	21000	24000 UJ	4200	15000	17000.00	-	13000.00	-	16000	-	-	16000	-	11000	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.7 J	-	0.7 J	-	0.7 J	-	0.5 U	0.5 U	-	0.6 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	3 J	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 J	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1
Styrene	ug/L	N	100	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	**8**	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	1	**2**
Toluene	ug/L	N	600	0.2 U	0.2 U	0.7 U	0.5 U	-	0.5 U	-	0.9 J	-	0.8 J	0.7 J	-	0.8 J	-	0.6 J	0.7 J	0.8 J	0.6 J	0.7 J	0.7 J	0.7 J	0.6 J
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	2 J	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	**31**	0.5 U	-	0.5 U	-	0.5 U	-	0.8 J	1 J	-	**2J**	-	**2**	**3**	**5**	**4**	**3**	**10**	**11**	**10**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.51 J	0.52 J	**22**	**11**	-	0.5 U	-	0.7 J	-	1	**6**	-	**7**	-	**8**	**19**	**32**	**30**	**26**	**73**	**77**	**66**
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	2 J	0.5 U	-	0.5 U	-	0.7 J	-	0.7 J	0.6 J	-	0.6 J	-	0.5 U	0.5 J	0.6 J	0.7 J	0.6 J	0.7 J	0.9 J	0.8 J
Total TICs	ug/L	N	NA	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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			Field Sample ID	M368B8X	M368B9X	M368C1X	M368C2X	M368C3X	M368C4X	M368C5X	M368C6X	M368C7X	D0730205	M368C8X	M368C9X	D0326211X	M368D1X	M368D2	M368D3	M368D4	M368D5	M369A1X	D1028145	M369A2X	M369A2X
			Sample Date	02/20/2018	05/11/2018	12/14/2018	02/22/2019	04/23/2019	07/16/2019	11/01/2019	01/20/2020	05/06/2020	07/30/2020	07/30/2020	11/13/2020	03/26/2021	03/26/2021	06/22/2021	09/23/2021	12/29/2021	03/28/2022	06/06/2013	10/28/2014	10/28/2014	10/28/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**300**	**490**	**570**	**730J**	**710**	**440**	**400**	**540**	**450**	**370**	**390**	**410**	**350**	**350**	**430**	**540J**	**390**	**420**	**170**	**160**	-	**150**
1,1,1-Trichloroethane	ug/L	N	30	**460**	**790**	**1100**	**1400**	**1400**	**880**	**740**	**740**	**520**	**440**	**460**	**330**	**380**	**360**	**450**	**660J**	**540**	**560**	**66**	**41**	-	**40**
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	1	2 J	2 J	2 J	2	2	2	2	1	1.1	1.1	1	1.2	1.3	1	1.5	1.6	1.5	0.8 U	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	4 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	2 U	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	**470**	**330**	**380**	**360**	**330**	**240**	**230**	**390**	**340**	**270**	**280**	**330**	**290**	**290**	**290**	**300J**	**340**	**390**	**150**	**88**	-	**85**
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	2 U	0.6 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	4 U	0.6 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	2 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	2	1 J	2	**3J**	**3**	1	0.3 U	2	2	1.3	1.4	1.2	1.2	1.5	1.3	**2.1**	1.6	1.1	1 U	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	2 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	2 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	6 U	2 J	2 U	1 J	0.8 J	0.3 U	1 J	0.9 J	1 J	0.92 J	0.57 J	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-	3 U
2-Hexanone	ug/L	N	40	3 UJ	6 U	0.6 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	6 U	1 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-	3 U
Acetone	ug/L	N	6000	6 U	12 U	8 J	4 J	5 UJ	5 J	4 J	3 J	4 J	4.5 J	4.4 J	0.7 U	0.7 U	1.2 UJ	0.7 U	0.7 U	0.7 U	0.7 U	15 J	6 U	-	6 U
Benzene	ug/L	N	1	**6**	**23**	**20**	**37**	**28**	**38**	**33**	**30**	**27**	**25**	**25**	**26**	**26**	**26**	**27**	**47**	**33**	**17**	**17**	**5**	-	**5**
Bromodichloromethane	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	1 U	0.6 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	190000	190000	160000	140000	130000	150000 J	130000 J	210000 J	220000 J	-	180000 J	-	-	180000 J	-	-	-	-	200000	-	-	160000
Carbon disulfide	ug/L	N	700	1 U	2 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	180	110	100	97	72	46	47	110	150	95	99	140	100	110	100	90	97	86	73	37	-	35
Chloroform	ug/L	N	70	0.5 U	1 U	0.8 J	1 U	1 UJ	0.8 J	0.8 J	0.9 UJ	0.7 J	0.2 U	0.5 J	0.52 J	0.46 UJ	0.49 UJ	0.48 J	0.67 UJ	0.7 UJ	0.53 UJ	0.8 U	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	11	11	18	18	19	11	10	18	15	13	12	14	11	11	11	16	17	14	5 J	4 J	-	3 J
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	2 U	4 U	2 J	3 J	3 J	4 J	3 J	4 J	4 J	3.6 J	1 UJ	3.4 J	3.3 J	3.2 J	2.3 J	4.7 J	3.9 J	2.6 J	2 U	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	16	17	18	14	-	10	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	-	2.10	2.1
Ethylbenzene	ug/L	N	700	0.5 U	1 U	0.8 U	2 U	0.8 U	0.6 J	1	6	6	3.5	3.4	3.5	2	2	0.92 J	0.77 J	1	0.85 J	0.8 U	0.5 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	2 U	1 J	2 J	2 J	1 J	2 J	2 J	2 J	2 J	1.8 J	2.1 J	2.1 J	2.1 J	1 J	2.4 J	2.3 J	1.8 J	1 U	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9300	7500	7100	8800	2800	-	5900	-
Methyl acetate	ug/L	N	7000	1 U	2 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 J	0.23 J	0.2 U	0.25 J	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.21 J	0.6 J	1	-	1
Methylcyclohexane	ug/L	N	NA	1 U	2 U	1 J	1 J	1 J	1 J	1 J	1 J	2 J	1.8 J	1.6 J	1.7 J	1.4 J	1.4 J	0.7 J	2.1 J	1.7 J	1.3 J	1 U	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2	1 J	2 UJ	3 J	2	2	1	2	1	0.99 J	1.1	1.1	1.1	1	1.2	2	1.3	0.84 J	2 U	2 U	-	2 U
Styrene	ug/L	N	100	1 U	2 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	**3**	**4**	**5**	**6**	**6**	**5**	**4**	**6**	**5**	**3.5**	**3.4**	**4**	**3.9**	**4.1**	**2.9**	**5.3**	**5.2**	**4.5**	**2J**	**2**	-	**2**
Toluene	ug/L	N	600	0.7 J	1 U	0.6 J	1 U	0.7 J	0.5 J	0.4 J	0.8 J	0.7 J	0.54 J	0.51 J	0.69 J	0.55 J	0.56 J	0.43 J	0.45 J	0.55 J	0.56 J	0.7 U	0.5 U	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**14**	**19**	**22**	**29**	**27**	**24**	**24**	**25**	**18**	**16**	**15**	**15**	**15**	**16**	**14**	**21**	**19**	**15**	**11**	**8**	-	**8**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	1 U	0.4 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**81**	**54**	**43**	**35**	**28**	**18**	**20**	**41**	**50**	**35**	**35**	**41**	**31**	**31**	**35**	**34**	**33**	**25**	**12**	**14**	-	**13**
Xylene (total)	ug/L	N	1000	0.9 J	1 U	2 U	5 U	2 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.44 J	0.76 J	0.96 J	0.81 J	0.8 U	0.5 U	-	0.5 U
Total TICs	ug/L	N	NA	170 J	75 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369
			Field Sample ID	M369A4X	M369A4X	M369A5X	M369A5X	M369A6X	M369A6X	D1009155	M369A7X	M369A7X	D0202165	M369A8X	D0512165	M369A9X	M369RB1X	M369RB2X	M369RB3X	M369RB4X	M369RB5X	M369RB6X	M369RB7X	M369B8X	M369B9X
			Sample Date	01/13/2015	01/13/2015	04/21/2015	04/21/2015	07/10/2015	07/10/2015	10/09/2015	10/09/2015	10/09/2015	02/02/2016	02/02/2016	05/12/2016	05/12/2016	08/05/2016	11/02/2016	05/22/2017	08/28/2017	11/15/2017	02/21/2018	05/11/2018	12/14/2018	02/21/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	**150**	-	**110**	-	**160**	**120**	-	**140**	**110**	**120**	**110**	**120**	**100**	**140**	**270**	**290**	**420**	**280**	**360**	**400**	**98J**
1,1,1-Trichloroethane	ug/L	N	30	-	29	-	19	-	25	15	-	19	12	13	16	16	18	**42**	**270**	**420**	**720**	**500**	**700**	**960**	**250**
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	-	0.5 U	-	0.5 U	0.5 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	1	1 J	2	0.8 J	1 J	1 J	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	-	2 U	-	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	0.4 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	-	**86**	-	**73**	-	**110**	**93**	-	**100**	**83**	**86**	**100**	**100**	**96**	**150**	**230**	**200**	**260**	**270**	**280**	**230**	**53**
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.6 J	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	-	2 U	-	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	0.6 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	-	0.5 U	-	0.5 U	0.6 J	-	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	1	0.5 U	1 J	0.6 U	0.4 J
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	-	3 U	-	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	1 J	0.3 U
2-Hexanone	ug/L	N	40	-	3 U	-	3 U	-	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	0.6 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	-	3 U	-	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	1 U	0.5 U
Acetone	ug/L	N	6000	-	6 U	-	6 U	-	6 U	6 U	-	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	12 U	4 J	0.7 U
Benzene	ug/L	N	1	-	**5**	-	**3**	-	**4**	**3**	-	**3**	**3**	**3**	**3**	**3**	**4**	**4**	**5**	**7**	**7**	**4**	**4**	**6**	1
Bromodichloromethane	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Bromoform	ug/L	N	4	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.6 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	170000	-	140000	-	150000	-	-	140000	-	180000	-	220000	210000	220000	200000	-	180000	180000	190000	150000	22000
Carbon disulfide	ug/L	N	700	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Chlorobenzene	ug/L	N	50	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Chloroethane	ug/L	N	NA	-	39	-	30	-	40	39	-	41	41	42	42	42	33	82	110	96	120	100	91	63	14
Chloroform	ug/L	N	70	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.5 U	1 U	0.6 J	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	4	-	3	-	4	3	-	3	3	3	3	3	3	4	7	7	10	10	11	13	3
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Cyclohexane	ug/L	N	NA	-	2 U	-	2 U	-	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 J	2 U	4 U	1 J	0.3 J
Dibromochloromethane	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Ethane	ug/L	N	NA	10	-	8.2	-	9.5	-	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	2.00	-	1.6	-	3.3	-	-	4.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.8 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.6 J	0.2 U
Methane	ug/L	N	NA	6600.00	6600	6400	6400	5500	-	-	4400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	-	1	-	1	-	0.8 J	0.5 U	-	0.5 U	0.6 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	2 U	0.5 J	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	-	2 U	-	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1	0.8 J	1 U	0.7 UJ	0.3 U
Styrene	ug/L	N	100	-	1 U	-	1 U	-	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	**2**	-	1	-	**2**	1	-	1	1	1	1	1	1	**2**	**3**	**3**	**3**	**2**	**2**	**3**	0.5 J
Toluene	ug/L	N	600	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.6 J	0.5 U	1 U	0.4 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	**7**	-	**5**	-	**7**	**6**	-	**6**	**6**	**6**	**6**	**6**	**5**	**7**	**12**	**14**	**18**	**11**	**12**	**15**	**3**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	**13**	-	**10**	-	**14**	**16**	-	**14**	**13**	**13**	**11**	**11**	**12**	**18**	**25**	**17**	**21**	**38**	**28**	**15**	**3**
Xylene (total)	ug/L	N	1000	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.8 J	0.8 J	0.6 J	1 U	2 U	1 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95 J	140 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370
			Field Sample ID	M369RC1X	M369RC2X	M369RC3X	M369RC4X	D0505205A	M369RC5X	M369RC6X	M369RC7X	M369RC8X	M369C9	M369RD1	M369RD2	M369D3	M370A1X	M370A2X	M370A2X	M370A3X	M370A4X	M370A4X	M370A5X	M370A5X	M370A6X
			Sample Date	04/23/2019	07/16/2019	10/30/2019	01/20/2020	05/05/2020	05/05/2020	07/30/2020	11/13/2020	03/26/2021	06/24/2021	09/23/2021	11/08/2021	01/11/2022	06/05/2013	01/19/2015	01/19/2015	04/24/2015	07/08/2015	07/08/2015	10/09/2015	10/09/2015	02/09/2016
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**540**	**680**	**210**	**410**	**320**	**310**	**560**	**420**	**36**	**330**	**390**	**450**	**470**	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	**1200**	**1600**	**310**	**570**	**450**	**480**	**790**	**390**	**36**	**390**	**470**	**700**	**720**	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	2	2	0.5 J	1	1	1	1.4	0.94 J	0.2 U	1	0.3 U	1	1.5	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	**300**	**280**	**61**	**280**	**260**	**270**	**270**	**250**	23	**250**	**290**	**300**	**410**	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	1 UJ	1 U	-	1 U	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	2	2	0.7 J	1	1	1	1.5	1	0.3 U	1.3	0.3 U	1.5	1.2	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.7 J	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.67 J	0.3 U	0.3 U	0.74 J	0.5 U	0.5 U	0.5 U	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	-	3 U	3 U	-	3 U	-	3 U	3 U
Acetone	ug/L	N	6000	3 UJ	5 J	2 J	2 J	1 J	2 J	7.8 J	2.5 UJ	0.7 U	0.7 U	0.7 U	1.5 J	0.7 U	6 U	-	6 U	6 U	-	6 U	-	6 U	6 U
Benzene	ug/L	N	1	**10**	**26**	**7**	**20**	**16**	**16**	**28**	**22**	**1.2**	**16**	**16**	**16**	**16**	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	120000	150000 J	110000 J	160000 J	-	200000 J	160000 J	-	23000 J	-	-	-	-	-	-	33000	31000	-	68000	-	46000	58000
Carbon disulfide	ug/L	N	700	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	5 J	-	1 U	1 U	-	1 U	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	64	56	14	76	73	76	77	85	5.1	92	93	74	100	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.8 J
Chloroform	ug/L	N	70	0.9 UJ	1 J	0.2 J	0.6 UJ	0.4 J	0.5 J	0.8 J	0.49 J	0.2 U	0.3 U	0.43 UJ	0.61 UJ	0.59 UJ	1 J	-	0.7 J	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	16	14	3	13	10	11	12	11	0.2 U	11	13	14	17	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 J	2 J	1 U	3 J	2 J	2 J	3.3 J	3.3 J	1 U	1 U	1 U	1 U	2.7 J	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	12	14	17	16	-	0.0070J	0.007J	-	0.0020U	-	0.0059J	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05	-	-	0.01J	-	0.27	-	-
Ethylbenzene	ug/L	N	700	0.9 J	2 J	0.4 U	4	3	3	4	3.3	0.4 U	1.2	0.97 J	0.89 J	0.89 J	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 J	1 J	0.3 J	2 J	1 J	1 J	2 J	2.1 J	0.2 U	1.6 J	1.3 J	1.4 J	1.4 J	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	9600	7600	7900	8600	-	1.50	-	-	0.66	-	0.31J	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.3 J	0.4 U	0.2 U	0.3 J	0.4 J	0.4 J	0.2 U	0.3 J	0.2 U	0.25 J	0.2 U	0.23 J	0.21 J	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 J	0.7 J	0.5 U	1 J	1 J	1 J	1.4 J	1.6 J	0.5 U	1.4 J	1.1 J	1 J	1 J	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	3 U	0.5 J	1	0.3 U	0.8 J	1.3	0.88 J	0.3 U	0.3 U	0.3 U	0.94 J	0.95 J	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	**5**	**7**	**2**	**3**	**3**	**3**	**4.1**	**3.8**	0.33 J	**3**	**3.8**	**4.1**	**4.3**	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Toluene	ug/L	N	600	0.6 J	0.6 J	0.2 U	0.6 J	0.5 J	0.5 J	0.56 J	0.61 J	0.2 U	0.51 J	0.52 J	0.49 J	0.51 J	0.7 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**21**	**33**	**9**	**17**	**14**	**14**	**24**	**16**	**1.3**	**14**	**16**	**18**	**18**	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**19**	**13**	**4**	**23**	**21**	**22**	**21**	**24**	0.62 J	**25**	**22**	**18**	**27**	1 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	2 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.63 J	0.65 J	0.66 J	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371
			Field Sample ID	M370A7X	D0809165	M370A8X	M370A9X	M370B1X	M370B2X	M370B3X	M370B4X	M370B5X	M370B6X	M370B7X	M370B8	M370B9	M370C1	D0710135	M371A1X	M371A2X	M371A2X	M371A3X	M371A3X	M371A4X	M371A4X
			Sample Date	05/12/2016	08/09/2016	08/09/2016	11/10/2016	05/31/2017	11/08/2017	05/08/2018	12/17/2018	04/19/2019	10/31/2019	04/30/2020	06/22/2021	09/21/2021	11/08/2021	07/10/2013	07/10/2013	01/14/2015	01/14/2015	04/27/2015	04/27/2015	07/07/2015	07/07/2015
Parameter Name	Report Units	Filtered	CMI GW Action Limit	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	-	2 U	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	2 U	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	4 J	4 J	-	3 U	-	29	-	30
2-Hexanone	ug/L	N	40	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	-	3 U	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-	3 U	-	3 U	-	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	1 J	0.7 U	0.7 U	1.5 J	0.7 U	43	43	-	6 U	-	26	-	24
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	**3**	-	1	-	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	37000	-	36000	48000	38000	93000	35000	65000	84000	74000	34000 J	-	-	-	-	-	-	4000 U	-	4000 U	-	4000 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 J	-	8	-	6	-	4 J
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 J	2 J	-	0.5 U	-	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 J	1 J	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	2 U	2 U	-	2 U	-	4 J	-	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	0.5 UJ	-	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	0.34	-	0.28	-	0.24	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.30	6.3	3.6	-	2.2	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	-	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	31	-	-	2500.00	-	1300	-	2600	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	-	1 U	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**4J**	**4J**	-	2 U	-	2 U	-	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	-	0.5 U	-	0.5 U	-	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**12**	**13**	-	**3**	-	0.9 J	-	0.5 J
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	0.5 U	-	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	0 U	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
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			Location ID	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-372	MW-372	MW-372	MW-372	MW-372R
			Field Sample ID	M371A5X	M371A5X	M371A6X	M371A7X	M371A8X	D1110165	M371A9X	M371B1X	M371B2X	M371B3X	M371B4X	M371B5X	M371B6X	M371B7X	M371B8	M371B9	M371C1	D0614135	M372A1X	M372A2	M372RB3X	M372RA1X
			Sample Date	10/12/2015	10/12/2015	02/03/2016	05/17/2016	08/12/2016	11/10/2016	11/10/2016	05/31/2017	11/10/2017	05/08/2018	12/18/2018	04/18/2019	10/25/2019	05/06/2020	06/22/2021	09/21/2021	12/16/2021	06/14/2013	06/14/2013	09/24/2013	11/09/2017	10/30/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**48**	**47**	**52**	0.5 U	-
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	-
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	-
1,1-Dichloroethane	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20	20	18	0.5 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	-
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	-
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	19	13	11	10 J	6 J	9 J	3 U	3 U	3 U	5 J	3 J	4 J	4 J	5.5 J	1.5 J	2.7 J	3 U	3 U	3 U	3 U	-
2-Hexanone	ug/L	N	40	-	3 U	3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	-
Acetone	ug/L	N	6000	-	14 J	31	21	17 J	18 J	25	11 J	19 J	6 U	44	32	62	65	140	36	12 J	6 U	6 U	6 U	6 U	-
Benzene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.8 J	1 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	**2**	**4**	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.7 J	0.5 U	-
Bromodichloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
Bromoform	ug/L	N	4	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	-
Carbon Dioxide	ug/L	N	NA	-	4000 U	4000 U	4000 U	4000 U	-	4000 U	4000 U	4000 U	7200 J	2600 U	2600 U	2600 UJ	2900 J	-	-	-	-	140000	-	5300 J	-
Carbon disulfide	ug/L	N	700	-	3 J	2 J	2 J	3 J	2 J	2 J	1 J	1 J	1 U	0.9 J	0.7 J	1 J	0.6 J	0.3 U	0.3 U	0.61 J	1 U	1 U	1 U	1 U	-
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	-
Chlorobenzene	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.45 J	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	-
Chloroethane	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
Chloroform	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	25	24	23	4	-
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
Cyclohexane	ug/L	N	NA	-	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	-
Dibromochloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	-
Ethane	ug/L	N	NA	0.29	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	1.6	-	-	5.90
Ethene	ug/L	N	NA	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1	-	-	16.00
Ethylbenzene	ug/L	N	700	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	-
Isopropylbenzene	ug/L	N	700	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	-
Methane	ug/L	N	NA	3000	-	-	-	-	-	-	-	-	-	-	-	-	-	410	280	880	-	1300	-	-	4600.00
Methyl acetate	ug/L	N	7000	-	1 U	1 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	-
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Methylcyclohexane	ug/L	N	NA	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 U	2 U	4 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.5 U	-
Styrene	ug/L	N	100	-	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	-
Tetrachloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	-
Toluene	ug/L	N	600	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	-
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	3 J	3 J	3 J	0.5 U	-
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**160**	**150**	**160**	1	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**32**	**31**	**37**	0.5 U	-
Xylene (total)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	-
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-390
			Field Sample ID	M372RA1X	D0115155	M372RA3X	M372RA4X	M372RA5X	M372RA5X	M372RA6X	M372RA6X	M372RA7X	M372RA8X	M372RA9X	M372RB1X	M372RB2X	M372RB4X	M372RB5X	M372RB6X	M372RB7X	M372RB8X	M372RB9	M372RC1	M372RC2	M390A1X
			Sample Date	10/30/2014	01/15/2015	01/15/2015	04/24/2015	07/07/2015	07/07/2015	10/12/2015	10/12/2015	02/03/2016	05/11/2016	08/11/2016	11/04/2016	05/31/2017	05/08/2018	12/06/2018	04/18/2019	10/24/2019	05/01/2020	06/21/2021	09/21/2021	11/02/2021	01/09/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**2**	**12**	**12**	**16**	-	**9**	-	**5**	**15**	**10**	**3**	**11**	1 J	**5**	0.2 U	**3**	0.2 U	**2**	**1.6**	0.97 J	0.67 J	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	4	7	7	8	-	5	-	4	7	4	2	4	0.5 J	2	0.2 U	1	0.2 U	0.7 J	0.49 J	0.4 J	0.3 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 UJ	1 UJ	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.50 U	0.5 U	0.5 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	-	3 U	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	-	3 U	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	-	6 U	-	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	1 UJ	0.70 U	0.7 U	0.7 U	6 U
Benzene	ug/L	N	1	0.5 J	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.6 J	0.5 J	0.6 J	0.9 J	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1.0 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U
Carbon Dioxide	ug/L	N	NA	120000	-	100000	89000	-	13000	-	43000	110000	90000	140000	120000	16000	81000	4000 J	56000	3000 J	52000 J	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U
Chloroethane	ug/L	N	NA	4	3	3	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	23	55	54	41	-	34	-	30	**430**	**270**	**200**	**710**	**82**	**97**	4	**95**	12	**120**	70	**110**	54	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1.0 U	1 U	1 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	3.9	-	1.9	-	0.87	-	-	-	-	-	-	-	-	-	-	-	4.3 J	3 UJ	2.9 J	-
Ethene	ug/L	N	NA	-	-	8.8	-	3	-	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
Methane	ug/L	N	NA	-	-	5500	-	1600	-	930	-	-	-	-	-	-	-	-	-	-	-	670	430 UJ	350	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	2	2	2	2	-	1	-	0.5 U	4	3	1	8	1	3	0.2 U	2	0.2 U	2	1.6	1.8	1	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 UJ	0.5 UJ	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**48**	**150**	**140**	**200**	-	**150**	-	**69**	**210**	**160**	**42**	**88**	**15**	**82**	**4**	**68**	**7**	**56**	**47**	**78**	**28**	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**12**	**18**	**18**	**18**	-	**14**	-	**5**	**94**	**51**	**19**	**80**	**3**	**12**	0.2 U	**8**	1 J	**9**	**9.1**	**14**	**5.3**	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.40 U	0.4 U	0.4 U	0.8 U
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	0.0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-416
			Field Sample ID	M390A2X	M390A3X	M390A4X	M390A5X	D0827151	M390A6X	M390A7X	M390A8X	D1111161	M390A9X	M390B1X	M390B2X	M390B3X	M390B4X	M390B5X	D1101191X	M390B6X	M390B7X	M390B8X	M390C5	M390B9	M416A1X
			Sample Date	04/17/2014	07/15/2014	02/12/2015	05/15/2015	08/27/2015	08/27/2015	10/28/2015	05/13/2016	11/11/2016	11/11/2016	04/05/2017	09/22/2017	04/25/2018	11/05/2018	03/28/2019	11/01/2019	11/01/2019	02/19/2020	10/29/2020	06/23/2021	10/27/2021	05/19/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.6 J
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**6**
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	3 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	9 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	2 J
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.5 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	0 U	0 U	-	-	-	-	0 U	-	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416
			Field Sample ID	M416A2X	M416A3X	M416A4X	M416A7X	M416A8X	M416B1X	M416B2X	M416B3X	M416B4X	M416B5X	M416B6X	M416B7X	M416B8X	D0426191	M416B9X	M416C1X	M416C2X	M416C3X	M416C4X	M416C6X	M416C7X	M416C8X
			Sample Date	08/20/2015	10/28/2015	03/02/2016	08/12/2016	11/15/2016	03/31/2017	06/22/2017	09/22/2017	12/05/2017	04/20/2018	06/13/2018	10/05/2018	12/04/2018	04/26/2019	04/26/2019	06/17/2019	09/05/2019	12/05/2019	03/25/2020	09/17/2020	12/29/2020	03/18/2021
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.7 J	0.5 J	0.5 J	0.8 J	0.8 J	1	1	0.9 J	0.9 J	1	0.8 J	0.9 J	1 J	0.78 J	0.99 J	0.87 J
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	2	**3**	**3J**	2	2	2	2	2	2	2	2	2	2	2	2	**3J**	2	2	2	1.6	1.8	1.6
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	13 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 UJ	0.3 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	6 J	7 J	0 U	0 U	0 U	0 U	0 U	-	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-416	MW-416	MW-416	MW-416	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417
			Field Sample ID	M416C9	M416D1	M416D2	M416D3	M417A1X	M417A2X	M417A3X	M417A4X	M417A7X	M417A8X	M417B1X	M417B2X	M417B3X	M417B4X	M417B5X	M417B6X	M417B7X	M417B8X	M417B9X	M417C1X	M417C2X	M417C3X
			Sample Date	05/28/2021	09/02/2021	11/23/2021	02/18/2022	05/19/2015	08/20/2015	10/28/2015	03/02/2016	08/12/2016	11/15/2016	03/31/2017	06/22/2017	09/22/2017	12/05/2017	04/20/2018	06/13/2018	10/05/2018	12/04/2018	04/26/2019	06/17/2019	09/05/2019	12/05/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.84 J	0.93 J	0.42 J	0.5 U	0.5 U	0.5 J	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 J	0.5 J	0.5 U	0.5 J	0.5 J	0.3 J	0.4 J	0.4 J	0.5 J	0.4 J
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.77 J	1.3	1.5	0.3 U	2	**6**	**6**	**6J**	**7**	**6**	**4**	**6**	**7**	**6**	**6**	**6**	**6**	**4**	**5**	**8J**	**8**	**6**
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	10 J	18 J	13 J	6 J	7 J	7 J	9 J	6 J	6 U	6 J	6 U	6 U	0.7 U	1 J	0.7 U	1 UJ	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.2 U	0.4 UJ	0.2 U	0.2 J	0.2 J
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.3 U	0.3 U	0.3 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U
Styrene	ug/L	N	100	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	8 J	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418	MW-434	MW-434	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R
			Field Sample ID	M417C4X	M417C5X	M417C6X	M417C7X	M417C8X	M417C9	M417D1	M417D2	M417D3	M418A1X	M418A2X	M418A3X	M418A4X	M418A7X	M418A8X	M434A1X	M434A2X	M434RA4X	M434RA5X	M434RA6X	M434RA7X	M434RA8X
			Sample Date	03/26/2020	06/16/2020	09/22/2020	12/29/2020	03/18/2021	05/28/2021	09/02/2021	12/21/2021	02/18/2022	05/19/2015	08/18/2015	10/28/2015	03/02/2016	08/12/2016	11/15/2016	10/06/2015	12/07/2015	05/17/2017	08/21/2017	10/31/2017	02/05/2018	05/02/2018
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.4 J	0.2 U	0.5 J	0.52 J	0.41 J	0.2 UJ	0.3 J	0.3 U	0.3 U	4	7	10	16	23	26	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	**5**	**6.6**	**7.2**	**6.3**	**5.7**	**5.1J**	**4.3**	**6.6**	**5.4**	**14**	**22**	**20**	**26J**	**22**	**21**	0.5 U	0.5 U	**9**	2	2	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**2**	0.6 J	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	46	17	15	22	19
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	1.9 U	6 U	9 J	7 J	15 J	9 J	13 J	6 U	6 U	740	210	400	380	310
Benzene	ug/L	N	1	0.2 U	0.2 U	0.28 J	0.24 J	0.22 J	0.2 UJ	0.3 U	0.3 U	0.3 U	**2**	1	**2**	1	**2**	**2**	**23**	**53**	**8**	**3**	**2**	**3**	**8**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 J	2 J	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	**120**	**120**	**74**	**54**	**33**
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	37	15	12	8	17
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	13	5	13	7	7
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	300	280	460	320	310
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	6	25	10	5	7	6	8
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	2	0.9 J	0.5 U	0.5 U	0.5 U	3
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	8	1 U	1 U	1 U	1 U	1 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 J	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	15	9	6	8	7	9
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**15**	3 J	**4**	2	2
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1	1	**2**	**2**	**3**	**3**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J
Total TICs	ug/L	N	NA	0 U	0 U	-	-	0 U	0 UJ	0 U	0 U	0 U	0 U	0 U	0 U	5 J	0 U	0 U	60 J	280 J	66 J	0 U	19 J	20 J	70 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-435	MW-435	MW-435	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R
			Field Sample ID	D0810188	M434RA9X	M434RB1X	M434RB2X	M434RB3X	M434RB4X	M434RB5	M434RB6	M434RB7	D1006158A	M435A1X	M435A2X	M435RA3X	M435RA4X	M435RA5X	D0206188	M435RA6X	M435RA7X	M435RA8X	M435RA9X	M435RB1X	M435RB2X
			Sample Date	08/10/2018	08/10/2018	11/07/2018	02/06/2019	02/03/2020	03/03/2021	05/24/2021	09/15/2021	10/28/2021	10/06/2015	10/06/2015	12/07/2015	05/01/2017	08/23/2017	10/31/2017	02/06/2018	02/06/2018	05/02/2018	08/10/2018	11/08/2018	02/06/2019	02/03/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	2	1	2	2	1	1.1	1.9	1.4	1.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.7 J	0.2 U	0.2 J	0.2 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	7 J	4 J	11	10	2 J	1 J	22	4.8 J	4.3 J	5 J	5 J	4 J	9 J	3 J	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.42 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	94	65	230	230	46	16 UJ	420	76	72	33	34	13 J	130	12 J	64	6 U	6 U	14 J	2 J	2 J	3 J	0.7 U
Benzene	ug/L	N	1	**3**	**4**	0.5 J	**3**	0.9 J	0.54 J	0.2 U	**1.1**	0.84 J	**82**	**74**	**68**	0.8 J	1	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.2 U	0.2 U	0.2 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.4 J	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	**15**	8	**12**	**15**	0.7 J	0.3 U	5.7	1.4	0.3 U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	7	5 J	4 J	3 J	1 J	0.64 J	0.85 J	1 J	0.84 J	4 J	5 J	2 J	4 J	6	1 J	1 U	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	11	8	5	4	1	1.4	4.3	4.7	2.6	0.5 U	0.5 U	0.5 U	0.7 J	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.29 UJ	0.3 U	0.3 U	0.5 U	0.5 U	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	400 J	230	110	110	13	3.5	100	24	2.5	0.5 U	0.5 U	0.5 U	13	14	4	0.5 U	0.5 U	0.9 J	0.7 J	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	12 J	10 J	3 J	3 J	2 J	3.7 J	3.2 J	4.5 J	2.9 J	61	58	62	6	59	2 U	2 U	2 U	2 U	11 J	0.2 U	0.2 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	1.9 J	1.1 J	1.1 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2	3	0.4 U	2	2	0.93 J	1.8	1.1	0.48 J	100	92	76	3	2	0.5 U	0.5 U	0.5 U	0.5 U	1	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.9 J	1 J	0.2 U	0.6 J	0.8 J	0.75 J	1.3 J	0.91 J	0.46 J	32	30	27	1 J	2 J	1 U	1 U	1 U	1 U	0.8 J	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	360	170	210	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	30	20	4 J	5 J	5	7.8	7.7	7.3	4.4 J	37	38	62	8	110	1 U	1 U	1 U	1 U	9	0.2 U	0.2 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	3	2	2	1	0.3 U	0.3 U	2.2	1.6	1.1	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	6	5	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Total TICs	ug/L	N	NA	46 J	5 J	25 J	29 J	0 U	-	-	-	-	810 J	620 J	550 J	11 J	150 J	0 U	0 U	0 U	0 U	5 J	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-435R	MW-435R	MW-435R	MW-435R	MW-436	MW-436	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-438
			Field Sample ID	M435RB3X	M435RB4	M435RB5	M435RB6	M436A1X	M436A2X	D0503178	M436RA3X	M436RA7X	M436RA8X	M436RA9X	M436RB1X	M436RB2X	M436RB3X	M436RB4X	M436RB5X	M436RB6X	M436RB7	M436RB8	M436RB9	M436RC1	M438A1X
			Sample Date	03/03/2021	05/24/2021	09/22/2021	11/22/2021	10/08/2015	12/07/2015	05/03/2017	05/03/2017	08/23/2017	11/01/2017	02/07/2018	05/03/2018	08/15/2018	11/09/2018	02/11/2019	02/17/2020	03/11/2021	05/24/2021	09/22/2021	11/22/2021	03/30/2022	10/06/2015
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	**2J**	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	**4**	3	0.5 U	0.5 U	0.5 U	0.5 U	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2	0.3 U	0.48 J	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	5	3 J	0.5 U	0.5 U	0.5 U	3	7	0.6 J	0.2 U	0.2 U	0.2 U	2.9	5.9	1.3	0.96 J	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 UJ	0.3 U	2 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.30 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	**4**	**5**	**38**	**31J**	2	2	0.5 U	**4**	**29**	1	0.3 U	0.4 J	0.31 J	**6.4**	**11**	**2.5**	**6.7**	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	1	0.5 U	**3**	**3J**	0.5 J	0.5 J	0.5 U	0.5 U	**5**	0.4 J	0.2 U	0.2 U	0.2 U	**1.3**	**2.8**	0.3 U	0.64 J	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	78	82 J	3 U	4 J	3 U	3 U	7 J	3 J	0.3 U	0.3 U	0.66 J	10	0.5 U	0.5 U	22	23
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.40 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 J	0.5 U	0.5 U	0.5 U	0.50 U	9 J
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	9 J	6 U	2600	2600	16 J	57	30	200	100	36	6 J	7 J	5 J	270	44	24	680	84
Benzene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	**140**	**100**	1 U	1 J	1 J	0.5 U	0.5 U	0.8 J	1	0.6 J	0.2 U	0.2 J	0.54 J	**1.8**	**3.5**	**1.7**	**1.9**	**5**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	**2J**	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1.0 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	**200**	**190**	4	**15**	3	**85**	**21**	1	0.3 U	0.3 U	0.3 U	2	0.3 U	0.3 U	**28**	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	0.3 U	2 J	1 U	5 J	6 J	1 J	1 J	1 U	8	4 J	1 J	0.2 U	0.2 U	0.32 J	2 J	0.77 J	0.5 J	0.97 J	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 J	0.3 U	0.30 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	31	26 J	5	7	0.9 J	35	40	4	0.2 U	0.8 J	0.2 U	17	5	1.8	6.1	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	40	32 J	5	12	0.8 J	37	**140**	10	0.3 UJ	2	0.71 UJ	39	24	6.7	14	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	3200	3000	120	740	80	3400	1600	130	0.2 U	42	0.57 J	310	3.3	43	330	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	48	39	4 U	4 U	10	6	2 U	12	10	7	0.2 U	1 U	1 U	1.7 J	2.9 J	4.5 J	1.0 U	37
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Ethane	ug/L	N	NA	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1.0 U	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	44	30	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.48 J	0.4 U	0.40 U	0.7 J
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	17	12	2 U	2 UJ	1 U	1 U	1 U	1 U	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.20 U	47
Methane	ug/L	N	NA	-	3 U	3 U	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	20	11	24	16	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	26	28	2 U	2 U	17	10	2 J	21	19	15	0.2 U	0.5 U	0.5 U	4.2 J	3.5 J	6.8	0.68 J	200
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	**120**	**100J**	**11**	**18**	0.7 J	**66**	**250**	**13**	0.3 U	3	0.89 J	**74**	**19**	**5.9**	**35**	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	2 U	2 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	3	1	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.29 J	0.2 U	0.20 U	2
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.6 J	0.8 J	0.2 U	0.2 U	0.2 U	0.2 U	0.45 J	0.68 J	0.2 UJ	0.30 J	0.5 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	0.4 U	0.4 U	32	15	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	0.40 U	5
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	530 J	260 J	190 J	150 J	18 J	0 U	0 U	7 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	920 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439
			Field Sample ID	M438A2X	M438A3X	D0817178	M438A4X	M438A5X	M438A6X	M438A7X	M438A8X	M438A9X	M438B1X	M438B2X	M438B3X	M438B4	M438B5	M439A1X	M439A2X	M439A3X	M439A5X	M439A9X	M439B1X	M439B2X	M439B3X
			Sample Date	12/08/2015	05/01/2017	08/17/2017	08/17/2017	10/30/2017	02/05/2018	05/02/2018	08/09/2018	11/07/2018	02/06/2019	02/04/2020	03/03/2021	05/28/2021	10/29/2021	10/07/2015	12/07/2015	03/01/2016	08/23/2016	04/27/2017	08/03/2017	11/01/2017	02/06/2018
Parameter Name	Report Units	Filtered	CMI GW Action Limit	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.8 J	0.5 J
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	140	9 J	3 U	3 U	3 U	7 J	3 J	2 J	4 J	0.3 U	0.3 U	0.3 U	0.9 J	0.5 U	3 U	4 J	3 U	3 U	3 U	3 UJ	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.37 J	0.4 U	10 J	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	4 J	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	26	12 J	6 J	6 U	6 U	10 J	10 J	4 J	10 J	4 J	0.7 U	0.91 UJ	1.7 J	1.1 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**2**	**19**	**6**	**8**	**4**	**2**	0.8 J	0.6 J	0.8 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	**2**	0.5 U	0.7 J	**5**
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	19	16	2 U	2 U	2 U	3 J	2 U	1 J	3 J	0.2 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1
Isopropylbenzene	ug/L	N	700	17	10	8	8	10	5 J	1 J	3 J	4 J	0.2 U	0.2 U	0.49 J	0.2 U	0.2 U	1 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	400	900	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	130	16	2 J	2 J	3 J	6	3 J	3 J	9 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 J	2	1 J	1 J	1	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	2	5	3	3	3	2	0.5 U	1 U	1 UJ	1 U	1 U	1.4 U	1.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2
Total TICs	ug/L	N	NA	740 J	500 J	400 J	430 J	610 J	430 J	210 J	230 J	650 J	130 J	20 J	-	-	-	59 J	0 U	-	-	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440
			Field Sample ID	M439B4X	M439B5X	M439B6X	M439B7X	M439B8X	M439B9X	M439C1	M439C2	M440A1X	D120815A8	M440A2X	M440A3X	M440A4X	D1102178B	M440A5X	M440A6X	M440A7X	M440A8X	M440A9X	D0207198	M440B1X	D0204208
			Sample Date	05/08/2018	08/13/2018	11/28/2018	02/15/2019	02/04/2020	03/04/2021	06/01/2021	08/13/2021	10/07/2015	12/08/2015	12/08/2015	04/28/2017	08/21/2017	11/02/2017	11/02/2017	02/06/2018	05/01/2018	08/14/2018	11/08/2018	02/07/2019	02/07/2019	02/04/2020
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	0.4 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 J	0.4 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.4 J	0.3 U	1 J	1 J	0.3 U
2-Hexanone	ug/L	N	40	3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	4 J	3 J	2 J	0.7 J	0.7 U	1.8 J	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	4 UJ	0.7 U	8 J	8 J	0.7 U
Benzene	ug/L	N	1	0.8 J	**4**	**2**	0.4 J	0.2 U	0.2 U	0.3 U	0.3 U	**2**	1 J	0.5 U	**4**	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.2 U	0.2 J	0.2 J	0.2 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 UJ	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	4 J	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	8	7	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.8 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	4 J	1 U	1 U	1 U	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	170	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	0.4 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	0.4 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	2 J	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	6	6	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	2 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U
Total TICs	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	15 J	0 U	0 U	98 J	7 J	5 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-441	MW-441	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R
			Field Sample ID	M440B2X	M440B3X	M440B4	M440B5	M440B6	M440B7	M441A1X	M441A2X	M441RA3X	M441RA4X	M441RA5X	M441RA6X	D0503188	M441RA7X	M441RA8X	M441RA9X	M441RB1X	M441RB2X	M441RB3X	M441RB4	M441RB6	M441RB7
			Sample Date	02/04/2020	03/05/2021	06/01/2021	08/13/2021	10/29/2021	03/30/2022	10/07/2015	12/09/2015	06/09/2017	08/22/2017	10/30/2017	02/07/2018	05/03/2018	05/03/2018	08/14/2018	11/09/2018	02/11/2019	02/03/2020	03/05/2021	06/02/2021	09/17/2021	01/10/2022
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 J	0.2 U	0.2 U	0.23 J	0.3 U	0.3 UJ	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 J	0.5 U	**7**	**6**	**3**	**3**	1	0.5 U	**4**	**6**	0.3 U	**4**	**4.3**	**4.3**	0.3 UJ	**3.5**
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	**2**	**2**	0.5 U	1 J	0.5 U	0.5 U	0.9 J	0.2 U	0.2 U	0.7 J	0.99 J	0.81 J	0.3 UJ	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 J	160	51	7 J	7 J	3 U	3 U	0.6 U	2 J	0.3 U	4 J	0.3 U	0.5 U	0.5 UJ	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	5 J	9 J	3 U	3 U	3 U	3 U	0.6 U	0.3 U	0.3 U	2 J	0.3 U	0.4 U	0.4 UJ	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	5 J	3 U	3 U	3 U	3 U	3 U	1 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	12 J	25	1100	580	71	18 J	61	60	7 UJ	6 J	0.7 U	12 J	6.5 UJ	2 J	0.7 UJ	9.3 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.79 J	0.3 U	0.3 U	0.3 U	**20**	**24**	**15**	**28**	**25**	**14**	**11**	**11**	**24**	**26**	0.3 J	**24**	**25**	**24**	0.3 UJ	**23**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	**120**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	57	21	1 J	1 U	1 U	1 U	0.4 U	1 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	37	21	9	4	4	4	8	8	0.2 U	2	1.7	1.6	0.2 UJ	0.95 J
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	5	3	2	1	0.5 U	0.5 U	0.5 J	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1700	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	2.6 J	1 U	1 U	1 U	39	26	32	30	66	38	28	28	19	20	3 J	14	11	14	1 UJ	13
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	1 U	19
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	52	5	6	48	62	22	32	33	26	10	2	22	5.7	23	0.4 UJ	1.8
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.75 J	0.2 U	0.2 U	0.2 U	10	1 U	2 J	14	20	7	8	8	9 J	6	0.5 J	11	3.9 J	7.7	0.2 UJ	1.9 J
Methane	ug/L	N	NA	-	-	240	3 U	27	680	-	-	-	-	-	-	-	-	-	-	-	-	-	2200	3 U	8200
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2	6	0.9 J	1	2	0.9 J	0.5 U	0.5 U	2 J	3	0.2 U	3	3.5	4.3	0.2 UJ	3.8
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	27	13	30	30	67	35	27	27	11	13	2 J	7	5.4	6	0.5 UJ	5.2
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	**6**	**10**	**4**	3	2	2	**5**	**7**	0.3 U	3	2.5	2.5	0.3 UJ	1.2
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 J	0.5 U	0.5 U	1 J	0.6 J	0.5 U	0.5 U	0.5 U	0.4 U	0.2 J	0.2 U	0.3 J	0.42 J	0.2 U	0.2 UJ	0.23 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.7 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4	2	0.5 U	18	10	4	5	5	2 U	1 U	1 U	1 U	1.4 U	0.53 J	0.4 UJ	0.4 U
Total TICs	ug/L	N	NA	0 U	0 U	-	0 U	0 U	0 U	460 J	370 J	130 J	350 J	470 J	290 J	300 J	310 J	360 J	320 J	0 U	370 J	-	-	0 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513
			Field Sample ID	D1010168	M509A1X	M509A2X	M509A3X	M509A4X	M509A5X	M509A6X	M509A7X	M509A8X	M509A9X	M509B1X	M509B2X	M509B3X	M509B4	M509B5	D0814175	M513A1X	M513A2X	D0510185	M513A3X	M513A4X	D0422195
			Sample Date	10/10/2016	10/10/2016	11/10/2016	05/02/2017	08/22/2017	11/02/2017	02/07/2018	05/01/2018	08/14/2018	11/08/2018	02/07/2019	02/04/2020	03/05/2021	06/03/2021	10/28/2021	08/14/2017	08/14/2017	11/16/2017	05/10/2018	05/10/2018	12/10/2018	04/22/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	4 U	2 U	2 U	0.2 U	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 J	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	2 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	2 U	2 U	4 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.5 U	3 U	3 U	6 U	3 U	3 U	1 J	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.4 U	3 U	3 U	6 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	6 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	14 J	14 J	6 U	10 J	6 U	6 U	6 U	6 U	2 UJ	0.7 U	4 J	0.7 U	4.8 UJ	0.7 UJ	0.7 U	7 J	8 J	12 U	6 U	6 U	98	0.7 U
Benzene	ug/L	N	1	**27**	**11**	**9**	**15**	**13**	**28**	**7**	**17**	**26**	**11**	**14**	**5**	**6.3**	**5.6J**	**1.3**	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.3 J	0.2 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	95000	73000	-	110000	110000	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 UJ
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.6 J	1	1 U	1	1 J	2	0.5 J
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	1	0.8 J	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	3 J	2 U	2 U	2 U	2 U	0.3 J	0.6 J	0.5 J	1 J	1.9 J	7.6 J	1 U	2 U	2 U	4 U	2 U	2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 UJ	0.5 UJ	0.2 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1 J	1 U	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.6 J	0.5 U	0.5 U	0.8 J	0.5 U	0.6 J	0.6 J	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 J	0.4 UJ	0.4 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 J	1 U	2 J	1 J	2 J	2 J	1 J	1 J	1 J	1 J	1.1 J	3.1 J	0.55 J	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2400	730 J	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	2 J	1 U	0.2 U	0.7 J	0.2 U	2 J	0.96 J	2.2 J	0.5 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	2 U	2 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	1 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 J	0.85 J	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	0.4 UJ	0.4 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	1 U	1 U
Total TICs	ug/L	N	NA	27 J	0 U	36 J	0 U	46 J	40 J	24 J	21 J	27 J	96 J	19 J	100 J	-	-	-	-	-	-	0 U	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514
			Field Sample ID	M513A5X	M513A6X	M513A7X	M513A8	M513B1	M513B3	M514A1X	M514A2X	M514A3X	M514A4X	M514A5X	M514A6X	M514A7X	M514A8X	M514A9X	M514B1X	M514B2X	M514B3X	M514B4X	M514B5	M514B6	M514B8
			Sample Date	04/22/2019	11/01/2019	05/07/2020	06/22/2021	08/31/2021	03/21/2022	08/16/2017	11/14/2017	02/16/2018	05/11/2018	12/13/2018	02/21/2019	04/24/2019	07/18/2019	10/30/2019	01/22/2020	05/07/2020	07/28/2020	03/26/2021	07/01/2021	08/26/2021	03/21/2022
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 UJ	0.2 U	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 UJ	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 UJ	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 UJ	0.2 U	0.3 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 UJ	0.2 U	0.3 U	0.3 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 UJ	0.2 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 UJ	0.2 U	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	2 J	0.3 U	0.3 U	0.3 U	1.9 UJ	0.3 U	0.5 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 UJ	0.3 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	7 J	12 J	0.7 U	0.7 U	0.7 U	6 U	6 U	7 J	6 U	1 J	0.7 U	0.7 U	30	0.7 U	0.7 U	0.7 U	4.4 UJ	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.54 UJ	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	110000	140000 J	150000 J	-	-	-	4000 U	4500 J	2600 U	2600 U	6800 J	14000	28000	2600 UJ	53000 J	54000 J	79000 J	35000 J	25000 J	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 UJ	0.2 U	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	1 U	1 U	1 UJ	1 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.32 UJ	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 UJ	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	9400	13000	8400	-	-	-	-	-	-	-	-	-	-	-	-	-	3.4 J	100	33
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.26 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.32 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 UJ	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 UJ	0.2 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.32 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.65 UJ	1.4 U	0.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	-	-	-	0 U	0 U	0 U	-	-	0 U	0 U	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516
			Field Sample ID	M515A1X	M515A2X	M515A3X	M515A4X	M515A5X	M515A6X	M515A7X	M515A8	M515A9	M515B2	M516A1X	M516A3X	M516A4X	M516A5X	M516A6X	M516A7X	M516A8X	M516A9X	M516B1X	M516B2	M516B3
			Sample Date	08/15/2017	11/15/2017	05/10/2018	12/11/2018	04/25/2019	10/30/2019	05/06/2020	07/01/2021	08/26/2021	01/13/2022	05/12/2018	02/09/2019	05/04/2019	07/27/2019	11/02/2019	01/25/2020	05/02/2020	07/25/2020	03/27/2021	06/19/2021	09/22/2021
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	18	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	6	2	0.6 J	0.4 J	0.4 J	0.2 J	0.3 J	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.3 U	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	1.1 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	0.7 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	4.4 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.2 U	0.2 U	0.5 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.55 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	60000	69000	52000	2600 U	2600 U	40000 J	37000 J	-	-	-	96000	100000	79000	73000 J	110000 J	76000 J	88000 J	110000 J	96000 J	-	-
Carbon disulfide	ug/L	N	700	4 J	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.32 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.9 J	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	0.32 U	1 UJ	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	5700	5100	4500	-	-	-	-	-	-	-	-	-	11	27
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	-	-	0 U	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-516	MW-516	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-518	MW-518	MW-518	MW-518	MW-518
			Field Sample ID	M516B4	M516B5	M517A1X	M517A2X	M517A3X	M517A4X	M517A5X	M517A6X	M517A7X	M517A8X	M517A9X	M517B1X	M517B2X	M517B3X	M517B4X	M517B5	M517B6	M518A1X	M518A2X	M518A3X	M518A4X	M518A5X
			Sample Date	12/17/2021	03/15/2022	08/15/2017	11/14/2017	02/14/2018	05/10/2018	12/14/2018	02/26/2019	04/25/2019	07/19/2019	10/29/2019	01/28/2020	05/08/2020	07/29/2020	03/26/2021	06/22/2021	10/28/2021	08/16/2017	11/15/2017	02/16/2018	05/14/2018	12/11/2018
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	**200**	**200**	**130**	**79**	**34J**	**85J**	**130**	**52**	**28**	**8**	**3**	**3.9**	0.92 J	0.78 J	1	**36**	**26**	**41**	**34**	**26**
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	**2300**	**1400**	**1200**	**510**	0.8 J	**55J**	**34**	6	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	1 U	0.7 J	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	4 U	2 U	2 U	2 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	40	48	**51**	**89**	9 J	15 J	37	5	2	4	0.3 J	0.6 J	0.2 U	0.65 J	0.55 J	**110**	**78**	**120**	**120**	**71**
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	2 U	1 U	1 U	1 U	0.3 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	4 U	2 U	2 U	2 U	0.3 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	0.6 J	0.5 U	0.5 U	0.3 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	6 U	3 U	3 U	3 U	99 J	39 J	81	110	100	63	41	17	4.1 J	2.5 J	0.5 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	6 U	3 U	3 U	3 U	0.5 J	0.6 UJ	1 J	1 J	1 J	0.3 U	0.8 J	1.1 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	6 U	3 U	3 U	3 U	2 J	1 UJ	1 J	1 J	1 J	1 J	1 J	1.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	12 U	6 U	6 U	6 U	**17000J**	3400 J	**7100**	5800 E	4600	2300	870	180	17 J	7 J	1.6 J	6 U	6 U	6 U	6 U	0.7 U
Benzene	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**5**	**4**	**4**	**3**	**2**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	66000	63000	61000	89000	330000	230000	300000	290000 J	470000 J	230000 J	410000 J	310000 J	250000 J	-	-	69000	48000	42000	57000	23000
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	2 U	1 U	1 U	1 U	0.2 UJ	0.5 J	0.7 J	0.5 J	1 J	3 J	2 J	1.1	0.67 J	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	1 U	0.7 J	0.5 U	0.5 U	57 J	100 J	190	130	180	140	100	110	26	18	32	0.5 U	0.5 U	0.5 U	0.6 J	0.6 J
Chloroform	ug/L	N	70	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	1 U	0.8 J	0.5 U	0.5 U	0.3 J	0.4 UJ	0.7 J	1	1	0.2 U	0.2 U	0.3 J	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	4 U	2 U	2 U	2 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	1 U	1 U	1 U	0.32 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	1 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.8 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	7.7 J	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	4700	12000 J	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	4 U	0.6 J	0.5 U	0.5 U	0.3 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.3 U	0.3 U	2 U	1 U	1 U	1 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	**7**	**5**	**4**	**2**	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 J	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	43	0.9 J	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	**17**	**16**	**11**	**5**	0.9 J	0.6 J	1	0.7 J	0.6 J	0.3 J	0.2 U	0.35 J	0.2 U	0.3 U	0.3 U	**4**	**2**	**3**	**3**	**2**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	1 U	0.8 J	0.5 U	0.6 J	0.4 J	1 J	**2**	**2**	**6**	**5**	**3**	**3.8**	0.67 J	0.55 J	**1.2**	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	1 U	0.5 U	0.5 U	0.5 U	1 UJ	2 UJ	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Total TICs	ug/L	N	NA	0 U	0 U	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	0 U	-	-	0 U	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-518	MW-518	MW-518	MW-518	MW-518	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-528	MW-528	MW-528
			Field Sample ID	M518A6X	M518A7X	M518A8X	M518A9	M518B1	M519A1X	M519A2X	M519A3X	M519A4X	M519A7X	M519A8X	M519A9X	M519B1X	M519B2X	M519B3X	M519B4X	M519B5	M519B6	M519B7	M528A1X	M528A2X	D1218185
			Sample Date	04/25/2019	10/23/2019	05/04/2020	06/22/2021	09/21/2021	08/16/2017	11/16/2017	02/21/2018	05/15/2018	04/30/2019	07/19/2019	10/29/2019	01/28/2020	05/07/2020	07/29/2020	03/25/2021	06/30/2021	09/23/2021	12/14/2021	02/14/2018	05/15/2018	12/18/2018
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**16**	**2**	**5**	**4.4**	**3.4**	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 UJ	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	47	5	14	9.6	8.2	0.5 U	2	3	5	0.3 J	0.6 J	0.9 J	0.5 J	0.4 J	0.31 J	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	4 J	7 J	11	5 J	9 J	16	51	73	61	28	7.3 J	0.5 UJ	0.5 U	0.5 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	0.6 J	0.3 U	0.3 U	0.3 U	2 J	1.1 U	0.35 J	0.4 UJ	0.4 U	0.4 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.7 J	0.6 J	1 J	1 J	1 J	1.3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	38	80	80	38	570	680	3900	**6300**	4900	1400	380	17 J	32	72	6 U	6 U	0.9 J
Benzene	ug/L	N	1	1	0.3 J	0.2 U	0.3 U	0.3 U	0.5 U	0.9 J	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	0.54 U	1 U	1 UJ	1 U	1 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	25000	30000 J	21000 J	-	-	4000 U	4000 U	2600 U	2600 U	2600 U	2600 UJ	2600 UJ	12000 UJ	29000 J	63000 J	100000 J	-	-	-	160000	140000	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	3 J	1 U	1 U	0.5 J	0.3 J	0.6 J	0.4 J	0.4 J	0.82 U	0.2 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.9 J	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	1 UJ	1 U	1 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.32 U	1 U	1 UJ	1 U	1 U	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	-	-	-	12	17	-	-	-	-	-	-	-	-	-	-	-	22000	24000	21000	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.5 UJ	0.3 J	0.3 U	0.3 U	0.32 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.3 J	0.3 J	0.3 J	0.4 J	0.82 J	0.21 J	0.2 UJ	0.3 J	0.2 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1	0.4 J	0.6 J	0.38 J	0.57 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	0.5 U	1 U
Total TICs	ug/L	N	NA	-	-	-	0 U	0 U	-	-	62 J	-	-	-	-	-	-	-	-	0 UJ	0 U	0 U	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-530	MW-530	MW-530
			Field Sample ID	M528A3X	M528A5X	M528A6X	M528A7X	M528A8	M528B4	M528A9	M528B1	M528B2	M529A1X	M529A2X	M529A3X	M529A4X	M529A5X	M529A6X	M529A7	M529A8	M529A9	M529B1	M530A1X	D0516185	M530A2X
			Sample Date	12/18/2018	04/25/2019	10/30/2019	05/04/2020	06/18/2021	08/20/2021	08/31/2021	12/27/2021	03/30/2022	02/13/2018	05/16/2018	12/18/2018	04/17/2019	10/23/2019	05/04/2020	06/16/2021	08/31/2021	12/27/2021	03/30/2022	02/12/2018	05/16/2018	05/16/2018
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	**34**	**31**	**46**	**7**	**21**	**22**	**30**	**29**	**25**	**18**	**260**	**280**	**280**
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.9 J	0.9 J	1	0.3 U	0.4 J	0.6 J	0.57 J	0.71 J	0.54 J	0.37 J	**720**	**600**	**590**
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.3 J	0.2 U	0.3 J	0.2 J	0.3 U	0.3 U	0.3 U	0.30 U	0.8 J	0.8 J	0.7 J
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	**52**	47	**51**	9	30	32	39	42	35	23	**310**	**290**	**290**
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.6 J	0.6 J	0.7 J	0.3 U	0.5 J	0.4 J	0.48 J	0.65 J	0.55 J	0.30 U	0.6 J	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	1 J	0.3 U	0.5 U	0.50 U	0.5 U	0.5 U	0.50 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.50 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.40 U	0.4 U	0.4 U	0.40 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.40 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.50 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	10 J	0.7 U	0.7 U	0.70 U	0.7 U	0.7 U	0.70 U	6 U	6 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.70 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.0 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1.0 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	81000	130000	110000 J	150000 J	-	-	-	-	-	140000	140000	110000	36000	100000 J	130000 J	-	-	-	-	78000	-	110000
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	5	5	5
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 J	0.3 U	0.31 UJ	0.3 U	0.30 U	0.5 J	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	25	26	31	6	20	23	26	29	25	17	5	6	5
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1.0 U	1 UJ	1 U	1.0 U	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 U	1 UJ	1 U	1.0 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	-	1 U	1 U	1.0 U	-	-	-	-	-	-	1 U	1 U	1 U	1.0 U	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.40 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	3.3 UJ	-	3 U	3 U	3.0 U	-	-	-	-	-	-	240	230	220	84	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.52 J	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	4	5	5
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.50 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.50 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1	0.9 J	0.9 J
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.5 U	0.5 U	0.4 J	0.2 U	0.2 U	0.3 J	0.3 U	0.3 U	0.3 U	0.30 U	**2**	1	1
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	9	9	14	2	5	6	7.6	7.6	6.9	3.3	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	**480**	**520**	**600**	**190**	**410**	**380**	**440**	**510**	**430**	**230**	**22**	**30**	**29**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	**4**	**5**	**11**	0.7 J	**2**	**4**	**6.3**	**5.9**	**4**	**1.6**	0.9 J	1	1
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	0.4 U	0.40 U	0.4 U	0.4 U	0.40 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.40 U	0.5 U	0.5 U	0.5 U
Total TICs	ug/L	N	NA	-	-	-	-	0 U	-	0 U	0 U	0.0 U	-	-	-	-	-	-	0 U	0 U	0 U	0.0 U	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-532	MW-532	MW-532	MW-532	MW-532
			Field Sample ID	M530A3X	M530A4X	M530A5X	M530A6X	M530A7	M530A8	M530A9	M530B1	M531A1X	M531A2X	M531A3X	D1023195	M531A4X	M531B2X	M531A6	M531A7	M532A1X	M532A2X	M532A3X	M532A4X	M532A5X
			Sample Date	12/18/2018	04/17/2019	10/23/2019	04/30/2020	05/26/2021	09/16/2021	12/28/2021	03/29/2022	05/17/2018	12/10/2018	04/22/2019	10/23/2019	10/23/2019	05/07/2020	06/18/2021	10/04/2021	02/13/2018	05/15/2018	12/07/2018	04/22/2019	10/31/2019
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**260J**	**280**	**220**	**160**	**200**	**64**	**530**	**450**	**30**	**340**	**160**	**4J**	**3J**	**18**	**19**	**19**	**790**	**730**	**430**	**300**	**210**
1,1,1-Trichloroethane	ug/L	N	30	**410J**	**410**	**200**	**170**	**330**	**69**	**890**	**700**	**97**	**790**	**360**	7	6	**40**	19	9.2	**540**	**510**	**240**	**150**	**120**
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.7 J	0.7 J	0.6 J	0.4 J	1.3	0.3 U	1.3	1.2	0.5 U	1 J	0.4 J	0.2 U	0.2 U	0.2 U	0.41 J	0.3 U	2	2	2	0.5 J	0.6 J
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	0.4 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	0.2 U	0.2 UJ	0.2 U
1,1-Dichloroethane	ug/L	N	50	**270J**	**310**	**250**	**200**	**310**	**63**	**550**	**600**	34	**1100**	**210**	8	7	32	26	26	**180**	**140**	**93**	**57**	**54**
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.6 J	0.3 U	0.6 J	0.3 U	0.82 J	0.3 U	0.57 J	0.54 J	0.5 U	2 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	**4**	**1**	**0.9J**	**2**
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	18	2 J	0.3 U	1 J	1 J	0.3 U	0.5 U	0.5 U	3 U	3 U	0.8 J	0.3 U	0.7 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	0.3 U	0.3 U	0.6 J
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	2 J	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	26	5 J	2 J	6 J	7 J	0.7 U	1.4 J	0.7 U	6 U	6 U	3 J	2 J	3 J
Benzene	ug/L	N	1	0.3 J	0.2 J	0.2 J	0.3 J	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.6 J	0.3 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**140**	**120**	**110**	**62**	**53**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.4 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	110000	150000	160000 J	180000 J	-	-	-	-	2600 U	150000	150000	-	180000 J	63000 J	-	-	200000	210000	190000	270000	190000
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.4 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	4 J	3	2	2	3.1	0.55 J	4.2	11	10	240	40	1	1	10	2.7	2	24	14	8	5	5
Chloroform	ug/L	N	70	0.8 J	0.5 UJ	0.5 J	0.3 J	0.58 UJ	0.3 U	0.81 UJ	0.74 UJ	0.5 U	0.5 UJ	0.2 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1	1	0.6 UJ	0.3 UJ	0.3 J
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	19 J	13	15	8	9.8	2.9	18	14	2	20	8	0.2 U	0.2 U	1	1.1	1	6	5	5	4	4
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.4 U	0.2 U	1 U	1 U	1 U	1 U	1 U	18	18	13	6	3 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	1.3 J	1.3 J	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.8 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3	2	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.4 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7	6	4 J	2 J	2 J
Methane	ug/L	N	NA	-	-	-	-	11	3.2 UJ	14	3 U	-	-	-	-	-	-	2400	2400	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	12 J	8	5	5	3.5	0.31 J	3.1	1.3	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.3 J	0.3 J	0.3 J
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5	7	4 J	1 J	0.9 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 J	1	1	0.9 J	1.2	0.3 U	1.4	1.2	0.5 U	2 J	0.5 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.9 J	0.8 J	1	2	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.7 J	0.7 J	0.7 J	0.4 J	0.42 J	0.3 U	**1.6**	**2.5**	0.5 U	**2J**	1	0.2 U	0.2 U	0.2 J	0.3 U	0.3 U	**9**	**9**	**6**	**3**	**3**
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1	1 J	0.6 J	0.4 J	0.5 J
trans-1,2-Dichloroethene	ug/L	N	100	2 J	1	2	0.7 J	0.23 J	0.3 U	0.67 J	0.4 J	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**150J**	**170**	**260**	**120**	**63**	**21**	**110**	**81**	0.5 U	**2J**	1	0.2 U	0.2 U	0.2 J	0.39 J	0.42 J	**44**	**39**	**29**	**18**	**15**
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.4 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**4J**	**2**	**3**	**2**	0.65 J	0.22 J	**1.5**	**1.2**	**3**	**72**	**22**	0.4 J	0.4 J	**3**	**1.9**	**2.3**	**31**	**26**	**19**	**11**	**9**
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.4 U	0.5 U	2 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	2	1	1 U	1 U	1 U
Total TICs	ug/L	N	NA	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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Chevron Perth Amboy Facility

			Location ID	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018
			Field Sample ID	D0505205B	M532A6X	M532A7	M532C8	D1228211B	M532A9	M533A1X	M533A2X	D1210185	M533A3X	M533A4X	M533A5X	M533A6X	M533A7	M533A8	M533B1	TP2018X	TP2018A8X	TP2018B1X	TP2018B2X	TP2018B3X	TP2018B4X
			Sample Date	05/05/2020	05/05/2020	06/18/2021	09/29/2021	12/28/2021	12/28/2021	02/12/2018	05/17/2018	12/10/2018	12/10/2018	04/16/2019	10/25/2019	04/30/2020	06/29/2021	09/16/2021	03/29/2022	06/29/2012	09/11/2012	08/13/2013	11/01/2013	02/11/2014	11/06/2014
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	**360**	**420**	**330**	**370**	**330**	**380**	**600**	**610**	**340J**	**560J**	**320J**	**460**	**260**	**180**	**120**	**120**	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	**320**	**310**	**240**	**250**	**280**	**290**	3	4	28 J	16 J	10	8 J	9	19	11	12	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	1	1 J	1.3	1.2	0.3 U	0.3 U	0.9 J	0.8 J	0.7 J	0.7 J	0.7 J	0.5 J	0.3 J	0.36 J	0.31 J	0.3 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	-	-	-	-	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	4 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	**110**	**120**	**120**	**110**	**140**	**130**	**140**	**170**	**67J**	**120J**	**85**	**95**	**65**	46	32	30	2 U	1 U	1 U	1 U	1 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	**1J**	**1**	**0.85J**	**0.97J**	0.3 U	0.3 U	2	2	1 J	2 J	1 J	2 J	0.3 U	0.45 J	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	0.5 U
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.53 J	0.5 U	0.5 U	0.5 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	18 J	23	15	12	8 J	10 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.55 J	0.4 U	0.4 U	0.4 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	6 U	3 U	3 U	6 J	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	4 J	5 J	0.7 J	0.7 U	0.7 U	0.7 U	6 U	6 U	0.7 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	47	54	37	30	23	24
Benzene	ug/L	N	1	**81**	**88**	**86**	**75**	**57**	**54**	**32**	**24**	**12J**	**17J**	**18**	**10**	**8**	**4.3**	**4.2**	**3.1**	**1000**	**910**	**1100**	**840**	**1000**	**800**
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	260000 J	-	-	-	-	6900 J	84000	-	110000	60000	98000 J	98000 J	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloroethane	ug/L	N	NA	12 J	16 J	9.7	8.9	11	9.7	0.7 J	0.9 J	0.7 J	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Chloroform	ug/L	N	70	0.6 J	0.6 J	0.63 J	0.34 UJ	0.88 UJ	0.94 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	5	5	5.3	5.4	6	5.5	1	1	2 J	1 J	1	1	1 J	0.98 J	0.75 J	0.67 J	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	6 J	8 J	12	11	11	11	2 U	2 U	0.2 U	0.2 U	0.4 J	1 U	1 U	1 U	1 U	1 U	110	210	190	170	200	180
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	2 U	2 U	2 U	2 U	0.5 U
Ethane	ug/L	N	NA	-	-	14	17	18	17	-	-	-	-	-	-	-	1.6 J	1 U	1.2 J	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	1	0.4 U	0.4 U	0.54 J	0.66 J	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	330	260	320	170	310	120
Isopropylbenzene	ug/L	N	700	4 J	5 J	3.6 J	3.2 J	3.8 J	3.4 J	1 U	1 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	30	35	53	34	49	35
Methane	ug/L	N	NA	-	-	4700	4400	4500	3900	-	-	-	-	-	-	-	390	130	280	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.3 J	0.2 J	0.22 J	0.29 J	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 J	2 J	3 J	2.7 J	2.7 J	2.4 J	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	45	160	160	130	150	140
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.6 J	1.1	0.62 J	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	**6**	**6**	**4.6**	**3.9**	**4.3**	**3.9**	0.5 U	0.5 J	**2J**	1 J	1	1	1 J	0.81 J	0.41 J	0.73 J	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	0.6 J	0.7 J	0.56 J	0.46 J	0.64 J	0.63 J	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6 J	6	8	5 J	7	5
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	**27**	**28**	**24**	**23**	**22**	**20**	**12**	**12**	**17**	**16**	**15**	**14**	**11**	**8.7**	**6.6**	**6.5**	2 U	1 U	1 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	4 U	2 U	2 U	2 U	2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**17**	**20**	**17**	**15**	**15**	**14**	**5**	**7**	**5**	**6**	**3**	**5**	**4**	**2.2**	1	**1.3**	2 U	1 U	1 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1 U	0.62 J	0.56 J	0.4 U	0.4 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	410	480	510	330	460	180
Total TICs	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A1 Central Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	TP2-018	TP2-018	TP2-018	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R
			Field Sample ID	TP2018B5X	TP2018B6X	TP2018B7X	TP2018RB8X	TP2018RB9X	TP2018RC1X	TP2018RC2X	TP2018RC3X	TP2018RC4X	D1109188	TP2018RC5X	TP2018RC6X	TP2018RC7X	TP2018RC8X	TP2018RC9X	D0304218	TP2018RD1X	TP2018RD2	TP2018RD3	TP2018RD4
			Sample Date	07/02/2015	10/08/2015	12/08/2015	05/03/2017	08/23/2017	11/01/2017	02/06/2018	05/02/2018	08/15/2018	11/09/2018	11/09/2018	02/06/2019	07/26/2019	02/03/2020	09/02/2020	03/04/2021	03/04/2021	05/11/2021	10/05/2021	12/27/2021
Parameter Name	**Report Units**	**Filtered**	**CMI GW Action Limit**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	4 U	10 U	2 U	2 U	20 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	1 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	2 U	5 U	1 U	1 U	10 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	4 U	10 U	2 U	2 U	20 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	2 U	5 U	1 U	1 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.3 U	**4**	**3**	2	3 U	**4J**	**2.4**	**2.4**	**2.4**	1.2	**2.7**	0.56 J
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	1 J	0.8 J	0.2 U	0.8 J	2 U	1 U	0.53 J	0.2 U	0.2 U	0.2 U	0.55 J	0.3 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	2 U	5 U	1 U	1 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	2 U	5 U	1 U	1 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	8 J	3 U	3 J	55	40 J	7 J	14	30 UJ	9 J	2 J	0.3 U	3 J	3 U	2 U	0.3 U	0.3 U	0.3 U	5.3 J	0.5 U	0.72 J
2-Hexanone	ug/L	N	40	3 U	3 U	4 J	6 U	15 U	3 U	3 U	30 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	2 U	0.3 U	1.5 J	0.3 U	1.1 J	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	6 U	15 U	3 U	3 U	30 UJ	0.9 J	0.5 U	0.5 U	0.5 U	5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	18 J	6 U	6 U	880	1000	96	130	320 J	140	3 J	0.7 U	50	13 J	4 U	0.7 U	12 J	12 J	83	0.7 U	7.6 J
Benzene	ug/L	N	1	**1100**	**960**	**860**	**86**	**100**	**32**	**80**	**78J**	**73**	**43**	**49**	**24**	**24**	**40**	**23**	**44**	**42**	0.77 J	**15**	**2.1**
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	5 UJ	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	9	4 J	4	0.5 U	5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	2 U	0.3 U	0.3 U	0.3 U	1.1	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	7 J	12 J	9	1 J	10 UJ	0.8 J	0.5 J	0.2 U	0.2 U	2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.63 J	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 J	0.3 J	0.3 J	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5	5	0.5 U	4	5 UJ	3	1	1	0.9 J	2 UJ	1 U	0.35 J	0.77 J	0.71 J	2.5	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	2 J	3 U	2	0.7 J	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	110	48	98	1	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	1 U	0.2 U	0.2 U	0.2 U	21	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	200	190	66	64	62	50	58	33 J	45	28	28	16	20 U	5 U	1.3 J	1 U	1 U	2.7 J	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3 J	1.6 J	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	460	240	140	51	30	16	32	28 J	33	26	31	23	12	12	9.4	3.3	3	2	3	0.68 J
Isopropylbenzene	ug/L	N	700	53	42	21	22	15 J	8	11	12 J	15	14	17	13	5 J	9 J	7.4	4.4 J	4.1 J	1.2 J	1.6 J	0.39 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	440	2000	490
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	2 U	5 U	1 U	1 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	160	120	52	46	50	73	36	23 J	46	22	22	21	10 U	3 U	0.5 U	3.8 J	2.9 J	5.5	0.84 J	0.51 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	4 U	**15J**	**5**	3	**8J**	**7**	**5**	**5**	2	7 UJ	2 J	2.7	1.2	0.3 U	1.1	0.95 J	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	2 U	5 U	1 U	1 U	10 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	10	6	3	1 U	3 U	0.5 U	1	5 UJ	0.9 J	0.5 J	0.6 J	0.3 J	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	530	270	180	35	22	11	18	14 J	20	13	15	11	10 U	7 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U
Total TICs	ug/L	N	NA	-	2100 J	1400 J	780 J	580 J	380 J	360 J	120 J	440 J	450 J	280 J	390 J	55 J	65 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0037R	MW-0037RR	MW-0044	MW-0044	MW-0045	MW-0045	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054R	MW-0054R	MW-0054R	MW-0054R	MW-0055	MW-0055	MW-0055R	MW-0055R	MW-0055R
			Field Sample ID	M037RA1	M037RRC3	M044C1X	M044C2X	M045B9X	M045C1X	M054B2X	D08151312	M054B3	M054B3X	M054B4X	D1203148	M054B5X	M054B9X	M054C1X	M054RD9	M054RE1	M054RE2	M054RE3	M055A1	M055A2X	M055RC3X	M055RC4X	M055RC6
			Sample Date	08/20/2013	05/13/2021	06/13/2012	08/06/2013	06/28/2012	08/08/2013	06/26/2012	08/15/2013	08/15/2013	08/28/2013	08/20/2014	12/03/2014	12/03/2014	12/11/2015	04/11/2016	05/14/2021	07/30/2021	12/28/2021	02/01/2022	08/14/2013	12/03/2014	08/11/2020	11/10/2020	05/14/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
2,4-Dichlorophenol	ug/L	N	20	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
2,4-Dimethylphenol	ug/L	N	100	-	3 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.9 J	1 J	0.9 J	0.7 J	0.5 U	0.7 J	3 UJ	3.1 U	3.2 U	3.4 U	-	0.9 J	-	-	3 UJ
2,4-Dinitrophenol	ug/L	N	40	-	14 U	12 U	11 U	10 U	10 U	99 U	-	-	10 U	11 U	10 U	10 U	11 U	10 U	14 U	15 U	15 U	16 U	-	11 U	-	-	14 U
2,4-Dinitrotoluene	ug/L	N	10	-	1 U	1 U	1 U	1 U	1 U	10 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	-	1 U	-	-	1 U
2,6-Dinitrotoluene	ug/L	N	5	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
2-Chloronaphthalene	ug/L	N	600	-	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	4 U	-	-	0.4 U	0.4 U	1	1	0.4 U	0.4 U	0.41 U	0.42 U	0.42 U	0.46 U	-	0.4 U	-	-	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
2-Methyl-Naphthlalene	ug/L	N	30	-	10 J	0.1 U	0.2 J	0.1 U	0.1 U	**130**	-	-	4	0.5 J	0.5 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-	**47**	**60 J**	**33 J**	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.8 J	-	-	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	-	1 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.1 U	1.1 U	-	0.5 U	-	-	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	1 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.1 U	1.1 U	-	0.5 U	-	-	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	-	4 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	4.1 UJ	4.2 U	4.2 UJ	4.6 U	-	2 U	-	-	4 UJ
3-Nitroaniline	ug/L	N	NA	-	2 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	2.1 U	2.1 UJ	2.3 U	-	0.5 U	-	-	2 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	8 U	6 U	5 U	5 U	5 U	49 U	-	-	5 U	5 U	5 U	5 U	5 U	5 U	8.1 U	8.3 U	8.4 U	9.2 U	-	5 U	-	-	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
4-Chloroaniline	ug/L	N	30	-	4 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	1	0.5 U	0.5 U	2 U	2 U	4.1 UJ	4.2 U	4.2 U	4.6 U	-	0.5 U	-	-	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	3	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	1	-	-	0.51 U
4-Nitroaniline	ug/L	N	NA	-	0.9 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91 U	0.93 U	0.95 UJ	1 U	-	0.5 U	-	-	0.91 U
4-Nitrophenol	ug/L	N	NA	-	10 U	12 U	11 U	10 U	10 U	99 U	-	-	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U	-	11 U	-	-	10 U
Acenaphthene	ug/L	N	400	-	2.5	0.1 U	0.1 U	0.1 U	0.1 U	83	-	-	8	5	11	10	0.5 J	19	0.1 U	0.1 U	0.11 U	0.11 U	-	26	-	-	5
Acenaphthylene	ug/L	N	NA	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	-	-	0.1 U	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-	0.1 U	-	-	0.1 U
Acetophenone	ug/L	N	700	-	1 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	10	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.1 U	1.1 U	-	0.5 U	-	-	1 U
Anthracene	ug/L	N	2000	-	0.31 J	0.1 U	0.1 U	0.1 U	0.1 U	51	-	-	3	1	8	8	0.1 U	13	0.1 U	0.1 U	0.11 U	0.11 U	-	28	-	-	1.7
Atrazine	ug/L	N	3	-	1 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	1 UJ	1 U	1.1 U	1.1 U	-	2 U	-	-	1 UJ
Benzaldehyde	ug/L	N	NA	-	1 U	1 U	1 U	1 U	1 U	10 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	-	1 U	-	-	1 U
Benzo(a)anthracene	ug/L	N	0.1	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**39**	-	-	**1**	**0.2J**	**6**	**6**	0.1J	**10**	0.1 U	0.1 U	0.11 U	0.11 U	-	**2**	-	-	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	**20**	-	-	**0.6**	0.1 U	**4**	**4**	0.1 U	**4**	0.11 U	0.11 U	0.12 U	0.13 U	-	**0.7**	-	-	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**14**	-	-	**0.3J**	0.1 U	**2**	**2**	0.1 U	**3**	0.1 U	0.1 U	0.11 U	0.11 U	-	**0.4J**	-	-	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	13	-	-	0.3 J	0.1 U	2	2	0.1 U	3	0.1 U	0.1 U	0.11 U	0.11 U	-	0.4 J	-	-	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	-	-	0.1 U	0.1 U	0.4 J	0.3 J	0.1 U	0.5	0.1 UJ	0.1 U	0.11 U	0.11 U	-	0.1 J	-	-	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	100	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	-	2 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	**4J**	2 U	2 U	**5J**	2 U	2.1 U	2.1 U	2.3 U	-	2 J	-	-	2 U
Butylbenzylphthalate	ug/L	N	100	-	2 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	-	2 U	-	-	2 U
Caprolactam	ug/L	N	4000	-	3 U	6 U	5 U	5 U	5 U	49 U	-	-	5 U	5 U	5 U	5 U	5 U	5 U	3 UJ	3.1 U	3.2 U	3.4 U	-	5 U	-	-	3 UJ
Carbazole	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	7	6	0.5 U	0.5 U	0.5 U	6	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
Chrysene	ug/L	N	5	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**67**	-	-	2	0.2 J	**11**	**11**	0.1 J	**19**	0.1 U	0.1 U	0.11 U	0.11 U	-	3	-	-	0.1 U
Di-n-butylphthalate	ug/L	N	700	-	2 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	-	2 U	-	-	2 U
Di-n-octylphthalate	ug/L	N	100	-	5 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	5.1 U	5.2 U	5.3 U	5.7 U	-	2 U	-	-	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**4J**	-	-	0.1 U	0.1 U	**0.6**	**0.6**	0.1 U	**0.7**	0.1 U	0.1 U	0.11 U	0.11 U	-	0.1 U	-	-	0.1 U
Dibenzofuran	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	2	1 J	0.5 U	0.5 U	0.5 U	4	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	1.9 J
Diethylphthalate	ug/L	N	6000	-	2 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	-	2 U	-	-	2 U
Dimethyl phthalate	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	20 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	-	2 U	-	-	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
Fluoranthene	ug/L	N	300	-	0.19 J	0.1 U	0.1 U	0.1 U	0.1 U	53	-	-	1	0.4 J	5	4	0.1 U	11	0.1 U	0.1 U	0.11 U	0.11 U	-	8	-	-	1.1
Fluorene	ug/L	N	300	-	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	76	-	-	9	4	11	11	0.3 J	8	0.12 U	0.12 U	0.13 U	0.14 U	-	36	-	-	1.7
Hexachlorobenzene	ug/L	N	0.02	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.13 U	-	0.1 U	-	-	0.11 U
Hexachlorobutadiene	ug/L	N	1	-	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	-	5 U	6 U	5 U	5 U	5 U	49 U	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.2 U	5.3 U	5.7 U	-	5 U	-	-	5.1 U
Hexachloroethane	ug/L	N	7	-	0.5 U	1 U	1 U	1 U	1 U	10 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.52 U	0.53 U	0.57 U	-	1 U	-	-	0.51 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	-	-	0.1 U	0.1 U	**0.6**	**0.5J**	0.1 U	**0.7**	0.11 U	0.11 U	0.12 U	0.13 U	-	**0.2J**	-	-	0.11 U
Isophorone	ug/L	N	40	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
Naphthalene	ug/L	N	300	1 J	0.14 J	0.1 U	0.1 J	0.1 U	0.1 U	77	15	18	16	14	5	5	0.5	0.1 U	0.1 U	0.1 U	0.15 U	0.11 U	2 J	6	15 J	9 J	2.6
Nitrobenzene	ug/L	N	6	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	-	1 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.1 U	1.1 U	-	0.5 U	-	-	1 U
Pentachlorophenol	ug/L	N	0.3	-	1 U	1 U	1 U	1 U	1 U	10 U	-	-	1 U	1 U	1 U	1 U	**6**	1 U	1 U	1 U	1.1 U	1.1 U	-	1 U	-	-	1 U
Phenanthrene	ug/L	N	NA	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	260	-	-	15	5	25	24	0.1 U	59	0.11 U	0.11 U	0.12 U	0.13 U	-	95	-	-	0.11 U
Phenol	ug/L	N	2000	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	9 J	-	-	2	1	0.5 U	0.5 U	3	1	0.51 U	0.52 U	0.53 U	0.57 U	-	0.5 U	-	-	0.51 U
Pyrene	ug/L	N	200	-	0.67	0.1 U	0.1 U	0.1 J	0.1 U	130	-	-	5	1	21	20	0.7	32	0.1 U	0.1 U	0.11 U	0.11 U	-	22	-	-	1
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	0 U	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0055R	MW-0055R	MW-0055R	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056	MW-0056R	MW-0056R	MW-0056R	MW-0056R	MW-102	MW-102	MW-102R	MW-102R	MW-102R	MW-102R	MW-102R	MW-102R	MW-103
			Field Sample ID	M055RC7	M055RC8	M055RC9	D0626121	M056B2X	M056B2	M056B3X	M056B4X	M056B5X	D0411168B	M056B7X	M056RD5X	M056RD6X	M056RD8	M056RD9	M102C1X	M102C4X	M102RA5X	M102RA6X	M102RA7X	M102RA8	M102RA9	M102RB1	M103B2X
			Sample Date	07/30/2021	12/21/2021	02/01/2022	06/26/2012	06/26/2012	08/14/2013	08/28/2013	08/20/2014	12/11/2015	04/11/2016	04/11/2016	08/11/2020	11/10/2020	05/13/2021	12/21/2021	06/13/2012	08/13/2013	08/07/2020	11/13/2020	02/25/2021	05/21/2021	09/30/2021	12/28/2021	06/22/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.51 UJ	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 UJ	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.51 UJ	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 UJ	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3.1 UJ	3.1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	3 U	3 UJ	0.5 U	0.5 U	-	-	-	3.2 U	3.8 J	3.2 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	10 U	10 U	-	10 UJ	11 U	10 U	10 UJ	11 UJ	-	-	14 U	14 U	10 U	10 U	-	-	-	15 U	15 U	15 U	9 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	-	1 UJ	1 U	1 U	1 UJ	1 UJ	-	-	1 U	1 U	1 U	1 U	-	-	-	1.1 U	1 U	1.1 U	0.9 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.41 U	0.41 U	0.41 U	0.4 U	0.4 U	-	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 UJ	-	-	0.41 U	0.41 U	0.4 U	0.4 U	-	-	-	0.42 U	0.42 U	0.43 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.51 UJ	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 UJ	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	28 J	0.1 U	0.4 J	0.1 U	-	0.1 UJ	0.1 U	0.1 U	**74 J**	**200J**	**270J**	**220J**	**200J**	0.1 U	0.1 U	0.7	-	-	-	26	**45**	**55**	2
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	1	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	1 U	1 U	0.5 U	0.5 U	-	-	-	1.1 U	1 U	1.1 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 UJ	1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	1 U	1 UJ	0.5 U	0.5 U	-	-	-	1.1 U	1 U	1.1 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.1 U	4.1 U	4.1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	4.1 U	4.1 U	2 U	2 U	-	-	-	4.2 U	4.2 U	4.3 UJ	2 U
3-Nitroaniline	ug/L	N	NA	2 U	2 U	2.1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	2 U	2 U	0.5 U	0.5 U	-	-	-	2.1 U	2.1 U	2.1 UJ	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.2 U	8.2 U	8.2 U	5 U	5 U	-	5 UJ	5 U	5 U	5 UJ	5 UJ	-	-	8.1 U	8.1 U	5 U	5 U	-	-	-	8.5 U	8.4 U	8.5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.1 U	4.1 U	4.1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	2 U	2 UJ	2 UJ	-	-	4.1 U	4.1 U	0.5 U	0.5 U	-	-	-	4.2 U	4.2 U	4.3 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.8 J	-	-	-	0.53 U	3.5	0.53 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.92 U	0.92 U	0.92 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.91 U	0.91 U	0.5 U	0.5 U	-	-	-	0.96 U	0.94 U	0.96 UJ	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	-	10 UJ	11 U	10 U	10 UJ	11 UJ	-	-	10 U	10 U	10 U	10 U	-	-	-	11 U	10 U	11 UJ	9 U
Acenaphthene	ug/L	N	400	5.7	4	4.2	1 J	2 J	-	1 J	0.7	0.1 U	3 J	7 J	-	-	1.5	0.1 U	0.1 U	0.1 U	-	-	-	0.58	1.4	1.6	1
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Acetophenone	ug/L	N	700	1 U	1 U	1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	1 U	1 U	0.5 U	0.5 U	-	-	-	1.1 U	1 U	1.1 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	1	0.93	0.8 J	2 J	-	0.5 J	0.4 J	0.1 U	3 J	8 J	-	-	0.2 J	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Atrazine	ug/L	N	3	1 U	1 U	1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	1 U	1 U	2 U	2 U	-	-	-	1.1 U	1 U	1.1 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	-	1 UJ	1 U	1 U	1 UJ	1 UJ	-	-	1 U	1 U	1 U	1 U	-	-	-	1.1 U	1 U	1.1 U	0.9 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	**0.6J**	**2J**	-	0.1J	0.1 U	0.1 U	**2J**	**5J**	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.11 U	**0.4J**	**1J**	-	0.1 UJ	0.1 U	0.1 U	**0.7J**	**3J**	-	-	0.11 U	0.11 U	0.1 U	0.1 U	-	-	-	0.12 U	0.12 U	0.12 U	0.09 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.2J	**0.7J**	-	0.1 UJ	0.1 U	0.1 U	**0.4J**	**1J**	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.3 J	1 J	-	0.1 UJ	0.1 U	0.1 U	0.7 J	2 J	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.3 J	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 UJ	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2.1 U	**9J**	**29J**	-	2 UJ	2 U	2 U	3 J	**5J**	-	-	2 U	2 U	2 U	2 U	-	-	-	2.1 U	2.1 U	2.1 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	2 U	2 U	2 U	2 U	-	-	-	2.1 U	2.1 U	2.1 U	2 U
Caprolactam	ug/L	N	4000	3.1 U	3.1 U	3.1 U	5 U	5 U	-	5 UJ	5 U	5 U	5 UJ	5 UJ	-	-	3 U	3 U	5 U	5 U	-	-	-	3.2 U	3.1 U	3.2 U	5 U
Carbazole	ug/L	N	NA	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.6 J	0.5 U	0.5 U	0.8 J	0.5 UJ	-	-	1.3 J	1.3 J	0.5 U	0.5 U	-	-	-	0.53 U	0.61 J	0.68 J	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	1 J	3 J	-	0.2 J	0.1 U	0.1 U	2 J	**8J**	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	2 U	2 U	2 U	2 U	-	-	-	2.1 U	2.1 U	2.1 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.1 U	5.1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	5.1 U	5.1 U	2 U	2 U	-	-	-	5.3 U	5.2 U	5.3 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	-	0.1 UJ	0.1 U	0.1 U	**0.2J**	**0.9J**	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Dibenzofuran	ug/L	N	NA	2.1	1.6 J	1.7 J	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.9 J	0.5 UJ	-	-	0.7 J	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	2 U	2 U	2 U	2 U	-	-	-	2.1 U	2.1 U	2.1 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.1 U	2 U	2 U	-	2 UJ	2 U	2 U	2 UJ	2 UJ	-	-	2 U	2 U	2 U	2 U	-	-	-	2.1 U	2.1 U	2.1 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
Fluoranthene	ug/L	N	300	1.2	0.97	0.97	1 J	0.1 UJ	-	0.3 J	0.2 J	0.1 U	2 J	5 J	-	-	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Fluorene	ug/L	N	300	1.5	0.12 U	0.73	0.8	1	-	1 J	0.5 J	0.1 U	4 J	10 J	-	-	1.8	1.6	0.1 U	0.1 U	-	-	-	0.44 J	0.72	0.7	1
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	-	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	-	0.11 U	0.11 U	0.1 U	0.1 U	-	-	-	0.12 U	0.12 U	0.12 U	0.09 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 UJ	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.1 U	5.1 U	5 U	5 U	-	5 UJ	5 U	5 U	5 UJ	5 UJ	-	-	5.1 U	5.1 U	5 U	5 U	-	-	-	5.3 U	5.2 U	5.3 U	5 U
Hexachloroethane	ug/L	N	7	0.51 U	0.51 U	0.51 U	1 U	1 U	-	1 UJ	1 U	1 U	1 UJ	1 UJ	-	-	0.51 U	0.51 U	1 U	1 U	-	-	-	0.53 U	0.52 U	0.53 U	0.9 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.11 U	0.1 U	**0.4J**	-	0.1 UJ	0.1 U	0.1 U	**0.2J**	**0.7J**	-	-	0.11 U	0.11 U	0.1 U	0.1 U	-	-	-	0.12 U	0.12 U	0.12 U	0.09 U
Isophorone	ug/L	N	40	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.51 U	0.51 U	0.5 U	0.7 J	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
Naphthalene	ug/L	N	300	1.7	0.74	0.94	0.1 U	0.1 U	2 J	0.1 UJ	1	0.1 U	62 J	150 J	-	-	17	8.1	0.1 U	15	**430J**	240 J	270 J	37 J	**370J**	190	1
Nitrobenzene	ug/L	N	6	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	0.5 U	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 UJ	1 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	1 U	1 UJ	0.5 U	0.5 U	-	-	-	1.1 U	1 U	1.1 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	-	1 UJ	**7**	1 U	1 UJ	1 UJ	-	-	1 U	1 U	1 U	1 U	-	-	-	1.1 U	1 U	1.1 U	0.9 U
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.11 U	2 J	4 J	-	2 J	0.2 J	0.1 U	15 J	50 J	-	-	2.5	1.5	0.1 U	0.1 U	-	-	-	0.12 U	0.4 J	0.45 J	0.09 U
Phenol	ug/L	N	2000	0.51 U	0.51 U	0.51 U	0.5 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	-	0.51 U	0.51 U	0.5 U	2	-	-	-	0.53 U	0.52 U	0.53 U	0.5 U
Pyrene	ug/L	N	200	1.3	0.96	0.98	3 J	10 J	-	1 J	0.9	0.1 U	7 J	19 J	-	-	0.33 J	0.12 J	0.1 U	0.1 U	-	-	-	0.11 U	0.1 U	0.11 U	0.09 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-104	MW-105	MW-105
			Field Sample ID	M103B3X	M103B4X	M103B5X	M103HS	M103B6X	M103B7X	M103B8X	M103B9X	M103C1X	M103C2X	M103C4X	M103C5X	M103C6X	M103C7X	M103C8	M103C9	M104B2X	M104B3X	M104B4X	M104B5X	M104B6X	M104B7X	M104B8X	M105B3X	M105B4X
			Sample Date	08/27/2013	08/21/2014	07/16/2015	02/02/2016	02/12/2016	08/19/2016	02/23/2017	09/12/2017	02/28/2018	08/14/2018	03/11/2019	09/18/2019	03/11/2020	09/23/2020	06/24/2021	12/17/2021	06/22/2012	08/27/2013	08/21/2014	09/21/2016	02/23/2017	02/28/2018	03/19/2019	06/29/2012	08/27/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	3 U	3.4 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	3 UJ	0.5 UJ	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	12 UJ	11 U	11 U	10 U	10 U	10 U	10 U	10 U	14 U	14 U	15 U	16 U	15 U	14 U	16 U	10 UJ	10 U	12 UJ	10 UJ	10 U	11 U	15 UJ	10 UJ	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 UJ	1 U	1 U	1.0 U	1 U	1 U	1 UJ	1 UJ	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.44 U	0.41 U	0.45 U	0.4 UJ	0.4 U	0.5 U	0.42 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1.1 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	2 UJ	0.5 UJ	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	1 U	1.1 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	3 UJ	0.5 UJ	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.3 U	4.1 U	4.5 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	3 UJ	2 UJ	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	2 U	2.3 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	3 UJ	0.5 UJ	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	9 U	8.8 U	8.1 U	9.1 U	5 UJ	5 U	6 U	5.2 UJ	5 U	5 U	8 UJ	5 UJ	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	0.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	5 U	4.4 U	4.1 U	4.5 U	0.5 UJ	0.5 U	0.6 U	2.1 U	2 U	2 U	4 UJ	0.5 UJ	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.99 U	0.91 U	1 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.9 UJ	0.5 UJ	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	12 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	12 U	11 U	10 U	11 U	10 UJ	10 U	12 U	10 UJ	10 UJ	11 U	10 UJ	10 UJ	10 U
Acenaphthene	ug/L	N	400	0.9	0.3 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.14 J	0.59	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	5 U	4.4 U	1 U	1.1 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	4 UJ	0.5 UJ	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1.1 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 UJ	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.3 U	1 U	1.1 U	1 UJ	1 U	1 U	1.0 U	1 U	1 U	3 UJ	1 UJ	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5.5 U	2 U	2.3 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	5 UJ	2 UJ	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.3 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 UJ	2 U
Caprolactam	ug/L	N	4000	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.5 U	3 U	3.4 U	5 UJ	5 U	6 U	5.2 U	5 U	5 U	5 UJ	5 UJ	5 U
Carbazole	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.3 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 UJ	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5.5 U	5.1 U	5.7 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	5 UJ	2 UJ	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.3 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 UJ	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.3 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 UJ	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	3 UJ	0.5 UJ	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Fluorene	ug/L	N	300	0.6	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.18 J	0.12 U	0.14 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.5 UJ	5.1 U	5.7 U	5 UJ	5 U	6 U	5.2 U	5 U	5 U	5 UJ	5 UJ	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.51 U	0.57 U	1 UJ	1 U	1 U	1.0 U	1 U	1 U	1 UJ	1 UJ	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.77 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.7 UJ	0.5 UJ	0.5 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.77 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.7 UJ	0.5 UJ	0.5 U
Naphthalene	ug/L	N	300	0.6	0.1 U	0.6	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.8 U	1 U	1.1 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 UJ	1 U	1 U	1.0 UJ	1 U	1 U	1 UJ	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.51 U	0.57 U	0.5 UJ	0.5 U	0.6 U	0.52 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	6 J	-	-	-	-	-	-	-	-	-	-	-	390 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-105	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129
			Field Sample ID	M105B5X	M105B6X	D020316HS7	M105HS	D0212161	M105B7X	M105C2X	M105C4X	M105C5X	M105C6X	M129C1X	M129C3X	M129C4X	M129C5X	M129D1X	M129D2X	M129D3X	M129D4X	D0617191	M129D9X	D1204191A	M129D6X	D0616201	M129E1X	M129E2X
			Sample Date	08/22/2014	12/09/2015	02/03/2016	02/03/2016	02/12/2016	02/12/2016	02/17/2017	03/27/2018	03/18/2019	06/25/2020	06/29/2012	08/22/2014	07/16/2015	04/26/2016	06/16/2017	12/19/2017	06/14/2018	12/03/2018	06/17/2019	06/17/2019	12/04/2019	12/04/2019	06/16/2020	06/16/2020	12/09/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.7 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.4 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.2 UJ	3 UJ	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	11 U	11 UJ	10 UJ	10 U	10 UJ	14 UJ	15 U	10 U	10 U	10 U	10 U	10 U	10 U	14 U	14 U	13 U	13 U	14 U	14 U	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 UUJ	1 UUJ	1 U	1 U	1 U	0.6 UJ	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.7 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.4 UUJ	0.5 UUJ	0.4 U	0.4 U	0.4 U	0.09 UJ	0.4 UJ	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.2 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.7 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.7 UJ	2 UJ	2.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.7 UJ	3 UJ	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	0.8 UJ	3 UJ	3.2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	6 U	5 UJ	5 UJ	5 U	3 UJ	8 UJ	8.6 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 UJ	8 UJ	8 U	8 U	8.1 U	8.1 U	8.7 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.4 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	1 UJ	4 UJ	4.3 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.6 UJ	0.9 UJ	0.97 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.91 U	0.91 U	0.98 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	11 U	11 UJ	10 UJ	10 UJ	0.6 UJ	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.05 UJ	0.1 UJ	0.11 U	1	1	0.1 U	0.8	0.6	0.5 J	0.8	0.5 J	0.9	0.8	0.7	0.6	1	0.94	0.67
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.05 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.3 UJ	4 UJ	4.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.04 UJ	0.1 UJ	0.11 U	0.1 J	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 J	0.1 U	0.1 U	0.12 J	0.11 U
Atrazine	ug/L	N	3	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	0.5 UJ	2 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Benzaldehyde	ug/L	N	NA	1 U	1 UJ	1 UUJ	1 UUJ	1 U	1 U	1 U	0.4 UJ	3 UJ	3.2 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.2 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	1 UJ	5 UJ	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 UJ	6 UJ	5 U	5 U	5.1 U	5.1 U	5.5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	1 UJ	2 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2.2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	5 UUJ	6 UUJ	5 U	5 U	5 U	0.2 UJ	5 UJ	5.4 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	11 J	5.1 U	5.1 U	5.5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.6 J	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.8 J	0.8 J	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.08 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	0.5 UJ	2 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	1 UJ	5 UJ	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5.5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	2 UJ	2 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 UUJ	2 UUJ	2 U	2 U	2 U	1 UJ	2 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.05 UJ	0.1 UJ	0.11 U	0.2 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.11 U
Fluorene	ug/L	N	300	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.03 UJ	0.1 UJ	0.11 U	0.8	1	0.8	0.6	0.4 J	0.2 J	0.3 J	0.3 J	0.7 J	0.1 U	0.5 J	0.5 J	0.58	0.55	0.5 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 UUJ	6 UUJ	5 U	5 U	5 U	1 UJ	5 UJ	5.4 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5.5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 UUJ	1 UUJ	1 U	1 U	1 U	0.5 UJ	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.3 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.4 UJ	0.7 UJ	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 U	0.71 U	0.77 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.4 UJ	0.7 UJ	0.75 U	**32**	**33**	**26**	**19**	**13**	7	10	10	**17**	**15**	**13**	**13**	**17**	**16**	**15**
Naphthalene	ug/L	N	300	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.11 U	1	1	1	0.8	0.3 J	0.2 J	0.3 J	0.2 J	0.3 J	0.3 J	0.1 U	0.2 J	0.5 J	0.41 J	0.22 J
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.5 UUJ	0.6 UUJ	0.5 U	0.5 U	0.5 U	0.8 UJ	0.5 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.4 UJ	0.5 UJ	1.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.6 U	1.7 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.05 UJ	0.1 UJ	0.11 U	0.6	1	0.7	0.3 J	0.2 J	0.2 J	0.1 J	0.2 J	0.4 J	0.4 J	0.3 J	0.3 J	0.28 J	0.24 J	0.13 J
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	2	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.55 U
Pyrene	ug/L	N	200	0.1 U	0.1 UJ	0.1 UUJ	0.1 UUJ	0.1 U	0.1 U	0.1 U	0.07 UJ	0.1 UJ	0.11 U	0.1 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.19 J	0.11 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	110 J	-	-	-	-	-	-	-	-	20 J	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-130	MW-147	MW-147	MW-147	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R
			Field Sample ID	M130B2X	D062820211A	M147D8	M147D9	M167B8X	M167B9X	M167C1X	M167C2X	M167C3X	M167C4X	M167C6X	M167C9X	M167D2X	M167D3	M167D4	M167D5	M167D6	M169RC1X	M169RC3X	M169RC5X	M169RD9X	D1217191	M169RE5X	M169RE6X
			Sample Date	06/26/2012	06/28/2021	06/28/2021	10/22/2021	07/03/2012	08/06/2013	08/12/2014	12/03/2015	04/28/2016	06/15/2017	06/14/2018	06/21/2019	04/27/2020	07/01/2021	10/01/2021	12/28/2021	02/17/2022	06/28/2012	08/01/2013	08/26/2014	11/07/2017	12/17/2019	12/17/2019	04/27/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3.7 U	3.5 U	3 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3.1 U	3.1 U	3.1 U	3 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	3 UJ	3 UJ	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	17 U	16 U	14 U	10 U	10 U	11 U	10 U	10 U	10 U	14 U	14 U	14 U	14 U	15 U	14 U	14 U	10 UJ	13 UJ	11 U	10 U	15 UJ	14 UJ	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.2 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.46 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.41 U	0.4 U	0.4 UJ	0.5 UJ	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	1.2 U	1.2 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	1 U	1 U	1 U	1 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	2 U	2 UJ	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	1.2 U	1.2 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	1 U	1 U	1 U	1 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	3 UJ	3 UJ	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	5 U	4.6 UJ	4 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	4.1 U	4.2 U	4.1 UJ	4 U	2 UJ	3 UJ	2 U	2 U	3 U	3 UJ	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	2.5 U	2.3 UJ	2 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	2.1 U	2.1 U	2.1 UJ	2 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	3 U	3 UJ	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	9.9 U	9.3 U	8 U	5 U	5 U	6 U	5 U	5 U	5 U	8 U	8 U	8 U	8.2 U	8.3 U	8.2 U	8 U	5 UJ	6 UJ	5 U	5 U	9 UJ	8 UJ	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	5 U	4.6 UJ	4 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.2 U	4.1 UJ	4 U	0.5 UJ	0.6 UJ	0.5 U	2 U	4 U	4 UJ	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	28	0.5 U	0.5 UJ	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	1.1 U	1 UJ	0.91 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.92 U	0.94 U	0.93 U	0.9 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	1 U	0.9 UJ	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	12 U	12 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	13 UJ	11 U	10 U	11 UJ	10 UJ	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Acetophenone	ug/L	N	700	0.5 U	1.2 U	1.2 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	1 U	1 U	1 U	1 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	4 U	4 UJ	4 U
Anthracene	ug/L	N	2000	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Atrazine	ug/L	N	3	2 U	1.2 U	1.2 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1 U	2 UJ	3 UJ	2 U	2 U	2 U	2 UJ	2 U
Benzaldehyde	ug/L	N	NA	1 U	1.2 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	3 U	3 UJ	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.14 U	0.13 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.12 U	0.12 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.12 U	0.12 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.12 U	0.12 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.5 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	2.1 U	2.1 U	2.1 U	2 U	2 UJ	3 UJ	2 U	2 U	5 U	5 UJ	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.5 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 UJ	3 UJ	2 U	2 U	2 U	2 UJ	2 U
Caprolactam	ug/L	N	4000	5 U	3.7 U	3.5 U	14	5 U	5 U	6 U	5 U	5 U	5 U	5 UJ	5 U	5 U	3.1 U	3.1 U	3.1 U	4.7 J	5 UJ	6 UJ	5 U	5 U	5 U	5 UJ	5 U
Carbazole	ug/L	N	NA	0.5 U	0.62 U	0.58 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.5 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 UJ	3 UJ	2 U	2 U	2 U	2 UJ	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	6.2 U	5.8 UJ	5 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.2 U	5.2 U	5 U	2 UJ	3 UJ	2 U	2 U	5 U	5 UJ	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.12 U	0.12 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.5 U	2.3 U	2.7 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 UJ	3 UJ	2 U	2 U	2 U	2 UJ	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.5 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 UJ	3 UJ	2 U	2 U	2 U	2 UJ	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	3 U	3 UJ	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J
Fluorene	ug/L	N	300	0.1 U	0.15 U	0.14 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.14 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6.2 U	5.8 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.2 U	5.2 U	5 U	5 UJ	6 UJ	5 U	5 U	5 U	5 UJ	5 U
Hexachloroethane	ug/L	N	7	1 U	0.62 U	0.58 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.52 U	0.52 U	0.5 U	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.14 U	0.13 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.62 U	0.58 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.8 U	0.7 UJ	0.7 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.8 U	0.7 UJ	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.12 U	1.4	0.11 J	0.1 U	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	1.2 U	1.2 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U	1 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	2 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.2 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.14 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J
Phenol	ug/L	N	2000	0.5 U	0.62 U	0.58 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.3 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-169R	MW-169R	MW-169R	MW-169R	MW-170	MW-170	MW-170	MW-170	MW-170	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R	MW-170R
			Field Sample ID	M169RE7	M169RE8	M169RE9	M169RF1	M170C3X	M170C4X	M170C5X	D1101131	M170C6X	M170RA1X	M170RA2X	M170RA3X	M170RA4X	M170RA6	M170RA7X	M170RA8X	D0328191	M170RA9X	D0916191	M170RB1X	M170RB2X	M170RB3X	D062120211A
			Sample Date	06/30/2021	09/30/2021	12/15/2021	02/03/2022	06/28/2012	09/11/2012	08/08/2013	11/01/2013	11/01/2013	12/10/2015	03/17/2016	09/15/2016	04/05/2017	11/01/2017	04/25/2018	10/16/2018	03/28/2019	03/28/2019	09/16/2019	09/16/2019	04/30/2020	10/29/2020	06/21/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.6 U	0.58 UJ	0.58 U
2,4,6-Trichlorophenol	ug/L	N	20	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 U	0.6 U	0.58 UJ	0.58 U
2,4-Dichlorophenol	ug/L	N	20	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 UJ	0.58 U
2,4-Dimethylphenol	ug/L	N	100	3.5 U	3 U	3 UJ	3.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	1 U	1 U	3 U	3.5 UJ	3.5 U
2,4-Dinitrophenol	ug/L	N	40	17 U	14 U	14 UJ	15 U	10 U	11 U	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	14 U	14 U	14 U	22 U	28 U	16 U	16 UJ	16 U
2,4-Dinitrotoluene	ug/L	N	10	1.2 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 U	3 U	1 U	1.2 U	1.2 U
2,6-Dinitrotoluene	ug/L	N	5	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.6 U	0.58 U	0.58 U
2-Chloronaphthalene	ug/L	N	600	0.47 U	0.41 U	0.4 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.9 U	1 U	0.5 U	0.46 U	0.46 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 UJ	0.58 U
2-Methyl-Naphthlalene	ug/L	N	30	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.6 U	0.58 UJ	0.58 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.2 U	1 U	1 U	1.0 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	1.2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.2 U	1 U	1 UJ	1.0 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	2 U	2 U	3 U	3.5 UJ	1.2 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.7 U	4.1 U	4 UJ	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	3 U	3 U	3 U	4 U	6 U	3 U	3.5 U	4.6 U
3-Nitroaniline	ug/L	N	NA	2.4 U	2 U	2 UJ	2.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	1 U	1 U	3 U	3.5 U	2.3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9.5 U	8.1 U	8 UJ	8.3 U	5 U	6 U	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	8 U	8 U	8 U	11 U	14 U	9 U	9.2 UJ	9.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
4-Chloroaniline	ug/L	N	30	4.7 U	4.1 U	4 U	4.2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	4 U	4 U	4 U	4 U	6 U	5 U	4.6 U	4.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 UJ	0.58 U
4-Nitroaniline	ug/L	N	NA	1.1 U	0.91 U	0.9 U	0.93 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	2 U	1 U	1 U	1.0 U
4-Nitrophenol	ug/L	N	NA	12 U	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	22 U	28 U	11 U	12 UJ	12 U
Acenaphthene	ug/L	N	400	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Acenaphthylene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Acetophenone	ug/L	N	700	1.2 U	1 U	1 U	1.0 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	1 U	1 U	5 U	4.6 U	1.2 U
Anthracene	ug/L	N	2000	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Atrazine	ug/L	N	3	1.2 U	1 U	1 U	1.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	6 U	2 U	2.3 U	1.2 U
Benzaldehyde	ug/L	N	NA	1.2 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	3 U	3 U	3 U	2 U	3 U	3 U	3.5 U	1.2 U
Benzo(a)anthracene	ug/L	N	0.1	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Benzo(a)pyrene	ug/L	N	0.1	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.13 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 U	0.6 U	0.1 U	0.12 U	0.12 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.4 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	5 U	5 U	5 U	4 U	6 U	6 U	5.8 U	2.3 U
Butylbenzylphthalate	ug/L	N	100	2.4 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	6 U	2 U	2.3 U	2.3 U
Caprolactam	ug/L	N	4000	3.5 U	3 U	3 U	3.1 U	5 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U	11 U	14 U	6 U	5.8 U	3.5 U
Carbazole	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
Chrysene	ug/L	N	5	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Di-n-butylphthalate	ug/L	N	700	2.4 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	6 U	2 U	2.3 U	2.3 U
Di-n-octylphthalate	ug/L	N	100	5.9 U	5.1 U	5 U	5.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	5 U	5 U	5 U	4 U	6 U	6 U	5.8 U	5.8 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Dibenzofuran	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
Diethylphthalate	ug/L	N	6000	2.4 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	6 U	2 U	2.3 U	2.3 U
Dimethyl phthalate	ug/L	N	NA	2.4 U	2 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	6 U	2 U	2.3 U	2.3 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	1 U	1 U	3 U	3.5 U	0.58 U
Fluoranthene	ug/L	N	300	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Fluorene	ug/L	N	300	0.14 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.14 U
Hexachlorobenzene	ug/L	N	0.02	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.13 U
Hexachlorobutadiene	ug/L	N	1	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 U	0.6 U	0.58 U	0.58 U
Hexachlorocyclopentadiene	ug/L	N	40	5.9 U	5.1 U	5 UJ	5.2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	11 U	14 U	6 U	5.8 U	5.8 U
Hexachloroethane	ug/L	N	7	0.59 U	0.51 U	0.5 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 U	3 U	1 U	1.2 U	0.58 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.13 U
Isophorone	ug/L	N	40	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 U	0.58 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	1 U	1 U	0.8 U	0.81 U	0.58 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	1 U	1 U	0.8 U	0.81 U	0.58 U
Naphthalene	ug/L	N	300	0.12 U	0.31 J	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Nitrobenzene	ug/L	N	6	0.59 U	0.51 U	0.5 U	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.6 U	0.58 U	0.58 U
p-Chloro-m-cresol	ug/L	N	NA	1.2 U	1 U	1 UJ	1.0 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	2 U	1.8 UJ	1.2 U
Pentachlorophenol	ug/L	N	0.3	1.2 U	1 U	1 UJ	1.0 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	2 U	3 U	1 U	1.2 UJ	1.2 U
Phenanthrene	ug/L	N	NA	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.13 U
Phenol	ug/L	N	2000	0.59 U	0.51 U	0.5 UJ	0.52 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.6 U	0.58 UJ	0.58 U
Pyrene	ug/L	N	200	0.12 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.3 U	0.1 U	0.12 U	0.12 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	0.0 U	-	-	-	-	-	-	-	-	-	-	-	0 U	100 J	20 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-170R	MW-170R	MW-170R	MW-170R	MW-183	MW-183	MW-185	MW-185	MW-185	MW-185	MW-185	MW-186	MW-188	MW-188	MW-188	MW-188	MW-188	MW-189	MW-189	MW-189	MW-189	MW-190	MW-190	MW-190
			Field Sample ID	M170RB4	M170RB5	M170RB6	M170RB7	M183C4	M183C5	M185D6	D092420211C	M185D7	M185D8	M185D9	M186B8X	M188B9X	M188E8	M188E9	M188F1	M188F2	M189D3	M189D4	M189D5	M189D6	D0503211	M190D7	M190D8
			Sample Date	06/21/2021	09/30/2021	12/30/2021	02/17/2022	06/28/2021	10/22/2021	06/21/2021	09/24/2021	09/24/2021	10/22/2021	01/13/2022	06/28/2012	04/10/2014	06/19/2021	09/22/2021	12/17/2021	03/15/2022	06/19/2021	09/22/2021	12/17/2021	03/15/2022	05/03/2021	05/03/2021	10/27/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	3.0 U	3.4 UJ	3.5 U	3.1 UJ	3.2 UJ	3 U	3 U	3.6 U	3.1 U	3 U	3.2 U	0.5 U	-	3.4 U	3.1 UJ	3 UJ	3.2 U	3 UJ	3.8 UJ	3 UJ	3.1 U	3.2 UJ	3.1 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	14 U	16 UJ	16 U	14 U	15 UJ	14 U	14 U	17 U	14 U	14 U	15 U	10 U	-	16 U	15 UJ	14 UJ	15 U	14 UJ	18 UJ	14 UJ	14 U	15 UJ	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1.0 U	1.1 U	1.2 U	1 U	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	1 U	-	1.1 U	1 U	1 U	1.1 U	1 U	1.3 U	1 U	1 U	1.1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	0.40 U	0.45 U	0.46 U	0.41 U	0.42 UJ	0.4 U	0.4 U	0.47 U	0.41 U	0.41 U	0.42 U	0.4 U	-	0.46 U	0.42 U	0.4 U	0.42 U	0.4 U	0.5 U	0.41 U	0.41 U	0.42 UJ	0.42 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
2-Methyl-Naphthlalene	ug/L	N	30	0.10 U	0.11 U	0.12 U	0.1 U	0.11 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.0 U	1.1 U	1.2 U	1 U	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	0.5 U	-	1.1 U	1 U	1 U	1.1 U	1 U	1.3 U	1 U	1 UJ	1.1 UJ	1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.0 U	1.1 UJ	1.2 U	1 UJ	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	0.5 U	-	1.1 U	1 UJ	1 UJ	1.1 U	1 UJ	1.3 UJ	1 UJ	1 U	1.1 UJ	1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.0 U	4.5 U	4.6 U	4.1 U	4.2 UJ	4 U	4 U	4.7 U	4.1 U	4.1 U	4.2 U	2 U	-	4.6 U	4.2 U	4 U	4.2 U	4 U	5 U	4.1 U	4.1 U	4.2 UJ	4.2 U	4.1 U
3-Nitroaniline	ug/L	N	NA	2.0 U	2.3 U	2.3 U	2.1 U	2.1 UJ	2 U	2 U	2.4 U	2.1 U	2 U	2.1 U	0.5 U	-	2.3 U	2.1 U	2 U	2.1 U	2 U	2.5 U	2 U	2 U	2.1 UJ	2.1 U	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	9.1 UJ	9.2 U	8.3 U	8.5 UJ	8.1 U	8 U	9.5 U	8.3 U	8.1 U	8.5 U	5 U	-	9.1 U	8.4 UJ	8 UJ	8.5 UJ	8 UJ	10 UJ	8.1 UJ	8.2 UJ	8.5 UJ	8.4 U	8.3 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
4-Chloroaniline	ug/L	N	30	4.0 U	4.5 U	4.6 U	4.1 U	4.2 UJ	4 U	4 U	4.7 U	4.1 U	4.1 U	4.2 U	0.5 U	-	4.6 U	4.2 U	4 U	4.2 U	4 U	5 U	4.1 U	4.1 U	4.2 UJ	4.2 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
4-Nitroaniline	ug/L	N	NA	0.91 U	1 U	1 U	0.93 U	0.96 UJ	0.91 U	0.9 U	1.1 U	0.93 U	0.91 U	0.95 U	0.5 U	-	1 U	0.94 U	0.91 U	0.95 U	0.9 U	1.1 U	0.91 U	0.92 U	0.95 UJ	0.94 U	0.93 U
4-Nitrophenol	ug/L	N	NA	10 U	11 UJ	12 U	10 UJ	11 UJ	10 U	10 U	12 U	10 U	10 U	11 U	10 U	-	11 U	10 U	10 UJ	11 U	10 UJ	13 UJ	10 UJ	10 U	11 UJ	10 U	10 U
Acenaphthene	ug/L	N	400	0.10 U	0.11 U	0.12 U	0.1 U	0.11 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.10 U	0.11 U	0.12 U	0.1 U	0.11 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.0 U	1.1 U	1.2 U	1 U	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	0.5 U	-	1.1 U	1 U	1 U	1.1 U	1 U	1.3 U	1 U	1 U	1.1 UJ	1 U	1 U
Anthracene	ug/L	N	2000	0.10 U	0.11 U	0.12 U	0.1 U	0.11 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.0 U	1.1 U	1.2 U	1 U	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	2 U	-	1.1 U	1 U	1 UJ	1.1 U	1 U	1.3 U	1 UJ	1 U	1.1 UJ	1 U	1 U
Benzaldehyde	ug/L	N	NA	1.0 U	1.1 U	1.2 U	1 U	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	1 U	-	1.1 U	1 U	1 U	1.1 U	1 U	1.3 U	1 U	1 U	1.1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.10 U	0.11 U	0.12 U	0.1 U	**0.65J**	**0.12J**	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.12 U	0.13 U	0.11 U	0.94 UJ	**0.14J**	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.1 U	-	0.13 U	0.12 U	0.11 U	0.12 U	0.11 U	0.14 U	0.11 U	0.11 U	0.12 UJ		0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.10 U	0.11 U	0.12 U	0.1 U	1.1 UJ	0.19J	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.10 U	0.11 U	0.12 U	0.1 U	0.76 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.10 U	0.11 U	0.12 U	0.1 U	0.46 J	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 UJ	0.53 U	0.5 U	0.63 U	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.0 U	2.3 U	2.3 U	2.1 U	2.1 UJ	2 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2 U	-	2.3 U	2.1 U	2 U	2.1 U	2 U	2.5 U	2 U	2 U	2.1 UJ	2.1 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2.0 U	2.3 U	2.3 U	2.1 U	2.1 UJ	2 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2 U	-	2.3 U	2.1 U	2 U	2.1 U	2 U	2.5 U	2 U	2 U	2.1 UJ	2.1 U	2.1 U
Caprolactam	ug/L	N	4000	4.3 J	3.4 U	3.5 U	3.1 U	3.2 UJ	14	3 U	3.6 U	3.1 U	3 U	3.2 U	5 U	-	3.4 U	3.1 U	3 U	6.4 J	3 U	3.8 U	3 U	24cn	3.2 UJ	3.1 U	3.1 U
Carbazole	ug/L	N	NA	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
Chrysene	ug/L	N	5	0.10 U	0.11 U	0.12 U	0.1 U	0.85 J	0.14 J	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.0 U	2.3 U	2.3 U	2.1 U	2.1 UJ	2 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2 U	-	2.3 U	2.1 U	2 U	2.1 U	2 U	2.5 U	2 U	2 U	2.1 UJ	2.1 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.7 U	5.8 U	5.2 U	5.3 UJ	5.1 U	5 U	5.9 U	5.2 U	5.1 U	5.3 U	2 U	-	5.7 U	5.2 U	5 U	5.3 U	5 U	6.3 U	5.1 U	5.1 U	5.3 UJ	5.2 U	5.2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.10 U	0.11 U	0.12 U	0.1 U	**0.14J**	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
Diethylphthalate	ug/L	N	6000	2.0 U	2.3 U	2.3 U	2.1 U	2.1 UJ	2 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2 U	-	2.3 U	2.1 U	2 U	2.1 U	2 U	2.5 U	2 U	2 U	2.1 UJ	2.1 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2.0 U	2.3 U	2.3 U	2.1 U	2.1 UJ	2 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2 U	-	2.3 U	2.1 U	2 U	2.1 U	2 U	2.5 U	2 U	2 U	2.1 UJ	2.1 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
Fluoranthene	ug/L	N	300	0.10 U	0.11 U	0.12 U	0.1 U	1.5 J	0.31 J	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.12 U	0.14 U	0.14 U	0.12 U	0.13 UJ	0.12 U	0.12 U	0.14 U	0.12 U	0.12 U	0.13 U	0.1 U	-	0.14 U	0.13 U	0.12 U	0.13 U	0.12 U	0.15 U	0.12 U	0.12 U	0.13 UJ	0.13 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.12 U	0.13 U	0.11 U	0.12 UJ	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.1 U	-	0.13 U	0.12 U	0.11 U	0.12 U	0.11 U	0.14 U	0.11 U	0.11 U	0.12 UJ	0.12 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.7 U	5.8 U	5.2 U	5.3 UJ	5.1 U	5 U	5.9 U	5.2 U	5.1 U	5.3 U	5 U	-	5.7 U	5.2 U	5 U	5.3 U	5 U	6.3 U	5.1 U	5.1 U	5.3 UJ	5.2 U	5.2 U
Hexachloroethane	ug/L	N	7	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	1 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.12 U	0.13 U	0.11 U	0.66 UJ	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.1 U	-	0.13 U	0.12 U	0.11 U	0.12 U	0.11 U	0.14 U	0.11 U	0.11 U	0.12 UJ	0.12 U	0.11 U
Isophorone	ug/L	N	40	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
Naphthalene	ug/L	N	300	0.10 U	0.11 U	0.12 U	0.1 U	1.2 J	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.51 U	0.57 U	0.58 U	0.52 U	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 U	0.5 U	0.53 U	0.5 U	0.63 U	0.51 U	0.51 U	0.53 UJ	0.52 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	1.0 U	1.1 UJ	1.2 U	1 UJ	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	0.5 U	-	1.1 U	1 UJ	1 UJ	1.1 U	1 UJ	1.3 UJ	1 UJ	1 U	1.1 UJ	1 U	1 U
Pentachlorophenol	ug/L	N	0.3	1.0 U	1.1 UJ	1.2 U	1 UJ	1.1 UJ	1 U	1 U	1.2 U	1 U	1 U	1.1 U	1 U	-	1.1 U	1 UJ	1 U	1.1 U	1 UJ	1.3 UJ	1 UJ	1 U	1.1 UJ	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.12 U	0.13 U	0.11 U	0.51 J	0.14 J	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.1 U	-	0.13 U	0.12 U	0.11 U	0.12 U	0.11 U	0.14 U	0.11 U	0.11 U	0.12 UJ	0.12 U	0.11 U
Phenol	ug/L	N	2000	0.51 U	0.57 UJ	0.58 U	0.52 UJ	0.53 UJ	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.53 U	0.5 U	-	0.57 U	0.52 UJ	0.5 UJ	0.53 U	0.5 UJ	0.63 UJ	0.51 UJ	0.51 U	0.53 UJ	0.52 U	0.52 U
Pyrene	ug/L	N	200	0.10 U	0.11 U	0.12 U	0.1 U	1.5 J	0.32 J	0.1 U	0.12 U	0.1 U	0.1 U	0.11 U	0.1 U	-	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	0 U	-	-	0 U	-	-	-	-	0 U	-	-	-	-	-	-	-	-	0 U	-	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-191	MW-191	MW-191	MW-191	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-217	MW-217	MW-217	MW-217	MW-219	MW-219	MW-219R	MW-219R
			Field Sample ID	M191C8	M191C9	M191D1	M191D2	M216B6X	M216C3X	M216C8X	M216E4X	M216E6X	M216F3X	M216F5X	M216F7X	M216F8	M216F9	M216G1	M216G2	M217B4X	M217E5	M217E6	M217E7	M219B3X	M219B9X	M219RA8X	M219RB7X
			Sample Date	06/19/2021	09/22/2021	12/17/2021	03/15/2022	06/15/2012	07/30/2013	08/12/2014	11/07/2017	05/18/2018	12/16/2019	04/28/2020	04/06/2021	06/24/2021	09/30/2021	12/28/2021	03/29/2022	06/15/2012	06/29/2021	08/31/2021	11/24/2021	06/13/2012	08/06/2013	12/03/2015	05/09/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.9 U	3.4 U	3 U	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	3.1 U	3.5 U	3 U	3.3 UJ	3.1 U	0.5 UJ	3.2 UJ	3.1 U	3.2 UJ	0.5 U	0.5 U	0.5 UJ	3 U
2,4-Dinitrophenol	ug/L	N	40	14 U	18 U	16 U	14 U	10 UJ	11 U	11 U	10 U	14 U	15 UJ	14 U	14 U	16 U	14 U	15 UJ	14 U	10 UJ	15 UJ	14 U	15 UJ	9 U	11 U	10 UJ	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.3 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.2 U	1 U	1.1 U	1 U	1 UJ	1.1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.52 U	0.46 U	0.41 U	0.4 UJ	0.4 U	0.5 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.41 U	0.46 U	0.4 U	0.44 U	0.41 U	0.4 UJ	0.42 U	0.41 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.13 U	0.11 U	0.1 U	2 J	1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1.3 U	1.1 U	1 U	0.5 UJ	0.5 U	0.6 U	0.5 U	2 U	2 UJ	2 U	1 U	1.2 U	1 U	1.1 U	1 U	0.5 UJ	1.1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1.3 U	1.1 U	1 U	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	1 U	1.2 U	1 U	1.1 UJ	1 U	0.5 UJ	1.1 UJ	1 U	1.1 UJ	0.5 U	0.5 U	0.5 UJ	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	5.2 U	4.6 U	4.1 U	2 UJ	2 U	2 U	2 U	3 U	3 UJ	3 U	4.1 U	4.6 U	4 U	4.4 U	4.1 U	2 UJ	4.2 U	4.1 U	4.3 U	2 U	2 U	2 U	3 U
3-Nitroaniline	ug/L	N	NA	2 U	2.6 U	2.3 U	2 U	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	2.1 U	2.3 U	2 U	2.2 U	2 U	0.5 UJ	2.1 U	2.1 U	2.2 U	0.5 U	0.5 U	0.5 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	10 U	9.2 U	8.1 U	5 UJ	5 U	6 U	5 U	8 U	8 UJ	8 U	8.2 U	9.2 U	8.1 U	8.8 UJ	8.2 U	5 UJ	8.5 UJ	8.3 U	8.6 UJ	5 U	5 U	5 UJ	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	5.2 U	4.6 U	4.1 U	0.5 UJ	0.5 U	0.6 U	2 U	4 U	4 UJ	4 U	4.1 U	4.6 U	4 U	4.4 U	4.1 U	0.5 UJ	4.2 U	4.1 U	4.3 U	0.5 U	0.5 U	2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	35	0.5 U	0.5 U	4 J	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	1.2 U	1 U	0.91 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.9 U	0.9 UJ	0.9 U	0.93 U	1 U	0.91 U	0.99 U	0.92 U	0.5 UJ	0.95 U	0.93 U	0.97 U	0.5 U	0.5 U	0.5 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	13 U	11 U	10 U	10 UJ	11 U	11 U	10 U	10 U	10 UJ	10 U	10 U	12 U	10 U	11 UJ	10 U	10 UJ	11 UJ	10 U	11 UJ	9 U	11 U	10 UJ	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.13 U	0.11 U	0.1 U	0.3 J	0.2 J	0.1 U	0.4 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.13 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	1.3 U	1.1 U	1 U	0.5 UJ	0.5 U	0.6 U	0.5 U	4 U	4 UJ	4 U	1 U	1.2 U	1 U	1.1 U	1 U	0.5 UJ	1.1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1 U	1.3 U	1.1 UJ	1 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	1 U	1.2 U	1 U	1.1 U	1 U	2 UJ	1.1 U	1 U	1.1 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1.3 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	3 UJ	3 U	1 U	1.2 U	1 U	1.1 U	1 U	1 UJ	1.1 U	1 U	1.1 U	0.9 U	1 U	1 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.14 U	0.13 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.13 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.65 U	0.57 UJ	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.6 U	2.3 U	2 U	2 UJ	2 U	2 U	2 U	5 U	5 UJ	5 U	2.1 U	2.3 U	2 U	2.2 U	2 U	2 UJ	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.6 U	2.3 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.3 U	2 U	2.2 U	2 U	2 UJ	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3 U	3.9 U	3.4 U	14	5 UJ	5 U	6 U	5 U	11 J	11 J	5 U	3.1 U	30	3 U	3.3 U	5.5 J	5 UJ	3.2 U	8	3.2 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.6 U	2.3 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.3 U	2 U	2.2 U	2 U	2 UJ	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	6.5 U	5.7 U	5.1 U	2 UJ	2 U	2 U	2 U	5 U	5 UJ	5 U	5.2 U	5.8 U	5 U	5.5 U	5.1 U	2 UJ	5.3 U	5.2 U	5.4 U	2 U	2 U	2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.65 U	0.57 U	0.51 U	0.7 J	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.6 U	2.3 U	2 U	2 UJ	21	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.3 U	2 U	2.2 U	2 U	2 UJ	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.6 U	2.3 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.3 U	2 U	2.2 U	2 U	2 UJ	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.65 U	0.57 U	0.51 U	0.6 J	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.12 U	0.15 U	0.14 U	0.12 U	0.4 J	0.2 J	0.1 U	0.4 J	0.2 J	0.1 UJ	0.1 U	0.12 U	0.14 U	0.12 U	0.13 U	0.12 U	0.1 UJ	0.13 U	0.12 U	0.13 U	0.09 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.14 U	0.13 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.13 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6.5 U	5.7 U	5.1 U	5 UJ	5 U	6 U	5 U	5 U	5 UJ	5 U	5.2 U	5.8 U	5 U	5.5 U	5.1 U	5 UJ	5.3 U	5.2 U	5.4 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.5 U	0.65 U	0.57 U	0.51 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	1 UJ	0.53 U	0.52 U	0.54 U	0.9 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.14 U	0.13 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.13 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.7 U	0.7 UJ	0.7 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.7 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.7 U	0.7 UJ	0.7 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.13 U	0.11 U	5.6 NJ	4 J	2	1	0.7	1	0.8 J	0.9	0.1 U	0.51 J	0.68	1.1	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 U	0.58 U	0.5 U	0.55 U	0.51 U	0.5 UJ	0.53 U	0.52 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1.3 U	1.1 U	1 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	2 U	1 U	1.2 U	1 U	1.1 UJ	1 U	0.5 UJ	1.1 UJ	1 U	1.1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.3 U	1.1 U	1 U	1 UJ	**8**	1 U	**4J**	**2J**	1 UJ	1 U	1 U	1.2 U	**3.2J**	1.1 UJ	1 U	1 UJ	1.1 UJ	1 U	1.1 UJ	0.9 U	1 U	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.14 U	0.13 U	0.11 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.13 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.65 U	0.57 U	0.51 U	0.5 UJ	0.5 U	0.8 J	0.5 U	0.5 U	1 J	0.5 U	0.52 U	0.58 U	0.5 U	0.55 UJ	0.51 U	0.5 UJ	0.53 UJ	0.52 U	0.54 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.13 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-220	MW-220	MW-220	MW-220	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-222
			Field Sample ID	M219RC2X	M219RC3X	M219RC4	D0826211	M219RC5	M219RC6	M219RC7	M220E8	M220E9	M220F1	M220F2	M221B1X	M221B2X	M221B3X	M221B4X	M221B5X	M221B6X	D0607191	M221B8X	M221B9X	M221C1	M221C2	M222B2X
			Sample Date	12/20/2019	04/28/2020	06/21/2021	08/26/2021	08/26/2021	10/22/2021	02/18/2022	06/22/2021	09/23/2021	11/22/2021	03/17/2022	06/21/2012	08/30/2013	08/14/2014	04/26/2016	06/20/2017	06/15/2018	06/07/2019	06/07/2019	06/05/2020	06/16/2021	10/21/2021	06/21/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3.4 UJ	3 U	3 U	3.1 U	3 U	3.7 UJ	3.2 U	3.1 U	3.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3.2 U	3.1 U	0.5 UJ
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	16 UJ	14 U	14 U	14 U	14 U	17 UJ	15 U	14 U	14 U	10 U	11 U	12 U	11 U	10 U	15 U	14 U	14 U	14 U	15 U	14 U	10 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.45 U	0.41 U	0.4 U	0.41 U	0.4 U	0.49 U	0.42 U	0.41 U	0.41 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.41 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1.1 U	1 U	0.5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	1.1 UJ	1 U	1 U	1 U	1 U	1.2 UJ	1.1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1.1 U	1 U	0.5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	4.5 U	4.1 U	4 U	4.1 U	4 U	4.9 U	4.2 U	4.1 U	4.1 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	4.2 U	4.1 U	2 UJ
3-Nitroaniline	ug/L	N	NA	3 U	3 U	2.3 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.1 U	2.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2.1 U	2.1 U	0.5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	9 UJ	8.1 U	8.1 U	8.1 U	8.1 U	9.8 UJ	8.4 U	8.2 U	8.2 U	5 U	5 U	6 U	5 U	5 U	8 U	8 U	8 U	8.1 U	8.4 U	8.2 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	4 U	4 U	4.5 U	4.1 U	4 U	4.1 U	4 U	4.9 U	4.2 U	4.1 U	4.1 U	0.5 U	0.5 U	0.6 U	2 U	2 U	4 U	4 U	4 U	4 U	4.2 U	4.1 U	0.5 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	1 U	0.91 U	0.91 U	0.92 U	0.91 U	1.1 U	0.95 U	0.93 U	0.93 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.91 U	0.95 U	0.92 U	0.5 UJ
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	12 UJ	11 U	10 UJ	10 U	10 U	11 U	12 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	4 U	4 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	1.1 U	1 U	0.5 UJ
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	2 U	2 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1 U	2 UJ
Benzaldehyde	ug/L	N	NA	3 U	3 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1.1 U	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.14 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	**0.1J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 UJ	0.53 U	0.51 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	2.3 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	2.1 U	2.1 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ
Caprolactam	ug/L	N	4000	5 U	5 U	3.4 U	3 U	3 U	3.1 U	3 U	5.4 J	8.1	3.1 U	3.1 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	18	3.1 U	5 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5.6 U	5.1 U	5.1 U	5.1 U	5 U	6.1 U	5.3 U	5.2 UJ	5.2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.3 U	5.1 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.53 U	0.51 U	0.5 UJ
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.15 U	0.13 U	0.2 J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.12 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.14 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5.6 U	5.1 U	5.1 U	5.1 U	5 U	6.1 U	5.3 U	5.2 U	5.2 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.3 U	5.1 U	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	0.51 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.14 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 UJ
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.71 U	0.53 U	0.51 U	0.5 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.71 U	0.53 U	0.51 U	0.5 UJ
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.23 J	0.11 U	0.1 U	0.1 UJ
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.56 U	0.51 U	0.51 U	0.51 U	0.5 U	0.61 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	2 U	1.1 U	1 U	1 U	1 U	1 U	1.2 UJ	1.1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.1 U	1 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 UJ	1 U	1 U	1 U	1 U	1.2 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.14 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 UJ
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.56 UJ	0.51 U	0.51 U	0.51 U	0.5 U	0.61 UJ	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.5 UJ
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.13 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-222	MW-222	MW-226	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-335	MW-335	MW-335	MW-335	MW-359	MW-359	MW-359	MW-359
			Field Sample ID	M222C1	M222C2	M226B3X	M230A7X	M230A8X	M230A9X	M230B1X	M230B2X	M230B3X	M230B5X	M230B8X	M230C1X	M230C2	M230C3	M230C4	M230C5	M335C6	M335C7	M335C8	M335C9	M359A1X	M359A2X	M359A3X	M359A4X
			Sample Date	06/16/2021	10/21/2021	06/21/2012	06/13/2012	08/06/2013	08/12/2014	12/03/2015	04/28/2016	06/15/2017	06/14/2018	06/21/2019	04/28/2020	06/22/2021	09/23/2021	12/29/2021	03/28/2022	06/21/2021	10/04/2021	12/27/2021	03/18/2022	06/06/2013	09/13/2013	11/19/2013	01/29/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	3.4 U	3.1 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	3 U	16 U	3 UJ	3.3 UJ	3.1 UJ	3.4 U	3.1 U	3.2 UJ	3.5 U	3.1 U	3.1 U	0.5 U	0.5 U	0.6 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	16 U	14 U	10 U	10 UJ	10 U	11 UJ	11 UJ	10 U	10 U	14 U	74 U	14 UJ	16 UJ	15 UJ	16 UJ	14 U	15 UJ	16 U	14 U	14 U	10 U	11 U	12 U	12 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	5 U	1 U	1.1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.45 U	0.41 U	0.4 U	0.4 UJ	0.4 U	0.5 UJ	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	0.44 U	0.42 U	0.45 U	0.41 U	0.43 U	0.47 U	0.41 U	0.41 U	0.4 U	0.4 U	0.5 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
2-Methyl-Naphthlalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	2 U	11 U	2 U	1.1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	3 U	16 U	3 UJ	1.1 UJ	1 UJ	1.1 UJ	1 U	1.1 UJ	1.2 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.5 U	4.1 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	3 U	16 UJ	3 U	4.4 U	4.2 U	4.5 U	4.1 U	4.3 U	4.7 U	4.1 U	4.1 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	3 U	16 UJ	3 U	2.2 U	2.1 U	2.3 U	2 U	2.1 U	2.3 U	2.1 U	2.1 U	0.5 U	0.5 U	0.6 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	8.1 U	5 U	5 UJ	5 U	6 UJ	5 UJ	5 U	5 U	8 U	42 U	8 UJ	8.9 UJ	8.4 UJ	9.1 UJ	8.2 U	8.5 UJ	9.3 U	8.2 U	8.2 U	5 U	5 U	6 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
4-Chloroaniline	ug/L	N	30	4.5 U	4.1 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	2 U	2 U	2 U	4 U	21 UJ	4 U	4.4 U	4.2 U	4.5 U	4.1 U	4.3 U	4.7 U	4.1 U	4.1 U	0.5 U	0.5 U	0.6 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
4-Nitroaniline	ug/L	N	NA	1 U	0.92 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.9 U	5 U	0.9 U	1 U	0.94 U	1 U	0.92 U	0.96 U	1 U	0.92 U	0.92 U	0.5 U	0.5 U	0.6 U	0.6 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 UJ	10 U	11 UJ	11 UJ	10 U	10 U	10 U	53 U	10 UJ	11 UJ	10 UJ	11 UJ	10 U	11 UJ	12 U	10 U	10 U	10 U	11 U	12 U	12 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	4 U	21 U	4 U	1.1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	1 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	11 UJ	2 U	1.1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	3 U	16 U	3 U	1.1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U	0.11 U	0.13 U	0.11 U	0.12 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 UJ	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	5 U	26 U	5 U	2.2 U	2.1 U	2.3 U	2 U	2.1 U	2.3 U	**3.1J**	2.1 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2.2 U	2.1 U	2.3 U	2 U	2.1 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	39	3.1 U	5 U	5 UJ	5 U	6 UJ	5 U	5 U	5 U	5 UJ	26 U	5 U	3.3 U	3.1 U	3.4 U	6 J	38	3.5 U	3.1 U	3.1 U	5 U	5 U	6 U	6 U
Carbazole	ug/L	N	NA	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2.2 U	2.1 U	2.3 U	2 U	2.1 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.6 U	5.1 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	5 U	26 U	5 U	5.6 U	5.2 U	5.7 U	5.1 U	5.3 U	5.8 U	5.1 U	5.1 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
Diethylphthalate	ug/L	N	6000	2.2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2.2 U	2.1 U	2.3 U	2 U	2.1 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2.2 U	2.1 U	2.3 U	2 U	2.1 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	3 U	16 U	3 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.13 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.13 U	0.13 U	0.14 U	0.12 U	0.13 U	0.14 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U	0.11 U	0.13 U	0.11 U	0.12 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5.6 U	5.1 U	5 U	5 UJ	5 U	6 UJ	5 U	5 U	5 U	5 U	26 U	5 U	5.6 U	5.2 U	5.7 U	5.1 U	5.3 U	5.8 U	5.1 U	5.1 U	5 UJ	5 U	6 U	6 U
Hexachloroethane	ug/L	N	7	0.56 U	0.51 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	5 U	1 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	**0.1J**	0.1 U	0.5 U	0.1 U	0.12 U	0.11 U	0.13 U	0.11 U	0.12 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.7 U	4 U	0.7 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.7 U	4 UJ	0.7 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.6	2	0.9	0.8	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J
Nitrobenzene	ug/L	N	6	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.56 U	0.52 U	0.57 U	0.51 U	0.53 U	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	2 UJ	1.1 UJ	1 UJ	1.1 UJ	1 U	1.1 U	1.2 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	5 U	1 UJ	1.1 UJ	1 UJ	1.1 UJ	1 U	1.1 UJ	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U	0.11 U	0.13 U	0.11 U	0.12 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.56 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.56 UJ	0.52 UJ	0.57 UJ	0.51 U	0.53 UJ	0.58 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 J	5 J	11 J	14 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-360	MW-360	MW-360
			Field Sample ID	M359A5X	M359A6X	M359A7X	M359A8X	M359A9X	D0818151	M359B1X	D1027151	M359B2X	M359B3X	M359B4X	M359B5X	M359B6X	M359B7X	M359B8X	M359B9X	M359C1X	M359C2X	M359C3X	D0219211	M359C4X	M359C5	M360A1X	M360A2X	M360A3X
			Sample Date	04/04/2014	07/01/2014	11/26/2014	04/07/2015	05/13/2015	08/18/2015	08/18/2015	10/27/2015	10/27/2015	05/06/2016	11/01/2016	03/31/2017	09/20/2017	04/20/2018	11/01/2018	05/02/2019	11/18/2019	05/04/2020	11/23/2020	02/19/2021	02/19/2021	09/15/2021	06/06/2013	09/16/2013	11/21/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3.3 U	3 U	3.1 U	3.4 U	0.5 UJ	0.6 UJ	0.6 UJ
2,4-Dinitrophenol	ug/L	N	40	11 U	11 U	11 U	10 U	11 U	10 U	10 U	11 U	10 U	10 UJ	10 U	10 U	10 U	10 U	16 U	14 U	14 U	17 U	16 U	14 U	14 U	16 U	11 UJ	11 UJ	12 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 UJ	1 UJ	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.44 U	0.4 U	0.41 U	0.45 U	0.4 UJ	0.4 UJ	0.5 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1 U	1.1 U	0.5 UJ	0.6 UJ	0.6 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3.3 U	1 U	1 U	1.1 U	0.5 UJ	0.6 UJ	0.6 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	3 U	3 U	3 U	4 U	3.3 U	4 U	4.1 U	4.5 U	2 UJ	2 UJ	2 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3.3 U	2 UJ	2 UJ	2.2 U	0.5 UJ	0.6 UJ	0.6 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	5 U	9 U	8 U	8 U	10 U	8.9 U	8.1 U	8.1 U	9 U	5 UJ	6 UJ	6 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
4-Chloroaniline	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	4 U	4 U	4 U	5 U	4.4 U	4 U	4.1 U	4.5 U	0.5 UJ	0.6 UJ	0.6 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	1 U	1 U	0.91 U	0.92 U	1 U	0.5 UJ	0.6 UJ	0.6 UJ
4-Nitrophenol	ug/L	N	NA	11 U	11 U	11 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	12 U	11 U	10 U	10 U	11 U	11 UJ	11 UJ	12 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	5 U	4.4 U	1 U	1 U	1.1 U	0.5 UJ	0.6 UJ	0.6 UJ
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1 U	1.1 U	2 UJ	2 UJ	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	3 U	3 U	3 U	4 U	3.3 U	1 U	1 U	1.1 U	1 UJ	1 UJ	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	6 U	5 U	5 U	6 U	5.6 U	2 UJ	2 UJ	2.2 U	2 UJ	2 UJ	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 UJ	2 UJ	2.2 U	2 UJ	2 UJ	2 UJ
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 UJ	5 U	6 U	5 U	5 UJ	6 U	5.6 U	3 U	3.1 U	3.4 U	5 UJ	6 UJ	6 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2.2 U	2 UJ	2 UJ	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	6 U	5 U	5 U	6 U	5.6 U	5 U	5.1 U	5.6 U	2 UJ	2 UJ	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2.2 U	2 UJ	2 UJ	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2.2 U	2 UJ	2 UJ	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3.3 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.13 U	0.1 UJ	0.1 UJ	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	5.6 U	5 U	5.1 U	5.6 U	5 UJ	6 UJ	6 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.51 U	0.56 U	1 UJ	1 UJ	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 UJ	0.9 U	0.78 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.9 U	0.78 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.15 J	0.11 U	0.1 UJ	0.1 J	0.2 J
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	1.8 U	1 U	1 U	1.1 U	0.5 UJ	0.6 UJ	0.6 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 UJ	1 UJ	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.66 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.56 U	0.5 U	0.51 U	0.56 U	0.5 UJ	0.6 UJ	0.6 UJ
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	7 J	27 J	0 U	34 J	14 J	0 U	48 J	90 J	70 J	-	-	-	-	-	120 J	-	-	-	-	-	-	-	32 J	30 J	21 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361
			Field Sample ID	M360A4X	M360A5X	M360A6X	M360A7X	M360A8X	M360A9X	M360B1X	M360B2X	M360B3X	M360B4X	M360B5X	M360B6X	M360B7X	M360B8X	M360B9X	M360C1X	M360C2X	M360C4X	M360C6	M361A1X	M361A2X	M361A3X	D0131141	M361A4X	M361A5X
			Sample Date	01/29/2014	04/04/2014	07/01/2014	11/26/2014	04/07/2015	05/13/2015	08/18/2015	10/27/2015	05/06/2016	11/01/2016	03/31/2017	09/20/2017	04/20/2018	11/01/2018	05/02/2019	11/05/2019	05/04/2020	02/09/2021	10/06/2021	06/06/2013	09/16/2013	11/21/2013	01/31/2014	01/31/2014	04/08/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	3 U	3 UJ	3 U	3.3 U	3.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2,4-Dinitrophenol	ug/L	N	40	12 UJ	11 UJ	12 UJ	11 U	10 U	10 UJ	10 UJ	10 U	10 UJ	11 UJ	10 U	10 UJ	10 U	15 U	14 U	15 UJ	15 U	15 U	15 U	10 U	11 U	11 U	11 U	11 U	11 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.5 UJ	0.4 UJ	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.42 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.43 U	0.42 U	0.4 U	0.5 U	0.5 U	0.4 U	0.5 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2-Methyl-Naphthlalene	ug/L	N	30	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	2 U	2 U	2 UJ	2 U	1.1 U	1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 UJ	3 U	1.1 U	1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	3 U	3 U	3 UJ	3 U	4.3 U	4.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 UJ	3 U	2.2 U	2.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 UJ	5 UJ	6 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5.3 UJ	5 U	5 UJ	5 U	9 U	8 U	8 UJ	9 U	8.7 U	8.4 U	5 U	6 U	6 U	5 U	6 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	4 U	4 U	4 UJ	4 U	4.3 U	4.2 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	1 U	0.9 U	0.9 UJ	1 U	0.98 U	0.94 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
4-Nitrophenol	ug/L	N	NA	12 UJ	11 UJ	12 UJ	11 U	10 U	10 UJ	10 UJ	10 U	10 UJ	11 UJ	10 U	10 UJ	10 U	11 U	10 U	10 UJ	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	11 UJ
Acenaphthene	ug/L	N	400	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	4 U	4 U	4 UJ	4 U	1.1 U	1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Anthracene	ug/L	N	2000	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 UJ	1 U	3 U	3 U	3 UJ	3 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	100	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	6 U	5 U	5 UJ	5 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	6 UJ	5 UJ	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5.3 U	5 U	5 UJ	5 U	6 U	5 U	5 UJ	5 U	3.3 U	3.1 U	5 U	6 U	6 U	5 U	6 U	5 UJ
Carbazole	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	6 U	5 U	5 UJ	5 U	5.4 U	5.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 UJ	3 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	6 UJ	5 UJ	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5.3 U	5 U	5 UJ	5 U	6 U	5 U	5 UJ	5 U	5.4 U	5.2 U	5 UJ	6 U	6 U	5 U	6 U	5 UJ
Hexachloroethane	ug/L	N	7	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	0.54 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.8 U	0.7 U	0.7 UJ	0.8 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.8 U	0.7 U	0.7 UJ	0.8 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Naphthalene	ug/L	N	300	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Nitrobenzene	ug/L	N	6	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	2 U	1.1 U	1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1.1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Phenol	ug/L	N	2000	0.6 UJ	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.53 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.52 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 UJ
Pyrene	ug/L	N	200	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	23 J	17 J	39 J	21 J	13 J	36 J	19 J	76 J	-	-	-	-	-	200 J	-	-	-	-	-	0 U	7 J	6 J	74 J	8 J	20 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362
			Field Sample ID	M361A6X	M361A7X	M361A8X	M361A9X	M361B1X	M361B2X	M361B3X	M362A1X	M362A2X	D1121131	M362A3X	M362A4X	M362A5X	M362A6X	M362A7X	M362A8X	M362A9X	M362B1X	M362B2X	M362B3X	M362B4X	M362B5X	M362B6X	M362B7X	M362B8X
			Sample Date	07/01/2014	02/12/2015	05/15/2015	08/18/2015	11/04/2015	05/10/2016	11/01/2016	06/06/2013	09/19/2013	11/21/2013	11/21/2013	01/31/2014	04/17/2014	07/25/2014	11/26/2014	04/01/2015	06/16/2015	08/20/2015	11/04/2015	05/10/2016	11/02/2016	04/06/2017	09/21/2017	05/03/2018	11/26/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	12 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 UJ	12 UJ	11 UJ	11 U	11 U	11 U	12 U	11 UJ	10 UJ	11 UJ	10 U	12 U	10 UJ	10 U	10 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1.0 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.42 UJ	0.4 U	0.4 UJ	0.5 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 UJ	6 UJ	5 UJ	6 U	5 U	5 U	6 U	5 UJ	5 UJ	5 UJ	5 U	6 U	5.1 UJ	5 U	5 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 U	0.5 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	12 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 UJ	12 UJ	11 UJ	11 U	11 U	11 U	12 U	11 UJ	10 UJ	11 UJ	10 U	12 U	10 UJ	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.9 J	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1.0 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	5 UJ	5 UJ	5 U	5 U	5.2 UJ	5 U	5 UJ	6 UJ	5 UJ	6 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5.1 U	5 U	5 UJ	5 U	5 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5 UJ	5 UJ	5 U	5 U	5.2 UJ	5 UJ	5 UJ	6 UJ	5 UJ	6 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5.1 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1.0 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.7 U	0.7 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1.0 UJ	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.9	0.4 J	0.3 J	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	56 J	15 J	0 UJ	4 UJ	100 J	-	-	17 J	41 J	15 J	17 J	16 J	24 J	23 J	11 J	23 J	13 J	0 U	95 J	-	-	-	-	-	29 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363
			Field Sample ID	M362B9X	M362C1X	M362C2X	M362C3X	M362C4	M362C5	M363A1X	M363A2X	M363A3X	M363A4X	M363A5X	M363A6X	M363A7X	M363A8X	M363A9X	M363B1X	M363B2X	M363B3X	M363B4X	M363B5X	D0503181	M363B6X	M363B7X	M363B8X	M363B9X
			Sample Date	05/10/2019	11/22/2019	05/08/2020	11/20/2020	05/03/2021	10/28/2021	06/06/2013	09/19/2013	11/26/2013	01/31/2014	04/04/2014	07/01/2014	04/02/2015	06/16/2015	08/20/2015	11/04/2015	05/10/2016	11/02/2016	04/06/2017	09/21/2017	05/03/2018	05/03/2018	11/26/2018	05/10/2019	11/22/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	3 UJ	3 UJ	3 U	3.2 U	3.1 UJ	3.3 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ
2,4-Dinitrophenol	ug/L	N	40	14 UJ	14 UJ	15 U	15 U	15 UJ	15 UJ	11 U	10 U	11 U	11 U	11 UJ	11 U	11 UJ	10 UJ	10 U	10 U	11 U	10 U	10 U	10 U	15 U	14 U	15 U	14 U	14 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 UJ	1 U	1.1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1.0 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 UJ	0.4 U	0.43 U	0.41 UJ	0.43 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 UJ	0.4 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.41 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Methyl-Naphthlalene	ug/L	N	30	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	2 UJ	2 U	2.1 U	1 UJ	1.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 UJ	3 UJ	3 U	3.2 UJ	1 UJ	1.1 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	3 UJ	3 U	3.2 U	4.1 UJ	4.3 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 UJ
3-Nitroaniline	ug/L	N	NA	3 UJ	3 UJ	3 U	3.2 U	2.1 UJ	2.2 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 UJ	8 UJ	8 U	8.6 U	8.3 UJ	8.7 UJ	5 U	5 U	6 U	6 U	5 UJ	5 U	6 UJ	5 UJ	5 U	5 U	6 U	5.1 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	8 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	4 UJ	4 UJ	4 U	4.3 U	4.1 UJ	4.3 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.9 UJ	0.9 UJ	0.9 U	0.96 U	0.93 UJ	0.98 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 UJ
4-Nitrophenol	ug/L	N	NA	10 UJ	10 UJ	10 U	11 U	10 UJ	11 UJ	11 U	10 U	11 U	11 U	11 UJ	11 U	11 UJ	10 UJ	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ
Acenaphthene	ug/L	N	400	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	4 UJ	4 UJ	4 U	4.3 U	1 UJ	1.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 UJ
Anthracene	ug/L	N	2000	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	2 UJ	2 UJ	2 U	2.1 U	1 UJ	1.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	3 UJ	3 UJ	3 U	3.2 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1.0 UJ	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 UJ	5 UJ	5 U	5.4 U	2.1 UJ	2.2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 UJ	2 U	2.1 U	2.1 UJ	2.2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	5 UJ	5 UJ	5 U	5.4 U	3.1 UJ	3.3 U	5 U	5 U	6 U	6 U	5 UJ	5 U	6 U	5 U	5 UJ	5 U	6 U	5.1 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 UJ	2 U	2.1 U	2.1 UJ	2.2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	5 UJ	5 UJ	5 U	5.4 UJ	5.2 UJ	5.4 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 UJ	2 UJ	2 U	2.1 U	2.1 UJ	2.2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U	2 J	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 UJ	2 U	2.1 U	2.1 UJ	2.2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3 UJ	3 U	3.2 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 UJ	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 UJ	5 U	5.4 U	5.2 UJ	5.4 U	5 UJ	5 U	6 U	6 U	5 UJ	5 U	6 U	5 U	5 UJ	5 U	6 U	5.1 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Hexachloroethane	ug/L	N	7	1 UJ	1 UJ	1 U	1.1 U	0.52 UJ	0.54 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1.0 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 UJ	0.7 UJ	0.7 U	0.75 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 UJ	0.7 UJ	0.7 U	0.75 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ
Naphthalene	ug/L	N	300	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.39 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 UJ	2 U	1.7 U	1 UJ	1.1 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 U	1.1 U	1 UJ	1.1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.12 U	0.8	0.2 J	0.2 J	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Phenol	ug/L	N	2000	0.5 UJ	0.5 UJ	0.5 U	0.54 U	0.52 UJ	0.54 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Pyrene	ug/L	N	200	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 UJ	21 J	49 J	31 J	20 J	79 J	-	-	-	-	-	-	65 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-363	MW-363	MW-363	MW-363	MW-363	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364
			Field Sample ID	M363C1X	D1120201	M363C2X	M363C3	M363C4	M364A1X	M364A2X	M364A3X	M364A5X	M364A6X	M364A7X	M364A8X	M364A9X	M364B1X	M364B2X	M364B4X	M364B5X	M364B6X	M364B7X	M364B8X	M364B9X	M364C1X	M364C2X	M364C3X	M364C4
			Sample Date	05/08/2020	11/20/2020	11/20/2020	05/03/2021	10/28/2021	06/19/2013	09/19/2013	11/26/2013	04/08/2014	07/01/2014	04/09/2015	06/25/2015	09/03/2015	10/30/2015	05/10/2016	11/11/2016	04/06/2017	09/21/2017	05/03/2018	11/30/2018	05/09/2019	11/07/2019	05/07/2020	11/24/2020	06/25/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.2 UJ	3.3 UJ	3.2 UJ	3.1 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	3.4 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	15 U	15 UJ	15 UJ	15 UJ	14 U	10 U	11 UJ	11 U	11 U	12 U	11 U	11 UJ	10 U	10 UJ	11 U	10 U	10 U	10 UJ	15 U	14 U	14 U	14 U	15 U	16 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.43 UJ	0.44 UJ	0.42 UJ	0.41 UJ	0.4 U	0.4 UJ	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.46 U	0.42 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.11 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2.2 UJ	2.2 UJ	1.1 UJ	1 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3.2 UJ	3.3 UJ	1.1 UJ	1 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	3.4 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3.2 UJ	3.3 UJ	4.2 UJ	4.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	3 U	3 U	3 U	3 U	3 U	3.4 U	4.2 UJ
3-Nitroaniline	ug/L	N	NA	3 U	3.2 UJ	3.3 UJ	2.1 UJ	2 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	3.4 U	2.1 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	8.6 UJ	8.7 UJ	8.4 UJ	8.1 U	5 U	5 UJ	6 U	5 U	6 U	5 U	5 UJ	5 U	5 UJ	6 U	5 U	5 U	5 UJ	8 U	8 U	8 U	8 U	8 U	9.1 U	8.3 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
4-Chloroaniline	ug/L	N	30	4 U	4.3 UJ	4.4 UJ	4.2 UJ	4.1 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	4 U	4 U	4 U	4 U	4 U	4.6 U	4.2 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
4-Nitroaniline	ug/L	N	NA	1 U	0.97 UJ	0.98 UJ	0.95 UJ	0.92 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.94 UJ
4-Nitrophenol	ug/L	N	NA	11 U	11 UJ	11 UJ	11 UJ	10 U	10 U	11 UJ	11 U	11 U	12 U	11 U	11 UJ	10 U	10 UJ	11 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.13 J	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4.3 UJ	4.4 UJ	1.1 UJ	1 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	4 U	4 U	4 U	4 U	4 U	4.6 U	1 U
Anthracene	ug/L	N	2000	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Atrazine	ug/L	N	3	2 U	2.2 UJ	2.2 UJ	1.1 UJ	1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	1 UJ
Benzaldehyde	ug/L	N	NA	3 U	3.2 UJ	3.3 UJ	1.1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	3 U	3 U	3 U	3 U	3 U	3.4 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.11 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5.4 UJ	5.4 UJ	2.1 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	5 U	5 U	5 U	5 U	5 U	5.7 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.2 UJ	2.2 UJ	2.1 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	5.4 UJ	5.4 UJ	3.2 UJ	3.1 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.7 U	3.1 U
Carbazole	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 UJ
Chrysene	ug/L	N	5	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.2 UJ	2.2 UJ	2.1 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 U	5.4 UJ	5.4 UJ	5.3 UJ	5.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	5 U	5 U	5 U	5 U	5 U	5.7 U	5.2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
Diethylphthalate	ug/L	N	6000	2 U	2.2 UJ	2.2 UJ	2.1 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.2 UJ	2.2 UJ	2.1 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3.2 UJ	3.3 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	3.4 U	0.52 U
Fluoranthene	ug/L	N	300	0.1 U	0.11 J	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.11 UJ	0.11 UJ	0.13 UJ	0.12 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.11 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.4 UJ	5.4 UJ	5.3 UJ	5.1 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.7 U	5.2 U
Hexachloroethane	ug/L	N	7	1 U	1.1 UJ	1.1 UJ	0.53 UJ	0.51 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.52 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.11 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.75 UJ	0.76 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.52 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.75 UJ	0.76 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.52 U
Naphthalene	ug/L	N	300	0.1 U	0.11 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.11 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	1.7 UJ	1.7 UJ	1.1 UJ	1 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.8 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 UJ	1.1 UJ	1.1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.11 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Phenol	ug/L	N	2000	0.5 U	0.54 UJ	0.54 UJ	0.53 UJ	0.51 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.52 U
Pyrene	ug/L	N	200	0.1 U	0.12 J	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	20 J	13 J	24 J	24 J	21 J	24 J	50 J	41 J	120 J	-	-	-	-	-	30 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-364	MW-365	MW-367	MW-367	MW-367	MW-367	MW-367	MW-368	MW-368	MW-368	MW-368	MW-368	MW-369	MW-369	MW-369	MW-369	MW-369	MW-370	MW-370	MW-370	MW-371	MW-371	MW-371
			Field Sample ID	M364C5	M365A1X	M367C2	M367C3	M367C4	D0225221A	M367C5	M368C9X	M368D2	M368D3	M368D4	M368D5	M369RC7X	M369C9	M369RD1	M369RD2	M369D3	M370B8	M370B9	M370C1	M371B8	M371B9	M371C1
			Sample Date	10/29/2021	06/27/2013	06/29/2021	09/22/2021	12/20/2021	02/25/2022	02/25/2022	11/13/2020	06/22/2021	09/23/2021	12/29/2021	03/28/2022	11/13/2020	06/24/2021	09/23/2021	11/08/2021	01/11/2022	06/22/2021	09/21/2021	11/08/2021	06/22/2021	09/21/2021	12/16/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	0.5 U	3.1 U	3.1 U	3 U	3 U	3 U	-	3.6 UJ	3.1 U	3.1 U	3.1 U	-	3.1 U	3.1 UJ	3.5 U	3.1 UJ	3 U	3.1 U	3.4 U	3.1 U	3.1 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	11 U	15 U	15 U	14 U	14 U	14 U	-	17 UJ	14 U	14 UJ	14 U	-	15 U	14 UJ	16 U	15 UJ	14 U	15 U	16 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1.2 U	1 U	1 U	1 U	-	1 U	1 U	1.2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 UJ	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.43 U	0.4 U	0.41 U	0.42 U	0.4 U	0.4 U	0.41 U	-	0.49 U	0.41 U	0.41 U	0.41 U	-	0.41 U	0.41 U	0.46 U	0.42 U	0.4 U	0.42 U	0.46 U	0.41 U	0.41 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.86	1.6	-	0.12 U	11 J	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	-	1.2 U	1 U	1 U	1 U	-	1 U	1 U	1.2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	0.5 U	1 U	1 U	1 U	1 U	1 UJ	-	1.2 UJ	1 U	1 UJ	1 U	-	1 U	1 UJ	1.2 U	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.3 U	2 U	4.1 U	4.2 U	4 U	4 U	4.1 U	-	4.9 U	4.1 U	4.1 U	4.1 UJ	-	4.1 U	4.1 U	4.6 U	4.2 U	4 U	4.2 U	4.6 U	4.1 U	4.1 U	4 U
3-Nitroaniline	ug/L	N	NA	2.1 U	0.5 U	2.1 U	2.1 U	2 U	2 U	2 U	-	2.4 U	2 U	2 U	2 U	-	2.1 U	2 U	2.3 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2 U	2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.6 U	5 U	8.3 U	8.4 U	8.1 U	8.1 U	8.1 UJ	-	9.7 UJ	8.2 U	8.2 UJ	8.1 U	-	8.3 U	8.1 UJ	9.3 U	8.3 UJ	8 U	8.3 U	9.1 U	8.2 U	8.2 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.3 U	0.5 U	4.1 U	4.2 U	4 U	4 U	4.1 U	-	4.9 U	4.1 U	4.1 U	4.1 U	-	4.1 U	4.1 U	4.6 U	4.2 U	4 U	4.2 U	4.6 U	4.1 U	4.1 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.96 U	0.5 U	0.93 U	0.94 U	0.91 U	0.91 U	0.91 U	-	1.1 U	0.92 U	0.92 U	0.92 U	-	0.93 U	0.92 U	1 U	0.94 U	0.9 U	0.94 U	1 U	0.93 U	0.92 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	10 U	10 U	10 U	10 U	10 U	-	12 UJ	10 U	10 UJ	10 U	-	10 U	10 UJ	12 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10 UJ
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 J	-	0.81	0.66	0.6	1	-	1	0.81	0.75	0.77	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	-	1.2 U	1 U	1 U	1 U	-	1 U	1 U	1.2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.12 J	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	2 U	1 U	1 U	1 U	1 U	1 U	-	1.2 U	1 U	1 U	1 U	-	1 U	1 U	1.2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1.2 U	1 U	1 U	1 U	-	1 U	1 U	1.2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	-	0.13 U	0.11 U	0.11 U	0.11 U	-	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	-	2.4 U	2 U	2 U	2 U	-	2.1 U	2 U	2.3 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	-	2.4 U	2 U	2 U	2 U	-	2.1 U	2 U	2.3 U	2.1 U	2 U	2.1 UJ	2.3 U	2.1 U	2 UJ	2 U
Caprolactam	ug/L	N	4000	3.2 U	5 U	3.1 U	3.1 U	3 U	3 U	3 U	-	3.6 U	3.1 U	3.1 U	5.1 J	-	3.7 J	3.1 U	3.5 U	11	3 U	3.1 U	3.4 U	3.1 U	3.1 U	3 U
Carbazole	ug/L	N	NA	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	-	2.4 U	2 U	2 U	2 U	-	2.1 U	2 U	2.3 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.4 U	2 U	5.2 U	5.2 U	5 U	5 U	5.1 U	-	6.1 U	5.1 U	5.1 U	5.1 U	-	5.2 U	5.1 U	5.8 U	5.2 U	5 U	5.2 U	5.7 U	5.1 U	5.1 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.81 J	0.76 J	0.63 J	0.95 J	-	0.92 J	0.81 J	0.81 J	0.81 J	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	-	2.4 U	2 U	2 U	2 U	-	2.1 U	2 U	2.3 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	-	2.4 U	2 U	2 U	2 U	-	2.1 U	2 U	2.3 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.13 U	0.1 U	0.12 U	0.13 U	0.12 U	0.23 J	0.12 U	-	0.81	0.73	0.68	0.89	-	1.1	0.92	0.92	0.77	0.12 U	0.12 U	0.14 U	0.12 U	0.12 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	-	0.13 U	0.11 U	0.11 U	0.11 U	-	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.4 U	5 U	5.2 U	5.2 U	5 U	5 U	5.1 U	-	6.1 U	5.1 U	5.1 U	5.1 U	-	5.2 U	5.1 U	5.8 U	5.2 U	5 U	5.2 U	5.7 U	5.1 U	5.1 U	5 U
Hexachloroethane	ug/L	N	7	0.54 U	1 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	-	0.13 U	0.11 U	0.11 U	0.11 U	-	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U
Isophorone	ug/L	N	40	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28 J	0.42 J	7.3 J	0.12 U	1.3	0.7	0.1 U	11 J	0.1 U	0.89	0.94	0.86	0.1 U	0.1 U	0.11 U	0.19 J	0.1 U	0.15 J
Nitrobenzene	ug/L	N	6	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 U	0.51 U	0.51 U	0.51 U	-	0.52 U	0.51 U	0.58 U	0.52 U	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	-	1.2 UJ	1 U	1 UJ	1 U	-	1 U	1 UJ	1.2 U	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1.2 UJ	**6.9**	**3.5J**	**8**	-	**6.2**	**4.7J**	**2.4J**	**6.6J**	1 U	1 U	1.1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.1 U	0.11 U	0.12 U	0.11 U	0.37 J	0.44 J	-	0.13 U	0.14 J	0.11 U	0.18 J	-	0.33 J	0.2 J	0.23 J	0.24 J	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U
Phenol	ug/L	N	2000	0.54 U	0.5 U	0.52 U	0.52 U	0.5 U	0.5 U	0.51 U	-	0.61 UJ	0.51 U	0.51 UJ	0.51 U	-	0.52 U	0.51 UJ	0.58 U	0.52 UJ	0.5 U	0.52 U	0.57 U	0.51 U	0.51 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 J	-	0.12 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	250 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-372R	MW-372R	MW-372R	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390
			Field Sample ID	M372RB9	M372RC1	M372RC2	M390A1X	M390A2X	M390A3X	M390A4X	M390A5X	D0827151	M390A6X	M390A7X	M390A8X	D1111161	M390A9X	M390B1X	M390B2X	M390B3X	M390B4X	M390B5X	D1101191X	M390B6X	M390B7X	M390B8X	M390C5
			Sample Date	06/21/2021	09/21/2021	11/02/2021	01/09/2014	04/17/2014	07/15/2014	02/12/2015	05/15/2015	08/27/2015	08/27/2015	10/28/2015	05/13/2016	11/11/2016	11/11/2016	04/05/2017	09/22/2017	04/25/2018	11/05/2018	03/28/2019	11/01/2019	11/01/2019	02/19/2020	10/29/2020	06/23/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
2,4,6-Trichlorophenol	ug/L	N	20	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
2,4-Dichlorophenol	ug/L	N	20	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
2,4-Dimethylphenol	ug/L	N	100	3.0 U	3.1 U	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.3 UJ	3.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	15 U	10 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 U	15 U	14 U	14 U	15 U	15 UJ	15 UJ	16 U
2,4-Dinitrotoluene	ug/L	N	10	1.0 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1.2 U
2,6-Dinitrotoluene	ug/L	N	5	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
2-Chloronaphthalene	ug/L	N	600	0.40 U	0.41 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.44 U	0.47 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
2-Methyl-Naphthlalene	ug/L	N	30	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.11 U	0.12 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.0 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	1.2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.0 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.3 UJ	1.2 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.0 U	4.1 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 UJ	3.3 U	4.7 U
3-Nitroaniline	ug/L	N	NA	2.0 U	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.3 U	2.3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.0 U	8.2 U	8.5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	9 U	8 U	8 U	8 U	9 UJ	8.8 UJ	9.3 U
4-Bromophenylphenylether	ug/L	N	NA	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
4-Chloroaniline	ug/L	N	30	4.0 U	4.1 U	4.3 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 UJ	4.4 U	4.7 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
4-Nitroaniline	ug/L	N	NA	0.90 U	0.93 U	0.96 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	1 UJ	0.99 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	10 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10 U	11 UJ	11 UJ	12 U
Acenaphthene	ug/L	N	400	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Acenaphthylene	ug/L	N	NA	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.11 U	0.12 U
Acetophenone	ug/L	N	700	1.0 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 UJ	4.4 U	1.2 U
Anthracene	ug/L	N	2000	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Atrazine	ug/L	N	3	1.0 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	1.2 U
Benzaldehyde	ug/L	N	NA	1.0 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 UJ	3.3 U	1.2 U
Benzo(a)anthracene	ug/L	N	0.1	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.13 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.0 U	2.1 U	2.1 U	2 U	2 U	**5J**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	6 UJ	5.5 U	2.3 U
Butylbenzylphthalate	ug/L	N	100	2.0 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2.3 U
Caprolactam	ug/L	N	4000	12	3.1 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	6 UJ	5.5 U	3.5 U
Carbazole	ug/L	N	NA	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
Chrysene	ug/L	N	5	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Di-n-butylphthalate	ug/L	N	700	2.0 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2.3 U
Di-n-octylphthalate	ug/L	N	100	5.0 U	5.1 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	6 UJ	5.5 U	5.8 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Dibenzofuran	ug/L	N	NA	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
Diethylphthalate	ug/L	N	6000	2.0 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2.3 U
Dimethyl phthalate	ug/L	N	NA	2.0 U	2.1 U	2.1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2.3 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.3 U	0.58 U
Fluoranthene	ug/L	N	300	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.12 U
Fluorene	ug/L	N	300	0.12 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.14 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.13 U
Hexachlorobutadiene	ug/L	N	1	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
Hexachlorocyclopentadiene	ug/L	N	40	5.0 U	5.1 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 UJ	5.5 U	5.8 U
Hexachloroethane	ug/L	N	7	0.50 U	0.51 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	0.58 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.1J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.13 U
Isophorone	ug/L	N	40	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.77 U	0.58 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.77 U	0.58 U
Naphthalene	ug/L	N	300	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 UJ	0.11 U	0.12 U
Nitrobenzene	ug/L	N	6	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 U	0.58 U
p-Chloro-m-cresol	ug/L	N	NA	1.0 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	1.8 UJ	1.2 U
Pentachlorophenol	ug/L	N	0.3	1.0 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 UJ	1.2 U
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 UJ	0.11 U	0.13 U
Phenol	ug/L	N	2000	0.50 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.55 UJ	0.58 U
Pyrene	ug/L	N	200	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.11 U	0.12 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	41 J	27 J	16 J	5 J	9 J	6 J	7 J	130 J	-	-	-	-	-	-	43 J	57 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-390	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416
			Field Sample ID	M390B9	M416A1X	M416A2X	M416A3X	M416A4X	M416A6X	M416A7X	M416A9X	M416B1X	M416B2X	M416B3X	M416B4X	M416B5X	M416B6X	M416B7X	M416B8X	D0426191	M416B9X	M416C1X	M416C2X	M416C3X	M416C4X	M416C6X	M416C7X
			Sample Date	10/27/2021	05/19/2015	08/20/2015	10/28/2015	03/02/2016	06/07/2016	08/12/2016	12/07/2016	03/31/2017	06/22/2017	09/22/2017	12/05/2017	04/20/2018	06/13/2018	10/05/2018	12/04/2018	04/26/2019	04/26/2019	06/17/2019	09/05/2019	12/05/2019	03/25/2020	09/17/2020	12/29/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3 U	3.3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	10 U	11 U	10 U	10 U	10 UJ	10 U	9 U	10 U	10 U	10 U	11 UJ	10 U	14 U	15 UJ	14 UJ	14 UJ	14 UJ	14 UJ	14 U	14 UJ	15 UJ	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1.2 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
2-Chloronaphthalene	ug/L	N	600	0.43 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.47 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
2-Methyl-Naphthlalene	ug/L	N	30	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2.3 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3 U	3.3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.3 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3 UJ	3.5 U
3-Nitroaniline	ug/L	N	NA	2.1 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3 UJ	3.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	8 U	8 UJ	8 UJ	8 UJ	8 UJ	8 UJ	8 U	8 UJ	8 UJ	8 UJ	8.7 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
4-Chloroaniline	ug/L	N	30	4.3 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U	4 UJ	4 UJ	4 UJ	4 UJ	4 UJ	4 U	4 UJ	4 UJ	4 UJ	4.7 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
4-Nitroaniline	ug/L	N	NA	0.96 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.9 U	0.9 UJ	0.9 UJ	0.9 UJ	0.9 UJ	0.9 UJ	0.9 U	0.9 UJ	0.9 UJ	0.9 UJ	1 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	11 U	10 U	10 U	10 UJ	10 U	9 U	10 U	10 U	10 U	11 UJ	10 U	10 U	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 UJ	10 U	11 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Acetophenone	ug/L	N	700	1.1 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	4 U	4 UJ	4 UJ	4 UJ	4 UJ	4 UJ	4 U	4 UJ	4 UJ	4 UJ	4.7 U
Anthracene	ug/L	N	2000	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Atrazine	ug/L	N	3	1.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2.3 UJ
Benzaldehyde	ug/L	N	NA	1.1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3 UJ	3.5 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5.8 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2.3 U
Caprolactam	ug/L	N	4000	3.2 U	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5.8 U
Carbazole	ug/L	N	NA	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
Chrysene	ug/L	N	5	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2.3 U
Di-n-octylphthalate	ug/L	N	100	5.3 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5.8 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Dibenzofuran	ug/L	N	NA	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	3 J	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2.3 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2.3 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3 UJ	3.5 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Fluorene	ug/L	N	300	0.13 U	0.1 J	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 U	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5.8 U
Hexachloroethane	ug/L	N	7	0.53 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1.2 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Isophorone	ug/L	N	40	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.82 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.82 U
Naphthalene	ug/L	N	300	0.11 U	0.5 J	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Nitrobenzene	ug/L	N	6	0.53 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.58 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	2 UJ	1.6 U	1.7 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.8 J	0.8 J	0.2 J	0.3 J	0.1 UJ	0.2 J	0.1 J	0.2 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Phenol	ug/L	N	2000	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.54 U
Pyrene	ug/L	N	200	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.12 U
Total TIC SVOCS	ug/L	N	NA	-	0 UJ	12 J	190 UJ	0 U	25 J	25 J	14 J	0 U	15 J	110 J	74 J	0 U	5 J	-	75 J	32 J	18 J	6 J	0 U	0 UJ	8 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-416	MW-416	MW-416	MW-416	MW-416	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417
			Field Sample ID	M416C8X	M416C9	M416D1	M416D2	M416D3	M417A1X	M417A2X	M417A3X	M417A4X	M417A6X	M417A7X	M417A9X	M417B1X	M417B2X	M417B3X	M417B4X	M417B5X	M417B6X	M417B7X	M417B8X	M417B9X	M417C1X	M417C2X	M417C3X	M417C4X
			Sample Date	03/18/2021	05/28/2021	09/02/2021	11/23/2021	02/18/2022	05/19/2015	08/20/2015	10/28/2015	03/02/2016	06/07/2016	08/12/2016	12/07/2016	03/31/2017	06/22/2017	09/22/2017	12/05/2017	04/20/2018	06/13/2018	10/05/2018	12/04/2018	04/26/2019	06/17/2019	09/05/2019	12/05/2019	03/26/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
2,4-Dimethylphenol	ug/L	N	100	3.4 UJ	3 UJ	3.3 U	3.1 U	3.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	4 U
2,4-Dinitrophenol	ug/L	N	40	16 UJ	14 UJ	15 U	14 U	15 U	11 U	10 U	10 U	10 U	10 UJ	10 U	9 U	10 U	10 U	10 U	10 UJ	11 U	15 U	15 UJ	14 UJ	14 UJ	14 UJ	14 U	14 UJ	17 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 UJ	1 UJ	1.1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.46 UJ	0.4 UJ	0.44 U	0.41 UJ	0.42 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
2-Methyl-Naphthlalene	ug/L	N	30	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 UJ	1 UJ	1.1 U	1 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 UJ	1 UJ	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	4 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.6 UJ	4 UJ	4.4 U	4.1 UJ	4.2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	4 U
3-Nitroaniline	ug/L	N	NA	2.3 UJ	2 UJ	2.2 U	2.1 UJ	2.1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	4 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9.1 UJ	8 UJ	8.8 U	8.2 U	8.4 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	8 U	8 UJ	8 UJ	8 UJ	8 UJ	8 U	8 UJ	10 U
4-Bromophenylphenylether	ug/L	N	NA	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
4-Chloroaniline	ug/L	N	30	4.6 UJ	4 UJ	4.4 U	4.1 UJ	4.2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U	4 UJ	4 UJ	4 UJ	4 UJ	4 U	4 UJ	5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
4-Nitroaniline	ug/L	N	NA	1 UJ	0.91 UJ	0.99 U	0.92 UJ	0.94 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.9 U	0.9 UJ	0.9 UJ	0.9 UJ	0.9 UJ	0.9 U	0.9 UJ	1 U
4-Nitrophenol	ug/L	N	NA	11 UJ	10 UJ	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U	9 U	10 U	10 U	10 U	10 UJ	11 U	10 U	11 UJ	10 UJ	10 UJ	10 UJ	10 U	10 UJ	12 U
Acenaphthene	ug/L	N	400	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Acetophenone	ug/L	N	700	1.1 UJ	1 UJ	1.1 U	1 UJ	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	4 U	4 UJ	4 UJ	4 UJ	4 UJ	4 U	4 UJ	5 U
Anthracene	ug/L	N	2000	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Atrazine	ug/L	N	3	1.1 UJ	1 UJ	1.1 U	1 UJ	1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U
Benzaldehyde	ug/L	N	NA	1.1 UJ	1 UJ	1.1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	4 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.13 UJ	0.11 UJ	0.12 U	0.11 UJ	0.12 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.3 UJ	2 UJ	2.2 U	2.1 UJ	2.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	6 U
Butylbenzylphthalate	ug/L	N	100	2.3 UJ	2 UJ	2.2 U	2.1 UJ	2.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U
Caprolactam	ug/L	N	4000	3.4 UJ	3 UJ	31	3.1 UJ	3.1 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	6 U
Carbazole	ug/L	N	NA	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
Chrysene	ug/L	N	5	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.3 UJ	2 UJ	2.2 U	2.1 UJ	2.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U
Di-n-octylphthalate	ug/L	N	100	5.7 UJ	5 UJ	5.5 U	5.1 UJ	5.2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	6 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Dibenzofuran	ug/L	N	NA	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
Diethylphthalate	ug/L	N	6000	2.3 UJ	2 UJ	2.2 U	2.1 UJ	2.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U
Dimethyl phthalate	ug/L	N	NA	2.3 UJ	2 UJ	2.2 U	2.1 UJ	2.1 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 UJ	4 U
Fluoranthene	ug/L	N	300	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Fluorene	ug/L	N	300	0.14 UJ	0.12 UJ	0.13 U	0.12 UJ	0.13 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.13 UJ	0.11 UJ	0.12 U	0.11 UJ	0.12 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5.7 UJ	5 UJ	5.5 U	5.1 UJ	5.2 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	6 U
Hexachloroethane	ug/L	N	7	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.13 UJ	0.11 UJ	0.12 U	0.11 UJ	0.12 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Isophorone	ug/L	N	40	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.8 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.8 U
Naphthalene	ug/L	N	300	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.4 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Nitrobenzene	ug/L	N	6	0.57 UJ	0.5 UJ	0.55 U	0.51 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 UJ	1 UJ	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	2 U
Pentachlorophenol	ug/L	N	0.3	1.1 UJ	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.13 UJ	0.11 UJ	0.12 U	0.11 UJ	0.12 UJ	0.9 J	0.4 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Phenol	ug/L	N	2000	0.57 UJ	0.5 UJ	0.55 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.6 U
Pyrene	ug/L	N	200	0.11 UJ	0.1 UJ	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	22 J	10 J	110 UJ	0 U	21 J	9 J	10 J	13 J	10 J	110 J	40 J	8 J	10 J	-	230 J	23 J	25 J	0 U	9 J	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418	MW-434	MW-434	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R
			Field Sample ID	M417C5X	M417C6X	M417C7X	M417C8X	M417D1	M417D2	M417D3	M418A1X	M418A2X	M418A3X	M418A4X	M418A6X	M418A7X	M418A9X	M434A1X	M434A2X	M434RA3X	M434RA5X	M434RA6X	M434RA7X	M434RA8X	D0810188	M434RA9X	M434RB1X	M434RB2X
			Sample Date	06/16/2020	09/22/2020	12/29/2020	03/18/2021	09/02/2021	12/21/2021	02/18/2022	05/19/2015	08/18/2015	10/28/2015	03/02/2016	06/07/2016	08/12/2016	12/07/2016	10/06/2015	12/07/2015	04/28/2017	08/21/2017	10/31/2017	02/05/2018	05/02/2018	08/10/2018	08/10/2018	11/07/2018	02/06/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	3 U	3.4 U	3.2 UJ	3.3 UJ	3.6 U	3 U	3 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 UJ	3 UJ	3 UJ
2,4-Dinitrophenol	ug/L	N	40	14 U	16 U	15 UJ	15 UJ	17 U	14 U	14 U	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 U	9 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	15 U	14 U	14 UJ	14 UJ	14 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.2 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	0.9 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.45 UJ	0.42 UJ	0.44 UJ	0.48 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
2-Methyl-Naphthlalene	ug/L	N	30	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.7	8 J	0.1 U	0.2 J	0.1 U	0.3 J	2	2	0.5	0.7	1
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	2.2 UJ	2.1 UJ	1.1 UJ	1.2 U	1 UJ	1 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3.4 U	3.2 UJ	1.1 UJ	1.2 U	1 U	1 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 UJ	3 U	3 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	3.4 UJ	3.2 UJ	4.4 UJ	4.8 U	4 UJ	4 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3.4 UJ	3.2 UJ	2.2 UJ	2.4 U	2 UJ	2 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	9 U	8.5 UJ	8.8 UJ	9.5 U	8 U	8.1 U	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 UJ	8 U	8 U	8 UJ	8 UJ	8 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 UJ	4.5 UJ	4.2 UJ	4.4 UJ	4.8 U	4 UJ	4 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.91 UJ	1 UJ	0.95 UJ	0.99 UJ	1.1 U	0.9 UJ	0.91 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	11 UJ	11 UJ	12 U	10 U	10 U	10 UJ	10 UJ	10 UJ	10 U	10 UJ	10 U	9 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	11 U	10 U	10 UJ	10 UJ	10 UJ
Acenaphthene	ug/L	N	400	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 UJ	4.5 UJ	4.2 UJ	1.1 UJ	1.2 U	1 UJ	1 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	20	7	7	9	7 J	4 U	4 U	4 U	4 J
Anthracene	ug/L	N	2000	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2.2 UJ	2.1 UJ	1.1 UJ	1.2 U	1 UJ	1 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 UJ	3.4 UJ	3.2 UJ	1.1 UJ	1.2 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 UJ	4 J	1 J	1 J	4 J	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.11 UJ	0.11 UJ	0.12 UJ	0.13 U	0.11 UJ	0.11 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1J	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.2J	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.1 UJ	5.6 UJ	5.3 UJ	2.2 UJ	2.4 U	**3.8J**	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2.2 UJ	2.1 UJ	2.2 UJ	2.4 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5.1 UJ	5.6 UJ	5.3 UJ	3.3 UJ	6.8 J	3 UJ	3 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 U	10 J	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2.2 UJ	2.1 UJ	2.2 UJ	2.4 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.1 UJ	5.6 UJ	5.3 UJ	5.5 UJ	6 U	5 UJ	5 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 UJ	2.2 UJ	2.1 UJ	2.2 UJ	2.4 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	8	9	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2.2 UJ	2.1 UJ	2.2 UJ	2.4 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3.4 UJ	3.2 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 UJ	0.11 UJ	0.11 UJ	0.13 UJ	0.14 U	0.12 UJ	0.12 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.2 J	0.7 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.11 UJ	0.11 UJ	0.12 UJ	0.13 U	0.11 UJ	0.11 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 UJ	5.6 UJ	5.3 UJ	5.5 UJ	6 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 UJ	1.1 UJ	1.1 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	0.9 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.11 UJ	0.11 UJ	0.12 UJ	0.13 U	0.11 UJ	0.11 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.1J**	**0.2J**	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.71 UJ	0.78 UJ	0.74 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.71 UJ	0.78 UJ	0.74 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.11 J	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.8	7 J	0.1 U	0.1 U	0.1 U	0.1 J	2	1	0.1 U	0.5 J	1
Nitrobenzene	ug/L	N	6	0.51 UJ	0.56 UJ	0.53 UJ	0.55 UJ	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.6 U	1.8 U	1.7 UJ	1.1 UJ	1.2 U	1 U	1 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	1.1 UJ	1.1 UJ	1.2 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	0.9 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
Phenanthrene	ug/L	N	NA	0.1 UJ	0.11 UJ	0.11 UJ	0.12 UJ	0.13 U	0.11 UJ	0.11 U	0.7 J	0.3 J	0.3 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.4 J	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.51 U	0.56 U	0.53 UJ	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
Pyrene	ug/L	N	200	0.1 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.12 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	0 U	-	220 J	110 J	310 UJ	7 J	140 J	18 J	23 J	-	-	220 J	100 J	120 J	69 J	-	370 J	73 J	-	250 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-435	MW-435	MW-435	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-436	MW-436
			Field Sample ID	M434RB3X	M434RB4X	M434RB5	M434RB6	M434RB7	D1006158A	M435A1X	M435A2X	M435RA3X	M435RA4X	M435RA5X	D0206188	M435RA6X	M435RA7X	M435RA8X	M435RA9X	M435RB1X	M435RB2X	M435RB3X	M435RB4	M435RB5	M435RB6	M436A1X	M436A2X
			Sample Date	02/03/2020	03/03/2021	05/24/2021	09/15/2021	10/28/2021	10/06/2015	10/06/2015	12/07/2015	05/01/2017	08/23/2017	10/31/2017	02/06/2018	02/06/2018	05/02/2018	08/10/2018	11/08/2018	02/06/2019	02/03/2020	03/03/2021	05/24/2021	09/22/2021	11/22/2021	10/08/2015	12/07/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	3 U	3.2 UJ	3.2 UJ	3.3 U	3.1 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3.6 U	3.1 U	3.2 U	3.2 U	0.5 U	0.5 UJ
2,4-Dinitrophenol	ug/L	N	40	14 U	15 UJ	15 UJ	16 U	15 U	11 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	15 U	14 U	15 U	14 U	14 U	17 U	14 U	15 U	15 U	11 U	10 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1.1 UJ	1.1 U	1.1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1.1 U	1.1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.43 UJ	0.43 U	0.44 UJ	0.42 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.41 U	0.43 U	0.43 U	0.4 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
2-Methyl-Naphthlalene	ug/L	N	30	2 J	1.5 J	5.4 J	6.6 J	1.8 J	15	13 J	17	3	0.9	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.11 U	17	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.9 J	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	1.1 UJ	1.1 U	1.1 UJ	1 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	1.1 UJ	1.1 UJ	1.1 U	1 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	4.3 UJ	4.3 U	4.4 UJ	4.2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	4.7 U	4.1 U	4.3 U	4.3 U	2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	3 UJ	2.1 UJ	2.2 U	2.2 UJ	2.1 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2.4 U	2 U	2.2 U	2.2 U	0.5 U	0.5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8.6 UJ	8.6 UJ	8.9 U	8.4 U	6 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	9 U	8 U	8 U	8 U	8 U	9.5 U	8.1 U	8.6 U	8.6 U	5 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	4 UJ	4.3 UJ	4.3 U	4.4 UJ	4.2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4.7 U	4.1 U	4.3 U	4.3 U	2 U	2 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.9 UJ	0.96 UJ	0.97 U	1 UJ	0.94 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	1.1 U	0.92 U	0.97 U	0.97 U	0.5 U	0.5 UJ
4-Nitrophenol	ug/L	N	NA	10 U	11 UJ	11 UJ	11 U	10 U	11 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	12 U	10 U	11 U	11 UJ	11 U	10 UJ
Acenaphthene	ug/L	N	400	0.1 UJ	0.11 UJ	0.11 U	0.12 J	0.1 UJ	0.1 U	0.6 J	1	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.11 U	0.4 J	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	4 UJ	1.1 UJ	3 J	1.1 UJ	1 UJ	0.6 U	0.5 UJ	0.5 U	7	0.8 J	2	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	3 J
Anthracene	ug/L	N	2000	0.1 UJ	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	2 UJ	1.1 UJ	1.1 U	1.1 UJ	1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.2 U	1 U	1.1 U	1.1 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	3 UJ	1.1 UJ	1.1 U	1.1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	1.2 U	1 U	1.1 U	1.1 U	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.37J**	0.1 U	0.11 U	**0.19J**	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1J	0.12 UJ	0.12 U	0.12 UJ	0.12 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	**0.5J**	0.11 U	0.12 U	**0.16J**	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.2J	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	**0.72**	0.1 U	0.11 U	**0.25J**	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.36 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 J	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.29 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 UJ	0.5 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 UJ	2.1 UJ	2.2 U	2.2 UJ	2.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	2.4 U	2 U	2.2 U	2.2 UJ	2 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 UJ	2.1 UJ	2.2 U	2.2 UJ	2.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.2 U	2.2 UJ	2 U	2 UJ
Caprolactam	ug/L	N	4000	5 UJ	3.2 UJ	6.4 J	3.3 UJ	3.1 UJ	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.6 U	8.1	45	3.2 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
Chrysene	ug/L	N	5	0.2 J	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.46 J	0.1 U	0.11 U	0.21 J	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 UJ	2.1 UJ	2.2 U	2.2 UJ	2.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.2 U	2.2 UJ	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	5 UJ	5.4 UJ	5.4 U	5.5 UJ	5.2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 U	5.4 U	5.4 UJ	2 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 UJ	2.1 UJ	2.2 U	2.2 UJ	2.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.2 U	2.2 U	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 UJ	2.1 UJ	2.2 U	2.2 UJ	2.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.2 U	2.2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	0.59 U	0.51 U	0.54 U	0.54 U	0.8 J	0.5 UJ
Fluoranthene	ug/L	N	300	0.1 J	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.66	0.1 U	0.11 U	0.32 J	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.1 UJ	0.13 UJ	0.13 U	0.14 J	0.13 UJ	0.6	0.5 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 U	0.12 U	0.13 U	0.13 U	0.5	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.12 UJ	0.12 U	0.12 UJ	0.12 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 UJ	0.5 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5.4 UJ	5.4 U	5.5 UJ	5.2 UJ	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 U	5.4 U	5.4 U	5 U	5 UJ
Hexachloroethane	ug/L	N	7	1 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.59 U	0.51 U	0.54 U	0.54 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.12 UJ	0.12 U	0.12 UJ	0.12 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.1J**	0.1 U	0.1 U	0.1 U	0.1 U	**0.42J**	0.11 U	0.12 U	0.12 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
Naphthalene	ug/L	N	300	1 J	6 J	1.4	1.3 J	1.2 J	27	26 J	34	2	0.7	0.1 U	0.1 U	0.1 J	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.11 U	26	0.1 UJ
Nitrobenzene	ug/L	N	6	0.5 UJ	0.54 UJ	0.54 U	0.55 UJ	0.52 UJ	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.5 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	2 U	1.1 UJ	1.1 U	1.1 U	1 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 UJ	1.1 UJ	1.1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1.1 U	1.1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 UJ	0.12 UJ	0.12 U	0.24 J	0.12 J	1	1 J	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.12 U	0.12 U	0.7	0.1 UJ
Phenol	ug/L	N	2000	0.5 U	0.54 UJ	0.54 UJ	0.55 U	0.52 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.54 U	0.54 U	0.6 J	0.5 UJ
Pyrene	ug/L	N	200	0.1 UJ	0.11 UJ	0.11 U	0.11 UJ	0.1 UJ	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.11 U	0.34 J	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	87 J	-	-	-	-	-	-	-	-	27 J	0 U	14 J	6 J	-	42 J	-	54 J	0 U	-	0 U	-	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438
			Field Sample ID	D0503178	M436RA3X	M436RA7X	M436RA8X	M436RA9X	M436RB1X	M436RB2X	M436RB3X	M436RB4X	M436RB5X	M436RB6X	M436RB7	M436RB8	M436RB9	M436RC1	M438A1X	M438A2X	M438A3X	D0817178	M438A4X	M438A5X	M438A6X	M438A7X	M438A8X	M438A9X
			Sample Date	05/03/2017	05/03/2017	08/23/2017	11/01/2017	02/07/2018	05/03/2018	08/15/2018	11/09/2018	02/11/2019	02/17/2020	03/11/2021	05/24/2021	09/22/2021	11/22/2021	03/30/2022	10/06/2015	12/08/2015	05/01/2017	08/17/2017	08/17/2017	10/30/2017	02/05/2018	05/02/2018	08/09/2018	11/07/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	15 U	3.1 U	3 U	3.1 U	3.3 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 UJ	11 UJ	10 U	11 U	10 U	15 U	15 U	14 U	15 U	15 U	72 U	15 U	14 U	15 U	15 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U	15 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	5.1 UJ	1 U	1 U	1 U	1.1 UJ	1 UJ	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.5 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2.1 UJ	0.42 U	0.4 U	0.42 U	0.44 UJ	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.1 U	0.4 J	0.1 U	0.1 UJ	1	2	0.3 J	0.1 U	0.1 U	0.51 UJ	0.44 J	1.3	0.1 U	0.18 J	30	**58**	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	5.1 UJ	1 U	1 U	1 U	1.1 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	3 U	5.1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	2 U	2 U	2 U	2 UJ	3 U	3 U	3 U	3 U	3 U	21 UJ	4.2 U	4 U	4.2 U	4.4 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	10 UJ	2.1 U	2 U	2.1 U	2.2 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 UJ	5 U	6 U	5 U	8 U	8 U	8 U	8 U	9 U	41 U	8.4 U	8.1 U	8.4 U	8.7 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	9 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 UJ	2 U	2 U	2 U	2 UJ	4 U	4 U	4 U	4 U	4 U	21 UJ	4.2 U	4 U	4.2 U	4.4 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.9 J	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	1.6 J	0.52 U	0.55 U	4	2	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 UJ	0.9 U	0.9 U	0.9 U	0.9 U	1 U	4.6 UJ	0.94 U	0.91 U	0.94 U	0.98 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 UJ	11 UJ	10 U	11 U	10 U	10 U	11 U	10 U	10 U	11 U	51 U	10 U	10 U	10 U	11 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	4	7	10	2	2	2	4	2	3	2
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	9	9	0.5 U	1 J	0.5 UJ	4 U	4 U	4 U	4 U	4 U	5.1 UJ	1 U	1 U	1 U	1.1 UJ	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	1	3	6	0.5 J	0.4 J	0.6	2	2	0.1 U	0.4 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5.1 UJ	1 U	1 U	1 U	1.1 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	4 J	4 J	1 U	1 U	1 UJ	3 U	3 U	3 U	3 U	3 U	5.1 UJ	1 U	1 U	1 U	1.1 UJ	1 U	1 U	10 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	**0.2J**	**2**	**3J**	**0.3J**	**0.2J**	**0.4J**	**2**	**2**	**1**	**0.3J**
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.56 UJ	0.12 U	0.11 U	0.11 U	0.12 UJ	**0.2J**	**1**	**2J**	**0.2J**	**0.1J**	**0.3J**	**2**	**2**	**0.9**	**0.2J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.1 U	**2**	**3J**	**0.3J**	0.2J	**0.4J**	**2**	**2**	**1**	**0.3J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.1 U	0.5	2 J	0.1 J	0.1 U	0.2 J	0.7	1	0.6	0.1 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.1 U	**0.8**	1 J	0.1 J	0.1 U	0.1 J	**0.8**	**0.9**	0.5 J	0.1 J
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 UJ	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	**4J**	5 U	5 U	5 U	5 U	5 U	10 UJ	2.1 U	2 U	2.1 UJ	2.2 UJ	2 U	2 U	20 U	**6**	2 J	2 U	2 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 UJ	2.1 U	2 U	2.1 UJ	2.2 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	15 UJ	28	67	3.1 U	3.3 UJ	5 U	5 U	50 U	5 U	5 U	5 U	5 U	57	5 U	5 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.2 J	2	3 J	0.8	0.2 J	0.5	2	2	1	0.2 J
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 UJ	2.1 U	2 U	2.1 UJ	2.2 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	5 U	5 U	5 U	5 U	5 U	26 UJ	5.2 U	5.1 U	5.2 UJ	5.5 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.1 U	**0.2J**	**1J**	0.1 U	0.1 U	0.1 U	**0.2J**	**0.4J**	**0.2J**	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	2	0.5 U	5 U	0.5 U	0.5 U	0.9 J	2	0.5 U	1 J	0.9 J
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 UJ	2.1 U	2 U	2.1 U	2.2 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 UJ	2.1 U	2 U	2.1 U	2.2 UJ	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.8	5	8	0.9	0.7	1	5	4	2	0.6
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.62 UJ	0.13 U	0.12 U	0.13 U	0.13 UJ	4	12	14	3	2	3	6	2	3	3
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.56 UJ	0.12 U	0.11 U	0.11 U	0.12 UJ	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 UJ	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	26 UJ	5.2 U	5.1 U	5.2 U	5.5 UJ	5 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	1 UJ	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.56 UJ	0.12 U	0.11 U	0.11 U	0.12 UJ	0.1 U	**0.5**	**1J**	**0.1J**	0.1 U	**0.2J**	**0.9**	**1**	**0.7**	**0.1J**
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.4 J	0.1 U	0.1 UJ	0.6	1	0.3 J	0.1 U	0.1 U	0.51 UJ	0.54	1.1	0.1 U	0.17 J	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 UJ	0.52 U	0.51 U	0.52 U	0.55 UJ	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	5.1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.56 UJ	0.12 U	0.11 U	0.11 U	0.12 UJ	5	22	22	1	1	2	13	2	2	2
Phenol	ug/L	N	2000	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.52 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.51 UJ	0.1 U	0.1 U	0.1 U	0.11 UJ	0.6	4	7	0.7	0.5 J	0.9	4	4	3	0.6
Total TIC SVOCS	ug/L	N	NA	-	-	11 J	40 J	0 U	-	-	100 J	-	-	0 UJ	-	-	0 U	-	-	-	-	460 J	410 J	390 J	920 J	-	480 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-438	MW-438	MW-438	MW-438	MW-438	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-440	MW-440	MW-440
			Field Sample ID	M438B1X	M438B2X	M438B3X	M438B4	M438B5	M439A1X	M439A2X	M439A3X	M439A5X	M439A9X	M439B1X	M439B2X	M439B3X	M439B4X	M439B5X	M439B6X	M439B7X	M439B8X	M439B9X	M439C1	M439C2	M440A1X	D120815A8	M440A2X
			Sample Date	02/06/2019	02/04/2020	03/03/2021	05/28/2021	10/29/2021	10/07/2015	12/07/2015	03/01/2016	08/23/2016	04/27/2017	08/03/2017	11/01/2017	02/06/2018	05/08/2018	08/13/2018	11/28/2018	02/15/2019	02/04/2020	03/04/2021	06/01/2021	08/13/2021	10/07/2015	12/08/2015	12/08/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	30 U	16 U	3.3 U	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	0.5 UJ	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	140 U	76 U	15 U	15 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	14 U	14 U	14 U	14 U	15 U	14 U	14 U	14 U	10 UJ	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	10 U	5.4 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	4 U	2.2 U	0.44 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	1 U	0.54 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.2 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	20 U	5.4 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	30 U	5.4 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	1 UJ	1 U	1 U	0.5 UJ	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	30 U	22 U	4.4 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	4 U	4.1 U	4 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	30 U	11 U	2.2 U	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2 U	2.1 U	2 U	0.5 UJ	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	80 U	43 U	8.7 U	8.6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	8.3 U	8.1 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	40 U	22 U	4.4 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4.1 U	4 U	2 UJ	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	9 U	4.9 U	0.98 U	0.97 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.93 U	0.91 U	0.5 UJ	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	100 U	54 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 UJ	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	1 U	0.62 J	0.55	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	1 U	0.54 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	40 U	5.4 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	1 U	0.54 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	20 U	5.4 U	1.1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	30 U	5.4 U	1.1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**0.8**	**2J**	**0.91J**	0.11 U	**0.74**	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.13J**	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**0.8**	**5**	**0.99J**	0.12 U	**0.97**	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	**0.18J**	0.1 U	0.1 U	0.1J
Benzo(b)fluoranthene	ug/L	N	0.2	**1**	**7**	**1.3J**	0.11 U	**1.2**	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.24J**	0.1 U	0.1J	0.2J
Benzo(g,h,i)perylene	ug/L	N	NA	0.4 J	3 J	0.63 J	0.11 U	0.61	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	0.1 U	0.1 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.5 J	**3J**	**0.61 J**	0.11 U	**0.5**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	50 U	11 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	20 U	11 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	50 U	16 U	19	3.2 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 U	3.1 U	3 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	1	3 J	1 J	0.11 U	0.94	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.2 J
Di-n-butylphthalate	ug/L	N	700	2 U	20 U	11 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	50 U	27 U	5.5 U	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	1 U	0.54 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.1J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	20 U	11 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	20 U	11 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	30 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.9	5 J	1.6 J	0.16 J	1.2	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.29 J	0.1 U	0.1 J	0.2 J
Fluorene	ug/L	N	300	0.1 U	1 U	0.65 U	0.66	0.38 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	1 U	0.59 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	50 U	27 U	5.5 U	5.4 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	10 U	2.7 U	0.55 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.52 U	0.5 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**0.6**	**3J**	**0.63J**	0.12 U	**0.8**	0.1 U	0.1 U	0.1 U	0.1 U	**0.1J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	**0.14J**	0.1 U	0.1 U	**0.1J**
Isophorone	ug/L	N	40	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	7 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	7 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	1 U	0.54 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3	0.1 J	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	5 U	2.7 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	16 U	5.4 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	10 U	5.4 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	**5J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	1 U	0.59 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 J
Phenol	ug/L	N	2000	0.5 U	5 U	2.7 U	0.55 UJ	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Pyrene	ug/L	N	200	2	8	2.3 J	0.15 J	1.6	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.29 J	0.1 U	0.1 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	380 J	2000 J	-	-	-	-	-	-	-	-	4 J	77 J	13 J	30 J	30 J	58 J	23 J	33 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-441	MW-441	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R
			Field Sample ID	M440A3X	M440A4X	D1102178B	M440A5X	M440A6X	M440A7X	M440A8X	M440A9X	D0207198	M440B1X	D0204208	M440B2X	M440B3X	M440B4	M440B5	M440B6	M440B7	M441A1X	M441A2X	M441RA3X	M441RA4X	M441RA5X	M441RA6X	D0503188
			Sample Date	04/28/2017	08/21/2017	11/02/2017	11/02/2017	02/06/2018	05/01/2018	08/14/2018	11/08/2018	02/07/2019	02/07/2019	02/04/2020	02/04/2020	03/05/2021	06/01/2021	08/13/2021	10/29/2021	03/30/2022	10/07/2015	12/09/2015	06/09/2017	08/22/2017	10/30/2017	02/07/2018	05/03/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3.1 U	3.1 U	3.2 U	3.1 UJ	3.1 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.6 J	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	11 U	10 U	14 U	14 U	14 U	14 U	14 U	16 U	14 U	14 U	14 U	15 U	15 UJ	14 U	10 U	10 U	10 U	10 U	10 U	11 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.5 U	0.4 U	0.41 U	0.41 U	0.42 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methyl-Naphthlalene	ug/L	N	30	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.7	4	5	28	0.2 J	2	0.1 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	1 U	1 U	1.1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	3 UJ	3 U	3 U	3 UJ	3 UJ	4 U	3 U	4.1 U	4.1 U	4.2 U	4.2 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	3 U	3 UJ	3 UJ	4 U	3 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	9 U	8 U	8.2 U	8.1 U	8.4 U	8.3 UJ	8.2 U	5 U	5 U	5 U	5 U	5 U	5 U	9 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	4 UJ	4 U	4 U	4 UJ	4 UJ	5 U	4 U	4.1 U	4.1 U	4.2 U	4.2 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 UJ	0.9 U	0.9 U	0.9 UJ	0.9 UJ	1 U	0.9 U	0.92 U	0.92 U	0.95 U	0.94 U	0.93 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U	10 U	10 U	11 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.9	1	0.1 U	0.8	0.5	0.6	0.3 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 UJ	4 U	4 U	4 UJ	4 UJ	5 U	4 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	8	69	7	0.5 U	4	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	1 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	3 UJ	3 U	3 U	3 UJ	3 UJ	4 U	3 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 J	14	1 U	1 U	1 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.2J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U	**21J**	5 UJ	6 U	5 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	**5J**	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 UJ	6 U	5 U	3.1 U	3.1 U	3.2 U	3.1 U	3.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U	5 UJ	5 UJ	6 U	5 U	5.1 U	5.1 U	5.3 U	5.2 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	1 J	0.5 J	1 J	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 UJ	45	2 U	2 UJ	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	3 U	3 UJ	3 UJ	4 U	3 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.9 J	0.5 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.3 J	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U
Fluorene	ug/L	N	300	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.7 J	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	0.7	2	0.6	2	0.5 J	0.7	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 UJ	6 U	5 U	5.1 UJ	5.1 U	5.3 U	5.2 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.8 U	0.7 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.8 U	0.7 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U
Naphthalene	ug/L	N	300	1	0.8	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.9 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	3	8	2	23	3	4	0.8
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1 U	1 U	1.1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2 J	2 J	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	1	0.9	1	0.1 U	0.2 J	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.53 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.3 J	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 J	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 J	0.2 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	52 J	15 J	52 J	53 J	0 U	11 J	66 J	-	390 J	4 J	0 U	11 J	-	-	-	-	-	-	-	-	470 J	420 J	450 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509
			Field Sample ID	M441RA7X	M441RA8X	M441RA9X	M441RB1X	M441RB2X	M441RB3X	M441RB4	M441RB6	M441RB7	D1010168	M509A1X	M509A2X	M509A3X	M509A4X	M509A5X	M509A6X	M509A7X	M509A8X	M509A9X	M509B1X	M509B2X	M509B3X	M509B4	M509B5
			Sample Date	05/03/2018	08/14/2018	11/09/2018	02/11/2019	02/03/2020	03/05/2021	06/02/2021	09/17/2021	01/10/2022	10/10/2016	10/10/2016	11/10/2016	05/02/2017	08/22/2017	11/02/2017	02/07/2018	05/01/2018	08/14/2018	11/08/2018	02/07/2019	02/04/2020	03/05/2021	06/03/2021	10/28/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	3 UJ	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	3 UJ	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	3 UJ	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	15 UJ	3 U	32 U	16 U	3.1 U	3.4 U	3 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 UJ	3 UJ	3 UJ	15 U	15 UJ	3.8 UJ	3.1 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	71 U	14 U	150 U	72 U	15 U	16 U	14 U	11 UJ	10 UJ	10 UJ	10 UJ	11 UJ	10 U	10 U	15 U	15 UJ	14 UJ	14 UJ	70 U	71 UJ	18 UJ	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	5 UJ	1 U	11 UJ	5.2 UJ	1 UJ	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	5 UJ	5.1 U	1.3 UJ	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	2 UJ	0.4 U	4 UJ	2.1 UJ	0.42 UJ	0.45 U	0.4 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	2 UJ	2 U	0.51 UJ	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	3 UJ	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
2-Methyl-Naphthlalene	ug/L	N	30	3 J	0.6	0.5 UJ	0.1 U	1 UJ	0.52 UJ	0.1 UJ	0.11 U	27 J	1.3	0.11 J	4	0.2 J	13	4	5	0.5 J	0.1 U	6	1 UJ	4 J	1.4 J	0.52 J	1.1
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	2 U	10 UJ	2 U	21 UJ	5.2 UJ	1 UJ	1.1 U	1 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	10 UJ	5.1 U	1.3 UJ	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	15 UJ	3 U	32 U	5.2 U	1 U	1.1 U	1 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 UJ	3 UJ	3 UJ	15 U	5.1 UJ	1.3 UJ	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	3 U	15 UJ	3 U	32 UJ	21 UJ	4.2 UJ	4.5 U	4 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 UJ	15 UJ	20 U	5.1 UJ	4.1 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3 U	15 UJ	3 U	32 UJ	10 UJ	2.1 UJ	2.2 U	2 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	15 UJ	10 U	2.6 UJ	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	8 U	40 U	8 U	85 U	41 U	8.3 U	9 U	8 U	5.3 UJ	5.2 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	8 U	8 UJ	8 UJ	8 UJ	40 U	41 UJ	10 UJ	8.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
4-Chloroaniline	ug/L	N	30	4 UJ	4 U	20 UJ	4 U	43 UJ	21 UJ	4.2 UJ	4.5 U	4 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 UJ	20 UJ	20 U	5.1 UJ	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	3.2 UJ	3.1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
4-Nitroaniline	ug/L	N	NA	1 UJ	0.9 U	5 UJ	0.9 U	10 UJ	4.7 UJ	0.94 UJ	1 U	0.9 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 UJ	5 UJ	4.6 U	1.2 UJ	0.92 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	50 U	10 U	110 U	52 U	10 U	11 U	10 U	11 UJ	10 UJ	10 UJ	10 UJ	11 UJ	10 U	10 U	11 U	10 UJ	10 UJ	10 UJ	50 U	51 UJ	13 UJ	10 U
Acenaphthene	ug/L	N	400	0.5 J	1	0.9 J	0.1 U	1 UJ	1.6 J	0.1 UJ	0.11 U	0.1 U	0.19 J	0.29 J	0.3 J	0.1 U	0.3 J	0.1 U	0.2 J	0.1 J	0.4 J	0.4 J	0.1 UJ	0.5 J	0.59 J	1.4 J	0.45 J
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.5 UJ	0.1 U	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.51 U	0.13 UJ	0.1 U
Acetophenone	ug/L	N	700	7 J	4 U	20 UJ	4 U	43 UJ	5.2 UJ	1 UJ	1.1 U	1 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 UJ	20 UJ	5.1 U	1.3 UJ	1 U
Anthracene	ug/L	N	2000	0.1 UJ	0.1 U	0.5 UJ	0.1 U	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.51 U	0.13 UJ	0.1 J
Atrazine	ug/L	N	3	2 UJ	2 U	10 UJ	2 U	21 UJ	5.2 UJ	1 UJ	1.1 U	1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 UJ	5.1 U	1.3 UJ	1 U
Benzaldehyde	ug/L	N	NA	3 UJ	3 U	15 UJ	3 U	32 UJ	5.2 UJ	1 UJ	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 UJ	15 UJ	5.1 U	1.3 UJ	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 U	0.5 UJ	0.1J	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.51 U	0.13 UJ	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.1 U	0.5 UJ	**0.2J**	1 UJ	0.57 UJ	0.11 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 UJ	**0.9J**	0.56 U	0.14 UJ	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 U	0.5 UJ	**0.3J**	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 UJ	**1J**	**0.51J**	0.13 UJ	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 U	0.5 UJ	0.1 U	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.33 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.51 U	0.13 UJ	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 U	0.5 UJ	0.1 J	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.5 J	0.51 U	0.13 UJ	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 UJ	5 U	25 UJ	5 U	53 UJ	10 UJ	2.1 UJ	2.2 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	**9**	**13**	5 U	5 U	5 UJ	25 UJ	10 U	2.6 UJ	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	10 UJ	2 U	21 UJ	10 UJ	2.1 UJ	2.2 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 UJ	10 U	2.6 UJ	2.1 U
Caprolactam	ug/L	N	4000	5 UJ	5 U	25 UJ	5 U	53 UJ	16 UJ	3.1 UJ	3.4 U	3 U	5.3 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	25 UJ	15 U	3.8 UJ	3.1 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.69 J	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
Chrysene	ug/L	N	5	0.1 UJ	0.1 U	0.5 UJ	0.2 J	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 UJ	0.7 J	0.51 U	0.13 UJ	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 U	10 UJ	2 U	21 UJ	10 UJ	2.1 UJ	2.2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 UJ	10 U	2.6 UJ	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 UJ	5 U	25 UJ	5 U	53 UJ	26 UJ	5.2 UJ	5.6 U	5 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	25 UJ	25 U	6.4 UJ	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.5 UJ	0.1 U	1 UJ	0.52 UJ	0.1 UJ	0.11 U	**0.1J**	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.51 U	0.13 UJ	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.7 J	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.6 J	0.5 UJ	3 UJ	2.5 U	1.4 J	1.7 J
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	10 UJ	2 U	21 UJ	10 UJ	2.1 UJ	2.2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 UJ	10 U	2.6 UJ	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	10 UJ	2 U	21 UJ	10 UJ	2.1 UJ	2.2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 UJ	10 U	2.6 UJ	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3 U	15 UJ	3 U	32 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	1	0.5 J	0.6 J	3 U	3 U	3 U	3 UJ	15 UJ	2.5 U	0.64 UJ	0.51 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 U	0.5 UJ	0.2 J	1 UJ	0.52 UJ	0.1 UJ	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.4 J	0.1 U	0.1 U	0.1 UJ	0.9 J	0.51 U	0.13 UJ	0.1 U
Fluorene	ug/L	N	300	0.6 J	2	2 J	0.1 U	2 J	2.4 J	1.4 J	0.13 U	0.12 U	0.4 J	0.39 J	0.6	0.1 J	0.8	0.3 J	0.4 J	0.4 J	0.9	0.9	0.3 UJ	2 J	1.4 J	2.2 J	1.7
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 U	0.5 UJ	0.1 U	1 UJ	0.57 UJ	0.11 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.56 U	0.14 UJ	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 U	25 UJ	5 U	53 UJ	26 UJ	5.2 UJ	5.6 U	5 U	5.3 U	5.2 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	25 UJ	25 U	6.4 UJ	5.1 U
Hexachloroethane	ug/L	N	7	1 UJ	1 U	5 UJ	1 U	11 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	5 UJ	2.5 U	0.64 UJ	0.51 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 U	0.5 UJ	0.1 U	1 UJ	0.57 UJ	0.11 UJ	0.12 U	**0.19J**	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 UJ	0.5 UJ	0.56 U	0.14 UJ	0.11 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 UJ	0.7 U	4 UJ	0.7 U	7 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	4 UJ	2.5 U	0.64 UJ	0.51 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 UJ	0.7 U	4 UJ	0.7 U	7 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	4 UJ	2.5 U	0.64 UJ	0.51 U
Naphthalene	ug/L	N	300	6 J	6	0.5 UJ	0.1 U	1 UJ	0.52 UJ	0.1 UJ	0.11 U	1.3*1	0.84	0.1 U	1	0.3 J	3	1	1	0.4 J	0.1 U	2	0.1 UJ	1 J	0.85 J	0.13 UJ	1.2
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 U	3 UJ	0.5 U	5 UJ	2.6 UJ	0.52 UJ	0.56 U	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 UJ	2.5 U	0.64 UJ	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	3 UJ	0.5 U	17 U	5.2 U	1 U	1.1 U	1 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	8 U	5.1 UJ	1.3 UJ	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	5 UJ	1 U	11 U	5.2 U	1 U	1.1 U	1 U	1.1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	5 U	5.1 UJ	1.3 UJ	1 U
Phenanthrene	ug/L	N	NA	0.3 J	0.5 J	1 J	0.1 U	1 UJ	1.8 J	0.11 UJ	0.12 U	0.11 U	0.17 J	0.1 U	0.2 J	0.1 U	0.2 J	0.1 U	0.2 J	0.2 J	0.1 U	0.1 J	0.1 UJ	0.6 J	0.56 U	0.36 J	0.17 J
Phenol	ug/L	N	2000	0.8 J	0.5 U	3 UJ	0.5 U	5 U	2.6 U	0.52 U	0.56 U	0.5 U	0.53 UJ	0.52 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 U	2.5 UJ	0.64 UJ	0.51 U
Pyrene	ug/L	N	200	0.1 J	0.1 U	0.6 J	0.3 J	1 UJ	0.52 J	0.26 J	0.11 U	0.22 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 UJ	0.9 J	0.66 J	0.13 UJ	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	390 J	860 J	-	140 J	-	-	-	-	200 J	82 J	160 J	-	280 J	100 J	92 J	63 J	210 J	-	220 J	43 J	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-513	MW-513	MW-513	MW-513	MW-514	MW-514	MW-514	MW-514	MW-515	MW-515	MW-515	MW-515	MW-516	MW-516	MW-516	MW-516	MW-517	MW-517	MW-518	MW-518	MW-518	MW-519	MW-519
			Field Sample ID	M513A8	M513B1	M513B2	M513B3	M514B5	M514B6	M514B7	M514B8	M515A8	M515A9	M515B1	M515B2	M516B2	M516B3	M516B4	M516B5	M517B5	M517B6	M518A9	M518B1	M518B2	M519B5	M519B6
			Sample Date	06/22/2021	08/31/2021	01/11/2022	03/21/2022	07/01/2021	08/26/2021	10/28/2021	03/21/2022	07/01/2021	08/26/2021	10/28/2021	01/13/2022	06/19/2021	09/22/2021	12/17/2021	03/15/2022	06/22/2021	10/28/2021	06/22/2021	09/21/2021	12/14/2021	06/30/2021	09/23/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
2,4,6-Trichlorophenol	ug/L	N	20	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
2,4-Dichlorophenol	ug/L	N	20	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
2,4-Dimethylphenol	ug/L	N	100	3.1 UJ	3.5 U	3.2 U	3.1 U	3.5 U	3.1 U	3.1 U	3 U	3.1 U	3.4 U	3 U	3.1 U	3.3 U	3.1 U	3 U	3.1 U	3.2 U	3 U	3.1 U	3.3 U	3 U	3.6 U	3.3 U
2,4-Dinitrophenol	ug/L	N	40	15 UJ	16 U	15 U	14 U	16 U	14 U	14 U	14 U	14 U	16 U	14 U	14 U	15 U	14 U	14 U	14 U	15 U	14 U	15 U	15 U	14 U	17 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.47 U	0.43 U	0.41 U	0.47 U	0.41 U	0.41 U	0.4 U	0.41 U	0.45 U	0.4 U	0.41 U	0.44 U	0.41 U	0.4 U	0.41 U	0.43 U	0.4 U	0.42 U	0.44 U	0.41 U	0.48 U	0.44 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 UJ	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 U	4.7 U	4.3 U	4.1 U	4.7 U	4.1 U	4.1 U	4 U	4.1 U	4.5 U	4 U	4.1 U	4.4 U	4.1 U	4 U	4.1 U	4.3 U	4 U	4.2 U	4.4 U	4.1 U	4.8 U	4.4 U
3-Nitroaniline	ug/L	N	NA	2.1 U	2.3 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2.4 U	2.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.3 UJ	9.4 U	8.6 U	8.1 U	9.3 U	8.1 U	8.2 U	8 U	8.2 U	8.9 U	8 U	8.2 U	8.8 U	8.2 U	8 U	8.3 UJ	8.6 U	8.1 U	8.3 U	8.7 U	8.1 U	9.5 U	8.7 U
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
4-Chloroaniline	ug/L	N	30	4.2 U	4.7 U	4.3 U	4.1 U	4.7 U	4.1 U	4.1 U	4 U	4.1 U	4.5 U	4 U	4.1 U	4.4 U	4.1 U	4 U	4.1 U	4.3 U	4 U	4.2 U	4.4 U	4.1 U	4.8 U	4.4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	12	0.71 J	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
4-Nitroaniline	ug/L	N	NA	0.93 U	1.1 U	0.96 U	0.92 U	1 U	0.92 U	0.92 U	0.91 U	0.93 U	1 U	0.9 U	0.92 U	0.99 U	0.92 U	0.9 U	0.93 U	0.97 U	0.91 U	0.94 U	0.98 U	0.91 U	1.1 U	0.98 U
4-Nitrophenol	ug/L	N	NA	10 UJ	12 U	11 U	10 U	12 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	12 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.23 J	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Acetophenone	ug/L	N	700	1 U	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Atrazine	ug/L	N	3	1 U	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
Benzaldehyde	ug/L	N	NA	1 U	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	**0.42J**	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.13 U	0.12 U	0.11 U	**0.16J**	**0.13J**	0.11 U	**0.75**	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.18J	0.11J	**0.98**	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.68	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 J	1.2 J	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 UJ	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2.3 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 UJ	2 U	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2.4 U	2.2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2.3 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2.4 U	2.2 U
Caprolactam	ug/L	N	4000	37	12	26	3.1 U	3.5 U	3.1 U	3.1 U	3 U	3.1 U	3.4 U	3 U	3.1 U	3.3 U	3.1 U	3 U	21	63	3 U	4.8 J	9.3	3 U	3.6 U	50
Carbazole	ug/L	N	NA	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Chrysene	ug/L	N	5	0.1 U	0.12 U	0.11 U	0.1 U	0.13 J	0.1 U	0.1 U	0.76	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2.3 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2.4 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	5.2 U	5.9 U	5.4 U	5.1 U	5.8 U	5.1 U	5.1 U	5 U	5.1 U	5.6 U	5 U	5.1 U	5.5 U	5.1 U	5 U	5.2 U	5.4 U	5.1 U	5.2 U	5.5 U	5.1 U	6 U	5.4 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Diethylphthalate	ug/L	N	6000	2.1 U	2.3 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2.4 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2.3 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.1 U	2.2 U	2 U	2.4 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Fluoranthene	ug/L	N	300	0.1 U	0.12 U	0.11 U	0.1 U	0.2 J	0.19 J	0.13 J	0.98	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Fluorene	ug/L	N	300	0.12 U	0.14 U	0.13 U	0.12 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.13 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 U	5.9 U	5.4 U	5.1 U	5.8 U	5.1 U	5.1 U	5 U	5.1 U	5.6 U	5 U	5.1 U	5.5 U	5.1 U	5 U	5.2 U	5.4 U	5.1 U	5.2 U	5.5 U	5.1 U	6 U	5.4 U
Hexachloroethane	ug/L	N	7	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.13 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	**0.55**	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U	0.12 U
Isophorone	ug/L	N	40	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Naphthalene	ug/L	N	300	0.1 U	0.12 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Nitrobenzene	ug/L	N	6	0.52 U	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
p-Chloro-m-cresol	ug/L	N	NA	1 UJ	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1.2 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1.2 U	1.1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.13 U	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.39 J	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.12 U	0.11 U	0.13 U	0.12 U
Phenol	ug/L	N	2000	0.52 UJ	0.59 U	0.54 U	0.51 U	0.58 U	0.51 U	0.51 U	0.5 U	0.51 U	0.56 U	0.5 U	0.51 U	0.55 U	0.51 U	0.5 U	0.52 U	0.54 U	0.51 U	0.52 U	0.55 U	0.51 U	0.6 U	0.54 U
Pyrene	ug/L	N	200	0.1 U	0.12 U	0.11 U	0.1 U	0.26 J	0.16 J	0.13 J	1	0.1 U	0.11 U	0.11 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-519	MW-528	MW-528	MW-528	MW-528	MW-529	MW-529	MW-529	MW-529	MW-530	MW-530	MW-530	MW-530	MW-531	MW-531	MW-531	MW-532	MW-532	MW-532	MW-532	MW-533	MW-533	MW-533
			Field Sample ID	M519B7	M528A8	M528A9	M528B1	M528B2	M529A7	M529A8	M529A9	M529B1	M530A7	M530A8	M530A9	M530B1	M531A6	M531A7	M531A8	M532A7	M532C8	D1228211B	M532A9	M533A7	M533A8	M533A9
			Sample Date	12/14/2021	06/18/2021	08/31/2021	12/27/2021	03/30/2022	06/16/2021	08/31/2021	12/27/2021	03/30/2022	05/26/2021	09/16/2021	12/28/2021	03/29/2022	06/18/2021	10/04/2021	12/20/2021	06/18/2021	09/29/2021	12/28/2021	12/28/2021	06/29/2021	09/16/2021	12/20/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 UJ	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
2,4,6-Trichlorophenol	ug/L	N	20	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 UJ	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
2,4-Dichlorophenol	ug/L	N	20	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 UJ	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
2,4-Dimethylphenol	ug/L	N	100	3.7 U	3 U	3.1 UJ	3.1 U	3.1 UJ	3 U	3.1 U	3 U	3.1 UJ	3.1 U	3.1 U	3.3 UJ	3.1 U	3 U	3.1 U	3.3 U	3 UJ	3 UJ	3 UJ	3 UJ	3.3 U	3.1 U	3.3 U
2,4-Dinitrophenol	ug/L	N	40	17 U	14 U	14 UJ	14 U	14 UJ	14 U	14 U	14 U	14 UJ	14 U	15 U	15 UJ	14 U	14 U	14 U	15 U	14 UJ	14 UJ	14 UJ	14 UJ	15 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1.2 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
2-Chloronaphthalene	ug/L	N	600	0.49 U	0.41 U	0.41 UJ	0.41 U	0.41 U	0.4 U	0.41 U	0.4 U	0.41 U	0.41 U	0.42 U	0.44 U	0.41 U	0.4 UJ	0.41 U	0.44 U	0.41 U	0.4 U	0.4 U	0.4 U	0.44 U	0.41 U	0.44 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 UJ	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
2-Methyl-Naphthlalene	ug/L	N	30	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.15 J	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 UJ	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.2 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.2 U	1 U	1 UJ	1 U	1.0 UJ	1 U	1 U	1 U	1.0 UJ	1 U	1 U	1.1 UJ	1 U	1 U	1 U	1.1 U	1 UJ	1 UJ	1 UJ	1 UJ	1.1 U	1 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.9 U	4.1 U	4.1 UJ	4.1 U	4.1 U	4 U	4.1 U	4 U	4.1 U	4.1 U	4.2 U	4.4 U	4.1 U	4 UJ	4.1 U	4.4 U	4.1 U	4 U	4 U	4 U	4.4 U	4.1 U	4.4 U
3-Nitroaniline	ug/L	N	NA	2.4 U	2 U	2 UJ	2.1 U	2.0 U	2 U	2 U	2 U	2.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2 UJ	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9.8 U	8.1 U	8.1 UJ	8.3 U	8.1 UJ	8.1 U	8.2 U	8.1 U	8.1 UJ	8.3 U	8.3 U	8.8 UJ	8.3 U	8 U	8.2 U	8.7 U	8.1 UJ	8.1 UJ	8 UJ	8.1 UJ	8.8 U	8.2 U	8.7 U
4-Bromophenylphenylether	ug/L	N	NA	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
4-Chloroaniline	ug/L	N	30	4.9 U	4.1 U	4.1 UJ	4.1 U	4.1 U	4 U	4.1 U	4 U	4.1 U	4.1 U	4.2 U	4.4 U	4.1 U	4 UJ	4.1 U	4.4 U	4.1 U	4 U	4 U	4 U	4.4 U	4.1 U	4.4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 UJ	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
4-Nitroaniline	ug/L	N	NA	1.1 U	0.91 U	0.92 UJ	0.93 U	0.92 U	0.91 U	0.92 U	0.91 U	0.92 U	0.93 U	0.94 U	0.99 U	0.93 U	0.9 UJ	0.93 U	0.98 U	0.91 U	0.91 U	0.91 U	0.91 U	0.99 U	0.92 U	0.98 U
4-Nitrophenol	ug/L	N	NA	12 U	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	10 U	11 UJ	10 U	10 U	10 U	11 U	10 UJ	10 UJ	10 UJ	10 UJ	11 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.1 U	0.11 U	0.45 J	0.39 J	0.49 J	0.48 J	0.11 U	0.1 U	0.11 U
Acenaphthylene	ug/L	N	NA	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.71	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	1.2 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U
Anthracene	ug/L	N	2000	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.39 J	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Atrazine	ug/L	N	3	1.2 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U
Benzaldehyde	ug/L	N	NA	1.2 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	**0.15J**	**1.4**	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.13 U	0.11 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	**0.21J**	**2.5**	0.11 UJ	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.17J	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.15J	0.1 U	0.1 U	**0.3J**	**3**	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.1 U	0.14 J	2.3	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.12 J	**0.97**	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.4 U	2 U	2 UJ	2.1 U	2.0 U	2 U	2 U	2 U	2.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2 UJ	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U
Butylbenzylphthalate	ug/L	N	100	2.4 U	2 U	2 UJ	2.1 U	2.0 U	2 U	2 U	2 U	2.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2 UJ	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U
Caprolactam	ug/L	N	4000	3.7 U	3 U	65 J	3.1 U	3.1 U	30	21	34	3.1 U	3.1 U	3.1 U	3.3 U	3.1 U	3 UJ	3.1 U	3.3 U	3 U	3 U	3 U	3 U	3.3 U	3.1 U	3.3 U
Carbazole	ug/L	N	NA	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
Chrysene	ug/L	N	5	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.11 J	0.1 U	0.1 U	0.23 J	2	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2.4 U	2 U	2 UJ	2.1 U	2.0 U	2 U	2 U	2 U	2.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2 UJ	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	6.1 U	5.1 U	5.1 UJ	5.2 U	5.1 U	5 U	5.1 U	5 U	5.1 U	5.2 U	5.2 U	5.5 U	5.2 U	5 UJ	5.1 U	5.4 U	5.1 U	5.1 U	5 U	5 U	5.5 U	5.1 U	5.5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.77 J	0.55 J	0.83 J	0.84 J	0.55 U	0.51 U	0.55 U
Diethylphthalate	ug/L	N	6000	2.4 U	2 U	2 UJ	2.1 U	2.0 U	2 U	2 U	2.8 J	2.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2 UJ	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	2.4 U	2 U	2 UJ	2.1 U	2.0 U	2 U	2 U	2 U	2.0 U	2.1 U	2.1 U	2.2 U	2.1 U	2 UJ	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
Fluoranthene	ug/L	N	300	0.2 J	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.11 J	0.1 U	0.1 U	0.3 J	2.7	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Fluorene	ug/L	N	300	0.15 U	0.12 U	0.12 UJ	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	0.21 J	0.45 J	0.44 J	0.44 J	0.61	0.48 J	0.62 J	0.66	0.13 U	0.12 U	0.13 U
Hexachlorobenzene	ug/L	N	0.02	0.13 U	0.11 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
Hexachlorocyclopentadiene	ug/L	N	40	6.1 U	5.1 U	5.1 UJ	5.2 U	5.1 U	5 U	5.1 U	5 U	5.1 U	5.2 U	5.2 U	5.5 U	5.2 U	5 UJ	5.1 U	5.4 U	5.1 U	5.1 U	5 U	5 U	5.5 U	5.1 U	5.5 U
Hexachloroethane	ug/L	N	7	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.13 U	0.11 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	**0.16J**	**2.4**	0.11 UJ	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U
Isophorone	ug/L	N	40	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
Naphthalene	ug/L	N	300	0.12 U	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.25 J	0.1 UJ	0.1 U	0.11 U	0.56	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Nitrobenzene	ug/L	N	6	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 U	0.5 U	0.51 U	0.5 U	0.51 U	0.52 U	0.52 U	0.55 U	0.52 U	0.5 UJ	0.51 U	0.54 U	0.51 U	0.51 U	0.5 U	0.5 U	0.55 U	0.51 U	0.55 U
p-Chloro-m-cresol	ug/L	N	NA	1.2 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.1 UJ	1 U	1 U	1 U	1.1 U	1 UJ	1 UJ	1 UJ	1 UJ	1.1 U	1 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1.2 U	1 U	1 UJ	1 U	1.0 UJ	1 U	1 U	1 U	1.0 UJ	1 U	1 U	1.1 UJ	1 U	1 U	1 U	1.1 U	**6.4J**	1 UJ	**8.5J**	1 UJ	1.1 U	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.13 U	0.11 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.97	0.11 UJ	0.11 U	0.12 U	0.21 J	0.27 J	0.27 J	0.28 J	0.12 U	0.11 U	0.12 U
Phenol	ug/L	N	2000	0.61 U	0.51 U	0.51 UJ	0.52 U	0.51 UJ	0.5 U	0.51 U	0.5 U	0.51 UJ	0.52 U	0.52 U	0.55 U	0.52 U	0.5 U	0.51 U	0.54 U	0.51 UJ	0.51 UJ	0.5 UJ	0.5 UJ	0.55 U	0.51 U	0.55 U
Pyrene	ug/L	N	200	0.18 J	0.1 U	0.1 UJ	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	0.1 U	0.35 J	2.9	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-533	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R
			Field Sample ID	M533B1	TP2018X	TP2018A8X	TP2018B1X	TP2018B2X	TP2018B3X	TP2018B4X	TP2018B5X	TP2018B6X	TP2018B7X	TP2018RB8X	TP2018RB9X	TP2018RC1X	TP2018RC2X	TP2018RC3X	TP2018RC4X	D1109188	TP2018RC5X	TP2018RC6X	TP2018RC7X	TP2018RC8X	TP2018RC9X
			Sample Date	03/29/2022	06/29/2012	09/11/2012	08/13/2013	11/01/2013	02/11/2014	11/06/2014	07/02/2015	10/08/2015	12/08/2015	05/03/2017	08/23/2017	11/01/2017	02/06/2018	05/02/2018	08/15/2018	11/09/2018	11/09/2018	02/06/2019	07/26/2019	02/03/2020	09/02/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	3 U	5 U	8	7	3	5	2	0.5 U	0.5 U	5 U	2	2	0.5 U	2	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	14 U	110 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	100 U	10 U	11 U	11 U	10 U	14 U	15 U	15 U	15 U	14 U	14 UJ	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	10 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	4 U	0.5 U	0.7 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 UJ	0.41 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2-Methyl-Naphthlalene	ug/L	N	30	0.1 U	**790**	**150**	**210**	**160**	**180**	**110**	**120**	**150**	**460**	**54**	**58 J**	28	20	**35**	**40**	**43 J**	**38 J**	24	5 J	0.1 UJ	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3.1 UJ
3-Nitroaniline	ug/L	N	NA	2 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3.1 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	53 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 U	5 U	5 U	8 U	9 U	9 U	9 U	8 U	8 U	8 U	8.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
4-Chloroaniline	ug/L	N	30	4 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	4 U	4 U	4 UJ	4 UJ	4 U	4 UJ	4 UJ	4.1 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
4-Nitroaniline	ug/L	N	NA	0.91 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.9 U	1 U	1 UJ	1 UJ	0.9 U	0.9 UJ	0.9 UJ	0.92 UJ
4-Nitrophenol	ug/L	N	NA	10 U	110 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	100 U	10 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	42	4	6	4	4	4	4	5	20	1	2 J	0.1 U	0.7	1	2	2 J	1 J	0.1 U	1 J	2 J	2.3 J
Acenaphthylene	ug/L	N	NA	0.1 U	1 U	0.1 U	0.1 U	1	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
Acetophenone	ug/L	N	700	1 U	270	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5 U	51	30 J	13	14	12	14	4 UJ	4 UJ	4 U	4 UJ	4 UJ	4.1 UJ
Anthracene	ug/L	N	2000	0.1 U	19	1	1	0.6	1	0.5 J	0.7	0.9	10	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.2 J	0.7 J	0.4 J	0.1 U	0.3 J	0.1 UJ	0.1 UJ
Atrazine	ug/L	N	3	1 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	64	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 UJ	1 U	1 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3.1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**16**	**0.3J**	**0.8**	0.1 U	**0.7**	0.1 U	**0.2J**	**0.3J**	**8**	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1J	**0.4J**	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	0.43 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	**11**	**0.2J**	**0.7**	0.1 U	**0.5J**	0.1 U	**0.2J**	**0.3J**	**7**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	**0.33J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	**13**	**0.3J**	**0.7**	0.1 U	**0.6**	0.1 U	0.1J	0.1 U	**8**	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.2J	**0.48J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	6	0.1 J	0.3 J	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	3 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.2 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	**6**	0.2 J	0.4 J	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	**4J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.15 J
bis(2-Chloroethoxy)methane	ug/L	N	100	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5.1 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ
Caprolactam	ug/L	N	4000	10	53 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 UJ	5 U	5 U	7 J	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5.1 UJ
Carbazole	ug/L	N	NA	0.5 U	18	5	7	4	6	3	7	7	6J	1	1 J	0.6 J	0.5 U	0.5 J	0.9 J	0.7 J	0.6 J	0.5 U	0.6 J	0.5 UJ	0.99 J
Chrysene	ug/L	N	5	0.1 U	**14**	0.3 J	0.8	0.1 J	0.6	0.1 U	0.2 J	0.4 J	**8**	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.4 J	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.48 J
Di-n-butylphthalate	ug/L	N	700	2 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ
Di-n-octylphthalate	ug/L	N	100	5 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5.1 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	**2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**2J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	21	3	4	3	3	3	3	3	5 U	0.9 J	1 J	0.5 U	0.5 U	0.8 J	1 J	1 J	1 J	1 J	1 J	1 J	0.51 UJ
Diethylphthalate	ug/L	N	6000	2 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	21 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	31	3	4	2	4	2	2	2	5 U	0.7 J	0.7 J	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3.1 UJ
Fluoranthene	ug/L	N	300	0.1 U	30	0.8	2	0.4 J	2	0.3 J	0.5	0.9	15	0.2 J	0.3 J	0.3 J	0.1 U	0.1 J	0.3 J	0.8 J	0.4 J	0.1 U	0.3 J	0.6 J	1.2 J
Fluorene	ug/L	N	300	0.12 U	47	6	9	6	6	5	5	6	35	2	3 J	2	0.8	1	2	3 UJ	3 J	2	2 J	2 J	3 J
Hexachlorobenzene	ug/L	N	0.02	0.11 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	53 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	50 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5.1 UJ
Hexachloroethane	ug/L	N	7	0.5 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	10 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	**6**	**0.1J**	**0.3J**	0.1 U	**0.3J**	0.1 U	0.1 U	**0.2J**	**3J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	**0.1J**	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
Isophorone	ug/L	N	40	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	**45**	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.8 U	0.8 UJ	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.71 UJ
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2	2 J	5 U	0.6 J	0.5 UJ	0.5 U	0.5 U	0.7 U	0.8 U	0.8 UJ	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.71 UJ
Naphthalene	ug/L	N	300	0.1 U	**470**	180	230	190	210	150	180	190	210	58	58 J	20	21	32	31	23 J	22 J	16	6 J	0.1 UJ	0.1 UJ
Nitrobenzene	ug/L	N	6	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.51 UJ
p-Chloro-m-cresol	ug/L	N	NA	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	110	7	11	5	9	4	4	7	62	2	3 J	2	0.5	1	2	4 J	3 J	2	2 J	3 J	5 J
Phenol	ug/L	N	2000	0.5 U	20	22	18	13	11	11	9	0.5 U	5 U	0.5 U	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
Pyrene	ug/L	N	200	0.1 U	25	0.8	2	0.4 J	1	0.3 J	0.5	0.8	14	0.2 J	0.2 J	0.3 J	0.1 J	0.1 J	0.3 J	0.7 J	0.4 J	0.1 U	0.2 J	0.5 J	1.1 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	760 J	200 J	320 J	-	-	-	-	350 J	400 J	410 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A2 Central Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R
			Field Sample ID	D0304218	TP2018RD1X	TP2018RD2	TP2018RD3	TP2018RD4
			Sample Date	03/04/2021	03/04/2021	05/11/2021	10/05/2021	12/27/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	3.1 U	3 UJ	3.3 U	17 U
2,4-Dinitrophenol	ug/L	N	40	15 U	15 U	14 UJ	15 U	78 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 UJ	1 UJ	1 UJ	1.1 U	5.6 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
2-Chloronaphthalene	ug/L	N	600	0.42 UJ	0.42 UJ	0.4 UJ	0.44 U	2.2 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
2-Methyl-Naphthlalene	ug/L	N	30	0.11 UJ	0.1 UJ	2.2 J	0.11 U	0.56 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 UJ	1 UJ	1 UJ	1.1 U	5.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 UJ	1 UJ	1 UJ	1.1 U	5.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 UJ	4.2 UJ	4 UJ	4.4 U	22 U
3-Nitroaniline	ug/L	N	NA	2.1 UJ	2.1 UJ	2 UJ	2.2 U	11 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.4 U	8.4 U	8.1 UJ	8.8 U	45 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
4-Chloroaniline	ug/L	N	30	4.2 UJ	4.2 UJ	4 UJ	4.4 U	22 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
4-Nitroaniline	ug/L	N	NA	0.95 UJ	0.94 UJ	0.91 UJ	0.99 U	5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 UJ	11 U	56 U
Acenaphthene	ug/L	N	400	1.1 J	0.82 UJ	0.16 J	0.6	0.56 U
Acenaphthylene	ug/L	N	NA	0.51 J	0.1 UJ	0.1 UJ	0.11 U	0.56 U
Acetophenone	ug/L	N	700	1.1 UJ	1 UJ	1 UJ	1.1 U	5.6 U
Anthracene	ug/L	N	2000	0.34 J	0.25 J	0.1 UJ	0.17 J	0.56 U
Atrazine	ug/L	N	3	1.1 UJ	1 UJ	1 UJ	1.1 U	5.6 U
Benzaldehyde	ug/L	N	NA	1.1 UJ	1 UJ	1 UJ	1.1 U	5.6 U
Benzo(a)anthracene	ug/L	N	0.1	**0.18J**	0.1J	0.1 UJ	**0.22J**	0.56 U
Benzo(a)pyrene	ug/L	N	0.1	**0.16J**	0.12 UJ	0.11 UJ	0.12 U	0.61 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.2J	0.1 UJ	0.1 UJ	0.11 UJ	0.56 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 UJ	0.1 UJ	0.1 UJ	0.11 U	0.56 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.12 J	0.1 UJ	0.1 UJ	0.11 UJ	0.56 U
bis(2-Chloroethoxy)methane	ug/L	N	100	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 UJ	2.1 UJ	2 UJ	2.2 UJ	11 U
Butylbenzylphthalate	ug/L	N	100	2.1 UJ	2.1 UJ	2 UJ	2.2 U	11 U
Caprolactam	ug/L	N	4000	3.2 UJ	3.1 UJ	3 UJ	3.3 U	17 U
Carbazole	ug/L	N	NA	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
Chrysene	ug/L	N	5	0.24 J	0.1 UJ	0.1 UJ	0.11 UJ	0.56 U
Di-n-butylphthalate	ug/L	N	700	2.1 UJ	2.1 UJ	2 UJ	2.2 U	11 U
Di-n-octylphthalate	ug/L	N	100	5.3 UJ	5.2 UJ	5 UJ	5.5 UJ	28 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 UJ	0.1 UJ	0.1 UJ	0.11 U	0.56 U
Dibenzofuran	ug/L	N	NA	1.1 J	0.9 J	0.5 UJ	0.6 J	2.8 U
Diethylphthalate	ug/L	N	6000	2.1 UJ	2.1 UJ	2 UJ	2.2 U	11 U
Dimethyl phthalate	ug/L	N	NA	2.1 UJ	2.1 UJ	2 UJ	2.2 U	11 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
Fluoranthene	ug/L	N	300	0.42 J	0.24 J	0.1 UJ	0.39 J	0.56 U
Fluorene	ug/L	N	300	2.1 J	1.6 J	0.12 UJ	1.2	0.67 U
Hexachlorobenzene	ug/L	N	0.02	0.12 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.61 U
Hexachlorobutadiene	ug/L	N	1	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 UJ	5.2 UJ	5 UJ	5.5 U	28 U
Hexachloroethane	ug/L	N	7	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 UJ	0.12 UJ	0.11 UJ	0.12 U	0.61 U
Isophorone	ug/L	N	40	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
Naphthalene	ug/L	N	300	0.11 UJ	0.1 UJ	1.1 J	0.11 U	0.56 U
Nitrobenzene	ug/L	N	6	0.53 UJ	0.52 UJ	0.5 UJ	0.55 U	2.8 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 U	1 UJ	1.1 U	5.6 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 UJ	1.1 U	5.6 U
Phenanthrene	ug/L	N	NA	2.9 J	2.1 J	0.2 J	1.6	0.61 U
Phenol	ug/L	N	2000	0.53 U	0.52 U	0.5 UJ	0.55 U	2.8 U
Pyrene	ug/L	N	200	0.44 J	0.19 J	0.1 UJ	0.24 J	0.56 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. U = Not-detectable above minimum detection limit
6. J = Estimated value

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R
			Field Sample ID	MP01A1X	MP01A3X	MP01A4X	MP01A5X	MP01A6X	MP01A7X	MP01A8X	MP01A9X	MP01B1X	MP01B2X	MP01B3X	MP01RB4X	MP01RB5X	MP01RB6X	MP01RB7X	D0119178X	MP01RB8X	MP01RB9X	MP01RC1X	MP01RC2X	MP01RC3X	MP01RC4X	MP01RC5X
			Sample Date	11/13/2012	05/10/2013	07/09/2013	10/17/2013	12/11/2013	04/01/2014	07/15/2014	09/09/2014	01/14/2015	04/22/2015	07/16/2015	07/27/2016	09/01/2016	10/18/2016	12/07/2016	01/19/2017	01/19/2017	04/25/2017	07/12/2017	10/19/2017	01/09/2018	05/22/2018	08/17/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	20 U	100 U	20 U	10 U	2 U	2 U	4 UJ	10 UJ	4 U	2 U	10 U	2 U	4 U	4 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	10 U	50 U	10 U	5 U	1 U	1 U	2 UJ	5 UJ	2 U	1 U	5 U	1 UJ	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	20 U	100 U	20 U	10 U	2 U	2 U	4 UJ	10 UJ	4 U	2 U	10 U	2 U	4 U	4 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	10 U	50 U	10 U	5 U	1 U	1 U	2 UJ	5 UJ	2 U	1 U	5 U	1 U	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.3 J
1,2-Dichloroethane	ug/L	N	2	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	10 U	50 U	10 U	5 U	1 U	1 U	2 UJ	5 UJ	2 U	1 U	5 U	1 U	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	10 U	50 U	10 U	5 U	1 J	2 J	2 UJ	5 UJ	2 U	1 U	5 U	1 U	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.6 J
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	30 U	150 U	61 J	190	45	18	16 J	22 UJ	12 J	15	23 J	3 U	27	20	13	6 U	6 U	19	3 U	3 U	6 J	3 U	3 J
2-Hexanone	ug/L	N	40	30 U	150 U	41 J	17 J	3 U	3 U	6 UJ	23 J	6 U	13	15 U	7 J	6 U	6 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	30 U	150 U	30 U	15 UJ	3 U	3 U	6 UJ	18 J	6 U	11	15 U	3 U	6 U	6 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	60 U	420 J	60 U	400	73	28	38 J	32 J	12 U	6 U	56 J	6 U	28 J	46	29	12 U	12 U	27	6 U	6 U	20	6 U	0.7 U
Benzene	ug/L	N	1	**5300**	**12000**	**5000**	**4100**	**1800**	**1400**	**2000J**	**2700J**	**2200**	**3400**	**4400**	**2700**	**2000**	**1600**	**590**	**700**	**550**	**240**	**710**	**580**	**270**	**63**	**220**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon disulfide	ug/L	N	700	10 U	67 J	10 U	12 J	1 J	2 J	3 J	5 UJ	2 J	2 J	5 U	1 U	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.4 J
Carbon Tetrachloride	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 UJ	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	8 U	40 U	8 U	6 J	7	6	5 J	5 J	6	6	4 J	2	2 J	2	1	2 J	1 J	1	2	2	1	0.6 J	1
Chloroethane	ug/L	N	NA	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	1	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	310	610	250	390	270	240	310J	420J	190	210	320	450	430	560	140	150J	110J	130	31	13	14	2 J	3 J
Dibromochloromethane	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	20 U	100 U	20 U	10 U	2 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	190	340	160	170	170	120	130 J	120 J	100	150	170	240	240	220	120	130 J	100 J	110	200	170	55	13	4
Isopropylbenzene	ug/L	N	700	12 J	50 U	10 J	17 J	16	13	13 J	13 J	13	13	11 J	9	9 J	9 J	5	6 J	6 J	5 J	8	10	4 J	2 J	7
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	10 U	50 U	10 U	5 U	1 U	1 U	2 UJ	5 UJ	2 U	1 U	5 U	1 U	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	5 U	25 U	5 U	3 U	0.5 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	150	310	110	230	150	100	140J	240J	96	95	120	270	260	280	46	51	43	20	1 U	5 J	3 J	2 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	20 U	100 U	20 U	10 U	2 U	2 U	4 UJ	10 UJ	4 U	2 U	10 U	2 U	4 U	4 U	2 U	4 U	4 U	2 U	2 U	0.5 U	2	0.5 U	0.3 U
Styrene	ug/L	N	100	10 U	50 U	10 U	5 U	1 U	1 U	2 UJ	5 UJ	2 U	1 U	5 U	1 U	2 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	**2500**	**4900**	**1600**	**1200**	**860**	600	**610 J**	590 J	360	520	**900**	**2900**	390	110	21	51	62	8	15	20	8	2	6
trans-1,2-Dichloroethene	ug/L	N	100	8 U	40 U	8 U	4 U	0.8 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	1	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	20 U	100 U	20 U	10 U	2 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	10 U	50 U	10 U	5 U	1 U	0.5 U	1 UJ	3 UJ	1 U	0.5 U	3 U	0.5 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	930	**1800**	980	820	740	470	600 J	580 J	370	530	890	**1400**	990	310	160	190	160	140	220	88	28	9	6
Total TIC VOCS	ug/L	N	NA	6100 J	12000 J	6900 J	2700 J	4000 J	1200 J	1800 J	2300 J	1600 J	1900 J	2700 J	4300 J	3100 J	3200 J	1600 J	2500 J	2100 J	1700 J	2400 J	1900 J	1300 J	480 J	850 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02
			Field Sample ID	MP01RC6X	D0208198	MP01RC7X	D0506198	MP01RC8X	MP01RC9X	D0218208	MP01RD2X	D0515208	MP01RD3X	MP01RD4X	MP01RD5X	MP01RD6X	MP01RD7	MP01RD8	MP01RD9	MP01RE1	MP02A1X	MP02A3X	MP02A4X	MP02A5X	MP02A6X	MP02A7X
			Sample Date	11/12/2018	02/08/2019	02/08/2019	05/06/2019	05/06/2019	08/02/2019	02/18/2020	02/18/2020	05/15/2020	05/15/2020	09/04/2020	11/06/2020	02/04/2021	05/18/2021	08/25/2021	11/12/2021	02/08/2022	11/13/2012	05/10/2013	07/09/2013	10/17/2013	12/12/2013	04/03/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	0.8 U	16 U	16 U	4 U	8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 UJ	0.3 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.30 U	1.5 U	0.3 U	0.8 U	16 U	16 U	4 U	8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	1	0.30 U	1.5 U	0.3 U	0.8 U	16 U	16 U	4 U	8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	-	-	-	-	-	-	-	2 U	40 U	40 U	10 U	20 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 UJ	0.3 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 UJ	0.3 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.30 U	1.5 U	0.3 U	2 U	40 U	40 U	10 U	20 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	2 J	20 U	20 U	5 U	10 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.5 J	0.6 J	3 UJ	0.54 J	0.3 U	1.4	0.30 U	1.5 U	**6.3**	1 U	20 U	20 U	5 U	10 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.4 J	0.30 U	1.5 U	0.3 U	**5J**	20 U	20 U	5 U	10 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	7	20 U	20 U	5 U	10 U	1 J
1,4-Dichlorobenzene	ug/L	N	75	0.4 J	0.5 J	0.2 U	0.5 J	0.5 J	0.5 J	2 U	2 U	0.4 J	0.4 J	2 UJ	0.32 J	0.33 J	0.23 J	0.30 U	1.5 U	0.32 J	**100**	37 J	35 J	62	**77**	14
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2 J	0.3 U	0.3 U	3 J	4 J	3 J	150	65 J	33 J	85 J	46 J	5.1 J	0.3 U	30	25	17 J	9.6 UJ	5 J	60 U	60 U	53	30 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 J	5 J	3 UJ	0.3 U	0.3 U	2.2 J	2.1 J	2 U	0.68 J	3 U	60 U	60 U	15 U	30 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	2 J	3 J	5 UJ	0.5 U	0.5 U	1.1 J	1.2 J	2.5 U	0.61 J	3 U	60 U	60 U	15 UJ	30 U	3 U
Acetone	ug/L	N	6000	5 J	6 J	0.7 U	0.7 U	0.7 U	8 UJ	1400	600	150 J	310 J	180 J	15 J	7.9 J	170	100	63 J	0.7 U	6 U	130 J	120 U	150	60 U	6 U
Benzene	ug/L	N	1	**140**	**140**	**130**	**130**	**140**	**310J**	**410**	**270**	**89J**	**250J**	**55J**	**7.1**	**5.8**	**240**	**320**	**280**	**240**	**56**	**91J**	**110**	**94**	**52**	**110**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	10 U	10 U	1 UJ	1 UJ	10 UJ	1 U	1 U	1 U	1.0 U	5 U	1 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 UJ	0.3 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 J	0.3 J	0.2 U	7 J	4 J	6 J	10 J	3 J	0.3 J	0.28 J	7.9	3.2 J	2 J	5.4	1 U	29 J	20 U	5 U	10 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Chlorobenzene	ug/L	N	50	2	1	1	1	1	1	2 U	2 U	0.9 J	1 J	2 UJ	0.97 J	0.83 J	0.96 J	1.1	1.5 U	1.2	**120**	**140**	**120**	**120**	**57**	28
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.4 J	0.8 J	2 UJ	0.2 U	0.2 U	0.92 J	0.20 U	1 U	0.2 U	1 U	20 U	20 U	19 J	10 U	2
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	4 J	0.8 J	2 J	2 UJ	0.2 U	0.2 U	1.3 UJ	0.61 J	1.5 U	0.79 J	0.8 U	16 U	16 U	4 U	8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.3 J	0.4 J	0.2 U	73	26	8 J	24 J	47 J	2.9	1.1	19	2.2	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.29 J	0.30 U	1.5 U	0.42 J	0.8 U	16 U	16 U	4 U	8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Cyclohexane	ug/L	N	NA	4 J	3 J	0.2 U	0.2 U	0.2 U	10	44 J	53	43 J	53 J	20 J	1 U	5.7	59	56	29	74	170	60 J	57 J	45	20 U	33
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	2 U	40 U	40 U	10 U	20 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2	2	2	2	2	3	10 J	9 J	11 J	18 J	4 UJ	0.5 J	0.97 J	14	16	13	19	9	16 U	16 U	6 J	8 U	3
Isopropylbenzene	ug/L	N	700	3 J	4 J	3 J	3 J	3 J	5 J	2 U	2 U	2 J	2 J	2 UJ	0.32 J	0.5 J	0.95 J	1.2 J	1.2 J	2 J	34	20 U	20 U	12 J	10 U	4 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U	0.3 UJ	0.3 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	0.6 J	10 U	10 U	3 U	5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	3 J	3 J	3 J	0.2 U	3 J	1 U	9 J	14 J	19 J	15 J	5 J	5.8	5.1	15	17	9.3 J	23	300	94 J	90 J	74	10 U	45
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.5 J	0.4 J	2	3 U	3 U	**4J**	**4J**	3 UJ	0.37 J	0.3 U	0.3 U	1.9	1.5 U	2.8	2 U	40 U	40 U	10 U	20 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	0.8 U	16 U	16 U	4 U	8 U	0.5 U
Toluene	ug/L	N	600	3	2	2	2 J	3 J	5	45	29	11 J	31 J	10 J	0.83 J	1.1	67	78	32	36	7	14 U	14 U	8 J	7 U	5
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	0.8 U	16 U	16 U	4 U	8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	1.5 U	0.3 U	1 U	20 U	20 U	5 U	10 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	2 U	40 U	40 U	10 U	20 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	1 U	0.2 U	1 U	20 U	20 U	5 U	10 U	0.5 J
Xylene (total)	ug/L	N	1000	5	5	5	5 J	5	10	29 J	20 J	14 J	36 J	14 UJ	1.4 U	1.4 U	40	56	33	49	44	16 U	16 U	24 J	8 U	10
Total TIC VOCS	ug/L	N	NA	680 J	460 J	550 J	380 J	380 J	470 J	400 J	2300 J	500 J	610 J	-	-	-	-	-	-	-	1500 J	300 J	1400 J	850 J	0 U	260 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R
			Field Sample ID	MP02A8X	MP02A9X	MP02B1X	MP02B2X	MP02B3X	MP02RB4X	MP02RB5X	MP02RB6X	D1206168BX	MP02RB7X	MP02RB8X	MP02RB9X	MP02RC1X	MP02RC2X	MP02RC3X	MP02RC4X	MP02RC5X	MP02RC6X	MP02RC7X	MP02RC8X	MP02RC9X	MP02RD2X	MP02RD3X
			Sample Date	07/22/2014	09/09/2014	01/15/2015	04/22/2015	07/21/2015	07/27/2016	08/30/2016	10/18/2016	12/06/2016	12/06/2016	01/18/2017	04/17/2017	07/11/2017	10/18/2017	01/09/2018	05/22/2018	08/27/2018	11/12/2018	02/08/2019	05/07/2019	08/02/2019	02/18/2020	05/15/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.8 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	4 J	3 J	2 J	2 J	3 J	1 J	2 J	2 J	1 J	1 J	1 U	1 U	1 U	2 UJ	1 J	1 U	0.4 J	0.6 J	0.2 U	0.2 U	0.3 J	0.8 J	1 J
1,4-Dichlorobenzene	ug/L	N	75	54 J	50 J	29	26	41	25	29 J	25	18	19	5	1 U	10	18 J	17	1 J	6	9	0.4 J	0.5 J	4 J	11	18 J
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	4 J	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 J
2-Hexanone	ug/L	N	40	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	4 J	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Acetone	ug/L	N	6000	6 UJ	16 J	8 J	9 J	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	12 UJ	6 U	6 U	1 J	1 J	12 J	1 J	3 UJ	4 J	6 J
Benzene	ug/L	N	1	**180J**	**85J**	**83**	**180**	**150**	**12**	**15J**	**12**	**6**	**6**	0.5 U	0.5 U	**10**	**44J**	**8**	0.5 U	1	**2**	0.3 J	0.2 U	0.5 J	**3**	**5J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Bromoform	ug/L	N	4	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
Carbon disulfide	ug/L	N	700	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Chlorobenzene	ug/L	N	50	**98J**	**68J**	42	38	**66**	20	30 J	33	23	26	1	0.6 J	13	28 J	29	0.9 J	8	12	0.5 J	0.4 J	5	24	33 J
Chloroethane	ug/L	N	NA	3 J	2 J	0.5 U	0.5 U	0.6 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Chloroform	ug/L	N	70	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	2 J	1 J	0.8 J	0.7 J	0.5 U	0.8 J	1 J	1	0.6 J	0.7 J	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	0.6 J
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Cyclohexane	ug/L	N	NA	42 J	66 J	10	7	6	15	15 J	12	8 J	5 J	2 U	2 U	2 U	4 UJ	2 U	2 U	0.2 U	2 J	0.2 U	0.2 U	2 U	1 U	1 UJ
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	9 J	9 J	4	6	3	10	9 J	6	2	2	0.5 U	0.5 U	2	1 UJ	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ
Isopropylbenzene	ug/L	N	700	12 J	8 J	10	7	10	1 J	2 J	2 J	1 J	1 J	1 U	1 U	1 U	2 J	1 U	1 U	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 J	0.2 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ
Methyl-t-butyl ether	ug/L	N	70	0.8 J	0.5 UJ	0.5 U	0.5 U	0.6 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Methylcyclohexane	ug/L	N	NA	54 J	75 J	20	17	11	12	12 J	6	3 J	3 J	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	1 J	0.2 U	0.2 U	1 U	0.5 U	0.5 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 UJ	0.3 U	0.3 J
Styrene	ug/L	N	100	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Toluene	ug/L	N	600	6 J	4 J	2	3	3	3	2 J	1	0.6 J	0.6 J	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	1 J	0.6 J	0.5 J	0.5 U	1 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Xylene (total)	ug/L	N	1000	19 J	25 J	7	7	7	4	3 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Total TIC VOCS	ug/L	N	NA	640 J	850 J	370 J	400 J	460 J	92 J	75 J	74 J	130 J	100 J	0 U	0 U	50 J	59 J	5 J	0 U	0 U	0 U	0 U	0 U	25 J	13 J	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03R
			Field Sample ID	MP02RD4X	D1106208	MP02RD5X	D0204218	MP02RD6X	MP02RD7	MP02RD8	D1112218	MP02RD9	MP02RE1	MP03A1X	MP03A3X	MP03A4X	MP03A5X	MP03A6X	MP03A7X	MP03A8X	MP03A9X	MP03B1X	MP03B2X	MP03B3X	MP03RB4X
			Sample Date	09/01/2020	11/06/2020	11/06/2020	02/04/2021	02/04/2021	05/17/2021	08/25/2021	11/12/2021	11/12/2021	02/08/2022	11/13/2012	05/13/2013	07/02/2013	10/16/2013	12/11/2013	04/01/2014	07/10/2014	09/10/2014	01/09/2015	04/16/2015	07/21/2015	07/26/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.30 U	1.5 U	1.5 U	0.3 U	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2 U	4 U	2 U	4 U	2 U	2 U	2 U	4 U	2 U	4 U	4 U	4 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	3	4	2	2	2	1 J	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.30 U	1.5 U	1.5 U	0.3 U	2 U	4 U	2 U	4 U	2 U	2 U	2 U	4 U	2 U	4 U	4 U	4 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.34 J	0.40 J	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	**3J**	**10**	0.5 U	0.5 U	1 U	0.5 U	1 U	2 J	1 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	0.5 U	**3**	1 U	0.5 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.44 J	4 U	4 UJ	0.59 J	0.52 J	0.71 J	0.85 J	1.5 U	1.5 U	0.83 J	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	4.9	9 J	11 J	7.1 J	6.4 J	9.3	11	9.6 J	9.8 J	10	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.50 U	2.5 U	2.5 U	0.5 U	28	20 J	52	10 J	12	9 J	7 J	13 J	13	17 J	20 J	6 U
2-Hexanone	ug/L	N	40	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.40 U	2 U	2 U	0.4 U	3 U	6 U	3 U	6 U	3 U	3 U	3 U	6 U	3 U	6 U	6 U	6 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	10 U	10 UJ	0.5 UJ	0.5 UJ	0.5 U	0.50 U	2.5 U	2.5 U	0.5 U	3 U	6 U	3 U	6 U	3 U	3 U	3 U	6 U	3 U	6 U	6 U	6 U
Acetone	ug/L	N	6000	0.7 U	14 U	14 UJ	0.87 J	1.2 J	0.7 U	1.6 J	3.5 U	3.5 U	0.7 U	6 U	35 J	54	20 J	10 J	6 U	19 J	32 J	6 U	37 J	12 U	12 U
Benzene	ug/L	N	1	**1.8**	4 U	**13J**	**3.1J**	**3.3J**	**3.5**	**10**	**11**	**12**	**2.6**	**1200**	**660**	**850**	**1200**	**1100**	**310**	**820**	**910**	**1100**	**960**	**1100**	**33**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	1 U	20 U	20 UJ	1 UJ	1 UJ	1 U	1.0 U	5 U	5 U	1 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 UJ	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Carbon disulfide	ug/L	N	700	0.2 U	4 U	4 UJ	0.22 J	0.23 J	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	15	24	27 J	18 J	16 J	16	19	20	21	31	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Chloroethane	ug/L	N	NA	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	3 J	2 U	1 U	7 J	9	0.8 J	2	1 U	0.5 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	1.5	4 U	4 UJ	1.3 J	1.3 J	0.87 J	0.67 J	1.5 U	1.5 U	0.67 J	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	1 J	20 U	20 UJ	1.1 J	1 J	3 J	2.8 J	5 U	5 U	1 U	370	380	280	190	110	95	160	100	120	98	65	12
Dibromochloromethane	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	2 U	4 U	2 U	4 U	2 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	8 U	8 UJ	0.4 UJ	0.4 UJ	0.43 J	0.86 J	2 J	2 U	0.4 U	56	79	54	40	47	37	57	35	49	57	51	10
Isopropylbenzene	ug/L	N	700	0.2 U	4 U	4 UJ	0.27 J	0.25 J	0.37 J	0.57 J	1 U	1 U	0.25 J	24	18	14	12	15	13	17	15	22	17	18	2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	6 U	6 UJ	0.3 UJ	0.3 UJ	0.3 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Methylcyclohexane	ug/L	N	NA	0.87 J	10 U	10 UJ	0.76 J	0.78 J	0.65 J	0.51 J	2.5 U	2.5 U	0.5 U	260	180	150J	68	48	52	38	26	22	24	21	8 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	6 U	6 UJ	0.3 UJ	0.33 J	0.3 U	0.30 U	1.5 U	1.5 U	0.3 U	2 U	4 U	2 U	4 U	2 U	2 U	2 U	4 U	2 U	4 U	4 U	4 U
Styrene	ug/L	N	100	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	2 U	1 U	2 U	2 U	2 U
Tetrachloroethene	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Toluene	ug/L	N	600	0.2 U	4 U	4 UJ	0.35 J	0.38 J	0.54 J	0.96 J	1 U	1 U	0.24 J	50	40	29	19	18	9	14	8	22	22	31	1 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	0.8 U	2 U	0.8 U	2 U	0.8 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.30 U	1.5 U	1.5 U	0.3 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.20 U	1 U	1 U	0.2 U	2 U	4 U	2 U	4 U	2 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	4 U	4 UJ	0.2 UJ	0.2 UJ	0.2 J	0.26 J	1 U	1 U	0.2 U	1 U	2 U	1 U	2 U	1 U	0.5 U	0.6 J	1 U	0.5 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	1.4 U	28 U	28 UJ	1.4 UJ	1.4 UJ	1.4 U	0.61 J	2 U	2 U	0.4 U	100	130	50	20	10	8	9	3	5	6	8	2
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0.0 U	0 U	0 U	0 U	4300 J	3100 J	3600 J	3500 J	3100 J	2400 J	4000 J	3300 J	3000 J	3300 J	2900 J	100 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-04	MP-04
			Field Sample ID	MP03RB5X	D10201615	MP03RB6X	MP03RB7X	MP03RB8X	MP03RB9X	MP03RC1X	MP03RC2	MP03RC3X	MP03RC4X	MP03RC5X	MP03RC6X	MP03RC7X	MP03RC8X	MP03RC9X	D0903208	MP03RD1X	MP03RD2X	MP03RD3	D020420228A	MP03RD4	MP04A1X	MP04A3X
			Sample Date	08/29/2016	10/20/2016	10/20/2016	12/05/2016	01/17/2017	04/17/2017	07/07/2017	10/19/2017	01/09/2018	05/21/2018	08/27/2018	11/13/2018	02/08/2019	05/09/2019	08/05/2019	09/03/2020	09/03/2020	02/04/2021	08/25/2021	02/04/2022	02/04/2022	11/13/2012	05/13/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U	100 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	2 U	200 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U	100 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	100 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	2 U	200 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**2.3J**	0.3 U	0.30 U	0.3 U	0.3 U	1 U	100 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	**4J**	100 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	3 J	100 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	9	100 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2.1 J	0.3 U	0.50 U	2.5 J	2.9 J	5 J	300 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	0.4 U	3 U	300 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	3 U	300 U
Acetone	ug/L	N	6000	10 J	6 U	6 U	8 J	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	3 J	0.7 U	0.7 U	0.7 U	22 J	1.1 UJ	0.70 U	13 J	18 J	6 U	600 U
Benzene	ug/L	N	1	**230**	**10**	**10**	**4**	0.5 U	**2**	**3**	**15**	**2**	**2**	**4**	**3**	**2**	0.8 J	0.9 J	**1.9J**	**5.7J**	0.69 J	0.38 J	**4.4**	**4.5**	**260**	**270J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	100 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	100 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	1.6 J	0.2 U	0.30 U	0.3 U	0.34 J	1 U	100 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U	100 U
Chlorobenzene	ug/L	N	50	0.6 J	0.7 J	0.7 J	0.5 J	0.5 U	0.5 U	0.6 J	0.6 J	0.5 U	0.5 U	0.5 J	0.6 J	0.4 J	0.2 U	0.2 J	0.55 J	0.59 J	0.2 U	0.32 J	0.31 J	0.3 J	**90**	**120J**
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
Cyclohexane	ug/L	N	NA	33	15	16	4 J	2 U	2 U	2 U	2 U	2 U	2 U	0.7 J	3 J	2 J	0.5 J	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	240	200 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	2 U	200 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	37	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	24	80 U
Isopropylbenzene	ug/L	N	700	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	28	100 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	100 U
Methyl-t-butyl ether	ug/L	N	70	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 J	50 U
Methylcyclohexane	ug/L	N	NA	19	3 J	3 J	1 U	1 U	1 U	1 U	1 U	2 J	1 U	0.4 J	2 J	2 J	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	280	100 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	1	0.5 U	0.3 U	0.5 J	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	1.2	1.4	2 U	200 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U	100 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
Toluene	ug/L	N	600	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 J	0.3 J	0.2 U	0.2 UJ	0.2 U	0.53 J	0.2 U	0.20 U	0.33 J	0.31 J	16	70 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	80 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.3 U	1 U	100 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	2 U	200 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	100 U
Xylene (total)	ug/L	N	1000	27	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.40 U	0.4 U	0.4 U	59	80 U
Total TIC VOCS	ug/L	N	NA	250 J	120 J	120 J	260 J	0 U	220 J	200 J	0 U	170 J	52 J	23 J	150 J	160 J	25 J	9 J	-	0 U	-	0.0 U	0 U	0 U	2300 J	0

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR
			Field Sample ID	MP04A4X	MP04A5X	MP04A6X	MP04A7X	MP04A8X	MP04RB1X	MP04RB3X	MP04RB4X	MP04RRB5X	MP04RRB6X	MP04RRB7X	MP04RRB8X	MP04RRB9X	MP04RRC1X	MP04RRC2X	MP04RRC3X	MP04RRC5X	MP04RRC6X	D1115188	MP04RRC7X	MP04RRC8X	MP04RRC9X
			Sample Date	08/01/2013	10/16/2013	12/11/2013	04/03/2014	07/15/2014	09/10/2014	04/21/2015	07/23/2015	07/27/2016	08/29/2016	10/19/2016	12/07/2016	01/25/2017	04/17/2017	07/10/2017	10/18/2017	05/21/2018	08/27/2018	11/15/2018	11/15/2018	02/07/2019	05/07/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	16 U	8 U	8 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	16 U	8 U	8 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	16 U	8 U	8 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	40 U	20 U	20 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	20 U	10 U	10 U	5 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	5 UJ	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	40 U	20 U	20 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	20 U	10 U	10 U	5 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	20 U	10 U	10 U	5 U	3 J	3 J	1 J	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	20 U	10 U	12 J	14 J	16 J	15	6	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	60 U	**900**	**380**	49 J	5 J	5 J	3 J	5 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 UJ	3 U	0.3 U	0.3 U	0.3 U	0.9 J	0.3 U
2-Hexanone	ug/L	N	40	60 U	30 U	30 U	15 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	60 U	30 U	30 U	15 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	160 J	1600	550	120	11 J	20 J	14 J	57	6 U	6 U	6 U	6 J	6 U	6 U	6 U	30 UJ	6 U	0.7 U	0.9 J	0.7 U	10 J	1 J
Benzene	ug/L	N	1	**1000**	**680**	**1100**	**1300**	**590J**	**530**	**490**	**270**	**7**	**82**	**13**	1	**15**	1	**11**	**3J**	0.5 U	0.4 J	0.3 J	0.2 U	0.2 J	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	20 U	10 U	10 U	5 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	**160**	**75**	**130**	**130**	**150J**	**150**	**55**	**74**	0.5 U	0.8 J	0.5 J	0.5 U	0.6 J	0.6 J	1	3 UJ	0.5 U	0.5 J	0.8 J	0.6 J	0.3 J	0.2 U
Chloroethane	ug/L	N	NA	20 U	21 J	29 J	35	11 J	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	16 U	8 U	8 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	16 U	8 U	8 U	3 U	3 J	2	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	120	52	120	120	150J	54	25	21	2 U	4 J	2 U	2 U	5 J	2 U	2 U	10 UJ	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	40 U	20 U	20 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	16 U	8 U	10 J	21	36 J	32	12	17	1 J	25	3	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	20 U	10 U	14 J	17 J	23 J	21	7	11	1 U	1 J	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 J	0.3 J	0.2 J	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	20 U	10 U	10 U	5 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	10 U	5 U	5 U	3 U	0.8 J	0.9 J	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	120	42 J	100	88	85 J	14	7	6	1 U	1 U	1 U	1 U	1 J	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	40 U	20 U	20 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	20 U	10 U	10 U	5 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	16 U	8 U	8 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	29 J	14 J	19 J	66	21 J	11	10	6	0.7 J	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	16 U	8 U	8 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	20 U	10 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	40 U	20 U	20 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	20 U	10 U	10 U	3 U	**2J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	55 J	21 J	28 J	86	85 J	46	31	32	2	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	1 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	920 J	310 J	1400 J	1300 J	1200 J	1200 J	590 J	420 J	0 U	78 J	0 U	0 U	48 J	0 U	230 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043
			Field Sample ID	MP04RRD1X	MP04RRD2X	MP04RRD3X	MP04RRD4	MP04RRD5	M043C7X	M043C8X	M043C9X	M043D1X	M043D2X	M043D3X	M043D4X	M043D5X	M043D6X	D0329171	M043D7X	M043D8X	M043D9X	M043E1X	M043E2X	M043E3X	M043E4X	M043E5X
			Sample Date	08/05/2019	09/01/2020	02/05/2021	08/24/2021	02/03/2022	05/01/2012	08/28/2012	06/25/2013	10/02/2013	06/17/2014	11/05/2014	07/10/2015	03/18/2016	09/28/2016	03/29/2017	03/29/2017	09/12/2017	02/22/2018	05/10/2018	08/01/2018	11/27/2018	02/22/2019	05/13/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.3 UJ	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 UJ	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	1.1 J	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 UJ	1.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.63 J	1.8 J	**3.4J**	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
1,4-Dichlorobenzene	ug/L	N	75	0.3 J	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.5 UJ	2.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	-	3 U	-	0.3 U	-
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.4 UJ	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	-	3 U	-	0.3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.54 J	2.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	-	3 U	-	0.5 U	-
Acetone	ug/L	N	6000	2 J	3.3 J	1.8 J	4 UJ	3.5 U	6 U	6 U	6 U	8 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	-	6 U	-	3 J	-
Benzene	ug/L	N	1	1	0.23 J	0.97 J	**18J**	**26**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 UJ	5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.3 U	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	0.2 U	-
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Chlorobenzene	ug/L	N	50	0.8 J	0.76 J	0.59 J	0.55 J	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 UJ	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	0.2 U	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	-	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.89 J	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.4 U	-
Isopropylbenzene	ug/L	N	700	0.7 J	0.2 U	0.2 U	0.3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	0.3 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
Methyl-t-butyl ether	ug/L	N	70	0.2 J	0.2 U	0.2 U	0.2 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.3 J	-
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	2.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.42 J	1.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	0.5 U	-	0.3 U	-
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.2 U	-
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.68 J	1.2 J	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 UJ	1.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.2 U	-
Xylene (total)	ug/L	N	1000	1 U	1.4 U	1.4 U	0.65 J	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	1 U	-
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 UJ	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0051	MW-0051	MW-0073	MW-0073	MW-0073	MW-0073	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090
			Field Sample ID	M043E6X	M043E7X	M043E8X	M043E9X	M043F2	M043F3	M043F4	M051C1X	M051C2X	M073C2X	M073C3X	M073C4	M073C5	D1218128	M090C8	M090C9X	M090D1X	M090D2X	M090D3X	M090D4X	M090D5X	M090D6X	M090D7X
			Sample Date	08/20/2019	11/07/2019	05/15/2020	11/11/2020	05/12/2021	12/27/2021	02/03/2022	05/08/2012	07/03/2013	05/08/2012	11/25/2015	05/20/2016	06/14/2017	12/18/2012	12/18/2012	11/26/2013	09/16/2014	12/16/2015	05/20/2016	05/17/2017	11/21/2017	02/01/2018	03/05/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	0.2 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 UJ	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	-	0.3 U	0.3 U	0.3 U	0.5 U	0.50 U	-	-	-	-	-	-	3 U	3 U	-	-	-	-	-	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	-	0.3 U	0.3 U	0.3 U	0.4 U	0.40 U	-	-	-	-	-	-	3 U	3 U	-	-	-	-	-	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	-	-	-	-	-	-	3 U	3 U	-	-	-	-	-	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	-	4 J	8.5 UJ	3.2 J	0.7 U	0.84 J	-	-	-	-	-	-	6 U	6 U	-	-	-	-	-	6 U	6 U	0.7 U
Benzene	ug/L	N	1	0.6 J	2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	**12**	**43**	0.5 U	0.5 U	0.5 U	0.5 U	**3J**	0.9 J	1 J	0.5 U	0.5 U	0.9 J	**19**	**3**	0.9 J	0.2 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	-	1 U	1 U	1 U	1 U	1.0 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	-	1 U	1 U	1 U	1 U	1.0 U	-	-	-	-	-	-	14	13	-	-	-	-	-	9	4 J	2 J
Dibromochloromethane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	1 U	1.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.8 J	1 J	0.8 U	0.5 U	0.5 U	0.5 U	5 J	14 J	2 J	3	0.5 U	0.8 J	6	1	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	5 J	2 J	-	-	-	-	-	5 J	2 J	2 J
Methane	ug/L	N	NA	-	-	-	-	13000	7600	400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	0.2 U	0.42 J	0.74 J	0.31 J	0.20 U	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	-	-	-	-	-	-	5	3 J	-	-	-	-	-	4 J	1 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	-	0.2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.3 J	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	4 J	4 J	0.7 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.6 J	0.5 U	0.5 U	2	0.8 J	0.5 U	0.3 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	-	1 U	1.4 U	1.4 U	0.4 U	0.40 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	1 J	0.8 U	0.8 U	0.5 J	0.5 U	0.5 U	3	1	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	0 U	0 U	0.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	360 J	230 J	190 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7
			Field Sample ID	M090D8X	M090D9X	M090E1X	M090E2X	M0090E3X	M090E4X	M090E5X	M090E6X	M090E6	M090E8	M090E9	M006B6X	M006B7X	M006B8X	M006B9X	M006C1X	M006C2X	M006C3X	M006C4X	M007B5X	M007B6X	M007B9X	M007C4X
			Sample Date	05/17/2019	08/14/2019	11/01/2019	02/10/2020	05/14/2020	08/11/2020	11/12/2020	01/25/2021	05/04/2021	08/17/2021	10/11/2021	05/02/2012	07/10/2013	09/30/2014	01/07/2016	02/22/2017	02/20/2018	02/20/2019	03/30/2020	05/02/2012	07/10/2013	06/19/2014	10/02/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	0.7 U	8 J	6 J	0.7 U	0.7 U	0.7 U	4.2 UJ	3.3 UJ	2.4 UJ	0.7 U	0.7 U	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	1	0.9 J	0.9 J	1 J	0.9 J	0.2 U	0.2 U	0.26 J	0.2 U	0.3 U	0.3 U	**7**	**6**	**14**	**11**	**20**	**16**	**4**	**13**	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	1 J	5 J	2 J	1 J	13	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 J	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 J	5 J	2 J	1 J	1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	1 J	5 J	3 J	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.4 J	0.7 J	0.6 J	0.3 J	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	1 U	1 UJ	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.8 U	0.8 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	110 J	330 J	190 J	160 J	130 J	0 U	0 U	-	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
			Field Sample ID	M007C6X	M007D1X	M007D3X	M007D4X	M007D5X	M008B8X	D0710131B	M008B9X	M008C1X	M009C1X	M009C2X	M009C3X	M009C4X	M009C5X	M009C6X	M009C8	M010B6	M010B6	M010B7X	M010B8X	M010B9X	M010C1X	M010C2X
			Sample Date	01/07/2016	02/22/2017	02/20/2018	02/20/2019	03/30/2020	05/30/2012	07/10/2013	07/10/2013	11/01/2013	06/20/2013	06/20/2014	03/11/2016	03/30/2017	03/28/2018	03/26/2019	06/29/2021	03/28/2013	03/28/2013	01/14/2014	08/20/2014	09/17/2014	10/21/2014	01/20/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	5 J	-	-	-	-	-	-	-	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	19 J	-	-	-	-	-	-	-	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 UJ	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	0 U	0 UJ	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
			Field Sample ID	M010C3X	M010C4	D0421167	M010C5X	M010C6X	M010C7	M010C8X	M010C9X	M014B5X	M014B6X	M014B7X	M014B8X	M014B9X	M014C4X	M014C6X	M014C7X	M014C8X	M014C9X	M014D1X	M014D2X	M014D3X	M014D4X	D0629211
			Sample Date	10/21/2015	12/04/2015	04/21/2016	04/21/2016	09/13/2016	06/02/2017	10/26/2017	02/13/2019	05/02/2012	06/25/2013	09/23/2014	07/08/2015	01/07/2016	02/17/2017	08/25/2017	03/27/2018	08/14/2018	03/25/2019	09/18/2019	03/26/2020	09/23/2020	03/02/2021	06/29/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 UJ	2 U	2 U	-	2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 UJ	1 U	1 U	-	1 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 UJ	2 U	2 U	-	2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	3 UJ	3 U	3 U	-	3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U
2-Hexanone	ug/L	N	40	3 U	-	3 UJ	3 U	3 U	-	3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 UJ	3 U	3 U	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U
Acetone	ug/L	N	6000	6 U	-	6 UJ	6 U	6 U	-	6 U	0.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Bromoform	ug/L	N	4	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Carbon disulfide	ug/L	N	700	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Chloroform	ug/L	N	70	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Cyclohexane	ug/L	N	NA	2 U	-	2 UJ	2 U	2 U	-	2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	0.5 UJ	0.5 UJ	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U
Methyl acetate	ug/L	N	7000	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 UJ	2 U	2 U	-	0.5 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Styrene	ug/L	N	100	1 U	-	1 UJ	1 U	1 U	-	1 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 UJ	1 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	-	11 J	0 U	-	-	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-14	MW-14	MW-14	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R
			Field Sample ID	M014D5	M014D6	M014D8	M131B7X	M131B8X	D1108138	M131B9X	M131C1X	M131C2X	M131C3	M131C4	M131C5X	M131BT01	M131C6	M131C7X	M131C8X	D0219162	M131C9X	M131RD1	M131RD1X	M131RD2	M131RD2X	D1201168B
			Sample Date	06/29/2021	09/27/2021	02/03/2022	06/06/2012	04/30/2013	11/08/2013	11/08/2013	01/08/2014	06/10/2014	03/17/2015	06/29/2015	07/20/2015	09/25/2015	10/05/2015	10/30/2015	12/02/2015	02/19/2016	02/19/2016	06/06/2016	06/06/2016	09/06/2016	09/06/2016	12/01/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	-	-	20 U	2 U	-	10 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	10 U	1 U	-	5 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.30 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	20 U	2 U	-	10 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.20 U	5 J	4 J	4 J	4 J	2 J	2 J	-	-	10 U	1 U	-	5 U	1 U	1 U	1 J	-	1 U	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.30 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	10 U	1 U	-	5 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	10 U	1 U	-	5 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.50 U	6 J	9 J	3 U	3 U	3 U	5 J	-	-	30 U	9 J	-	19 J	11	14	14	-	8 J	-	3 U	6 J
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.40 U	3 U	3 U	3 U	3 U	3 U	3 U	-	-	30 U	3 U	-	15 U	3 U	3 U	3 U	-	3 U	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.50 U	3 U	3 U	3 U	3 U	3 U	3 U	-	-	30 U	3 U	-	15 U	3 U	3 U	3 U	-	3 U	-	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.70 U	18 J	13 J	6 U	6 U	6 U	17 J	-	-	60 U	90	-	130	100	47	46	-	77	-	6 U	42 J
Benzene	ug/L	N	1	0.3 U	0.3 U	0.30 U	**370**	**380**	**210**	**220**	**220**	**270**	-	-	**140**	**44**	-	**45**	**50**	**110**	**120**	-	**5**	-	**3**	**18**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	5	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	10 U	6	-	5 U	1 J	1 U	1 U	-	1 U	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	1	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.7 J	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	13 J	-	3 U	1 J	0.7 J	0.6 J	-	1	-	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1.0 U	70	66	26	29	7	21	-	-	20 U	2 J	-	10 U	2 U	2 J	3 J	-	3 J	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.20 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Ethane	ug/L	N	NA	1 U	1 U	1.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.40 U	25	17	6 J	8 J	2 J	9	-	-	5 U	0.5 U	-	3 U	1	4	5	-	3	-	0.5 U	2
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.20 U	2 J	1 J	1 J	1 J	1 U	1 U	-	-	10 U	1 U	-	5 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U
Methane	ug/L	N	NA	3 U	3 U	3.0 U	-	-	-	-	-	-	3900	4500	-	-	4000 J	-	-	-	-	3460	-	7200	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	10 U	1 U	-	5 U	1 U	1 J	1 U	-	1 U	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.50 U	22	19	10	12	2 J	2 J	-	-	10 U	1 U	-	5 U	1 U	1 U	1 U	-	1 J	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.30 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	20 U	**4J**	-	10 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	10 U	1 U	-	5 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.25 J	8	9	8	10	1 J	5	-	-	5 U	0.6 J	-	3 U	2	2	2	-	7	-	0.5 U	4
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.30 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.20 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	-	5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.20 U	1 U	1 U	1 U	1 U	1 U	0.5 U	-	-	5 U	0.5 UJ	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.40 U	94	70	55	60	11	25	-	-	20	1	-	6	8	8	9	-	17	-	0.7 J	12
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0.0 U	-	-	300 J	330 J	170 J	-	-	-	0 U	0 U	-	0 U	22 J	-	-	-	41 J	-	6 J	14 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132
			Field Sample ID	M131RD4X	M131RD6X	M131RD7X	M131RD8X	D0315181	M131RD9X	M131RE1X	M131RE2X	M131RE3X	M131RE4X	D121220191	M131RE5X	M131RE6X	M131RE9	M131RF1	M131RF2	M131RF3	M132C2X	D1114127	M132C3X	D0510138	M132C5X	D0703138
			Sample Date	12/01/2016	03/03/2017	06/06/2017	12/06/2017	03/15/2018	03/15/2018	06/04/2018	12/04/2018	03/12/2019	06/24/2019	12/12/2019	12/12/2019	03/17/2020	06/30/2021	10/05/2021	12/16/2021	02/11/2022	04/23/2012	11/14/2012	11/14/2012	05/10/2013	05/10/2013	07/03/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	100 U	100 U	100 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	100 U	100 U	100 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 J	2 J	3 J	50 U	50 U	50 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	17	20	24	50 U	50 U	50 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	9 J	7 J	6 J	150 U	150 U	150 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	150 U	150 U	150 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	150 U	150 U	150 U
Acetone	ug/L	N	6000	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	2 J	0.7 U	0.7 U	0.7 U	0.7 U	17 J	9 J	6 J	300 U	300 U	300 U
Benzene	ug/L	N	1	0.7 J	**2**	0.6 J	**2**	0.5 U	0.5 U	0.5 U	0.2 U	**4**	0.8 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	**590**	**430**	**360**	**640**	**610**	**820J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	50 U	50 U	50 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 UJ
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	40	50 J	**66J**	40 U	40 U	40 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 UJ
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	200	210	200	150J	150J	170J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	100 U	100 U	100 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2 J	1.3 J	1.2 J	1 U	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	1	0.5 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	62	64	61	40 U	47 J	71 J
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	13	11	12	50 U	50 U	50 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2000	9700	3700	72	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.7 J	0.7 J	25 U	25 U	25 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	180	150	160	100 J	130J	160J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	100 U	100 U	100 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
Toluene	ug/L	N	600	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	86	160	150	58 J	110 J	160 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	40 U	40 U	40 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	50 U	50 U	50 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	100 U	100 U	100 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	50 U	50 U	50 U
Xylene (total)	ug/L	N	1000	0.5 U	0.6 J	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	1 U	2 J	1 J	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	210	210	200	64 J	110 J	230 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	-	-	0 U	0 U	8 J	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	-	500 J	1500 J	370 J	580 J	1700 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R
			Field Sample ID	M132C6X	D1018138	M132C7X	D1212138	M132C8X	D0403148	M132C9X	D0711148	M132D1X	D0911148B	M132D2X	D0115158B	M132D3X	D0421158	M132D4X	D0722158	M132D5X	D0726168	M132RD5X	D0830168	M132RD6X	M132RD7X	M132RD8X
			Sample Date	07/03/2013	10/18/2013	10/18/2013	12/12/2013	12/12/2013	04/03/2014	04/03/2014	07/11/2014	07/11/2014	09/11/2014	09/11/2014	01/13/2015	01/15/2015	04/21/2015	04/21/2015	07/22/2015	07/22/2015	07/26/2016	07/26/2016	08/30/2016	08/30/2016	10/18/2016	12/06/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	40 U	8 U	8 U	8 U	8 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	40 U	8 U	8 U	8 U	8 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	50 U	10 UJ	10 UJ	10 U	10 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	40 U	8 U	8 U	8 U	8 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	100 U	20 U	20 U	20 U	20 U	2 U	2 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	4 U	4 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	50 U	10 U	10 U	10 U	10 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	2 U	2 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	100 U	20 U	20 U	20 U	20 U	2 U	2 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	4 U	4 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	50 U	10 U	10 U	10 U	10 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	2 U	2 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	50 U	10 U	10 U	10 U	10 U	1 U	1 U	5 U	5 J	5 U	5 U	6	7	1 U	1 U	2 J	2 J	2 U	2 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	50 U	24 J	23 J	19 J	25 J	6	6	40	44	28	28	53	59	7	7	13 J	13 J	4 UJ	4 UJ	4 J	4 J	4 J	2 J
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	150 U	150	140	47 J	65 J	16 J	12 J	17 J	15 U	15 U	15 U	10 J	8 J	29	31	23 J	28 J	6 U	6 U	6 J	7 J	3 U	3 U
2-Hexanone	ug/L	N	40	150 U	30 U	30 U	30 U	30 U	3 U	3 U	15 U	15 U	15 U	15 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	6 U	6 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	150 U	30 UJ	30 UJ	30 U	30 U	4 J	4 J	15 U	15 U	15 U	15 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	6 U	6 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	300 U	380	390	170 J	220 J	36 J	27 J	40 J	40 J	30 U	34 J	37	31	54	54	45 J	60 J	29 J	54	15 J	14 J	6 U	16 J
Benzene	ug/L	N	1	**520J**	**160**	**150**	**220J**	**170J**	**490**	**510**	**300**	**260**	**240**	**230**	**220**	**220**	**600**	**600**	**360J**	**480J**	**9**	**6**	**220J**	**290J**	**21**	**61**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	50 UJ	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	50 U	12 J	10 J	10 U	10 U	2 J	2 J	5 U	5 U	5 U	5 U	1 J	1 J	1 U	1 U	2 J	2 J	2 U	2 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	40 U	30 J	29 J	27 J	36 J	7	8	37	45	36	35	**65**	**74**	8	8	13 J	13 J	1 J	1 J	2	2	1	1
Chloroethane	ug/L	N	NA	50 UJ	10 U	10 U	10 U	10 U	4	5	3 U	3 U	3 U	3 U	0.5 U	0.5 U	2	2	1 J	1 J	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	40 U	8 U	8 U	8 U	**92J**	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	40 U	8 U	8 U	8 U	8 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2	2	0.6 J	0.5 J	0.9 J	0.8 J	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	130J	21 J	20 U	46 J	20 U	110	140	45	36	28	27	32	32	87	100	63 J	32 J	4 U	4 U	14 J	19 J	2 J	5 J
Dibromochloromethane	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	100 U	20 U	20 U	20 U	20 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	40 U	12 J	11 J	24 J	14 J	71	77	42	33	30	29	33	31	130	130	87 J	67 J	1 J	1 U	23 J	30 J	2	13
Isopropylbenzene	ug/L	N	700	50 U	10 U	10 U	10 U	10 U	11	12	11 J	8 J	5 J	5 J	7	7	14	15	13 J	10 J	2 U	2 U	1 J	2 J	1 U	1 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	50 U	10 U	10 U	10 U	10 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	2 U	2 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	25 U	5 U	5 U	5 U	5 U	0.6 J	0.5 J	3 U	3 U	3 U	3 U	0.7 J	0.7 J	0.5 U	0.5 U	0.5 J	0.6 J	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	110J	22 J	21 J	40 J	22 J	86 J	120J	38 J	29 J	18 J	19 J	26	26	45	52	36 J	19 J	2 J	2 U	7	8	1 J	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	100 U	20 U	20 U	20 U	20 U	2 U	2 U	10 U	10 U	10 U	10 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	4 U	4 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	50 U	10 U	10 U	10 U	10 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	2 U	2 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	40 U	8 U	8 U	8 U	8 U	0.5 U	0.5 U	**3J**	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	55 J	16 J	14 J	14 J	14 J	9	9	13	14	11	11	13	14	17	17	14 J	11 J	2 J	1 J	6	7	1	2
trans-1,2-Dichloroethene	ug/L	N	100	40 U	8 U	8 U	8 U	8 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	100 U	20 U	20 U	20 U	20 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	50 U	10 U	10 U	10 U	10 U	0.5 U	0.5 J	3 U	3 U	3 U	3 U	0.5 J	0.6 J	0.5 U	0.5 U	0.8 J	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	73 J	35 J	25 J	74 J	42 J	250	270	120 J	93 J	77	75	90	89	180	200	140 J	110 J	1 J	1 U	9 J	12 J	0.5 U	2
Total TIC VOCS	ug/L	N	NA	750 J	1400 J	1300 J	600 J	1800 J	1600 J	1700 J	3400 J	2100 J	910 J	840 J	2000 J	1900 J	1300 J	470 J	1300 J	1400 J	54 J	17 J	260 J	310 J	110 J	180 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR
			Field Sample ID	M132RD9X	M132RE1X	M132RE2X	M132RE3X	M132RE4X	M132RE5X	M132RE6X	M132RE8X	M132RE9X	D0201191B	M132RF1X	D0509191	M132RF2X	M132RF3X	D0226201X	M132RF7X	M132RRF9X	M132RRG1X	M132RRG2X	M132RRG3X	D0517218	M132RRG4	M132RRG5
			Sample Date	01/26/2017	04/18/2017	07/06/2017	10/18/2017	01/09/2018	04/27/2018	05/24/2018	08/28/2018	11/19/2018	02/01/2019	02/01/2019	05/09/2019	05/09/2019	08/15/2019	02/26/2020	02/26/2020	05/19/2020	08/19/2020	11/06/2020	02/04/2021	05/17/2021	05/17/2021	08/26/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2	2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	4 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1	1 J	0.6 J	0.36 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	4 UJ	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	**7**	**8**	0.3 U	0.64 J	0.36 J	0.3 U	0.71 J	0.67 J	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 J	2 UJ	1 U	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U	0.5 J	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	6 UJ	3 U	3 U	3 U	0.9 J	0.3 U	0.3 U	0.3 U	1 J	1 J	0.3 U	19 J	25 J	0.9 J	0.3 U	0.3 U	0.3 U	2.1 J	1.7 J	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	6 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	6 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	7 J	6 U	7 J	12 UJ	6 U	6 U	6 U	12 J	1 J	0.7 U	0.8 J	3 J	2 J	1 J	210	240	9 J	1.4 UJ	3.2 J	0.96 UJ	18 J	15 J	2 J
Benzene	ug/L	N	1	**2**	1	**9**	**6J**	**9**	1	1	**3**	**2**	0.4 J	0.4 J	**9**	**8**	**2**	1 J	**2J**	**2**	**2**	**1.1**	0.96 J	**1.8**	**1.7**	**1.6**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	2 UJ	1 U	1 UJ	1 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	33	41	0.7 J	0.2 U	0.2 U	0.2 U	4 J	3.5 J	0.66 J
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.7 J	1 UJ	0.7 J	0.5 U	0.5 U	0.4 J	0.2 U	0.2 U	0.2 U	0.7 J	0.6 J	0.4 J	0.2 J	0.2 J	0.4 J	0.55 J	0.2 U	0.29 J	0.31 J	0.2 U	0.3 J
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 J	0.8 J	0.2 U	0.2 U	0.2 U	0.2 U	0.65 J	0.67 J	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	24	25	1	0.2 U	0.2 U	0.2 U	0.94 UJ	0.9 UJ	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	43 J	58 J	0.2 U	0.2 U	0.2 U	0.2 U	4.2	3.1	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.24 J	0.2 U	0.23 J	0.28 J	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	4 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.6 J	2.3 J	1.1 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.6 J	1 UJ	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	1 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	**46**	**52**	0.6 J	0.3 U	0.3 U	0.3 U	1.7	1.6	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	2 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.6 J	1 UJ	0.5 U	0.5 U	0.5 U	0.4 J	0.2 U	0.2 U	0.2 U	0.5 J	0.5 J	0.3 J	0.2 U	0.2 J	0.2 J	0.35 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	120 J	11 J	35 J	-	0 U	0 U	0 U	0 U	0 U	17 J	16 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-132RR	MW-132RR	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142
			Field Sample ID	M132RRG6	M132RG7	M141B6X	M141B7X	D0917141	M141B8X	M141B9X	M141C1X	M141C2X	M141C3X	M141C4X	M141C5X	M141C6X	M142B6X	M142B7X	M142B8X	M142B9X	M142C1X	M142C2X	M142C3X	M142C4X	M142C5X	M142C6X
			Sample Date	11/23/2021	02/03/2022	06/05/2012	07/02/2013	09/17/2014	09/17/2014	12/08/2015	09/27/2016	03/03/2017	02/21/2018	02/21/2019	02/19/2020	01/22/2021	06/05/2012	07/16/2013	11/14/2014	12/08/2015	02/11/2016	03/02/2017	02/21/2018	02/21/2019	02/20/2020	01/28/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.38 J	0.59 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	3.3 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	2.5 J	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	**1.6**	**5.9**	**4J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1.6 J	5.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	0.3 U	0.33 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.3 U	0.67 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	1 U	1.3 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.9 J	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	1.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.2 U	0.39 J	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144
			Field Sample ID	M143B6X	M143B7X	M143B8X	M143B9X	M143C1X	M143C2X	D0221181	M143C3X	M143C4X	M143C5X	M143C6X	M144C1X	M144C2X	D0924141	M144C3X	M144C4X	M144C5X	M144C6X	M144C7X	M144C8X	M144C9X	M144D6X	M144D9
			Sample Date	06/05/2012	07/02/2013	09/17/2014	10/02/2015	03/04/2016	03/02/2017	02/21/2018	02/21/2018	02/19/2019	02/17/2020	02/05/2021	06/08/2012	05/31/2013	09/24/2014	09/24/2014	05/27/2016	09/14/2016	12/27/2016	05/31/2017	05/30/2018	05/30/2019	06/12/2020	06/23/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 UJ	40 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	15 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 UJ	40 U	-	-	-	-	15 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	10 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	15 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	15 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30 UJ	60 U	-	-	-	-	25 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30 UJ	60 U	-	-	-	-	20 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30 UJ	60 U	-	-	-	-	25 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60 UJ	120 U	-	-	-	-	35 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	25 U	5 UJ	10 U	1 U	0.5 U	4 U	4 U	15 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	50 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	15 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 UJ	40 U	-	-	-	-	50 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.3 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	25 U	5 UJ	10 U	1 U	0.5 U	8 U	8 U	20 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	10 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2300
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	15 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	25 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20 UJ	40 U	-	-	-	-	15 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 UJ	20 U	-	-	-	-	15 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	25 U	5 UJ	10 U	1 U	0.5 U	4 U	4 U	10 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	15 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 UJ	10 U	-	-	-	-	10 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	25 U	5 UJ	10 U	1 U	0.5 U	20 U	28 U	20 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	-	-	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-144	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146
			Field Sample ID	M144E1	M145B5X	M145B6X	M145B7X	M145B8X	M145B9X	M145C1X	M145C2X	M145C3X	M145C4X	M145C5X	M146B6X	M146B7X	M146B9X	M146C1X	M146C2X	M146C3X	M146C4X	M146C5X	M146C6X	M146C7X	M416C5X	M146C8X
			Sample Date	09/23/2021	05/03/2012	06/25/2013	09/23/2014	11/20/2015	01/05/2016	03/07/2017	02/15/2018	02/05/2019	01/31/2020	01/28/2021	05/01/2012	06/27/2013	11/20/2015	09/28/2016	02/28/2017	02/15/2018	04/19/2018	01/29/2019	11/15/2019	05/29/2020	06/18/2020	09/01/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.26 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.3 U	0.3 U	0.24 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.37 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.43 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	-	-	2 U	2 U	-	0.2 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	1.1	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	0.3 U	0.3 U	0.37 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	1.5 UJ	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	-	-	2 U	2 U	-	0.3 U	0.3 U	0.38 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.50 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	0.2 U	0.2 U	0.43 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.3 U	0.3 U	1.7	0.3 U
1,2-Dichloropropane	ug/L	N	1	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.35 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	0.2 U	0.2 U	0.34 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	0.2 U	0.2 U	0.33 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2.5 U	-	-	-	3 U	-	-	-	-	-	-	-	-	3 U	-	-	3 U	3 U	-	2 J	0.3 U	1.9 U	0.3 U
2-Hexanone	ug/L	N	40	2 U	-	-	-	3 U	-	-	-	-	-	-	-	-	3 U	-	-	3 UJ	3 U	-	0.3 U	0.3 U	1.1 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	2.5 U	-	-	-	3 U	-	-	-	-	-	-	-	-	3 U	-	-	3 U	3 U	-	0.5 U	0.5 U	1.3 U	0.5 U
Acetone	ug/L	N	6000	3.5 U	-	-	-	6 U	-	-	-	-	-	-	-	-	6 U	-	-	6 U	6 U	-	5 UJ	0.7 U	4.4 U	3.3 J
Benzene	ug/L	N	1	1.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	**7**	0.5 U	0.5 U	**20**	**6**	0.5 U	0.5 U	1 J	0.7 J	**11**	0.20 U	0.63 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.34 U	0.2 U
Bromoform	ug/L	N	4	5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	1 U	1 U	0.54 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.3 U	0.3 U	0.55 UJ	0.3 U
Carbon disulfide	ug/L	N	700	1.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	0.2 U	0.2 U	0.82 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.21 U	0.2 U
Chlorobenzene	ug/L	N	50	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.38 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.32 U	0.2 U
Chloroform	ug/L	N	70	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.33 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.40 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.22 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.22 U	0.2 U
Cyclohexane	ug/L	N	NA	5 U	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	-	-	2 U	2 U	-	2 J	2 J	0.32 U	1 U
Dibromochloromethane	ug/L	N	1	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.28 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.31 U	0.2 U
Ethane	ug/L	N	NA	1.1 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.30 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	1 J	0.8 J	0.34 U	0.99 J
Methane	ug/L	N	NA	9700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 UJ	1 U	-	0.2 U	0.3 U	0.79 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	1 U	-	-	-	0.7 J	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.4 J	0.2 J	0.47 U	0.35 J
Methylcyclohexane	ug/L	N	NA	2.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	7	5 J	0.26 U	5.6
Methylene chloride (Dichloromethane)	ug/L	N	3	1.5 U	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	-	-	0.5 U	0.5 U	-	0.3 U	0.3 U	0.32 U	0.3 U
Styrene	ug/L	N	100	1.5 U	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	1 U	1 U	-	0.2 U	0.2 U	0.42 U	0.2 U
Tetrachloroethene	ug/L	N	1	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.25 U	0.2 U
Toluene	ug/L	N	600	1 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	3	0.5 U	0.5 U	0.5 U	0.2 U	0.6 J	0.4 J	0.38 U	0.58 J
trans-1,2-Dichloroethene	ug/L	N	100	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.24 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.49 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1.5 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.31 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 U	0.32 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	-	-	-	0.5 U	-	-	-	-	-	-	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.2 U	0.2 UJ	0.17 U	0.2 U
Xylene (total)	ug/L	N	1000	2 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	3	4	0.5 U	0.5 U	1 U	2 J	1 U	0.65 U	1.6 J
Total TIC VOCS	ug/L	N	NA	0 U	-	-	-	0 U	-	-	-	-	-	-	-	-	0 U	-	-	0 U	0 U	-	140 J	66 J	0.0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-149
			Field Sample ID	M146C9X	M146D1X	M146D2	M146D3	M146D4	M146D5	M148B7X	M148B8X	M148C2X	M148C3	M148C4	D0307171	M148C6X	M148C7X	D0205191	M148C8X	M148C9X	M148D1X	M148D2	D0917211	M148D3	M149C1X
			Sample Date	11/11/2020	03/01/2021	05/14/2021	08/20/2021	11/09/2021	02/02/2022	05/03/2012	06/25/2013	01/05/2016	06/08/2016	09/08/2016	03/07/2017	03/07/2017	02/22/2018	02/05/2019	02/05/2019	02/07/2020	03/31/2021	06/03/2021	09/17/2021	09/17/2021	06/14/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 UJ	0.3 UJ	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	5 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	0.4 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	1.1 UJ	0.7 U	0.7 U	0.7 U	1.7 UJ	7.6 UJ	-	-	-	-	-	-	-	-	-	-	-	-	0.7 U	0.7 U	0.7 U	10 J
Benzene	ug/L	N	1	**1.3**	**29**	**46**	0.3 J	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**16**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	1 U	28	15	1.3 J	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	28
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	1.2	0.5 J	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1 J
Isopropylbenzene	ug/L	N	700	2.3 J	3.8 J	2.8 J	0.28 J	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	21
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	250	150	-	-	-	-	-	-	-	25	34	33	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.46 J	0.31 J	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 J
Methylcyclohexane	ug/L	N	NA	13	19	9.5	0.53 J	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	23
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
Toluene	ug/L	N	600	1.1	2.5	1.9	0.26 J	0.45 J	0.2 U	0.7 U	0.7 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	4 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	1 U
Xylene (total)	ug/L	N	1000	2.8 J	4.2 J	2.8 J	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.4 U	10
Total TIC VOCS	ug/L	N	NA	-	-	-	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149
			Field Sample ID	M149C2X	M149C3X	M149C4X	M149C5X	M149C6X	M149C7X	M149C8	M149C9	M149D1	M149D2	M149D3X	M149D4	M149D5X	M149D6X	M149D7X	D0219201X	M149D8X	M149D9X	M149E1X	D1118201	M149E2X	M149E3	M149E4
			Sample Date	05/31/2013	09/24/2014	12/17/2015	05/27/2016	09/21/2016	12/20/2016	06/01/2017	02/22/2018	05/30/2018	08/28/2018	11/20/2018	02/04/2019	05/03/2019	08/30/2019	11/13/2019	02/19/2020	02/19/2020	05/26/2020	08/19/2020	11/18/2020	11/18/2020	06/21/2021	12/17/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 J	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.55 J	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	2 U	0.2 UJ	0.2 UJ	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 J	3 U	3 U	4 J	0.3 U	1 J	0.7 J	0.6 U	3 U	2 J	3 J	0.3 U	2.7 J	0.3 U	0.3 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 UJ	6 U	6 U	6 U	10 J	8 J	9 J	17 J	2 J	9 J	4 UJ	1 U	7 U	9 J	9 J	0.7 U	10 UJ	0.7 U	8.1 J	0.7 U	0.7 U
Benzene	ug/L	N	1	**2J**	**2**	**4**	1	0.5 U	0.8 J	1	**3**	**5**	**8**	**13**	**2**	**3**	0.4 U	2 U	**2**	**2**	0.2 U	**2.9**	**3.1**	**2.9**	**2.3**	**4.1**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	4 J	9	11	8	2 U	2 J	2 U	6	6	5 J	12	4 J	2 UJ	2 U	10 U	3 J	2 J	1 U	1.2 J	1.9 J	1.9 J	2.9 J	3 J
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 J	0.4 U	0.4 U	0.8 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	2 J	3 J	14	5 J	1 U	1 U	1 J	8	7	6	3 J	2 J	2 J	0.4 U	2 U	12 J	8 J	0.2 J	3.2 J	3.9 J	3.5 J	1.3 J	1 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000	16000
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.8 J	0.7 J	3	1	0.5 J	0.5 J	0.5 U	0.6 J	0.7 J	0.8 J	0.5 J	0.3 J	0.3 J	0.4 U	2 U	0.4 J	0.4 J	0.3 J	0.36 J	0.35 J	0.36 J	0.28 J	0.2 U
Methylcyclohexane	ug/L	N	NA	7	9	16	10	5	4 J	4 J	13	12 J	10	19	8	6	1 U	5 U	14 J	10 J	3 J	4.8 J	6.6	5.6	6.5	6.9 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.7 U	0.7 J	2	0.7 J	0.5 U	0.5 U	0.5 U	1	1	2	2	0.5 J	0.3 J	0.4 U	2 U	1	0.9 J	0.2 U	0.78 J	0.72 J	0.61 J	0.32 J	0.59 J
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 J	2	6	2	0.5 U	0.6 J	0.7 J	3	3	3 J	3 J	1 U	1 U	3 U	14 U	3 J	2 J	1 U	2 J	1.5 J	1.4 J	0.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	0 U	36 J	-	110 J	100 J	58 J	110 J	26 J	26 J	0 U	0 U	130 J	79 J	17 J	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-149	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-152	MW-152
			Field Sample ID	M149E5	M151C1X	M151C2X	M151C2	M151C3X	M151C4X	M151C5X	M151C6X	M151D9X	M151E1X	M151E2	M151E3X	M151E6X	D0315191	M151E8X	M151F1X	M151F3X	M151F4	M151F5	M151F6	M151F7	D0712131	M152C3X
			Sample Date	03/31/2022	06/20/2012	07/11/2013	08/16/2013	10/30/2013	01/09/2014	08/15/2014	11/06/2014	09/29/2016	09/22/2017	10/25/2017	02/16/2018	10/09/2018	03/15/2019	03/15/2019	03/03/2020	03/11/2021	05/27/2021	07/29/2021	10/22/2021	03/23/2022	07/12/2013	07/12/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.3 UJ	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	-	-	-	2 U	-	2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.3 J	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	-	2 U	2 U	2 U	-	-	-	2 U	-	2 U	0.3 UJ	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.3 UJ	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	-
1,2-Dichloropropane	ug/L	N	1	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	-	-	3 U	3 U	3 UJ	-	-	-	3 U	-	3 U	0.6 J	0.3 U	0.3 U	-	-	0.3 U	0.5 U	0.5 U	0.5 U	-	-
2-Hexanone	ug/L	N	40	0.4 U	-	-	3 U	3 U	3 U	-	-	-	3 U	-	3 U	0.3 UJ	0.3 U	0.3 U	-	-	0.3 U	0.4 U	0.4 U	0.4 U	-	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	-	3 U	3 U	3 UJ	-	-	-	3 U	-	3 U	0.5 UJ	0.5 U	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	-	-
Acetone	ug/L	N	6000	1.1 J	-	-	6 U	6 U	6 U	-	-	-	6 U	-	6 U	4 UJ	0.9 UJ	0.7 U	-	-	0.7 U	0.79 J	1.1 J	0.7 U	-	-
Benzene	ug/L	N	1	0.32 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Bromoform	ug/L	N	4	1 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	1 U	1 U	1 U	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.3 UJ	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.3 UJ	0.3 U	-	-
Carbon disulfide	ug/L	N	700	0.3 UJ	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Carbon Tetrachloride	ug/L	N	1	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Chlorobenzene	ug/L	N	50	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Chloroethane	ug/L	N	NA	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 UJ	0.2 U	-	-
Chloroform	ug/L	N	70	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Cyclohexane	ug/L	N	NA	1.2 J	-	-	2 U	2 U	2 U	-	-	-	2 U	-	2 U	0.2 UJ	0.2 U	0.2 U	-	-	1 U	1 U	1 U	1 U	-	-
Dibromochloromethane	ug/L	N	1	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	-	2 U	2 U	2 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Ethane	ug/L	N	NA	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	8.5	1 U	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1.1 J	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	2.9 J	0.2 U	-	-
Methane	ug/L	N	NA	17000	-	-	11000	-	-	9500	-	-	-	-	-	-	-	-	-	-	100	3 U	6200	3 U	-	-
Methyl acetate	ug/L	N	7000	0.3 U	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	-	0.5 U	0.5 U	0.5 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Methylcyclohexane	ug/L	N	NA	5.7	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	-	2 U	2 U	2 U	-	-	-	0.5 U	-	0.5 U	0.3 UJ	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	-
Styrene	ug/L	N	100	0.3 U	-	-	1 U	1 U	1 U	-	-	-	1 U	-	1 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Tetrachloroethene	ug/L	N	1	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Toluene	ug/L	N	600	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	-	-	0.8 U	0.8 U	0.8 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.3 U	0.3 U	0.3 U	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	-	2 U	2 U	2 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	-	1 U	1 U	1 U	-	-	-	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.2 UJ	0.2 U	-	-
Xylene (total)	ug/L	N	1000	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 UJ	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	10 J	0 U	0 U	-	-	-	0 U	-	0 U	0 U	0 U	0 U	-	-	-	0 U	-	0 U	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-152	MW-152	MW-152	MW-152	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153
			Field Sample ID	M152C4	M152C5	M152C6	M152C7	M153C2X	M153C3X	M153C4X	M153C5X	M153C6X	M153C7X	M153C8X	M153C9X	M153D1X	M153D2X	M153D3X	M153D4X	M153D5X	M153D6X	M153D7X	M153D8X	M153D9X	M153E1	M153E2
			Sample Date	03/18/2015	06/30/2015	10/06/2015	11/25/2015	06/06/2012	09/05/2012	07/03/2013	10/04/2013	06/11/2014	01/14/2015	01/07/2016	08/05/2016	02/28/2017	08/29/2017	03/13/2018	08/30/2018	03/14/2019	08/28/2019	03/11/2020	08/19/2020	02/04/2021	05/27/2021	10/20/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7 U	0.7 U
Benzene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	-	-	-	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Methane	ug/L	N	NA	7400	8800	12000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	4.5 J
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Toluene	ug/L	N	600	-	-	-	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	-	-	-	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-155	MW-155R	MW-155R	MW-155R	MW-156	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-157	MW-157	MW-157	MW-157	MW-157	MW-157	MW-157	MW-157
			Field Sample ID	M155C1X	M155RA1X	M155RA3X	M155RA4X	M156C1X	M156A1X	M156RA2X	M156RA3X	M156RA4X	M156RA5X	D0324201	M156RA7X	M156RA8	M156RA9	M156RB1	M157B5X	M157B6X	M157B7X	M157B8X	M157B9X	M157C1X	M157C2X	M157C3X
			Sample Date	06/08/2012	07/26/2016	03/09/2017	03/29/2018	06/08/2012	11/05/2015	03/18/2016	03/09/2017	03/29/2018	03/27/2019	03/24/2020	03/24/2020	05/03/2021	10/22/2021	02/14/2022	06/27/2012	07/02/2013	09/17/2014	12/08/2015	09/27/2016	03/03/2017	03/13/2018	10/16/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	3 U	1 UJ	0.8 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	10 U	4 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	10 U	4 UJ	2 U	2 U	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	3 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	15 U	6 UJ	3 U	3 U	3 U	3 U	3 UJ	0.3 U	0.4 J	0.3 U	0.3 U	0.5 U	0.5 U	-	-	-	-	-	-	-	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	15 U	6 UJ	3 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	-	-	-	-	-	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	15 U	6 UJ	3 U	3 UJ	3 U	3 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	5 U
Acetone	ug/L	N	6000	6 U	6 U	30 U	12 U	6 U	6 U	6 U	6 U	6 U	5 UJ	3 J	2 J	0.7 U	1.1 J	0.7 U	-	-	-	-	-	-	-	7 U
Benzene	ug/L	N	1	0.5 U	**100**	**82**	**66**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**3J**	0.7 J	0.5 U	0.5 U	**2**	0.5 U	0.5 U	2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Bromoform	ug/L	N	4	1 U	0.5 U	3 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	3 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 UJ	0.3 U	-	-	-	-	-	-	-	3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	3 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	-	-	-	-	-	-	2 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	10 U	4 U	2 U	2 U	2 U	2 U	2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	2 U
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	3 U	1 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	93	81	88	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U
Isopropylbenzene	ug/L	N	700	4 J	9	9 J	10 J	1 U	15	14	2 J	1 U	4 J	3 J	3 J	4.1 J	3 J	4 J	-	-	-	-	-	-	-	2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	14000	12000	-	-	-	-	-	-	-	-	15
Methyl acetate	ug/L	N	7000	1 U	1 U	5 U	2 UJ	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	10 U	1 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	3 U
Styrene	ug/L	N	100	1 U	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Toluene	ug/L	N	600	0.7 U	6	7	6	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	3 U	1 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	3 U	1 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 U	-	-	-	-	-	-	-	2 U
Xylene (total)	ug/L	N	1000	0.8 U	170	170	170	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U
Total TIC VOCS	ug/L	N	NA	-	4700 J	-	-	-	-	-	-	-	56 J	-	-	-	-	-	-	-	-	-	-	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-157	MW-157	MW-157	MW-157	MW-157	MW-157	MW-157	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172
			Field Sample ID	M157C4X	M157C5X	M157C6X	M157C7X	M157C8X	M157C9X	M157D1	M172B9X	M172C1X	M172C2X	M172C4X	D1105141	M172C5X	M172C6X	M172C7X	M172C8X	M172C9X	M172D1X	M172D2X	M172D3X	M172D4X	D0820191A	M172D5X
			Sample Date	12/06/2018	03/21/2019	02/25/2020	09/30/2020	01/22/2021	03/04/2021	08/27/2021	06/20/2012	09/07/2012	07/11/2013	06/20/2014	11/05/2014	11/05/2014	07/10/2015	03/11/2016	09/28/2016	03/30/2017	09/13/2017	03/28/2018	08/28/2018	03/22/2019	08/20/2019	08/20/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	0.2 U	-	-	-	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.5 U	3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.4 U	3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	-	0.7 U	1.6 J	-	0.7 U	0.7 U	6 U	6 U	6 U	-	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1 J	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	-	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	-	1 U	1 U	-	1 U	1 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	-	0.2 UJ	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	2 U	2 U	2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.5 UJ	0.5 UJ
Styrene	ug/L	N	100	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	2 U	2 U	2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	-	-	0 U	-	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-173	MW-173	MW-174	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-193	MW-208	MW-208	MW-208	MW-209
			Field Sample ID	M172D6X	M172D7X	M172D8X	M172D9	M172E1	M172E2	M173B6X	M173B7X	M174B5X	M178B2X	M178B3X	M178B4X	M178B5X	M178B6X	M178B7	M178B8	M178B9	M178C1X	M193B2X	M208B5X	M208B6	M208B7	M209B6X
			Sample Date	03/12/2020	08/11/2020	03/04/2021	05/26/2021	09/24/2021	02/03/2022	06/27/2012	05/10/2013	06/06/2012	06/05/2012	07/02/2013	09/17/2014	12/08/2015	02/11/2016	03/03/2017	03/13/2018	03/06/2019	06/26/2020	07/11/2013	07/09/2013	12/15/2015	06/13/2017	07/09/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	0.95 J	0.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	**6**	**2J**	0.5 U	0.5 U	0.6 J	**12**	**10**	**2**	0.82 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	1 UJ	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3	2	0.4 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	95	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	6	4	0.5 J	0.38 U	0.7 U	0.7 U	0.5 U	0.5 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	9	6	1 U	0.65 U	0.8 U	0.8 U	0.5 U	0.5 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-209	MW-209	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
			Field Sample ID	M209B7X	M209B8X	M213A2X	M213A3X	M213A4X	M213A5X	M213B3X	M213B4X	M213B6X	M213D7X	M213B9X	M213C1X	M213C2X	M213C3X	M213C5X	M213C7X	M213C8X	M213RC9X	M213RD1X	M213RD2X	M213RD4X	D0216211X	M213D5X
			Sample Date	11/25/2015	06/13/2017	01/29/2013	05/09/2013	07/10/2013	12/13/2013	09/01/2016	10/20/2016	12/07/2016	01/16/2017	04/24/2017	07/11/2017	10/19/2017	01/10/2018	05/10/2018	08/29/2018	11/06/2018	02/01/2019	05/13/2019	08/13/2019	08/18/2020	02/16/2021	02/16/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	-	-	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	25 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	7 J	6 U	6 U	6 U	6 U	6 U	6 J	2 J	1 J	0.7 U	0.7 U	35 U	0.85 J	0.78 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	50 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	-	1 J	2 J	0.8 U	2 J	1	2	2	1	1	1	0.5 U	0.5 U	2	0.5 J	0.2 U	0.4 J	0.4 J	1	10 U	0.81 J	0.83 J
Chloroethane	ug/L	N	NA	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.6 J	0.9 J	0.4 J	0.2 U	1 U	50 U	1.3 J	1 U
Dibromochloromethane	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	20 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	1 J	2 J	1 U	2 J	1 U	2 J	2 J	3 J	1 U	2 J	1 U	1 U	2 J	0.8 J	1 J	4 J	0.5 J	0.9 J	10 U	1.4 J	1.5 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	15 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	-	1 J	2 J	1 U	1 J	1 U	2 J	2 J	4 J	1 U	1 U	1 U	1 U	3 J	1 J	6	2 J	0.5 J	0.6 J	25 U	1.4 J	1.4 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	15 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	70 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	0 U	0	5 J	0 U	5 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	6 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-213	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R
			Field Sample ID	M213D6	D0423123	M214A1X	M214A2X	M214A3X	M214A5X	M214A6X	M214A7X	M214A8X	M214A9X	M214B1X	M214B2X	M214B3X	M214B4X	M214B5X	M214RB6X	M214RB7X	M214RB8X	M214RB9X	M214RC1X	D0420178	M214RC2X	M214RC3X
			Sample Date	08/25/2021	04/23/2012	04/23/2012	06/21/2012	11/14/2012	05/10/2013	07/03/2013	10/17/2013	12/18/2013	03/31/2014	07/11/2014	09/10/2014	03/10/2015	04/22/2015	07/23/2015	07/25/2016	08/29/2016	10/17/2016	12/05/2016	01/17/2017	04/20/2017	04/20/2017	07/07/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	100 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.30 U	2 U	2 U	2 U	2 U	100 U	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	**8**	2 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.30 U	1 J	1 J	2 J	2 J	50 U	50 U	1 J	1 J	1 J	1 J	1 J	1 J	1 J	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.50 U	3 U	3 U	3 U	3 U	150 U	150 U	60	7 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.40 U	3 U	3 U	3 U	3 U	150 U	150 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.50 U	3 U	3 U	3 U	3 U	150 U	150 U	4 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	3.0 J	6 U	6 U	6 U	6 U	300 U	300 U	170	34	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.30 U	**6**	**6**	**5**	**4J**	25 U	**34J**	**47**	**38**	**29**	**18**	**16**	**18**	**21**	**16**	**7**	**12**	**3**	1	**5**	0.5 U	0.5 U	**2**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1.0 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.30 U	1 U	1 U	1 U	1 U	50 U	50 UJ	5 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	35	16	3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.30 U	6	6	6	7	40 U	40 U	4 J	4 J	4	4	4	4	3	4	2	2	2	0.7 J	0.5 U	0.5 U	0.5 U	1
Chloroethane	ug/L	N	NA	0.20 U	1 U	1 U	1 U	1 U	50 U	50 UJ	11	3 J	1	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	5	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	18	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	2 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1.0 U	17	16	24	34	100 U	100 U	27	19	28	3 J	7	5 J	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.20 U	2 U	2 U	2 U	2 U	100 U	100 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.40 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	1 J	2 J	1	0.7 J	1	2	1 J	0.9 J	0.5 J	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.24 J	25	24	28	27	50 U	50 U	8	12	16	11	6	9	7	8	7	9	5 J	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.20 U	0.6 J	0.6 J	0.7 J	0.8 J	25 U	25 U	0.7 J	0.6 J	0.7 J	1 J	1	0.9 J	0.6 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1.4 J	94	97	100	97	50 U	50 U	57	52	64	12	9	13	7	4 J	1 J	1 U	1 U	1 U	1 J	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.30 U	2 U	2 U	2 U	2 U	100 U	100 U	3 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.22 J	0.7 J	0.7 J	0.7 J	1 J	35 U	35 U	5	4 J	2	2	1	1	2	1	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.30 U	0.8 U	0.8 U	0.8 U	0.8 U	40 U	40 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.30 U	1 U	1 U	1 U	1 U	50 U	50 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.20 U	2 U	2 U	2 U	2 U	100 U	100 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.20 U	1 U	1 U	1 U	1 U	50 U	50 U	1 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.40 U	6	6	6	8	40 U	40 U	7	11	9	5	5	9	6	5	1	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0.0 U	-	-	-	650 J	0	0 U	120 J	160 J	380 J	510 J	380 J	540 J	300 J	350 J	36 J	69 J	11 J	0 U	290 J	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215
			Field Sample ID	M214RC4	M214RC5X	M214RC6X	M214RC7X	M214RC8X	M214RC9X	M214RD1X	M214RD2X	M214RD3X	M214RD4X	M214RD5	M214RD6	M215A1X	D0620123	M215A2	M215A3X	M215A5X	M215A6X	M215A7X	M215A8X	M215A9X	M215B1X
			Sample Date	10/19/2017	01/11/2018	05/23/2018	08/27/2018	11/13/2018	02/07/2019	05/08/2019	08/02/2019	09/03/2020	02/05/2021	08/25/2021	02/09/2022	04/23/2012	06/20/2012	06/20/2012	11/14/2012	05/13/2013	07/02/2013	10/15/2013	12/16/2013	03/31/2014	07/16/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	0.52 J	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	13	8	7	5 J	1 J	3 J	7	4 J	5 J	1 J
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.30 U	0.3 U	26	16	14	9	2 J	5	14	7	9	2 J
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.50 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	7 J	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	0.7 U	0.7 U	1 J	0.7 U	2 UJ	1.3 J	0.7 U	1.1 J	1.9 J	6 U	6 U	6 U	7 J	6 U	12 J	30	8 J	6 U	6 U
Benzene	ug/L	N	1	0.5 J	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.27 J	0.30 U	0.63 J	0.8J	1J	1J	**3J**	**2J**	**3J**	**2J**	**2J**	1	0.9J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	2 J	1 U	1 U	1 U	12	5 J	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	2	1	0.5 U	1 J	0.5 J	0.3 J	0.2 U	0.9 J	0.75 J	0.2 U	0.54 J	0.35 J	**69**	**71**	**68**	**57**	43	**87**	**65**	**78**	**62**	25
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 J	2 J	2 J	1	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	0.2 J	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1.0 U	1 U	2 U	3 J	2 J	3 J	2 U	2 J	4 UJ	4 J	2 U	3 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 UJ	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	0.5 J	0.2 U	0.2 U	0.2 U	0.6 J	0.2 U	0.2 U	0.20 U	0.2 U	11	11	10	12	10	9	9	9	8	7
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.50 U	0.5 U	6	5	4 J	9	4 J	3 J	6	4 J	4 J	4 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.40 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	16 J	0 U	0 U	0.0 U	0 U	-	-	-	780 J	310 J	440 J	270 J	270 J	180 J	190 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-215	MW-215	MW-215	MW-215	MW-227	MW-227	MW-227R	MW-227R	MW-227R	MW-227R	MW-227R	MW-228	MW-228	MW-228	MW-228	MW-228	MW-228	MW-229	MW-229R	MW-229R	MW-229R	MW-235	MW-235
			Field Sample ID	M215B2X	M215B3X	M215B4X	M215B5X	M227B9X	M227C1X	M227RA1	M227RA2X	M227RA3X	M227RA5	M227RA6	M228B8X	M228B9X	M228C1X	M228C2	M228C3	M228C4	M229B8X	M229RA1	M229RA2X	M229RA3	M235A9X	M235B1X
			Sample Date	09/11/2014	01/14/2015	04/22/2015	07/23/2015	05/08/2012	07/12/2013	11/25/2015	05/19/2016	06/14/2017	05/25/2021	10/28/2021	05/08/2012	07/09/2013	12/19/2014	12/15/2015	05/19/2016	06/13/2017	07/09/2013	12/15/2015	03/07/2017	03/06/2019	06/27/2012	09/05/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	-	-	-	-	-	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	-	-	-	-	-	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.35 J	0.58 J	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	3 J	2 J	1 U	4 J	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	6	3 J	2 J	8	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	-	-	-	-	-	0.3 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 J	-	-	-	-	-	0.3 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	-	-	-	-	-	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	-	-	-	-	-	5.9 J	4.4 J	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	**2**	1	0.5 U	**2**	**170**	**140**	**82**	**59**	**2**	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**3**	0.5 U	0.4 J	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	42	38	15	50	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.9 J	0.8 J	0.5 U	0.6 J	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	2 J	2 U	2 J	2 U	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 UJ	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	1 U	1.3 J	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	19	6	0.8 J	3 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	2	0.6 J	0.7 J	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	7	6	6	9	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	280	13000	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	-	-	-	-	-	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	5 J	4 J	4 J	5 J	-	-	-	-	-	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	-	-	-	-	-	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	8	3 J	0.5 U	3 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	2	0.5 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5J	0.5 U	0.5 U	0.5 U	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	19	13	0.5 U	3 U	0.5 U	1.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	5	0.6 J	1 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	220 J	310 J	180 J	330 J	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236
			Field Sample ID	M235B2X	M235B3X	M235B4X	M235B5X	M235B6X	M235B7X	M235B8X	M235B9X	M235C1X	M235C2X	M235C3X	M235C4X	M235C5X	M235C6X	D0828201X	M235C8X	M235C9X	M236B2X	M236B3X	M236B4X	M236B6X	M236B7X	M236C1X
			Sample Date	05/10/2013	10/02/2013	08/12/2014	11/05/2014	07/15/2015	02/10/2016	08/19/2016	02/28/2017	08/31/2017	02/15/2018	08/28/2018	01/29/2019	08/20/2019	01/27/2020	08/28/2020	08/28/2020	01/28/2021	05/03/2012	09/05/2012	05/10/2013	10/04/2013	11/06/2013	11/05/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	20	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 U	6 U	20 J	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	**3J**	0.5 U	0.5 U	1
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	36	2 U	6	3 J
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	11	0.8 U	0.8 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 J	210	1 U	34	14
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	48	1 U	4 J	4 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	3 J	0.7 U	0.7 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.8 U	0.8 U	4 J	0.8 U	0.8 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	390 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245
			Field Sample ID	M236C2	M236C3	M236C4X	M236C5	M236C6X	M236C9X	M236D1X	M236D2X	D0831171	M236D3X	M236D4X	M236D5X	M236D6X	M236D8X	M236D9X	M236E1X	M236E2X	M245B2X	M245B3X	M245B4X	M245B8X	M245C1X	M245C5X
			Sample Date	03/16/2015	06/30/2015	07/10/2015	10/06/2015	01/05/2016	06/21/2016	09/07/2016	02/28/2017	08/31/2017	08/31/2017	02/15/2018	08/30/2018	01/29/2019	09/26/2019	01/24/2020	07/24/2020	01/22/2021	05/03/2012	08/31/2012	10/04/2013	12/01/2015	02/19/2016	06/21/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	-	2 U	-	2 UJ	2 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	-
1,1-Dichloroethane	ug/L	N	50	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	1 U	1 U	1 U	1 U	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	2 U	-	2 UJ	-	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	2 U	2 U	2 U	2 U	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-
1,2-Dichloroethane	ug/L	N	2	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	-
1,2-Dichloropropane	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.7 J	1.9 U	0.3 U	3 U	3 J	3 U	3 U	3 U	-
2-Hexanone	ug/L	N	40	-	-	3 U	-	3 U	-	3 U	3 U	3 UJ	3 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	3 U	3 U	3 U	3 U	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	3 U	-	3 U	-	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	3 U	3 U	3 U	3 U	3 U	-
Acetone	ug/L	N	6000	-	-	6 U	-	6 UJ	-	6 U	34	6 U	6 U	7 J	4 J	0.7 U	1 J	2 J	4.4 U	0.7 U	6 U	11 J	6 U	6 U	6 U	-
Benzene	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	**2**	0.5 U	0.5 U	0.5 U	0.2 U	1	0.2 U	1	0.2 U	0.34 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Bromoform	ug/L	N	4	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Carbon disulfide	ug/L	N	700	-	-	1 U	-	1 U	-	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-
Carbon Tetrachloride	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Chlorobenzene	ug/L	N	50	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
Chloroethane	ug/L	N	NA	-	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Chloroform	ug/L	N	70	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Cyclohexane	ug/L	N	NA	-	-	2 U	-	2 U	-	2 UJ	17	2 U	2 U	3 J	0.2 U	11	1 U	5	0.32 U	3.6 J	2 U	2 U	4 J	2 U	2 U	-
Dibromochloromethane	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	4.5 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0 U
Ethene	ug/L	N	NA	-	-	-	-	-	1.0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0 U
Ethylbenzene	ug/L	N	700	-	-	0.5 U	-	0.5 U	-	0.5 U	7	0.5 U	0.5 U	0.7 J	0.4 U	3	0.4 U	3	0.3 U	1.8	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
Isopropylbenzene	ug/L	N	700	-	-	6	-	3 J	-	1 J	240	1 U	1 U	49	0.2 U	160	9	91	0.8 J	38	1 U	1 U	1 U	1 U	1 U	-
Methane	ug/L	N	NA	14000	15000	-	14000	-	16000	12000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3100
Methyl acetate	ug/L	N	7000	-	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.79 U	0.3 U	1 U	1 U	1 U	1 U	1 U	-
Methyl-t-butyl ether	ug/L	N	70	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Methylcyclohexane	ug/L	N	NA	-	-	1 J	-	2 J	-	1 U	19 J	1 U	1 U	3 J	0.2 U	9	0.5 U	4 J	0.26 U	3.2 J	4 J	7	2 J	8	10	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	2 U	2 U	2 U	2 U	2 U	-
Styrene	ug/L	N	100	-	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-
Tetrachloroethene	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
Toluene	ug/L	N	600	-	-	0.5 U	-	0.5 U	-	0.5 U	2	0.5 U	0.5 U	0.5 U	0.2 U	0.8 J	0.2 U	0.8 J	0.38 U	0.34 J	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	-
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	-
Xylene (total)	ug/L	N	1000	-	-	0.5 U	-	0.5 U	-	0.5 U	4	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	-
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1200 J	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246R	MW-246R	MW-246R
			Field Sample ID	M245C6X	M245C8X	M245C9X	M245D1X	M245D2X	M245D3X	D0722191	M245D4X	M245D5X	M245D6X	M245D7X	M246B3X	M246B4X	M246B5X	M246B6X	M246B7X	M246B8X	M246B9X	M246C1X	M246C2X	M246RC3X	M246RC4X	M246RC6X
			Sample Date	09/07/2016	01/27/2017	08/03/2017	02/07/2018	07/25/2018	01/30/2019	07/22/2019	07/22/2019	01/30/2020	08/17/2020	02/05/2021	06/06/2012	08/31/2012	05/10/2013	11/06/2013	01/08/2014	06/10/2014	07/20/2015	10/28/2015	12/01/2015	06/06/2016	09/06/2016	11/29/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	1 J	2 J	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	7 U	10 J	10 J	0.7 U	2.3 J	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**8J**	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	**6**	**2**	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 UJ	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	21	8	2
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 UJ	1 J	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	5	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	2 U	0.4 J	0.4 J	0.6 J	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	4400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	6	6	4 J	2 J	2 J	3 J	0.8 J	0.7 J	5	1.8 J	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	2 J	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.5 U	3 U	0.6 UJ	0.7 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 J	0.3 J	0.3 J	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 J	1 U	1 UJ	1 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	5 J	0 U	-	15 J	0 U	0 U	13 J	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-247
			Field Sample ID	D0303178B	M246RC8X	M246RC9X	D1207178A	M246R1DX	M246RD2X	M246RD3X	M246RD4X	D0625191	M246RD5X	M246RD6X	M246RD7X	D0327201	M246RD8X	M246RD9X	M246RE1	M246RE2	D122120211A	M246RE3	D031820221A	M246RE4	M247RA4X
			Sample Date	03/03/2017	03/03/2017	06/07/2017	12/07/2017	12/07/2017	03/15/2018	06/06/2018	03/12/2019	06/25/2019	06/25/2019	09/06/2019	12/13/2019	03/27/2020	03/27/2020	09/03/2020	06/24/2021	09/27/2021	12/21/2021	12/21/2021	03/18/2022	03/18/2022	05/25/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 J	1 J	0.8 J	0.2 U	1 J	1 J	0.86 J	0.68 J	0.37 J	1 J	1 J	0.76 J	0.9 J	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.9 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.3 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-
Benzene	ug/L	N	1	**8**	**9**	**24**	**32**	**21**	**20**	**26**	**17**	**2**	**2**	0.2 U	0.3 J	**11**	**11**	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 J	2 UJ	2 UJ	1 U	1 U	2 J	2 J	1 U	1 U	1 U	1 U	1 U	1 U	2.8 J	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	1.8 J	7.8	7.6	6.9	7	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2	2	6	6	4	4	4	1	0.4 U	0.4 U	0.4 U	0.4 U	1	1	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 J	1 J	0.6 J	0.2 U	1 J	1 J	0.65 J	0.64 J	0.2 J	0.61 J	0.61 J	0.63 J	0.7 J	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	660	380	1600	1600	540	560 J	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	0.3 J	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.8 J	0.5 J	0.8 J	0.5 U	1 J	1	0.9 J	0.5 J	0.2 U	1	1	0.27 J	0.39 J	0.2 U	0.24 J	0.26 J	0.35 J	0.37 J	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	2	2	8	12	8	8	11	21	21	21	11	1 U	22	23	14	15	4.2	12	12	12	13	0.8 U
Total TIC VOCS	ug/L	N	NA	6 J	6 J	97 J	-	-	-	110 J	130 J	140 J	140 J	29 J	0 U	98 J	110 J	-	-	0 U	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-247	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249
			Field Sample ID	M247B2X	M248RA5X	M248RA6X	M248RA7X	M248RA8X	M248RA9X	M248RB1X	M248RB2X	M248RB3X	M248RB4X	M248RB6X	M248RB8X	M248RB9X	M248RC1X	M248RC2X	M248RC3X	M248RC4	M249B1X	M249B2X	M249B3X	M249B4X	M249B5X	M249B6X
			Sample Date	07/10/2013	09/07/2012	07/03/2013	09/30/2014	10/02/2015	02/11/2016	03/03/2017	03/13/2018	10/15/2018	12/07/2018	03/15/2019	05/11/2020	09/30/2020	10/15/2020	03/08/2021	03/31/2021	08/26/2021	05/25/2012	07/03/2013	06/11/2014	10/02/2015	03/04/2016	03/02/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.3 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.3 U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.3 U	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	0.7 J	0.7 J	-	0.3 U	0.66 J	-	0.95 J	-	0.51 J	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.5 U	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.4 U	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	-	-	-	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	1 UJ	0.7 U	-	0.7 U	0.77 J	-	0.7 U	-	0.7 U	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.3 U	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	2900	3700	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.3 U	0.3 U	-	0.3 U	-	0.3 U	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	-	0.3 U	-	-	-	-	-	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.3 U	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	0.2 UJ	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	-	0.2 U	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	0 U	-	0 U	0 U	-	0 U	-	0 U	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-249	MW-249	MW-249	MW-249	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250
			Field Sample ID	M249B8X	M249B9X	M249C1X	M249C2X	M250C1X	M250C2X	M250C3X	M250C4X	M250C5X	M250C6X	M250C7X	M250C8X	M250C9X	M250D1X	M250D2X	M250D3X	M250D4X	M250D5X	M250D6X	D0514208	M250D7X	M250D8X	M250D9X
			Sample Date	08/28/2018	08/28/2019	07/24/2020	03/31/2021	12/19/2012	04/30/2013	10/07/2014	12/02/2015	05/26/2016	05/17/2017	11/22/2017	01/26/2018	07/25/2018	08/08/2018	02/13/2019	05/20/2019	08/14/2019	10/31/2019	02/10/2020	05/14/2020	05/14/2020	08/11/2020	11/12/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	10 U	-	-	2 U	-	-	2 U	4 U	10 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	10 U	-	-	2 U	-	-	2 U	4 U	10 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.5 J	0.3 U	0.3 U	0.63 J	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	45 J	-	-	3 U	-	-	3 U	6 U	15 U	31 J	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	-	-	-	-	15 U	-	-	3 U	-	-	3 U	6 U	15 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	15 U	-	-	3 U	-	-	3 U	6 U	15 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	-	-	130	-	-	6 U	-	-	22	12 U	35 J	110	2 J	1 J	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 J	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	**3900**	**4400**	**2700**	**68**	**3000**	**4600**	**1900**	**450**	**1600**	**1900**	**3**	0.2 U	0.2 U	0.2 UJ	0.4 J	0.2 U	0.2 U	0.82 J	0.61 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	5 U	-	-	0.7 J	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	-	-	430	440	290	31	280	440	220	70	110	210J	0.8 J	0.2 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	10 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 UJ	0.3 U	0.4 U	4 U	4 U	3 U	0.5 U	28	690	69	9	56	23	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	5 U	-	-	1 U	-	-	9	2 U	13 J	11 J	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	3 U	-	-	0.6 J	-	-	0.6 J	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	170	-	-	15	-	-	86	27	54	90	0.2 U	0.2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	10 U	-	-	2 U	-	-	0.5 U	1 U	3 U	2 U	0.3 U	0.3 U	0.4 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	-	-	5 U	-	-	1 U	-	-	1 U	2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 UJ	0.38 U	0.2 U	24 J	30	14	0.5 J	56	210	21	5	18	18	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	4 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	10 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	5 U	-	-	0.5 U	-	-	0.5 U	1 U	3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 UJ	0.65 U	1.4 U	6 J	8 J	12	0.5 U	28	**2200**	840	180	420	230	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	270 J	-	-	1800 J	710 J	1600 J	1400 J	0 U	0 U	0 U	0 U	10 J	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-250	MW-250	MW-250	MW-250	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252R	MW-252R	MW-252R
			Field Sample ID	M250E1X	M250E1	M250E3	M250E4	M251A9X	M251B1X	M251B2X	M251B3X	M251B5X	M251B6X	M251B7X	M252B3X	M252B4X	M252B6X	M252B7X	M252B8X	M252B9X	M252C1X	M252C2X	M252C3X	M252RC4X	M252RC5X	M252RC6X
			Sample Date	01/25/2021	04/26/2021	08/17/2021	10/11/2021	06/20/2013	09/16/2014	07/15/2015	03/22/2016	10/19/2016	05/19/2017	11/02/2017	04/23/2012	11/12/2012	05/09/2013	07/09/2013	10/15/2013	12/09/2013	07/10/2014	01/09/2015	07/14/2015	07/25/2016	10/19/2016	01/18/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.78 J	0.66 J	0.54 J	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 UJ	0.5 U	0.5 U	-	-	-	-	-	-	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 J	30 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.4 U	0.4 U	-	-	-	-	-	-	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	-	-	-	-	-	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U
Acetone	ug/L	N	6000	0.7 U	0.7 UJ	0.97 J	0.7 U	-	-	-	-	-	-	-	6 U	6 U	6 UJ	6 U	6 U	21	6 U	6 U	6 U	17 J	29	60 U
Benzene	ug/L	N	1	0.2 U	0.2 UJ	**2.1**	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Bromoform	ug/L	N	4	1 U	1 UJ	1 U	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	11	5 J	10 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.88 J	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Chloroform	ug/L	N	70	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	11	9	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Cyclohexane	ug/L	N	NA	1 U	1 UJ	1 U	1 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 UJ	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.25 J	0.32 J	0.33 J	-	-	-	-	-	-	-	10	0.5 U	16	1 J	12	0.5 U	0.5 U	6	2	3	3	5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	-	-	-	-	-	1 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U
Styrene	ug/L	N	100	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Toluene	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 UJ	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.9 J	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	0	110 J	0 U	1100 J	0 U	0 U	880 J	720 J	68 J	75 J	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253
			Field Sample ID	D0711178B	M252RC7X	M252RC8X	D0110188	M252RC9X	D0523188X	M252RD1X	D0828188	M252RD2X	M252RD3X	M252RD4X	M252RD5X	M252RD6X	M252RD7X	M252RD8X	M252RD9	M252RC1	M253B1X	M253B2X	M253B3X	M253B4X	M253B5X	M253B6X
			Sample Date	07/11/2017	07/11/2017	10/18/2017	01/10/2018	01/10/2018	05/23/2018	05/23/2018	08/28/2018	08/28/2018	11/13/2018	02/05/2019	05/08/2019	08/02/2019	09/02/2020	02/05/2021	08/25/2021	02/09/2022	06/20/2012	05/31/2013	09/24/2014	07/10/2015	02/11/2016	08/18/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	4 U	10 UJ	2 U	2 U	2 U	2 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	4 U	10 UJ	2 U	2 U	2 U	2 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	6 U	6 U	15 UJ	3 U	3 U	3 U	3 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.50 U	0.5 U	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	6 U	6 U	15 UJ	3 U	3 U	3 U	3 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	6 U	6 U	15 UJ	3 U	3 U	3 U	3 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	-	-	-	-	-	-
Acetone	ug/L	N	6000	12 U	12 U	30 UJ	6 U	6 U	6 U	6 U	3 J	1 UJ	0.7 U	0.7 U	0.7 U	1 UJ	0.7 U	0.7 U	0.70 U	0.7 U	-	-	-	-	-	-
Benzene	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Bromoform	ug/L	N	4	1 U	1 U	3 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.5 U	1 U	1 U	1.0 U	1 U	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 J	3 J	5 UJ	2 J	2 J	1 U	1 U	2 J	1 J	0.3 J	0.2 U	0.2 U	0.5 J	0.2 U	0.2 U	0.36 J	0.3 U	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Chloroform	ug/L	N	70	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	4 U	4 U	10 UJ	2 U	2 U	2 U	2 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1.0 U	1 U	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.8 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U
Isopropylbenzene	ug/L	N	700	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	3	3	4 J	3	3	0.5 U	0.5 U	3	4 J	5	0.2 U	0.2 U	0.2 U	0.25 J	1.3	5.6	5.3	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.4 J	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.50 U	0.5 U	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	4 U	4 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.30 U	0.3 U	-	-	-	-	-	-
Styrene	ug/L	N	100	2 U	2 U	5 UJ	1 U	1 U	1 U	1 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
Toluene	ug/L	N	600	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	3 U
trans-1,2-Dichloroethene	ug/L	N	100	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	1 U	1 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 UJ	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.40 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U
Total TIC VOCS	ug/L	N	NA	160 J	180 J	830 J	360 J	470 J	14 J	0 U	200 J	290 J	480 J	8 J	0 U	18 J	0 U	-	-	0 U	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254
			Field Sample ID	D0909168	M253B7X	M253B8X	M253B9X	M253C1X	M253C4X	M253C6X	M253C7X	M253D2X	M253D4X	M253D7X	M253D9	M253E1	M254B1X	M254B2X	M254B3X	M254B4X	M254B5X	M254B6X	M254B7X	M254B8X	M254B9X	M254C1X
			Sample Date	09/09/2016	09/09/2016	12/27/2016	03/09/2017	09/13/2017	04/27/2018	10/15/2018	04/25/2019	09/19/2019	04/27/2020	09/15/2020	05/27/2021	09/21/2021	05/10/2012	05/31/2013	09/25/2014	12/17/2015	05/27/2016	09/20/2016	12/15/2016	06/01/2017	05/30/2018	05/20/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	10 U	10 U	40 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	10 U	10 U	40 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 U	15 U	60 U	-	-	-	-	-	-	-	-	0.3 U	0.5 U	3 U	6 J	6 J	3 U	5 J	7 J	4 J	9 J	3 U	10 J
2-Hexanone	ug/L	N	40	15 U	15 U	60 U	-	-	-	-	-	-	-	-	0.3 U	0.4 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	15 U	15 U	60 U	-	-	-	-	-	-	-	-	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	30 U	30 U	120 U	-	-	-	-	-	-	-	-	0.7 U	0.7 U	39	19 J	11 J	6 UJ	6 U	10 J	11 J	24	9 J	27
Benzene	ug/L	N	1	3 U	3 U	10 U	10 U	0.5 U	0.5 U	0.2 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	**4J**	**3J**	**2**	**3**	**3**	**2**	**3**	**8**	**4**	1
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	3 U	3 U	10 U	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon disulfide	ug/L	N	700	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	10 U	10 U	40 U	-	-	-	-	-	-	-	-	1 U	1 U	33	36	20	21	25	21	22	45	48	28
Dibromochloromethane	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3 U	3 U	10 U	10 U	0.5 U	0.5 U	0.4 U	20 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.7 J	0.7 J	0.5 U	0.7 J	1	1	0.5 J
Isopropylbenzene	ug/L	N	700	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	35	39	30	35	34	28	31	32	36	33
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	290	100	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	0.8 J	1 J	0.8 J	1	2	1	0.5 U	2	1	0.6 J
Methylcyclohexane	ug/L	N	NA	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.5 U	0.5 U	130	140	120	150	130	130	120	140	160	140
Methylene chloride (Dichloromethane)	ug/L	N	3	10 U	10 U	40 U	-	-	-	-	-	-	-	-	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U
Styrene	ug/L	N	100	5 U	5 U	20 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	3 U	3 U	10 U	10 U	0.5 U	0.5 U	0.2 U	10 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	3 J	3	3	3	3	3	6	5	3
trans-1,2-Dichloroethene	ug/L	N	100	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.3 U	1 U	1 U	0.5 U	**2**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	3 U	3 U	10 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	3 U	3 U	10 U	10 U	0.5 U	0.5 U	1 U	50 U	1 U	1 U	1.4 U	1.4 U	0.4 U	6	6	5	6	5	6	5	7	7	6
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	610 J	540 J	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-255	MW-256
			Field Sample ID	M254C3X	M254C4X	M254C5X	M254C6X	M254C8X	M254C9	M254D1	D1124218	M254D2	M254D3	M255B2X	M255B3X	M255B4X	M255B5X	M255B6X	M255B7X	M255B8X	M255B9	M255C1	M255C2X	M255C3X	M255C4	M256B1X
			Sample Date	03/31/2020	05/27/2020	08/06/2020	11/10/2020	02/17/2021	05/11/2021	08/06/2021	11/24/2021	11/24/2021	02/22/2022	06/14/2012	05/31/2013	09/24/2014	12/17/2015	05/27/2016	09/19/2016	12/15/2016	06/01/2017	05/30/2018	05/28/2019	05/13/2020	05/25/2021	05/02/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	**1.6**	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 UJ	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	2 J	0.3 U	0.3 U	4.7 J	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	5 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.1 J	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	6.4 J	12 J	15 J	0.7 U	3.5 UJ	3.3 J	5.5 J	0.7 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	0.7 U	1 UJ	0.7 U	12 J
Benzene	ug/L	N	1	1	1	**1.4**	**1.5**	0.96 J	0.76 J	**1.1**	**1.3**	**1.2**	**1.1**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.24 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U
Carbon disulfide	ug/L	N	700	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.2 U	0.2 U	0.2 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	19 J	14	17	14 J	9.7	16	13	8.1	8.7	15	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	1 U	1 U	12
Dibromochloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	28	28	9.1 J	28	30	25	21	20	22	27	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	66
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.7 J	0.6 J	0.69 J	0.63 J	0.65 J	0.6 J	0.53 J	0.5 J	0.56 J	0.62 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	110	110	140	130	130	95	78	75	83	110	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.5 U	0.5 U	140
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U
Toluene	ug/L	N	600	2	2	2	1.5	1.9	1.8	1.7	1.7	1.7	2.1	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Xylene (total)	ug/L	N	1000	5 J	5 J	5.2 J	4.9 J	4.9 J	4.4 J	3.7	3.8	3.7	4.3	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 J	1.4 U	4 J
Total TIC VOCS	ug/L	N	NA	740 J	740 J	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256
			Field Sample ID	M256B2X	M256B3	D0627141	M256B5X	M256B8X	D020516HS1	M256C2X	M256C5X	M256C6X	M256C7X	M256C9X	M256D3X	M256D4	M256D5X	D0828191	M256D6X	M256D7X	M256D8X	M256D9X	M256E1	M256E2	M256E3	M256E4
			Sample Date	05/30/2013	08/15/2013	06/27/2014	06/27/2014	07/08/2015	02/05/2016	02/19/2016	10/04/2016	02/22/2017	08/29/2017	02/20/2018	08/21/2018	10/02/2018	02/14/2019	08/28/2019	08/28/2019	01/30/2020	08/20/2020	01/29/2021	05/24/2021	09/17/2021	01/10/2022	03/22/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	5 J	3 U	3 U	4 J	3 J	3 U	3 U	7 J	3 U	3 U	4 J	3 J	0.3 U	3 J	0.3 U	0.3 U	0.3 U	2.4 J	3.4 J	2.3 J	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	17 J	6 U	6 U	6 U	9 J	6 U	6 U	12 J	6 U	6 U	18 J	7 J	4 J	8 J	7 J	10 J	0.7 U	6.8 J	9.3 J	7.9 J	0.7 U	0.7 U	-
Benzene	ug/L	N	1	**2J**	1 J	**3**	**3**	**2**	**320**	0.9 J	1	0.8 J	**2**	**2**	0.9 J	0.5 J	0.4 J	1 J	**2J**	1	0.67 J	0.54 J	0.64 J	0.68 J	0.47 J	0.58 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	**2J**	0.2 U	0.2 U	0.2 U	0.47 J	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	0.2 U	0.3 U	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	16	21	24	24	17	2 U	12	10	10	14	13	6 J	2 J	5	7	9	7	2.9 J	4.3 J	4.8 J	4.1 J	4.6 J	-
Dibromochloromethane	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.9 J	2.2 J	3 J	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2 J	0.9 J	6	6	2	17	0.9 J	0.8 J	0.8 J	2	2	0.9 J	0.4 J	0.5 J	1 J	2 J	0.9 J	0.76 J	0.41 J	0.64 J	0.53 J	0.41 J	0.42 J
Isopropylbenzene	ug/L	N	700	87	59	220	220	140	1 U	110	83	91	210	190	120	65	82	160 J	230 J	97	120	92	88	77	75	-
Methane	ug/L	N	NA	-	17000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17000	16000	21000	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	2	2	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	150	120	65	74	83	1 U	78	82	66	24	31	15	7	22	25	29	31	14	31	26	24	40	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.6 U	0.3 U	0.3 U	0.6 U	0.9 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
Toluene	ug/L	N	600	2 J	1 J	0.7 J	0.8 J	0.9 J	2	1	2	1	1	1	1 J	1	1	1 J	2 J	0.9 J	0.78 J	1.1	1	0.9 J	1.1	1.2
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.27 J	0.2 U	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	5	4 J	5	5	5	7	4	5	5	5	4	2 U	3 J	3 J	4 J	5 J	4 J	2.9 J	3.4 J	3.4 J	1.4	1.8	1.9
Total TIC VOCS	ug/L	N	NA	-	840 J	-	-	-	-	-	-	-	-	-	-	870 J	1000 J	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	M257B2X	M257B3X	M257B4X	M257B5	M257B7X	M257B8X	M257B9X	M257C1X	M257D1X	M257D4X	M257D7X	M257D8X	M257D9X	M257E2X	M257E6X	M257E7	M257E8X	M257E9X	D0131201X	M257F2X	M257F5X	M257F8X	M257F9
			Sample Date	05/07/2012	09/07/2012	05/30/2013	08/15/2013	10/04/2013	06/19/2014	08/15/2014	11/06/2014	07/08/2015	02/19/2016	10/04/2016	02/22/2017	08/29/2017	02/20/2018	08/21/2018	10/02/2018	02/15/2019	08/28/2019	01/31/2020	01/31/2020	08/20/2020	01/27/2021	05/25/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	-	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	1 J	2 UJ	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	4200	-	-	4600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1000
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	-	-	-	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270
			Field Sample ID	M257G1	D1020211B	M257G2	M270B8X	M270B9	M270C2X	M270C3X	M270C4X	M270C5X	M270C6X	M270C7X	M270C8X	M270C9X	M270D1X	M270D2X	M270D4X	D0920167	M270D5X	M270D7X	M270D8X	M270E1X	M270E3X	M270E4X
			Sample Date	09/17/2021	10/20/2021	10/20/2021	12/20/2012	03/28/2013	01/16/2014	02/24/2014	08/21/2014	09/17/2014	10/28/2014	01/29/2015	04/14/2015	07/08/2015	07/22/2015	10/22/2015	04/15/2016	09/20/2016	09/20/2016	04/13/2017	05/31/2017	10/30/2017	01/16/2018	04/05/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	4 U	2 U	2 U	-	2 UJ	4 U	2 U	2 U	2 U	2 UJ	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 UJ	0.3 U	0.3 U	4 U	2 U	2 U	-	2 UJ	4 U	2 U	2 U	2 U	2 UJ	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	6 U	3 U	3 U	-	7 J	15 J	3 U	3 U	3 U	3 UJ	-	3 U	3 U	3 U	3 U	3 U	-	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	6 U	3 U	3 U	-	3 UJ	6 U	3 U	3 U	3 U	3 UJ	-	3 U	3 U	3 UJ	3 UJ	3 U	-	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	6 U	3 U	3 U	-	3 UJ	6 U	3 U	3 U	3 U	3 UJ	-	3 U	3 U	3 UJ	3 UJ	3 U	-	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	12 U	7 J	6 U	-	28 J	70 J	6 U	6 U	6 U	6 UJ	-	6 U	6 U	6 U	6 U	6 U	-	6 U	6 U	6 U
Benzene	ug/L	N	1	0.3 U	0.3 U	0.3 U	**740**	**120**	**38**	**82**	**1900J**	**1300J**	**86**	**25**	**70**	**200J**	**8**	**140**	**2**	**120**	**110**	0.7 J	0.5 U	**2**	**4**	**2**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	89	76	160	160	280J	160J	59	88	110	120J	61	130	45	130	110	14	6	2 J	67	13
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	4 U	2 U	2 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	17	69	270	180	230 J	40 J	1	1	9	2 J	0.5 J	0.8 J	0.5 U	1	1	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	13	11	31	-	30 J	21 J	8	13	17	16 J	-	15	6	15	12	2 J	-	1 U	12	2 J
Methane	ug/L	N	NA	610	240	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.6 J	-	0.6 J	1 U	0.5 U	0.5 J	0.6 J	0.5 J	-	0.6 J	0.5 U	0.6 J	0.5 U	0.5 U	-	0.5 U	0.5 J	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	43	46	85	-	100 J	59 J	25	37	45	47 J	-	48	16	55	40	6	-	1 U	30	6
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	4 U	2 U	2 U	-	2 UJ	4 U	2 U	2 U	2 U	2 UJ	-	2 U	2 U	2 U	2 U	2 U	-	0.5 U	0.5 U	0.5 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	1 UJ	2 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	16	9	11	7	66 J	42 J	5	2	4	7 J	1	7	0.9 J	8	7	0.5 U	0.5 U	0.5 U	1	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	4 U	2 U	2 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	-	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	33	62	330	93	500 J	310 J	17	5	22	12 J	7	10	1	11	10	1	0.5 U	0.5 U	3	0.8 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	-	-	1700 J	-	2100 J	1300 J	410 J	520 J	400 J	-	-	-	210 J	-	-	62 J	-	0 U	330 J	75 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271
			Field Sample ID	M270E5X	M270E6X	M270E7X	M270E8X	M270E9X	M270F1X	M270F2X	M270F3X	M270F4X	M270F4	M270F6	M270F7	M270F8	M271B9X	M271C1	M271C2X	M271C3X	M271C4X	M271C5X	M271C6X	M271C7X	M271C8X	M271C9X
			Sample Date	02/28/2019	05/13/2019	08/08/2019	11/05/2019	02/06/2020	05/12/2020	08/19/2020	11/17/2020	02/09/2021	05/03/2021	08/19/2021	10/13/2021	02/23/2022	12/20/2012	03/28/2013	01/17/2014	02/24/2014	08/20/2014	09/18/2014	10/21/2014	01/20/2015	04/13/2015	07/08/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	20 U	4 U	2 U	-	2 UJ	2 U	2 U	2 U	2 U	4 UJ
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	4 U	2 U	-	2 UJ	2 U	2 U	2 U	2 U	4 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
1,2-Dichloroethane	ug/L	N	2	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	30 U	7 J	3 U	-	3 UJ	3 U	3 U	3 U	3 U	6 UJ
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	30 U	6 U	3 U	-	3 UJ	3 U	3 U	3 U	3 U	6 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.67 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	30 U	6 U	3 U	-	3 UJ	3 U	3 U	3 U	3 U	6 UJ
Acetone	ug/L	N	6000	2 UJ	8 J	4 J	0.7 U	0.7 U	0.7 U	13 J	1.3 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	60 U	14 J	6 U	-	6 UJ	7 J	6 U	6 U	6 U	14 J
Benzene	ug/L	N	1	**4**	0.2 U	0.2 U	0.2 U	0.2 U	**6**	0.2 U	**2.5**	0.2 U	**3.7**	0.65 J	0.53 J	**1.6**	**4400**	**4000**	**130**	**4800**	**1200J**	**1400**	**660**	**510**	**300**	**1500J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Bromoform	ug/L	N	4	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Cyclohexane	ug/L	N	NA	44	0.4 J	1 U	1 U	1 U	1 J	1 U	29	8.5	47	17	4.6 J	28	190	210	160	180	120J	87	62	70	23	79 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	4 U	2 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	4	0.4 U	0.4 U	0.4 U	0.4 U	0.4 J	0.4 U	2	0.4 U	24	0.4 U	0.4 U	1.1	33 J	35	520	52	31 J	49	11	17	30	47 J
Isopropylbenzene	ug/L	N	700	17	0.2 U	0.8 J	0.6 J	0.5 J	11	0.2 U	21	4.6 J	22	12	6.6	12	20 J	18	32	-	9 J	8	7	6	6	10 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
Methyl-t-butyl ether	ug/L	N	70	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 J	0.2 U	0.22 J	0.2 U	0.4 J	0.33 J	0.3 J	0.38 J	5 U	1 U	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Methylcyclohexane	ug/L	N	NA	20	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	11	3.7 J	21	7.3	2.3 J	8.5	110	110	92	-	46 J	32	19	23	4 J	27 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	4 U	2 U	-	2 UJ	2 U	2 U	2 U	2 U	4 UJ
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	1 UJ	1 U	1 U	1 U	1 U	2 UJ
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Toluene	ug/L	N	600	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.81 J	0.2 U	1.4	0.51 J	0.2 U	0.63 J	44 J	56	32	61	9 J	200	63	40	72	28 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8 U	2 U	0.8 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	4 U	2 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ
Xylene (total)	ug/L	N	1000	7	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	27	0.4 U	0.4 U	4.7	300	360	480	190	82 J	110	29	48	67	160 J
Total TIC VOCS	ug/L	N	NA	540 J	0 U	7 J	0 U	7 J	400 J	0 U	-	-	-	-	-	-	-	-	2200 J	-	910 J	930 J	810 J	540 J	560 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-275	MW-275	MW-275
			Field Sample ID	M271D1X	M271D2X	M271D3X	M271D5X	M271D6X	M271D8X	M271E1X	M271E2X	M271E3X	M271E4X	M271E5X	M271E6X	M271E7X	M271E8X	M271E9X	M271F1X	M271F1	M271F3	M271F4	M271F5	M275B6X	M275B7X	M275B8X
			Sample Date	10/21/2015	04/15/2016	09/21/2016	04/13/2017	05/31/2017	10/30/2017	04/05/2018	02/28/2019	05/07/2019	08/08/2019	11/05/2019	02/12/2020	05/12/2020	08/20/2020	11/18/2020	02/10/2021	04/30/2021	08/19/2021	10/13/2021	02/15/2022	12/19/2012	08/13/2013	10/07/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
1,1,1-Trichloroethane	ug/L	N	30	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 UJ	0.3 U	0.3 U	0.3 U	1 U	-	-
1,1,2-Trichloroethane	ug/L	N	3	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	10 U	2 U	2 U	2 U	-	4 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-	2 U	-	-
1,1-Dichloroethane	ug/L	N	50	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.3 J	0.4 U	0.2 U	0.7 J	1	2 J	1.5	0.89 J	1.4	0.4 U	0.3 U	0.3 U	0.46 J	1 U	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	5 U	1 U	1 U	1 U	-	2 U	1 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	1 U	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	10 U	2 U	2 U	2 U	-	4 U	2 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	2 U	-	-
1,2-Dibromoethane	ug/L	N	0.03	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	5 U	1 U	1 U	1 U	-	2 U	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
1,2-Dichloroethane	ug/L	N	2	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	2	0.6 U	1	0.3 U	**5**	**5J**	**4.1**	**2.1**	**3.9**	0.6 UJ	0.97 J	0.3 U	0.3 U	1 U	-	-
1,2-Dichloropropane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	1 J	1	**2J**	**1.5**	**1.8**	**2.3**	**2.5**	0.3 U	**1.5**	0.3 U	1 U	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	5 U	1 U	1 U	1 U	-	2 U	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	1 U	-	-
1,4-Dichlorobenzene	ug/L	N	75	5 U	1 U	1 U	1 U	-	2 U	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	1 U	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 U	23	8 J	10 J	-	6 U	3 U	43	54	8 J	17	3 J	8 J	5.4 J	15	53	24	0.5 U	0.5 U	0.5 U	3 U	-	-
2-Hexanone	ug/L	N	40	15 U	3 U	3 U	3 U	-	6 U	3 U	7 J	8 J	1 J	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.6 U	0.4 U	0.4 U	0.4 U	3 U	-	-
4-Methyl-2-pentanone	ug/L	N	NA	15 U	3 U	3 U	3 U	-	6 U	3 U	9 J	2 J	1 J	3 J	0.8 J	1 J	0.5 U	1.2 J	2.7 J	1 U	4.8 J	1.5 J	0.5 U	3 U	-	-
Acetone	ug/L	N	6000	30 U	51	31 J	27	-	12 U	6 U	170	45	18 J	33	12 J	25 J	23	32	200	58	0.7 U	8.6 J	0.7 U	6 U	-	-
Benzene	ug/L	N	1	**3000**	**1300**	**970**	**580**	**2600**	**1400**	**340**	**340E**	**110**	**9**	**63**	**10**	**140J**	**7.4**	**530**	**630**	**2500**	**1500**	**1100**	**840**	**570**	**210**	**49**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
Bromoform	ug/L	N	4	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	1 U	-	-
Carbon disulfide	ug/L	N	700	5 U	1 U	1 U	1 U	-	2 U	1 U	3 J	0.7 J	0.4 J	2 J	0.3 J	0.3 J	0.2 U	0.23 J	0.5 J	0.57 J	0.3 U	0.3 UJ	0.3 U	1 U	-	-
Carbon Tetrachloride	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 UJ	0.3 U	1 U	-	-
Chlorobenzene	ug/L	N	50	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
Chloroethane	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	11	0.7 J	1	9	10	11 J	5.6	7.9	10	14	4.4	6.2	4.8	1 U	-	-
Chloroform	ug/L	N	70	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 J	0.3 UJ	0.3 J	0.3 J	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	42	0.9 J	0.5 J	8	0.7 J	1 J	1.2	1.8	4	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
cis-1,2-Dichloroethene	ug/L	N	70	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
cis-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
Cyclohexane	ug/L	N	NA	160	150	120	100	150	140	54	280	280	10	13	2 J	8 J	1 U	49	39	65	68	66 J	95	150	120	32
Dibromochloromethane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	2 U	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	340	59	100	26	200	20	36	10	17	1	3	0.8 J	14 J	1.3	78	64	250	280	230	290	0.8 U	0.8 U	0.5 U
Isopropylbenzene	ug/L	N	700	18 J	11	14	6	-	18	4 J	2 J	2 J	0.2 U	0.2 U	0.2 U	0.4 J	0.2 U	2.2 J	2 J	7.1 J	8	7.3	12	1 J	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	5 U	1 U	1 U	1 U	-	2 U	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	1 U	-	-
Methyl-t-butyl ether	ug/L	N	70	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 J	-	-
Methylcyclohexane	ug/L	N	NA	52	67	47	57	-	51	21	240	230	16	19	0.5 U	5 J	0.5 U	34	37	26	33	45	50	50	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	10 U	2 U	2 U	2 U	-	1 U	0.5 U	0.3 U	0.6 U	0.3 U	0.6 J	0.7 J	0.6 J	0.3 U	0.3 U	0.95 J	0.6 U	0.3 U	0.3 U	0.3 U	2 U	-	-
Styrene	ug/L	N	100	5 U	1 U	1 U	1 U	-	2 U	1 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	1 U	-	-
Tetrachloroethene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
Toluene	ug/L	N	600	54	11	16	17	29	28	15	150	96	0.9 J	0.8 J	0.5 J	2 J	0.64 J	10	7.2	7.1	3.5	2.9	3	8	2 J	0.7 J
trans-1,2-Dichloroethene	ug/L	N	100	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-
trans-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	1 U	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	2 U	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	-	1 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	1 U	-	-
Xylene (total)	ug/L	N	1000	710	35	68	51	74	140	39	580	**1700**	10	3 J	1 U	5 J	1.4 U	20	22	48	61	22	41	3 J	0.9 J	0.5 J
Total TIC VOCS	ug/L	N	NA	1600 J	720 J	-	540 J	-	880 J	300 J	960 J	2600 J	23 J	41 J	25 J	96 J	0 U	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-276	MW-276	MW-276	MW-276	MW-276	MW-276
			Field Sample ID	M275B9X	M275C1X	M275C2	M275C3X	M275C4X	M275C5X	M275C6X	M275C7X	M275C8X	M275C9X	M275D1X	M275D2X	M275D3X	M275D4X	M275D4	M275D6	M275D7	M276B1X	M276B2X	M276B3X	M276B4X	M276B5X	M276B6X
			Sample Date	12/01/2015	05/26/2016	05/17/2017	11/22/2017	02/01/2018	03/06/2019	05/20/2019	08/15/2019	10/28/2019	02/10/2020	05/14/2020	08/24/2020	11/11/2020	01/26/2021	05/03/2021	08/17/2021	10/11/2021	06/20/2013	09/16/2014	05/24/2016	05/19/2017	03/12/2019	05/22/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	-	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.3 U	2 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	-	2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	0.2 U	1 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	-	1 U	1 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.3 U	2 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	-	2 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.3 U	2 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	-	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	-	0.5 U	0.5 U	1	0.3 U	0.3 UJ	0.3 U	0.9 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 J	-	-	-	-	0.3 U	2 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	-	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	-	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	-	3 U	3 U	16	0.3 U	1 J	2 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	-	-	-	0.3 U	2 UJ
2-Hexanone	ug/L	N	40	3 U	-	-	3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	-	-	-	0.3 U	2 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	-	3 U	3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	0.5 U	3 UJ
Acetone	ug/L	N	6000	6 U	-	-	6 U	6 U	140	5 J	4 J	23	2 J	0.7 U	2.2 J	0.7 U	0.7 U	0.7 U	1.9 J	0.7 U	-	-	-	-	0.7 U	4 UJ
Benzene	ug/L	N	1	**120**	0.5 U	0.5 U	**37**	**82**	**3**	0.6 J	0.6 UJ	0.2 U	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.81 J	0.82 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 UJ
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Bromoform	ug/L	N	4	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	0.2 U	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	-	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.3 U	2 UJ
Carbon disulfide	ug/L	N	700	1 U	-	-	1 U	1 U	0.8 J	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Chlorobenzene	ug/L	N	50	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Chloroethane	ug/L	N	NA	0.5 U	-	-	0.5 U	0.5 U	2	0.3 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Chloroform	ug/L	N	70	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	-	0.5 U	0.5 U	27	0.7 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Cyclohexane	ug/L	N	NA	120	2 U	2 U	8	17	4 J	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	0.2 U	1 UJ
Dibromochloromethane	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.6 J	0.5 U	0.5 U	0.6 J	0.9 J	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.4 U	2 UJ
Isopropylbenzene	ug/L	N	700	1 J	-	-	1 U	1 U	0.2 J	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	-	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Methyl-t-butyl ether	ug/L	N	70	0.8 J	-	-	0.5 U	0.5 U	0.3 J	0.3 J	0.3 J	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 J	0.37 J	-	-	-	-	0.2 U	1 UJ
Methylcyclohexane	ug/L	N	NA	41	-	-	1 J	2 J	2 J	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	0.2 U	1 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	-	0.5 U	0.5 U	0.7 J	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	0.3 U	2 UJ
Styrene	ug/L	N	100	1 U	-	-	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Tetrachloroethene	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Toluene	ug/L	N	600	0.8 J	0.5 U	0.5 U	0.7 J	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U	0.2 U	1 UJ
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	0.2 U	1 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	1 UJ
Xylene (total)	ug/L	N	1000	0.7 J	0.5 U	0.5 U	1	5	1 U	1 U	1 UJ	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	1 U	5 UJ
Total TIC VOCS	ug/L	N	NA	1200 J	-	-	39 J	110 J	41 J	0 U	0 U	22 J	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	0 U	62 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282
			Field Sample ID	M277B1X	M277B2X	M277B4X	M277B5X	M277B6X	M277B7X	M277B8X	M277B9X	D0306201	M277C1X	M277C2X	M277C3	M282B6	M282B6X	M282B7X	M282B8X	M282B9X	M282C1	M282C2X	M282C3X	M282C4X	M282C5X	M282C6X
			Sample Date	06/20/2013	06/20/2014	03/11/2016	03/30/2017	03/15/2018	02/26/2019	03/14/2019	05/16/2019	03/06/2020	03/06/2020	03/05/2021	02/04/2022	12/18/2012	03/29/2013	01/13/2014	08/20/2014	09/17/2014	09/19/2014	10/28/2014	01/22/2015	04/14/2015	07/09/2015	10/15/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	-	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	3 U	5 J	3 U	3 UJ	3 U	-	3 U	3 U	4 J	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	3 U	3 U	3 U	3 UJ	3 U	-	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	1 U	-	0.5 U	-	-	-	-	3 U	3 U	3 U	3 UJ	3 U	-	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	1 U	-	0.7 U	-	-	-	-	6 U	6 U	6 U	6 UJ	9 J	-	6 J	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	**3J**	1 J	**2J**	0.8 J	**4**	**3**	**3**	1	**3**	1	**17**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	0.6 U	-	0.3 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	0.7 J	-	0.2 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	1 J	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	12	6	2 U	2 UJ	3 J	-	4 J	2 U	19	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	2 U	2 U	2 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 J	1 J	3 J	0.5 UJ	2	2	1	0.7 J	6	2	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	4 J	2 J	1 U	1 UJ	1 J	-	2 J	1 U	5 J	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	4 J	3 J	1 U	1 UJ	1 U	-	1 J	1 U	6	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	1 J	-	0.3 U	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	-	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	1 UJ	1 U	-	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	3 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	2 U	2 U	2 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	0.4 U	-	0.2 U	-	-	-	-	1 U	1 U	1 U	0.5 UJ	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U	1 U	1.4 U	0.4 U	0.9 J	0.8 U	21	0.5 UJ	0.7 J	2	1	0.7 J	4	0.5 J	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	0 U	-	0 U	-	-	-	-	-	-	58 J	0 UJ	130 J	-	120 J	0 U	170 J	-	-

Notes:
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Chevron Perth Amboy Facility

			Location ID	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-283
			Field Sample ID	M282C7X	M282C8X	M282C9X	M282D1X	M282D2X	M282D4X	M282D5X	D0301198	M282D6X	M282D7X	M282D8X	M282D9X	M282E1X	M282E2X	D0824208	M282E3X	M282E4X	M282E5X	M282E5	M282E7	M282E8	M282E9	M283B5X
			Sample Date	12/16/2015	04/19/2016	09/12/2016	04/11/2017	11/01/2017	02/01/2018	04/06/2018	03/01/2019	03/01/2019	05/17/2019	08/14/2019	10/30/2019	02/10/2020	05/11/2020	08/24/2020	08/24/2020	11/18/2020	01/27/2021	04/28/2021	08/19/2021	10/11/2021	03/17/2022	12/20/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	16 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	40 U
1,1-Dichloroethane	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	40 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	7 J	3 U	3 U	3 U	3 U	1 J	1 J	0.3 U	0.8 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	60 U
2-Hexanone	ug/L	N	40	-	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	60 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	60 U
Acetone	ug/L	N	6000	-	12 J	41	6 U	6 U	6 J	6 U	4 J	5 J	2 J	2 UJ	0.7 U	0.7 U	0.7 U	0.7 U	3.1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	120 U
Benzene	ug/L	N	1	0.7 J	**6**	0.7 J	**11**	1	**9**	**27**	0.6 J	0.7 J	0.2 U	0.3 J	0.3 J	0.5 J	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**8500**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Bromoform	ug/L	N	4	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U
Carbon disulfide	ug/L	N	700	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
Chlorobenzene	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
Chloroethane	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Chloroform	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Cyclohexane	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	9 J	11 J	2 J	1 U	1 J	1 J	3 J	1 U	1 U	1.3 J	1.6 J	1 U	1 U	1 U	1 U	250
Dibromochloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	40 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.6 J	0.9 J	0.5 U	0.8 J	0.6 J	0.5 U	1	0.4 U	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	16 U
Isopropylbenzene	ug/L	N	700	-	1 U	1 U	1 U	1 U	1 U	1 U	2 J	2 J	0.7 J	0.5 J	0.4 J	1 J	2 J	0.49 J	0.45 J	0.62 J	1.1 J	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	-
Methyl acetate	ug/L	N	7000	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U
Methylcyclohexane	ug/L	N	NA	-	1 U	1 U	1 U	1 U	1 U	1 U	3 J	4 J	0.9 J	0.5 U	3 J	1 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	91 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	40 U
Styrene	ug/L	N	100	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	20 U
Tetrachloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 J	0.2 U	0.2 U	58 J
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	16 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 J	0.3 U	0.3 U	0.3 U	20 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	40 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U
Xylene (total)	ug/L	N	1000	1	0.5 U	0.5 U	3	2	0.5 U	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	16 U
Total TIC VOCS	ug/L	N	NA	-	15 J	-	0 U	0 U	5 J	7 J	53 J	68 J	6 J	0 U	6 J	23 J	110 J	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283
			Field Sample ID	M283B6X	M283B7X	M283B8X	M283B9X	M283C1X	M283C2X	M283C3X	M283C4X	M283C5X	M283C6X	M283C7X	M283C8X	M283C9X	D1101177X	M283D1X	D0201188	M283D3X	M283D4X	M283D5	M283D6X	M283D7X	M283D8X	M283D9X
			Sample Date	04/01/2013	01/13/2014	08/21/2014	09/18/2014	10/07/2014	10/28/2014	01/22/2015	04/14/2015	07/09/2015	10/15/2015	04/19/2016	09/12/2016	04/11/2017	11/01/2017	11/01/2017	02/01/2018	02/01/2018	04/05/2018	07/25/2018	08/08/2018	02/13/2019	05/20/2019	08/14/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	20 U	10 UJ	20 U	-	20 U	10 U	2 U	10 U	10 U	20 U	20 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	1 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	20 U	10 UJ	20 U	-	20 U	10 U	2 U	10 U	10 U	20 U	20 U	10 U	2 U	2 U	10 U	10 U	10 U	10 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	9 J	30 U	15 UJ	30 U	-	30 U	39 J	24	15 U	15 U	200	30 U	15 U	8 J	8 J	15 U	15 U	15 U	20 J	16 J	0.9 J	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	30 U	15 UJ	30 U	-	30 U	15 U	3 U	15 U	15 U	30 U	30 U	15 U	3 U	3 U	15 U	15 U	15 U	15 U	2 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	30 U	15 UJ	30 U	-	30 U	15 U	3 U	15 U	15 U	30 U	30 U	15 U	3 U	3 U	15 U	15 U	15 U	15 U	3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	28	60 U	32 J	64 J	-	60 U	140	68	51 J	36 J	540	60 U	30 U	19 J	6 U	30 U	30 U	30 U	60 J	64 J	6 J	2 J	2 UJ
Benzene	ug/L	N	1	**3300**	**8000**	**8400J**	**6900**	**6700**	**6400**	**4300**	**5000**	**4300**	**3100**	**9000**	**6700**	**2800**	**4100**	**4100**	**3900**	**3900**	**4600**	**3000**	**2200**	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	10 U	3 UJ	5 U	-	5 UJ	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	4 J	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.5 J	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	200	350	170J	180	-	340	290	280	280	140	570	350	210	250	250	190	190	260	280	380J	0.2 U	0.2 U	1 U
Dibromochloromethane	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	20 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 UJ	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 J	8 U	8 J	8 J	10	8 J	14	19	20	7	350	650	10	32	31	3 U	3 U	8	21	39	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 J	10 U	9 J	10 U	-	10 U	16 J	11	12 J	5 U	18 J	30 J	5 U	11	11	5 U	5 U	6 J	5 J	7 J	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	2 J	5 UJ	3 UJ	5 U	-	5 U	3 U	2	3 U	3 U	5 U	5 U	3 U	1 J	1 J	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	62	160	45 J	61	-	130	100	160	91	53	140	100	92	100	100	70	73	110	81	130	0.2 U	0.2 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	20 U	10 UJ	20 U	-	20 U	10 U	2 U	10 U	10 U	20 U	20 U	10 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2 U	0.3 U	0.3 U	0.4 UJ
Styrene	ug/L	N	100	1 U	10 U	5 UJ	10 U	-	10 U	5 U	1 U	5 U	5 U	10 U	10 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	15	49 J	83 J	49	69	61	64	80	78	34	240	270	39	50	49	31	34	140	220	120	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	8 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	20 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	10 U	3 UJ	5 U	-	5 U	3 U	0.5 U	3 U	3 U	5 U	5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	11	16 J	65 J	56	70	58	91	170	140	79	**1100**	**1600**	**1100**	310	310	140	150	170	210	230	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	4200 J	1800 J	3300 J	-	3800 J	3400 J	2500 J	-	-	5300 J	-	2100 J	1800 J	1800 J	1700 J	1800 J	2700 J	1900 J	2400 J	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-284	MW-284	MW-284	MW-284	MW-284	MW-284	MW-284	MW-284	MW-284	MW-285	MW-285
			Field Sample ID	M283E1X	M283E2X	M283E3X	M283E4X	M283E5X	M283E6X	M283E6	D0820218B	M283E8	M283E9	D0215228	M283F1	D1214127	M284B2X	M284B3X	M284B4	M284B5X	M284B6	M284B7	M284B8X	M284B9X	M285B1X	M285B2X
			Sample Date	10/30/2019	02/11/2020	05/11/2020	08/25/2020	11/18/2020	01/25/2021	04/26/2021	08/20/2021	08/20/2021	10/12/2021	02/15/2022	02/15/2022	12/14/2012	12/14/2012	05/29/2013	09/19/2014	12/16/2015	05/20/2016	05/18/2017	11/20/2017	01/29/2018	12/14/2012	05/29/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	2 U	2 U	2 U	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	2 U	2 U	-	-	-	-	-	2 U	2 U	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.7 J	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 J	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	2.8 J	0.5 U	2.5 U	1.1 J	0.5 U	3 U	3 U	-	-	-	-	-	3 U	3 U	3 U	-
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.4 U	0.4 U	2 U	0.4 U	0.4 U	3 U	3 U	-	-	-	-	-	3 U	3 U	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U	3 U	3 U	-	-	-	-	-	3 U	3 U	3 U	-
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.99 UJ	1.5 J	9.8 UJ	4.5 UJ	3.5 U	2.4 J	1.6 J	6 U	6 U	-	-	-	-	-	6 U	6 U	6 U	-
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**3.7J**	**1.7**	**1.5**	**2.5J**	0.93 J	0.84 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	5 U	1 U	1 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	5 U	1 U	1 U	2 U	2 U	-	-	-	-	-	2 U	2 U	2 U	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 J	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.27 J	0.2 U	0.2 U	1 U	0.33 J	0.25 J	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	-
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	2 U	-
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 UJ	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	0 U	-	-	-	-	-	-	-	-	-	0 U	0 U	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-285	MW-285	MW-285	MW-285	MW-285	MW-285	MW-285	MW-286	MW-286	MW-286	MW-286	MW-286	MW-286	MW-286	MW-286	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287
			Field Sample ID	M285B3	M285B4	M285B5	M285B6X	M285B7X	M285B8X	M285B9X	M286B2X	D0529131	M286B3X	M286B4	M286B5X	M286B6	M286B7X	M286B8X	M287B1	M287B2X	M287B3X	M287B4	M287B5	M287B6X	M287B7X	M287B8X
			Sample Date	09/19/2014	05/20/2016	05/18/2017	11/21/2017	01/29/2018	03/06/2019	05/09/2019	12/13/2012	05/29/2013	05/29/2013	09/19/2014	12/20/2016	05/19/2017	11/16/2017	02/02/2018	12/17/2012	05/29/2013	10/08/2014	05/24/2016	05/18/2017	11/17/2017	02/02/2018	03/11/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	0.5 U	0.5 U	0.3 U	0.3 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 UJ	1 U	-	-	-	-	0.5 U	0.5 UJ	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	0.2 U	0.2 U	2 U	-	-	-	-	-	2 U	2 U	2 U	-	-	-	-	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	1 U	1 U	0.3 U	0.3 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	2 U	2 U	0.3 U	0.3 U	2 U	-	-	-	-	-	2 U	2 U	2 U	-	-	-	-	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	0.8 J	0.5 U	0.3 U	1	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	**7**	**7**	**10**
1,2-Dichloropropane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	3 U	3 U	0.3 U	0.3 U	3 U	-	-	-	-	-	3 U	3 U	3 U	-	-	-	-	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	-	-	-	3 U	3 U	0.3 U	0.3 U	3 U	-	-	-	-	-	3 U	3 UJ	3 U	-	-	-	-	3 U	3 UJ	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	3 U	3 U	0.5 U	0.5 U	3 U	-	-	-	-	-	3 U	3 UJ	3 U	-	-	-	-	3 U	3 UJ	0.5 U
Acetone	ug/L	N	6000	-	-	-	6 U	6 U	0.7 U	2 J	6 U	-	-	-	-	-	6 U	6 U	6 U	-	-	-	-	6 U	6 U	7 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	0.5 U	0.5 U	0.3 U	0.3 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.3 U
Carbon disulfide	ug/L	N	700	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 UJ
Chlorobenzene	ug/L	N	50	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	-	2 U	2 U	0.2 U	0.2 U	5	-	-	-	-	-	2 J	3 J	2 U	-	-	-	-	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	2 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	-	-	-	-	-	0.5 U	0.5 U	1 J	-	-	-	-	0.6 J	0.7 J	0.9 J
Methylcyclohexane	ug/L	N	NA	-	-	-	1 U	1 U	0.2 U	0.2 U	10	-	-	-	-	-	10	13	1 U	-	-	-	-	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	0.5 U	0.5 U	0.3 U	0.3 U	2 U	-	-	-	-	-	0.5 U	0.5 U	2 U	-	-	-	-	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	-	-	-	1 U	1 U	0.2 U	0.2 U	1 U	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	0.5 U	0.5 U	0.8 U	-	-	-	-	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	2 U	-	-	-	-	-	0.5 U	0.5 U	2 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.2 U	0.2 U	1 U	-	-	-	-	-	0.5 U	0.5 U	1 U	-	-	-	-	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	0 U	0 U	0 U	0 U	-	-	-	-	-	-	130 J	120 J	-	-	-	-	-	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
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Chevron Perth Amboy Facility

			Location ID	MW-287	MW-287	MW-287	MW-287	MW-287	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289
			Field Sample ID	M287B9X	M287C1X	M287C2X	M287C3X	M287C4X	M288B2	M288B3X	M288B4X	M288B5X	M288B6X	D0517171	M288B7X	M288B8X	M288B9X	M288C1	M288C2	M289B3X	M289B4X	M289B5X	M289B6X	M289B7X	M289B8X	M289B9X
			Sample Date	05/10/2019	08/14/2019	11/01/2019	02/11/2020	05/15/2020	12/17/2012	05/30/2013	10/08/2014	12/16/2015	05/26/2016	05/17/2017	05/17/2017	11/27/2017	01/31/2018	06/29/2021	10/21/2021	12/13/2012	05/30/2013	10/08/2014	05/24/2016	05/18/2017	11/15/2017	01/26/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 UJ	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	-	-	-	-	-	-	2 U	2 U	-	-	2 U	-	-	-	-	2 U	4 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	1 U	0.3 U	0.6 U	1 U	-	-	-	-	1 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	2 U	-	-	-	-	-	-	2 U	2 U	0.3 U	0.6 U	2 U	-	-	-	-	2 U	4 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	1 U	0.2 U	0.4 U	1 U	-	-	-	-	1 U	2 U
1,2-Dichloroethane	ug/L	N	2	**6**	**10J**	**5**	**8**	**6**	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	1 U	0.3 U	0.6 U	1 U	-	-	-	-	1 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	1 U	0.3 U	0.6 U	1 U	-	-	-	-	1 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 UJ	0.6 J	0.3 U	0.3 U	3 U	-	-	-	-	-	-	3 U	3 U	0.5 U	9 J	8 J	-	-	-	-	32	21
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	3 U	-	-	-	-	-	-	3 U	3 UJ	0.4 U	0.8 U	3 U	-	-	-	-	9 J	14 J
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	3 U	-	-	-	-	-	-	3 U	3 UJ	0.63 J	1 U	3 U	-	-	-	-	3 U	6 U
Acetone	ug/L	N	6000	0.7 U	0.7 UJ	1 J	0.7 U	0.7 U	6 U	-	-	-	-	-	-	6 U	6 U	5 J	14 J	16 J	-	-	-	-	120	36 J
Benzene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**18**	0.5 U	**160**	**1600**	1 J	0.5 U	1	0.5 U	0.5 U	**63**	**3**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
Bromoform	ug/L	N	4	0.2 U	1 UJ	1 U	1 U	1 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	1 U	2 U	1 U	-	-	-	-	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	1 U	0.3 U	0.6 U	1 U	-	-	-	-	1 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
Chloroethane	ug/L	N	NA	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
Chloroform	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
Cyclohexane	ug/L	N	NA	0.2 U	1 UJ	1 U	1 U	1 U	2 U	-	-	-	-	-	-	3 J	2 U	7.6	240J	120	-	-	-	-	330	360
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	2 U	-	-	-	-	0.5 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	51	330	85	6	2	0.8 J	4	**730**	110
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	1 U	4.2 J	13	32	-	-	-	-	69	15
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	380	1200	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	1 U	-	-	-	-	-	-	1 U	1 U	0.3 U	0.6 U	1 U	-	-	-	-	1 U	2 U
Methyl-t-butyl ether	ug/L	N	70	0.6 J	0.8 J	0.6 J	0.8 J	0.4 J	0.5 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	0.5 U	-	-	-	-	0.5 U	1 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	-	-	-	-	-	3 J	1 U	3.6 J	150	240	-	-	-	-	250	210
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	2 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	2 U	-	-	-	-	0.5 U	1 U
Styrene	ug/L	N	100	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	1 U	1 U	0.3 U	0.6 U	1 U	-	-	-	-	1 U	2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
Toluene	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.96 J	34	1 J	0.7 U	2	0.5 U	0.5 U	21	2
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	0.8 U	-	-	-	-	0.5 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.3 U	0.6 U	1 U	-	-	-	-	0.5 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	2 U	-	-	-	-	0.5 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	-	-	-	0.5 U	0.5 U	0.2 U	0.4 U	1 U	-	-	-	-	0.5 U	1 U
Xylene (total)	ug/L	N	1000	1 U	1 UJ	1 U	1 U	1 U	0.8 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	21	610	14	1 J	1	0.5 U	6	960	160
Total TIC VOCS	ug/L	N	NA	0 U	0 UJ	0 U	0 U	0 U	-	-	-	-	-	-	-	11 J	0 U	-	-	-	-	-	-	-	3700 J	2000 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290
			Field Sample ID	M289C1X	D0522198	M289C2X	M289C3X	D1029198	M289C4X	M289C5X	M289C6X	M289C7X	M289C8X	M289C9X	D0503218	M289D1	M289D2	D1015218	M289D3	M290A7X	M290A8X	M290A9X	M290B1X	M290B2X	M290B4X	M290B5X
			Sample Date	03/07/2019	05/22/2019	05/22/2019	08/16/2019	10/29/2019	10/29/2019	02/11/2020	05/12/2020	08/07/2020	11/18/2020	01/26/2021	05/03/2021	05/03/2021	08/17/2021	10/15/2021	10/15/2021	12/13/2012	03/29/2013	01/14/2014	08/20/2014	09/17/2014	10/21/2014	01/22/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.6 U	0.6 U	0.3 U	0.3 UJ	0.6 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.4 UJ	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.4 U	0.4 U	0.2 U	1 J	0.4 U	1 U	3	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.6 U	0.6 U	0.3 U	0.3 UJ	0.6 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.6 U	0.6 U	0.3 U	0.3 UJ	0.6 U	2 U	0.3 U	0.3 U	3 U	0.3 U	**6**	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	**0.5J**	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.6 U	0.6 U	0.3 U	0.8 J	0.6 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	**6.5**	0.2 U	0.2 UJ	0.2 U	0.3 U	**6.8**	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	20 J	31 J	22 J	18 J	52	63	26	26	60 J	0.3 U	0.3 U	28 J	34	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.6 U	2 J	90 J	0.3 UJ	0.6 U	2 U	0.3 UJ	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	1 U	1 J	0.5 U	0.5 UJ	2 J	3 U	2 J	0.5 U	5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U
Acetone	ug/L	N	6000	38 J	81 J	42 J	36 J	140 J	200 J	58	76	180 J	50	0.7 U	50 J	47	8.8 J	0.7 U	15 J	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U
Benzene	ug/L	N	1	**23**	**32J**	**23J**	**64J**	**190**	**160**	**250**	**110**	**57**	**64**	**51**	**29J**	**30**	**18**	**19**	**-**	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	**4.1**	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.4 U	0.4 U	0.2 U	1 UJ	2 U	5 U	1 U	1 U	10 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.6 U	0.6 U	0.3 U	0.3 UJ	0.6 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.4 U	0.4 U	0.3 J	2 J	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.4 UJ	0.4 U	0.2 U	0.2 UJ	0.4 UJ	1 UJ	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.4 U	0.4 U	0.2 U	0.2 UJ	2 J	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	410	380	370	370J	590	600	560	430	410	480	530	550J	530	420	420	500 E	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	400	350 J	250 J	440 J	**1700**	**1800**	**1600**	**1200**	**1300**	**860**	**800**	**980J**	**990**	520	430	450E	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	44	28 J	40 J	32 J	110	120	110	82	120	110	79	110 J	91	64	53	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.3 J	0.2 U	2 U	0.3 J	0.28 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	290	260	270	260J	450J	610J	610	440	630	340	440	520J	460	350	320	420 E	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.6 U	0.6 U	0.3 U	0.3 UJ	0.6 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Styrene	ug/L	N	100	0.4 U	0.4 U	0.2 U	0.8 J	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	1.6 J	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	10	13 J	10 J	18 J	63	60	71	54	41	33	27	25 J	27	11	9	9.1	0.7 U	0.7 U	0.7 U	0.5 UJ	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.4 UJ	0.4 U	0.2 U	0.2 UJ	0.4 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.4 U	0.4 U	0.2 U	0.2 UJ	0.7 J	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	370	310 J	230 J	340 J	1000	**1100**	**1100**	850	800	620	520	550 J	530	370	270	270	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	2700 J	2000 J	2000 J	1800J	6400 J	7800 J	7400 J	5200 J	-	-	-	-	-	-	-	-	-	-	0 U	0 UJ	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291
			Field Sample ID	M290B6X	M290B7X	M290B8X	M290B9	M290E2X	M290C2X	M290C4X	M290C5	M290C7X	M290C9X	M290D1X	M290D2X	M290D3X	M290D4X	M290D5X	M291A8X	M291C9X	M291D1X	M291D2X	M291D3X	M291D5X	M291D6X	M291D7X
			Sample Date	04/15/2015	07/09/2015	10/20/2015	12/04/2015	04/18/2016	09/14/2016	04/06/2017	06/02/2017	10/27/2017	04/04/2018	02/13/2019	08/14/2019	02/07/2020	08/21/2020	01/28/2021	12/14/2012	03/29/2013	01/14/2014	08/20/2014	09/17/2014	10/21/2014	01/22/2015	04/15/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	-	2 U	2 U	2 UJ	-	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	-	2 U	2 U	2 U	-	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	-	3 U	3 U	3 U	-	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	-	3 U	3 U	3 U	-	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	-	3 U	3 U	3 U	-	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	-	6 U	6 U	6 U	-	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	-	2 U	2 U	2 UJ	-	2 U	2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	-	2 U	2 U	2 U	-	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	-	0 U	-	37 J	-	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	0 U	0 UJ	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R
			Field Sample ID	M291D8X	M291D9X	M291E1	M291C1X	M291E3X	D0406177	M291E4X	M291E5X	M291E6X	M291E7X	M291E8X	M291E9X	M291F1X	M291F2X	M292RA3X	M292RA4X	M292RA5X	M292RA6X	M292RA7X	M292RA8X	M292RA9X	M292RB1X	M292RB2X
			Sample Date	07/09/2015	10/19/2015	12/04/2015	04/18/2016	09/13/2016	04/06/2017	04/06/2017	10/27/2017	04/04/2018	02/14/2019	08/20/2019	02/14/2020	08/10/2020	01/22/2021	01/15/2013	05/16/2013	01/15/2014	08/22/2014	09/16/2014	09/29/2014	10/24/2014	01/21/2015	04/13/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U	0.2 U	0.2 U	4 U	-	-	20 U	40 U	20 U	2 U	10 U	4 U	2 UJ	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	20 U	40 U	20 U	2 U	10 U	4 U	2 UJ	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	30 U	110 J	30 U	35	15 U	11 J	13 J	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	30 U	**270**	38 J	6 UJ	15 U	6 U	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	-	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	10 U	0.5 U	0.5 UJ	30 U	190J	36 J	3 U	15 U	6 U	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	-	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	1 J	14 U	0.7 U	0.7 UJ	80 J	370 J	60 U	85	30 U	30 J	30 J	6 U	6 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	**9800**	**11000**	**15000**	**230**	**170**	**160**	**88J**	**87**	**41**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	20 U	1 U	1 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	6 U	0.3 U	0.3 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U	0.2 U	1 U	20 U	1 U	1 UJ	530	650	680	3 J	10 U	4 J	2 UJ	4 J	6
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	20 U	40 U	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	8 U	0.4 U	0.4 UJ	**2900**	**2600**	**2300**	490	99	73	24 J	20	27
Isopropylbenzene	ug/L	N	700	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	93	83 J	76	55	11 J	7 J	3 J	2 J	2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	6 U	0.3 U	0.3 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.6 J	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	4 U	0.2 U	0.2 UJ	5 U	10 U	5 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.5 U	10 U	0.5 U	0.5 UJ	230	300	300	3 J	6 J	7 J	2 J	3 J	5 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	-	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.6 UJ	6 U	0.3 U	0.3 UJ	20 U	40 U	20 U	2 U	10 U	4 U	2 UJ	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	1 U	5 U	2 U	1 UJ	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	**8700**	**9000**	**9300**	260	85	68	22 J	3	6
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	8 U	16 U	8 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	20 U	40 U	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	4 U	0.2 U	0.2 UJ	10 U	20 U	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	28 U	1.4 U	1.4 UJ	**14000**	**12000**	**13000**	**3000**	560	380	110 J	42	57
Total TIC VOCS	ug/L	N	NA	-	0 U	-	0 U	-	0 U	0 U	0 U	18 J	0 U	0 U	0 U	0 U	0 U	-	11000 J	15000 J	9700 J	6800 J	11000 J	4200 J	-	2600 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-293	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R
			Field Sample ID	M292RB3X	M292RB4X	M292RB5X	M292RB6X	M292RB8X	M292RC1X	M292RC3X	M292RC4X	M292RC5X	M292RC6X	M292RC7X	D0208218	M292RC8X	M293A8	M293RA9X	M293RB1X	M293RB2X	M293RB3X	M293B4X	M293RB5X	M293RB7X	M293RB8X	M293RB9X
			Sample Date	07/08/2015	10/16/2015	04/20/2016	09/15/2016	04/10/2017	10/20/2017	04/03/2018	02/20/2019	08/13/2019	02/12/2020	08/20/2020	02/08/2021	02/08/2021	05/03/2012	01/21/2013	04/30/2013	05/14/2013	01/15/2014	08/22/2014	09/16/2014	10/24/2014	01/21/2015	04/13/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	4 J	3 U	3 U	3 U	3 U	3 U	4 J	1 J	0.3 U	3 J	0.3 U	0.3 U	6 J	3 U	-	3 U	3 U	3 U	3 U	3 UJ	3 U	6 U
2-Hexanone	ug/L	N	40	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 UJ	3 U	6 U
4-Methyl-2-pentanone	ug/L	N	NA	5 J	4 J	3 U	3 U	3 U	3 U	3 U	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-	3 U	3 U	3 U	3 U	3 UJ	3 U	6 U
Acetone	ug/L	N	6000	8 J	8 J	6 U	6 U	7 J	6 U	6 U	5 J	2 J	0.7 U	10 J	1.3 J	1.5 J	16 J	6 J	-	8 J	9 J	6 U	6 U	6 UJ	6 U	12 U
Benzene	ug/L	N	1	**25J**	**24**	**5**	**9**	**3**	**3**	**5**	**66**	0.3 J	**2**	**1.3**	0.76 J	0.81 J	**140**	**6**	**9**	**7J**	**6**	**2**	**10**	1 J	1	**100**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Bromoform	ug/L	N	4	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 UJ	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Carbon disulfide	ug/L	N	700	1 J	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Chlorobenzene	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Chloroform	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Cyclohexane	ug/L	N	NA	4 J	4 J	3 J	2 U	2 U	2 U	2 U	1 J	1 J	2 J	1 U	1 U	1 U	23	2 U	-	2 U	5	2 U	2 U	2 UJ	2 U	20
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	2 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	14 J	10	9	4	3	2	3	4	2	20	1.8	2	2.2	5	1 J	2 J	10 J	4 J	0.6 J	2	0.5 UJ	0.5 U	570
Isopropylbenzene	ug/L	N	700	2 J	1 J	1 J	1 U	1 U	1 J	1 J	0.9 J	0.9 J	1 J	1.1 J	0.89 J	0.9 J	5	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	31
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J	0.5 U	-	0.5 U	0.5 U	0.5 J	0.7 J	0.7 J	0.7 J	1 U
Methylcyclohexane	ug/L	N	NA	5 J	3 J	6	1 U	1 U	1 J	1 U	0.2 U	0.5 U	1 J	0.5 U	0.5 U	0.5 U	94	1 U	-	2 J	3 J	1 U	1 U	1 UJ	1 U	19
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U
Styrene	ug/L	N	100	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Toluene	ug/L	N	600	1 J	1	2	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.9 J	1	0.94 J	0.46 J	0.48 J	10	2 J	0.7 U	7 J	5 J	0.5 U	0.5 J	0.5 UJ	0.5 U	120
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	2 U	-	2 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U
Xylene (total)	ug/L	N	1000	27 J	20	31	12	8	4	3	3 J	1 U	3 J	1.4 U	1.4 U	1.4 U	20	10	4 J	50 J	18	2	3	0.6 J	0.5 U	**1400**
Total TIC VOCS	ug/L	N	NA	-	-	2100 J	-	1500 J	2300 J	1500 J	950 J	1000 J	1100 J	-	-	-	-	-	-	110 J	93 J	59 J	0 U	0 UJ	-	4300 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294
			Field Sample ID	M293RC1X	M293RC2X	M293RC3X	M293RC4X	M293RC5X	M293RC6X	M293RC7X	M293RC8X	M293RC9X	M293RD1X	M293RD2X	M293RD3X	M293RD4X	M294A7X	M294A8X	M294A9X	M294B2X	M294B3X	M294B4X	M294B5X	M294B6X	M294B7X	M294B8X
			Sample Date	05/07/2015	07/08/2015	10/21/2015	04/13/2016	09/16/2016	04/07/2017	10/20/2017	04/03/2018	02/20/2019	08/12/2019	02/13/2020	08/10/2020	02/10/2021	05/01/2012	08/28/2012	05/23/2013	06/17/2014	11/23/2015	02/10/2016	02/21/2017	02/13/2018	02/22/2019	02/07/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	20 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 UJ	2 U	2 U	2 U	20 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 UJ	3 U	3 U	3 U	30 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 UJ	3 U	3 U	3 U	30 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 UJ	3 U	3 U	3 U	30 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 UJ	6 U	6 U	7 J	60 U	6 U	6 U	5 J	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	160	6 U	6 U	6 U	1 J	1 J
Benzene	ug/L	N	1	**100**	**46J**	**32**	**15**	**12**	**9J**	**6**	**45**	**5**	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	46	14 J	21	28	24	20 U	7	7	2 J	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	640	240 J	470	240	350	310	180	11	30	0.6 J	3	0.4 U	0.61 J	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	39	23 J	31	18	36	22 J	14	1 J	2 J	0.4 J	0.5 J	0.4 J	0.22 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 J	0.3 J	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	42	17 J	23	22	33	14 J	18	6	3 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	20 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 UJ	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	130	16 J	71	22	12	22	4	1	0.7 J	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	**1600**	230 J	**1400**	580	830	580	250	10	15	1 U	1 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	4300 J	-	3800 J	2700 J	-	3300 J	2400 J	300 J	310 J	13 J	93 J	-	0 U	-	-	-	-	0 U	-	-	-	24 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-294	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R
			Field Sample ID	M294B9X	M295A7X	M295A8X	M295A9X	M295B1X	M295B2X	M295B3X	M295B4X	M295B5X	M295B6X	M295RB7X	M295RB8X	D0529201	M295RB9X	M295RC1X	D0303218	M295RC5X	M295RC6X	D0513218	M295RC7	M295RC8	M295RC9
			Sample Date	01/21/2021	05/01/2012	08/28/2012	05/23/2013	06/17/2014	11/23/2015	02/10/2016	02/21/2017	02/13/2018	04/19/2018	11/13/2019	12/06/2019	05/29/2020	05/29/2020	08/26/2020	03/03/2021	03/03/2021	03/29/2021	05/13/2021	05/13/2021	08/24/2021	11/09/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.48 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 J	5 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2.4 J	1.8 J
2-Hexanone	ug/L	N	40	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	64	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	2 J	17 J	0.7 U	2 J	4.5 J	1.3 J	0.93 J	0.7 U	0.7 U	0.7 U	6.3 UJ	5.7 UJ
Benzene	ug/L	N	1	0.2 U	**4J**	**2J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**2**	**68**	**4**	**5**	**13**	**1.8**	**4.7**	**15**	**19**	**19**	**5.4**	**21**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	8	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 J	9	2 J	3 J	4.8 J	1.4 J	3.9 J	4.5 J	9.2	9.1	3.1 J	4.1 J
Dibromochloromethane	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	1	0.4 U	0.4 U	0.54 J	0.4 U	0.4 U	0.79 J	0.72 J	0.72 J	0.56 J	0.61 J
Isopropylbenzene	ug/L	N	700	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	0.5 J	0.3 J	0.5 J	1 J	0.2 U	0.21 J	0.44 J	0.59 J	0.59 J	0.31 J	0.42 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	4 J	2 J	3 J	3.5 J	0.7 J	2.1 J	3.5 J	3.6 J	3.6 J	1.5 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	3	0.2 J	0.2 U	0.85 J	0.2 U	0.42 J	1.2	1.3	1.3	0.63 J	1.2
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	12	1 U	1 U	1.4 U	1.4 U	2.1 J	3.7 J	3.2 J	3.1 J	3.9	0.96 J
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	0 U	-	-	0 U	0 U	39 J	320 J	50 J	100 J	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-295R	MW-295R	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296
			Field Sample ID	M295RD1	M295RD2	M296A7X	M296A8X	M296A9X	M296B2X	M296B3X	M296B4X	M296B5X	S8	D0210162	M296B6X	M296B7X	M296B8X	M296B9X	M296C1X	M296C2X	D0830181	M296C3X	M296C4X	M296C5X	M296C6X	M296C7X
			Sample Date	02/01/2022	02/02/2022	05/01/2012	08/28/2012	04/30/2013	06/16/2014	06/17/2014	08/07/2015	11/23/2015	02/03/2016	02/10/2016	02/10/2016	08/19/2016	02/21/2017	08/31/2017	02/13/2018	04/19/2018	08/30/2018	08/30/2018	02/04/2019	04/23/2019	09/17/2019	11/13/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	4 U	4 U	2 U	-	2 U	10 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	2 U	2 U	1 J	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 J	0.4 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	4 U	4 U	2 U	-	2 U	10 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.6 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.5 J	0.5 U	6 U	6 U	21	-	3 U	15 U	14 J	3 U	14	16	17	3 U	21	18	3 U	0.3 U	0.3 U	7 J	5 J	0.3 U	7 J
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	6 U	6 U	3 U	-	3 U	15 U	6 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
4-Methyl-2-pentanone	ug/L	N	NA	0.63 J	0.5 U	6 U	7 J	9 J	-	3 U	15 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	1 J
Acetone	ug/L	N	6000	3.1 J	4.3 UJ	12 U	12 U	35	-	6 U	30 U	97	6 U	46 J	51 J	45	50	68	58	12 J	29 J	35 J	18 J	9 UJ	11 J	19 J
Benzene	ug/L	N	1	**44**	**14**	**190**	**120**	**110**	**130J**	**180**	**150**	**120**	**100**	**230**	**220**	**140**	**180**	**170**	**170**	**190**	**220**	**210**	**130**	**83**	**110**	**100**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Bromoform	ug/L	N	4	1 U	1 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.6 U
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.4 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Cyclohexane	ug/L	N	NA	2.9 J	2.3 J	120	110	140	-	150	150	75	87	130	130	96	110	110	150	120	110	100	75	90	88	94
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	4 U	4 U	2 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.4 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.45 J	0.4 J	31	21	19	20 J	37	24	16	7	25	23	15	19	18	18	19	24	23	11	9	19	19
Isopropylbenzene	ug/L	N	700	0.33 J	0.7 J	45	34	37	-	37	43	31	11	42	39	36	32	36	44	33	43	41	15	27	43	45
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	1 U	1 U	0.5 U	-	0.5 U	3 U	7	5	10	9	4	3	2	2	2	1	1	0.9 J	1	0.3 J	0.4 U
Methylcyclohexane	ug/L	N	NA	1.5 J	0.63 J	60	59	73	-	68	73	57	52	88	87	72	77	60	75	91	72	68	61	58	60	43
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	4 U	4 U	2 U	-	2 U	10 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
Styrene	ug/L	N	100	0.3 U	0.3 U	2 U	2 U	1 U	-	1 U	5 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Toluene	ug/L	N	600	1	0.54 J	28	20	23	17 J	27	29	21	12	34	33	27	28	28	34	27	34	32	16	20	22	18
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	2 U	2 U	0.8 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	4 U	4 U	2 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	2 U	2 U	1 U	-	0.5 U	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U
Xylene (total)	ug/L	N	1000	0.9 J	0.4 U	56	46	28	33 J	50	37	26	19	47	43	30	42	37	34	52	57	55	36	26	34	31
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	1500 J	-	-	-	-	-	-	1500 J	1600 J	-	-	990 J	1100 J	-	1500 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297
			Field Sample ID	M296C8X	M296C9X	M296D1X	M296D2X	M296D3	M296D4	D1109218	M296D5	M296D6	M297A7X	M297A8X	M297A9X	M297B1X	M297B2X	M297B3X	M297B4X	M297B5X	M297B6X	M297B7X	M297B8X	D0424191	M297B9X	M297C1X
			Sample Date	05/28/2020	08/28/2020	11/06/2020	03/02/2021	05/12/2021	08/24/2021	11/09/2021	11/09/2021	02/02/2022	05/03/2012	08/31/2012	05/23/2013	09/23/2014	02/24/2015	11/20/2015	01/05/2016	02/21/2017	02/13/2018	04/19/2018	02/04/2019	04/24/2019	04/24/2019	11/13/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.46 J	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	10	9 J	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	2.1 J	1.9 J	0.5 U	1.1 J	0.5 U	0.5 U	3.5 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	9 UJ	4.9 J	27	4.2 J	7.9 J	14 UJ	14 J	12 J	19 UJ	6 U	7 J	8 J	10 J	6 U	6 U	6 UJ	6 U	6 U	6 U	0.7 UJ	1 J	0.7 U	0.7 U
Benzene	ug/L	N	1	**88J**	**18**	**190**	**110**	**99**	**93**	**130**	**120**	**93**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	60 J	31	160	150J	82	80	78	80	130	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	8 J	3.3	35	25	18	16	14	15	8.7	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	16 J	4.1 J	54	57	40	43	33	36	42	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.3 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 J	4 J	6	2	6	3	4	5	0.6 J	2	0.2 U	0.2 U	0.2 U	0.3 J
Methylcyclohexane	ug/L	N	NA	42 J	20	87	71	44	40	45	47	49	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	9 J	2.5	23	17	12	13	16	16	12	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	22 J	12	63	37	29	22	31	32	24	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	870 J	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	0 U	0 U	0 U	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R
			Field Sample ID	M297C2X	D0828208	M297C3X	M297C4X	M297C5X	M297C6X	M297C7	D0820218A	M297C8	M297C9	M305RA1X	D0516137	M305RA3X	M305RA4X	M305RA5X	M305RA6X	M305RA7X	M305RA8X	M305RA9X	M305RB1X	D0708157	M305RB2X	D1016157
			Sample Date	05/28/2020	08/28/2020	08/28/2020	11/09/2020	03/02/2021	03/30/2021	05/14/2021	08/20/2021	08/20/2021	11/09/2021	01/21/2013	05/16/2013	05/16/2013	01/15/2014	08/22/2014	09/16/2014	09/29/2014	10/27/2014	01/29/2015	04/15/2015	07/08/2015	07/08/2015	10/16/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	-	2 U	10 U	10 U	10 U	10 U	40 U	10 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	5 U	20 U	5 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**0.68J**	0.3 U	0.3 U	0.3 U	0.3 U	2 U	10 U	10 U	10 U	10 U	40 U	10 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	5 U	20 U	5 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	5 U	20 U	5 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	5 U	20 U	5 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	9 J	15 U	15 U	15 U	260	**3100**	79	90 J	3 U	7 J	3 UJ	3 UJ	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	5 J	**64**	**63**	15 U	**75 J**	**270**	15 U	10 J	3 U	3 U	3 UJ	3 UJ	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 J	48 J	15 U	15 U	15 U	100 J	15 U	5 J	3 U	3 U	3 UJ	3 UJ	3 U
Acetone	ug/L	N	6000	0.7 U	2 UJ	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.8 UJ	25	35 J	30 U	30 U	1200	**19000**	460	760 J	7 J	22	9 J	7 J	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**940**	**6000**	**6200**	**8400**	**1800**	**11000**	**2000**	**740J**	**710**	**300**	**96J**	**96J**	**19**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	1 U	5 U	5 U	5 U	5 U	20 U	7 J	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 J
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	130	310	380	390	240	1000	410	61 J	87	60	27 J	23 J	7
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	10 U	10 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	220	**1100**	**1300**	**1100**	**2600**	**2600**	**790**	210 J	220	93	18 J	18 J	8
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	29	35	35	130	89 J	27	11 J	11	5	2 J	1 J	1 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	5 U	20 U	5 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.24 J	0.22 J	0.2 U	0.2 U	0.2 U	0.2 U	0.43 J	0.57 J	0.2 U	0.5 U	3 U	3 U	3 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	74	120	140	190	440	950	300	74 J	70	51	17 J	15 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	10 U	10 U	10 U	10 U	40 U	10 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	5 U	20 U	5 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	370	370	380	**1200**	**4500**	**15000**	**2600**	590 J	**820**	200	5 J	6 J	0.8 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	4 U	4 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	10 U	10 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	5 U	5 U	3 U	10 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	990	**2100**	**2000**	**2800**	**14000**	**14000**	**4100**	**1100J**	**1200**	480	35 J	38 J	2 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	-	5500 J	6500 J	8100 J	16000 J	18000 J	7200 J	1900 J	2100 J	1300 J	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-306	MW-306
			Field Sample ID	M305RB3X	D0413168	M305RB4X	M305RB5X	M305RB7X	M305RB9X	M305RC1X	M305RC2X	D0222198A	M305RC3X	D0521198	M305RC4X	M305RC5X	D1104198	M305RC6X	D0206208	M305RC7X	D0212208	M305RC7XA	M305RC8X	M305RC9X	M306A2	M306A3X
			Sample Date	10/16/2015	04/13/2016	04/13/2016	09/20/2016	04/10/2017	10/23/2017	01/15/2018	04/02/2018	02/22/2019	02/22/2019	05/21/2019	05/21/2019	08/12/2019	11/04/2019	11/04/2019	02/06/2020	02/06/2020	02/12/2020	02/12/2020	05/13/2020	08/14/2020	09/04/2012	07/22/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.8J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 J	6 J	0.3 U	0.3 U	0.3 U	0.9 J	1 J	0.3 U	0.3 U	-	-	0.3 U	0.3 U	3 U	4 J
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.5 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	11 J	25 J	4 J	4 J	2 J	3 J	5 J	0.7 U	0.8 J	-	-	0.7 U	0.7 U	8 J	6 J
Benzene	ug/L	N	1	**16**	1	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	**3**	**3**	0.3J	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	**6**	**5J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	1 U	1 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Cyclohexane	ug/L	N	NA	6	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	1 U	42	29
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	1 J	2 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	-	0.4 U	0.4 U	4 J	3 J
Isopropylbenzene	ug/L	N	700	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 J	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	40	32
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.6 J	0.5 J
Methylcyclohexane	ug/L	N	NA	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	3 J	0.7 J	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.5 U	0.5 U	74	67
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.3 U	0.3 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.6 J	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	10	3 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.2 U	0.2 U	1 U	1 U
Xylene (total)	ug/L	N	1000	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	69	80	1 U	1 U	1 U	1 U	1 U	-	-	1 U	1.4 U	11	8
Total TIC VOCS	ug/L	N	NA	-	18 J	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	110 J	130 J	0 U	0 U	0 U	0 U	0 U	-	-	0 U	0 U	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-316	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R
			Field Sample ID	M306A4X	M306A5X	M306A7X	M306A8X	M306A9X	M306B1X	M306B2X	M306B3X	M306B2	M306B5	M306B6	M306B7	M316RB2X	M316RA2X	M316RA3X	M316RA4X	D08221472	M316RA5X	D0916147	M316RA6X	M316RA7X	M316RA8X
			Sample Date	06/20/2014	12/19/2014	03/04/2016	03/31/2020	05/27/2020	08/14/2020	11/18/2020	01/27/2021	04/28/2021	09/08/2021	11/24/2021	02/22/2022	07/08/2015	01/15/2013	05/14/2013	01/15/2014	08/22/2014	08/22/2014	09/16/2014	09/16/2014	09/29/2014	10/23/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 UJ	1 U	-	-	-	-	-	-	-	4 UJ	10 U	20 U	10 U	20 U	10 U	10 U	10 U	10 U	4 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	0.3 U	2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 UJ	10 U	20 U	10 U	20 U	10 U	10 U	10 U	10 U	4 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	1	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	0.3 U	2 U	4.5 J	0.3 U	0.3 U	0.3 U	1.9 J	0.5 U	0.5 U	7 J	45 J	33 J	15 U	41 J	42 J	25 J	30 J	29 J	110
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	0.3 U	2 U	3.7 J	0.3 U	0.41 J	0.3 U	1.7 J	0.4 U	0.4 U	10 J	27 J	**170**	15 U	30 U	19 UJ	15 U	15 U	15 U	6 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6 UJ	15 U	120	15 U	30 U	15 U	15 U	15 U	15 U	6 U
Acetone	ug/L	N	6000	6 U	6 U	9 J	5 J	14 J	26	3.5 J	0.7 U	0.84 J	4.2 J	8.8 J	1.6 J	26 J	150	100 J	30 U	120 J	130	110	110	85 J	470
Benzene	ug/L	N	1	**4**	**3**	**4**	**2**	**2J**	**3.1**	**2.3**	**1.6**	**1.6**	**2.3**	**3.3**	**1.3**	**46J**	**5500**	**8300**	**8000**	**610**	**630**	**89**	**110**	**79**	**8**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 UJ
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Cyclohexane	ug/L	N	NA	21	20	22	14 J	6 J	17	13	1 U	1 U	11	11	5.8	9 J	710	520	530	88	110	10 U	10 U	10 U	4 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	10 U	20 U	10 U	5 U	3 U	3 U	3 U	3 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3	2	2	2	2 U	2.1	1.1	0.75 J	0.87 J	1.2	1.8	0.67 J	110 J	**2600**	**3000**	**2700**	**6000**	**6400**	**2700**	**2800**	**1200**	560
Isopropylbenzene	ug/L	N	700	29	48	35	53	24 J	33	58	51	53	27	31	25	20 J	100	120	75	270	280	140	160	100	74
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
Methyl-t-butyl ether	ug/L	N	70	0.6 J	4	2	0.6 J	1 U	0.32 J	0.49 J	0.55 J	0.53 J	0.38 J	0.47 J	0.49 J	1 UJ	3 U	5 U	3 U	5 U	3 U	3 U	3 U	3 U	1 U
Methylcyclohexane	ug/L	N	NA	58	69	61	65	24 J	55	76	69	65	23	41	19	5 J	400	210	240	110	120	24 J	18 J	7 J	6 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 UJ	10 U	20 U	10 U	20 U	10 U	10 U	10 U	10 U	4 U
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 UJ	5 U	10 U	5 U	10 U	5 U	5 U	5 U	5 U	2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
Toluene	ug/L	N	600	3	3	3	3	2 J	2.5	2.2	1.8	2	1.8	2.2	1.3	5 J	440	**620**	330	260	280	58	69	35	8
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	4 U	8 U	4 U	5 U	3 U	3 U	3 U	3 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	10 U	20 U	10 U	5 U	3 U	3 U	3 U	3 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	5 U	10 U	5 U	5 U	3 U	3 U	3 U	3 U	1 U
Xylene (total)	ug/L	N	1000	7	8	8	7	7 U	7.3	7.3	6.1	6	5.1	7.3	4	530 J	**11000**	**12000**	**6300**	**25000**	**26000**	**12000**	**12000**	**5400**	**3000**
Total TIC VOCS	ug/L	N	NA	-	-	-	1300 J	1400 J	-	-	-	-	-	-	-	-	-	15000 J	10000 J	34000 J	26000 J	24000 J	26000 J	33000 J	14000 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R
			Field Sample ID	M316RA9X	M316RB1X	M316RB3X	M316RB4X	M316RB5X	M316RB7X	M316RB9X	M316RC2X	M316RC3X	M316RC4X	M316RC5X	M316RC6X	M316RC7X	M317RA2X	D03281310	M317RA3X	M317RA4X	M317RA5X	M317RA6X	D0929147	M317RA7X	D1027147
			Sample Date	01/21/2015	04/13/2015	10/20/2015	04/20/2016	09/15/2016	04/07/2017	10/23/2017	04/03/2018	02/15/2019	08/13/2019	02/12/2020	08/21/2020	02/08/2021	01/22/2013	03/28/2013	03/28/2013	01/16/2014	08/22/2014	09/16/2014	09/29/2014	09/29/2014	10/27/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
1,1,1-Trichloroethane	ug/L	N	30	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
1,1,2-Trichloroethane	ug/L	N	3	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	-	-	20 U	20 U	20 U	20 U	20 U	4 U	10 U	10 U	10 UJ
1,1-Dichloroethane	ug/L	N	50	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	20 U	20 U	20 U	20 U	20 U	4 U	10 U	10 U	10 UJ
1,2-Dibromoethane	ug/L	N	0.03	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
1,2-Dichloroethane	ug/L	N	2	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
1,2-Dichloropropane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
1,4-Dichlorobenzene	ug/L	N	75	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 U	19	9 J	3 U	4 J	7 J	3 U	3 U	0.7 J	3 U	0.3 U	0.3 U	0.3 U	30 U	30 U	31 J	30 U	58 J	21	20 J	19 J	40 J
2-Hexanone	ug/L	N	40	15 U	20	14 J	5 J	3 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	**62 J**	**110**	**100**	**41 J**	30 U	6 U	15 U	15 U	15 UJ
4-Methyl-2-pentanone	ug/L	N	NA	15 U	6 J	3 UJ	7 J	3 U	3 U	3 U	3 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	31 J	49 J	46 J	30 U	30 U	6 U	15 U	15 U	15 UJ
Acetone	ug/L	N	6000	30 U	46	25	6 U	7 J	8 J	6 U	6 U	4 J	8 J	0.7 U	0.94 UJ	1.4 J	60 U	60 U	60 U	68 J	94 J	54	42 J	40 J	100 J
Benzene	ug/L	N	1	**65**	**100**	**58**	**20**	**26**	0.7J	**12**	0.5 U	0.4J	**2J**	0.2 U	0.35J	0.56J	**11000**	**12000**	**12000**	**11000**	**6900**	**2800**	**3300**	**3300**	**4800J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Bromoform	ug/L	N	4	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	1 U	1 UJ	1 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Carbon disulfide	ug/L	N	700	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
Carbon Tetrachloride	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Chlorobenzene	ug/L	N	50	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
Chloroethane	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Chloroform	ug/L	N	70	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
cis-1,2-Dichloroethene	ug/L	N	70	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
cis-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Cyclohexane	ug/L	N	NA	10 U	8	23	8	4 J	4 J	7	2 U	0.4 J	10 U	1 U	1 U	1 U	340	670	650	740	20 U	74	10 U	10 U	96 J
Dibromochloromethane	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	20 U	20 U	20 U	20 U	5 U	1 U	3 U	3 U	3 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	250	210	97	51	81	10	19	1	0.5 J	4 U	0.4 U	0.4 U	0.4 U	**1700**	**2600**	**2400**	**2500**	**930**	420	310	310	550 J
Isopropylbenzene	ug/L	N	700	35	29	18	12	20	3 J	6	1 U	0.3 J	2 U	0.2 U	0.2 U	0.2 U	63	87	74	96	18 J	16	11 J	11 J	26 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	0.3 U	0.3 U	0.3 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
Methyl-t-butyl ether	ug/L	N	70	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	5 U	5 U	5 U	5 U	5 U	1 U	3 U	3 U	3 UJ
Methylcyclohexane	ug/L	N	NA	5 U	14	39	7	2 J	2 J	1 U	1 U	0.2 J	5 U	0.5 U	0.5 UJ	0.5 U	170	400	330	480	10 U	110	5 U	5 U	27 J
Methylene chloride (Dichloromethane)	ug/L	N	3	10 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	4 UJ	0.3 U	0.3 U	0.3 U	20 U	20 U	20 U	20 U	20 U	4 U	10 U	10 U	10 UJ
Styrene	ug/L	N	100	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	10 U	2 U	5 U	5 U	5 UJ
Tetrachloroethene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
Toluene	ug/L	N	600	6	6	4	2	2	0.5 U	0.6 J	0.5 U	0.4 J	2 U	0.2 U	0.22 J	0.2 U	**1400**	**4100J**	**2800J**	**3200**	**1800**	**820**	350	350	410 J
trans-1,2-Dichloroethene	ug/L	N	100	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	8 U	8 U	8 U	8 U	5 U	1 U	3 U	3 U	3 UJ
trans-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 UJ	0.2 U	0.2 U	20 U	20 U	20 U	20 U	5 U	1 U	3 U	3 U	3 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	10 U	10 U	10 U	10 U	5 U	1 U	3 U	3 U	3 UJ
Xylene (total)	ug/L	N	1000	710	720	360	130	230	32	81	4	3 J	43 J	1 U	1.4 J	1.4 U	**5400**	**11000J**	**7500J**	**10000**	**3300**	**1900**	**1400**	**1400**	**2700J**
Total TIC VOCS	ug/L	N	NA	-	7300 J	6600 J	5400 J	-	1400 J	3300 J	240 J	270 J	0 U	160 J	-	-	-	16000 J	14000 J	16000 J	2600 J	2000 J	1600 J	1700 J	3300 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R
			Field Sample ID	M317RA8X	D0129157	M317RA9X	M317RB1X	M317RB2X	M317RB3X	M317RB4X	M317RB5X	M317RB7X	D1024177	M317RB9X	M317RC1X	M317RC2X	M317RC3X	M317RC4X	M317RC5X	M317RC6X	M317RC7X	M317RC8X	D0813208	M317RC9X	M317RD1X	D0211218
			Sample Date	10/27/2014	01/29/2015	01/29/2015	04/15/2015	07/08/2015	10/22/2015	04/18/2016	09/20/2016	04/10/2017	10/24/2017	10/24/2017	01/16/2018	04/02/2018	02/19/2019	05/21/2019	08/07/2019	11/04/2019	02/05/2020	05/13/2020	08/13/2020	08/13/2020	11/20/2020	02/11/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	10 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	10 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	40 J	15	14	8 J	6 J	3 U	3 U	4 J	3 U	3 U	3 U	3 U	3 U	3 U	1 J	3 U	0.8 J	0.3 U	0.3 J	0.3 U	0.81 J	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	15 UJ	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	15 UJ	6 J	6 J	5 J	6 J	10 J	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	100 J	38	38	20 J	17 J	6 U	6 U	87	15 J	6 U	6 U	6 U	6 U	7 U	15 J	7 U	2 J	0.7 U	0.7 U	2 UJ	2 UJ	2.1 UJ	3 J
Benzene	ug/L	N	1	**4300J**	**440**	**440**	**330**	**180J**	**140**	**78**	**110**	**9**	**220**	**220**	**3**	**8**	**13**	0.2 U	2 U	0.2 U	0.2 U	0.2 U	**19J**	0.75J	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	66 J	27	27	15	13 J	13	7	4 J	2 U	4 J	4 J	2 U	2 U	2 U	0.2 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	500 J	110	100	57	35 J	28	41	58	1	43	42	2	4	4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	1	1.6 J	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	22 J	7	6	4 J	4 J	2 J	1 J	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 J	0.81 J	1.3 J	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	18 J	8	7	4 J	7 J	17	8	2 J	1 U	3 J	3 J	2 J	2 J	2 U	0.2 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	10 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3 U	4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	380 J	2	2	2	2 J	2	0.9 J	1	0.5 U	5	5	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	3 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	**2400J**	100	100	20	32 J	28	47	52	0.8 J	28	27	5	7	10 U	1 U	14 U	1 U	1 U	3 J	4 J	5.2 J	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	2400 J	500 J	490 J	350 J	-	-	180 J	-	0 U	160 J	150 J	7 J	10 J	0 U	0 U	0 U	12 J	0 U	60 J	-	-	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-318R	MW-318R	MW-318R	MW-318R	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR
			Field Sample ID	M317RD2X	M317RD3	D0819218	M317RD4	M317RD5	M317RD6	M318RA1X	M318RA2X	M318RA5X	M318RA6X	M318RRA8X	M318RRA9X	M318RRB2X	M318RRB4X	M318RRB5X	M318RRB6X	M318RRB7X	M318RRB8X	M318RRB9X	M318RRC1X	M318RRC2X
			Sample Date	02/11/2021	04/29/2021	08/19/2021	08/19/2021	10/13/2021	02/14/2022	01/07/2013	05/16/2013	04/15/2015	07/08/2015	04/19/2016	09/20/2016	04/12/2017	10/24/2017	01/18/2018	04/02/2018	02/19/2019	05/21/2019	08/07/2019	11/04/2019	02/05/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	5 U	10 U	2 U	2 UJ	20 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	10 U	2 U	2 UJ	20 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.39 J	0.5 U	0.5 U	0.5 U	0.5 U	8 U	16 J	**360**	100 J	30 U	4 J	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	1 J	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	100	75	8 J	5 J	30 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	26	54	10	9 J	30 U	7 J	3 U	12	3 U	3 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	2.3 J	3.3 J	0.7 U	0.7 U	0.7 U	0.7 U	15 U	59 J	1100	440 J	130 J	9 J	6 U	6 U	6 U	6 U	24	2 J	2 J	3 J	1 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	**1800**	**5000**	**27**	**53J**	**260**	**310**	**8**	**220**	**93**	**160**	**79**	**8**	**8**	1	**21**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	0.5 UJ	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 UJ	1 U	420	500	14	11 J	20 U	17	7	8	13	8	6	0.2 U	1 U	1 U	2 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	10 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**870**	**2200**	9	32 J	140	300	5	100	48	98	24	3	2	0.4 U	12
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	28	66	1 U	8 J	10 U	11	1 U	2 J	1 J	3 J	0.4 J	0.2 U	0.2 U	0.2 U	1 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	3 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	210	190	9	24 J	10 U	9	3 J	1 U	3 J	1 J	7	0.2 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	10 U	2 U	2 UJ	20 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	1 U	1 UJ	10 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	330	420	11	21 J	47	61	1	13	3	5	13	0.2 U	0.2 J	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	10 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**2600**	**2500**	110	730 J	380	580	16	160	49	82	180	1 U	1 U	1 U	1 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	6100 J	520 J	-	510 J	-	110 J	320 J	170 J	290 J	72 J	0 U	5 J	0 U	46 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-319	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R
			Field Sample ID	M318RRC3X	M318RRC4X	M318RRC5X	M318RRC6X	M318RRC4	M318RRC8	M318RRC9	M318RRD1	M319A3X	M319RA1X	M319RA2X	M319RA3X	M319RA4X	M319RA5X	M319RA6X	M319RA7X	M319RA8X	M319RA9X	M319RB1X	M319RB3X	M319RB5X	M319RB7X	M319RB8X
			Sample Date	05/13/2020	08/14/2020	11/20/2020	02/11/2021	04/29/2021	08/19/2021	10/13/2021	03/01/2022	01/15/2014	01/17/2013	05/14/2013	08/22/2014	09/16/2014	09/29/2014	10/23/2014	01/21/2015	05/07/2015	07/08/2015	10/20/2015	09/14/2016	04/07/2017	10/23/2017	04/04/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	2 U	10 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	10 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	15	95	63 J	4 J	3 U	5 J	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	15 U	**130**	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 J	15 U	30 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	1.2 J	0.7 U	0.7 U	0.7 U	6 U	210	210	43	13 J	47	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**14**	0.2 U	**1.9**	**12**	0.2 U	0.3 U	0.3 U	0.3 U	**800**	**1100**	**1700**	**5**	0.5 U	**10**	**14**	**5**	**48**	**3J**	**3**	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 J	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	500	730	1400	2 U	2 U	7	59	18	73	2 UJ	3 J	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	12	0.4 U	0.74 J	9.4	0.4 U	0.4 U	0.4 U	0.4 U	**1700**	**3500**	**3500**	5	0.5 U	10	12	9	250	1 J	19	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 J	0.2 U	0.2 U	0.78 J	0.2 U	0.2 U	0.2 U	0.2 U	85	140	230	1 J	1 U	3 J	9	2 J	17	1 UJ	2 J	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	310	610	1200	1 U	1 U	2 J	32	7	22	1 UJ	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	10 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.5 U	0.5 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	130	280	300	1	0.5 U	3	2	0.5 U	1	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	4 U	8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	20 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 J	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	**3600**	**10000**	**11000**	21	1	25	49	0.7 J	15	3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	82 J	0 U	0 U	-	0 U	0 U	0 U	0 U	7000 J	-	34000 J	75 J	0 U	110 J	490 J	-	670 J	-	91 J	-	6 J	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321
			Field Sample ID	M319RB9X	M319RC1X	M319RC2X	M319RC3X	M319RC4X	M319RC5	M319RC6	M321A1X	M321A2X	M321A3X	M321A4X	M321A5X	M321A7X	M321A8X	M321A9X	M321B1X	M321B2X	M321B3	M321B4X	M321B5X	M321B7	M321B9X	M321C1X
			Sample Date	02/21/2019	08/13/2019	02/11/2020	08/21/2020	01/28/2021	08/19/2021	02/28/2022	01/07/2013	05/14/2013	01/14/2014	08/21/2014	09/18/2014	10/21/2014	01/20/2015	04/16/2015	07/08/2015	10/21/2015	12/04/2015	04/20/2016	09/13/2016	06/02/2017	10/25/2017	01/16/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.4 J	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	8 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	12	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	2 J	0.5 U	0.5 U	0.5 U	0.5 U	6.3 J	2.9 J	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	35	1 J	5 J	2.5 UJ	2.1 J	0.7 U	0.7 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 UJ	6 UJ	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**200**	**2**	**8**	0.99 J	**22**	**13**	**32**	0.6 J	0.5 U	0.5 U	1 J	**11**	**21**	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	81	2 J	23	1.3 J	8.1	62	75	2 U	2 U	3 J	4 J	70	200	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2	0.4 U	1	0.4 U	0.4 U	99	140	4 J	0.8 U	0.8 U	0.5 UJ	47	120	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	1 J	0.2 U	0.2 U	0.2 U	5.1	6	1 U	1 U	1 U	1 UJ	8	15	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	36	0.5 U	17	0.5 UJ	1.1 J	40	41	1 U	1 U	1 U	1 UJ	24	100	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	4	0.3 J	0.4 J	0.2 U	0.34 J	0.99 J	6.5	6	0.7 U	0.7 U	0.5 UJ	2	4	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	13	1 U	1 J	1.4 U	1.4 U	130	170	18	0.8 U	0.8 U	0.5 UJ	14	25	0.5 U	0.5 UJ	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	210 J	14 J	140 J	0 U	-	-	-	-	5 J	0 U	0 UJ	930 J	2300 J	0 U	0 UJ	-	0 U	-	0 U	-	-	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-321	MW-321	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R
			Field Sample ID	M321C2X	M321C3X	M329A1X	M329A2X	M329A3X	M329A5X	M329A6X	M329A7X	M329A8X	M329A9X	M329B1X	M329B2X	M329RB4X	M329RB5X	M329RB6X	M329RB7X	M329RB8X	M329RB9X	M329RC1X	M329RC2X	M329RC3X	M329RC4X	M329RC5X
			Sample Date	02/21/2019	08/20/2019	04/23/2012	06/21/2012	11/14/2012	05/09/2013	07/02/2013	10/15/2013	12/18/2013	07/09/2014	03/10/2015	07/14/2015	07/27/2016	08/31/2016	10/17/2016	12/07/2016	01/20/2017	04/18/2017	07/10/2017	10/18/2017	01/09/2018	05/22/2018	08/28/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	1 J	1 J	1 J	2 J	1 J	10 U	1 J	1 U	1 U	1 U	1 U	1 U	2 J	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.3 J
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	3 J	0.7 U	6 U	6 U	6 U	6 UJ	6 U	60 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	12 UJ	6 U	6 U	2 J
Benzene	ug/L	N	1	0.2 U	0.2 U	**6**	**14**	**6**	0.5 U	1 J	**13J**	0.6 J	**9**	0.5 U	**27**	**4**	**6**	**3**	0.6 J	0.6 J	0.7 J	**2**	1 UJ	0.5 U	0.5 J	1
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.6 J
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	14	13	2 J	9	3 J	8 U	3 J	2	0.8 J	0.8 J	8	13	29	11	10	6	16	5 J	3	1	5
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	10	11	14	13	10	26 UJ	14	7	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	5 J	3 J	5 J	8	5 J	10 U	7	3 J	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 U	14	14	16	9	7 J	10 U	11	4 J	2 J	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.7 UJ	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 UJ	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.7 J	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	-	-	240 J	210 J	0 U	140 J	23 J	170 J	0 U	33 J	7 J	12 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330
			Field Sample ID	M329RC6X	M329RC7X	M329RC8X	D0806198	M329RC9X	M329RD1X	M329RD2X	M329RD3	M329RD4	M330A1X	M330A2X	M330A3X	M330A4X	M330A5X	M330A6X	M330A7X	D0414157	M330A8X	M330A9X	M330B1X	M330B2X	M330B3X	M330B5X
			Sample Date	11/21/2018	02/11/2019	05/16/2019	08/06/2019	08/06/2019	09/08/2020	02/05/2021	08/25/2021	02/04/2022	01/17/2013	05/17/2013	01/17/2014	08/21/2014	09/18/2014	10/27/2014	01/20/2015	04/14/2015	04/14/2015	07/08/2015	10/22/2015	04/13/2016	09/21/2016	04/13/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	40 U	40 U	20 U	20 UJ	40 U	20 UJ	20 U	10 U	10 U	20 UJ	4 U	20 U	20 U	10 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	40 U	40 U	20 U	20 UJ	40 U	20 UJ	20 U	10 U	10 U	20 UJ	4 U	20 U	20 U	10 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1 J	1 J	0.5 J	0.3 U	0.3 U	0.3 UJ	0.3 U	0.50 U	0.5 U	270	**310**	30 U	88 J	130 J	38 J	30 U	18 J	16 J	30 UJ	20	30 U	30 U	29 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.40 U	0.4 U	60 U	60 U	**63 J**	30 UJ	60 U	30 UJ	30 U	15 U	15 U	30 UJ	6 U	30 U	30 U	15 U
4-Methyl-2-pentanone	ug/L	N	NA	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.50 U	0.5 U	91 J	230	83 J	30 UJ	60 U	30 UJ	30 U	15 U	15 U	30 UJ	6 U	30 U	30 U	15 U
Acetone	ug/L	N	6000	11 J	19 J	7 J	0.7 U	0.7 U	2.2 UJ	0.7 U	3.1 J	0.78 J	470	760	62 J	410 J	580	140 J	60 U	30 U	30 U	60 UJ	52	65 J	76 J	56 J
Benzene	ug/L	N	1	0.9 J	1	1	**2**	**2**	**4.9J**	0.7 J	**1.9**	0.34 J	**13000**	**12000**	**12000**	**9200J**	**5500**	**7100J**	**6400**	**9900**	**9000**	**8000J**	**5200**	**9000**	**7400**	**3500**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1.0 U	1 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Carbon disulfide	ug/L	N	700	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Chlorobenzene	ug/L	N	50	1	3	3	4	4	1.7 J	1.4	1.8	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.22 J	0.2 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1.0 U	1 U	620	480	400	500J	230	190J	130	170	160	190J	220	470	360	290
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	40 U	40 U	20 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.40 U	0.4 U	**4200**	**3400**	**2800**	**3000J**	**2800**	**2300J**	**2500**	**2900**	**2700**	**2400J**	**2000**	**3000**	**2800**	**2600**
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	140	120	130	88 J	110	94 J	86	97	94	89 J	78	190	120	92
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.30 U	0.3 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	10 U	10 U	5 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.50 U	0.5 U	560	330	380	360J	270	180J	110	150	150	150J	170	630	370	310
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 UJ	0.3 UJ	0.3 U	0.30 U	0.3 U	40 U	40 U	20 U	20 UJ	40 U	20 UJ	20 U	10 U	10 U	20 UJ	4 U	20 U	20 U	10 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	10 UJ	20 U	10 UJ	10 U	5 U	5 U	10 UJ	2 U	10 U	10 U	5 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Toluene	ug/L	N	600	0.2 J	0.2 J	0.3 J	0.6 J	0.6 J	0.2 UJ	0.2 U	0.20 U	0.2 U	**16000**	**14000**	**13000**	**8300J**	**8700**	**9400J**	**9000**	**8600**	**7700**	**8300J**	**5700**	**8000**	**8200**	**1400**
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	16 U	16 U	8 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	40 U	40 U	20 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	20 U	20 U	10 U	5 UJ	10 U	5 UJ	5 U	3 U	3 U	5 UJ	1 U	5 U	5 U	3 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1.4 UJ	1.4 U	0.40 U	0.4 U	**18000**	**15000**	**18000**	**14000J**	**15000**	**16000J**	**14000**	**13000**	**12000**	**13000J**	**9800**	**14000**	**14000**	**13000**
Total TIC VOCS	ug/L	N	NA	0 U	19 J	10 J	8 J	25 J	0 U	0 U	0.0 U	0 U	-	20000 J	14000 J	13000 J	21000 J	16000 J	15000 J	12000 J	12000 J	-	-	24000 J	-	12000 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-331	MW-331	MW-331	MW-331	MW-331
			Field Sample ID	M330B7X	D0405087	M330B9X	M330C1	M330C3X	M330C4X	D0808198	M330C5X	M330C6X	M330C7X	M330C8X	M330C9X	M330D1X	M330D2X	M330D2	M330D4	M330D5	M330D6	M331A1X	M331A2X	M331A3X	M331A4X	M331A5X
			Sample Date	10/31/2017	04/05/2018	04/05/2018	07/25/2018	02/27/2019	05/07/2019	08/08/2019	08/08/2019	11/05/2019	02/06/2020	05/12/2020	08/19/2020	11/13/2020	02/10/2021	04/30/2021	08/19/2021	10/13/2021	02/15/2022	01/04/2013	05/17/2013	01/16/2014	08/21/2014	09/18/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
1,1,1-Trichloroethane	ug/L	N	30	1 U	3 U	1 U	3 U	3 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
1,1,2-Trichloroethane	ug/L	N	3	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**14**	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	10 U	4 U	10 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	20 U	10 U	20 U	2 UJ	4 U
1,1-Dichloroethane	ug/L	N	50	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 UJ	5 U	2 U	5 U	3 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	1 UJ	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	10 U	4 U	10 U	3 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	**8.8**	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	20 U	10 U	20 U	2 UJ	4 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	5 U	2 U	5 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	1 UJ	2 U
1,2-Dichloroethane	ug/L	N	2	1 U	3 U	1 U	3 U	3 U	2 U	0.6 U	2	0.3 U	0.3 U	0.3 U	1	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
1,2-Dichloropropane	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	**2**	0.2 U	0.2 U	**1.5**	0.2 U	**2.7**	0.2 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	5 U	2 U	5 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	1 UJ	2 U
1,4-Dichlorobenzene	ug/L	N	75	2 U	5 U	2 U	5 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	1 UJ	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	6 U	15 U	6 U	17 J	160	30 J	15 J	15 J	9 J	10	6 J	0.3 U	4 J	10	16	17 J	4.5 J	1.5 J	30 U	15 U	30 U	27 J	12 J
2-Hexanone	ug/L	N	40	6 U	15 U	6 U	15 U	**640**	**58**	0.6 U	0.6 U	0.3 U	4 J	5 J	2.8 J	1.6 J	11	**95**	0.4 UJ	0.4 U	0.4 U	30 U	15 U	30 U	3 UJ	6 U
4-Methyl-2-pentanone	ug/L	N	NA	6 U	15 U	6 U	15 U	37 J	13 J	1 J	1 J	0.5 U	3 J	2 J	0.5 U	1.2 J	2.7 J	9.7 J	1.9 J	0.5 U	0.5 U	30 U	15 U	30 U	3 UJ	6 U
Acetone	ug/L	N	6000	12 U	30 U	12 U	34 J	710	99 J	36 J	35 J	24	29	16 J	11 J	13 J	26	50	0.7 UJ	0.7 U	0.74 J	60 U	30 U	60 U	94 J	38 J
Benzene	ug/L	N	1	**370**	**170**	**190**	**2800**	**880**	**510**	**80**	**63**	**57**	**48**	**23**	**32**	**26**	**120**	**66**	**25J**	**23**	**3.5**	**1800**	**2300**	**2800**	**1000J**	**970**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1.9**	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
Bromoform	ug/L	N	4	1 U	3 U	1 U	3 U	2 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	10 U	5 U	10 U	0.5 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	3 U	1 U	3 U	3 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
Carbon disulfide	ug/L	N	700	2 U	5 U	2 U	5 U	4 J	3 J	0.8 J	0.9 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 J	0.3 UJ	0.3 UJ	0.3 U	10 U	5 U	10 U	1 UJ	2 U
Carbon Tetrachloride	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 UJ	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
Chlorobenzene	ug/L	N	50	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
Chloroethane	ug/L	N	NA	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
Chloroform	ug/L	N	70	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	2.3	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
cis-1,2-Dichloroethene	ug/L	N	70	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
Cyclohexane	ug/L	N	NA	180	130	130	130	140	180	47	50	100	110	75	92	81	170	99	69 J	49 J	20	720	700	600	260J	270
Dibromochloromethane	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	20 U	10 U	20 U	0.5 UJ	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	**960**	450	540	**1200**	650	680	220 J	150 J	280	290	210	160	200	430	240	110 J	140	43	**2600**	**3000**	**2500**	**740J**	580
Isopropylbenzene	ug/L	N	700	36	25	29	46	36 J	32	18	14	24	26	16	14	12	33	15	9.4 J	12	4.1 J	62	70	66	28 J	26
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 U	5 U	2 U	5 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.3 U	0.3 U	1.2 J	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	1 UJ	2 U
Methyl-t-butyl ether	ug/L	N	70	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	5 U	3 U	5 U	0.5 UJ	1 U
Methylcyclohexane	ug/L	N	NA	170	150	140	100	220	170	58	67	140	170	130	130	110	170	100	98 J	120	23	300	250	240	150J	120
Methylene chloride (Dichloromethane)	ug/L	N	3	1 U	3 U	1 U	3 U	3 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	20 U	10 U	20 U	2 UJ	4 U
Styrene	ug/L	N	100	2 U	5 U	2 U	5 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	1 UJ	2 U
Tetrachloroethene	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
Toluene	ug/L	N	600	**990**	27	32	49	340	250	53 J	37 J	39	38	18	21	20	49	140	20 J	11	1.5	**5100**	**5700**	**5900**	**2000J**	**1500**
trans-1,2-Dichloroethene	ug/L	N	100	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	8 U	4 U	8 U	0.5 UJ	1 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	10 U	5 U	10 U	0.5 UJ	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	20 U	10 U	20 U	0.5 UJ	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	3 U	1 U	3 U	2 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	10 U	5 U	10 U	0.5 UJ	1 U
Xylene (total)	ug/L	N	1000	**5500**	**2800**	**3000**	**4800**	**4700**	**5700**	**4300**	**4700**	**3500**	**2800**	700	**1200**	700	**2100**	**1300**	**1300J**	800	110	**12000**	**12000**	**12000**	**2200J**	**2600**
Total TIC VOCS	ug/L	N	NA	10000 J	11000 J	7800 J	12000 J	7600 J	9300 J	9200 J	7600 J	5400 J	9400 J	3400 J	-	-	-	-	-	-	-	-	10000 J	13000 J	4100 J	4600 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331
			Field Sample ID	M331A6X	M331A7X	M331A8X	M331A9X	M331B1X	M331B2X	M331B3X	M331B5X	M331B7X	M331B8X	M331B9X	M331C1X	M331C2X	M331C3X	M331C4X	M331C5X	M331C6X	M331C7X	D1113208A	M331C8X	M331C9X	M331D1	M331D2
			Sample Date	10/27/2014	03/12/2015	04/15/2015	07/08/2015	10/22/2015	04/19/2016	09/19/2016	04/06/2017	10/25/2017	01/16/2018	04/09/2018	02/19/2019	05/13/2019	08/12/2019	11/04/2019	02/05/2020	05/13/2020	08/14/2020	11/13/2020	11/13/2020	02/12/2021	04/29/2021	08/19/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 UJ	2 U	2 U	2 UJ	2 U	2 U	4 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 UJ	2 U	2 U	2 UJ	2 U	2 U	4 U	2 U	2 UJ	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.9 J	0.4 J	0.3 U	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	14 J	3 U	3 U	6 J	3 U	3 U	7 J	13	3 UJ	3 U	3 U	15	1 J	2 J	2 J	0.3 U	0.3 U	2.1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	6 UJ	3 U	3 U	3 UJ	3 U	3 U	6 U	3 U	3 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	6 UJ	3 U	3 U	3 UJ	3 U	3 U	6 U	3 U	3 UJ	3 U	3 U	4 J	0.5 U	0.8 J	0.5 U	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	44 J	6 U	6 U	14 J	16 J	6 U	15 J	130	6 UJ	6 U	6 U	46	5 J	0.7 U	4 J	2 J	2 J	5.4 UJ	1.5 UJ	0.7 U	1.2 UJ	0.7 U	0.7 U
Benzene	ug/L	N	1	**1000J**	**4**	**3**	**23J**	**290**	**290**	**1300**	**200**	**1000J**	**9**	**35**	**43**	**2**	**11**	**7**	**7**	1	**14**	0.67 J	0.41 J	0.8 J	**1.2**	0.3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	310J	46	38	51 J	92	40	210	200	250J	25	40	140	11	41	30	38	1 J	21	1.7 J	1 U	2.7 J	1 U	1 U
Dibromochloromethane	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	**990J**	52	30	50 J	160	74	**750**	180	250 J	42	25	1	0.4 U	5	9	4	0.5 J	3.9	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	29 J	3 J	3 J	4 J	6	3 J	17	9	5 J	2 J	2 J	0.2 U	0.2 U	0.4 J	0.7 J	0.3 J	0.2 U	0.42 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	160J	34	31	37 J	37	15	67	120	110J	11	10	63	4 J	21	17	12	0.7 J	5.9	0.7 J	0.5 U	1.2 J	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	4 UJ	2 U	2 U	2 UJ	2 U	2 U	4 U	2 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	2 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	**1700J**	4	3	21 J	240	84	470	93	**780 J**	13	4	32	0.8 J	3	3	2	0.2 U	2.4	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	**3500J**	150	88	120 J	400	190	**2900**	490	**1600J**	120	49	280	9	14	31	20	1 U	6.7	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	6400 J	700 J	390 J	-	-	380 J	-	1400 J	2400 J	230 J	230 J	680 J	27 J	270 J	200 J	120 J	0 U	-	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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			Field Sample ID	M331D3	M331D4	M332A1X	M332A2X	D0115148	M332A3X	M332A4X	M332A5X	M332A6X	M332A7X	M332A8X	M332A9X	M332B1X	M332B2X	M332B3X	M332B6X	M332B7X	M341A1X	M341A2X	M341A3X	M341A4X	M341A5X	M341A6X
			Sample Date	10/13/2021	02/28/2022	01/07/2013	05/15/2013	01/15/2014	01/15/2014	08/20/2014	09/17/2014	10/21/2014	01/20/2015	04/13/2015	07/09/2015	10/19/2015	04/21/2016	09/14/2016	10/25/2017	02/14/2019	01/21/2013	05/16/2013	01/15/2014	08/22/2014	09/16/2014	09/29/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	8 U	8 U	8 U	1 U	0.5 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	8 U	8 U	8 U	1 U	0.5 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	8 U	8 U	8 U	1 U	0.5 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	5 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	20 U	20 U	20 U	4 U	2 U	4 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	10 U	10 U	10 U	2 U	1 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	5 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	20 U	20 U	20 U	4 U	2 U	4 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	10 U	10 U	10 U	2 U	1 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	10 U	**30J**	10 U	1 U	0.5 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	10 U	10 U	10 U	2 U	1 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	10 U	10 U	10 U	2 U	1 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	3 J	3 U	20 J	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	30 U	71 J	30 U	64	32	46
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	3 U	3 U	8 UJ	3 U	4 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	30 U	**160**	**55 J**	11 J	5 J	6 J
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	8 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	30 U	99 J	30 U	6 U	3 J	6 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	7 J	6 U	42 J	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	60 U	260	63 J	120	78	92
Benzene	ug/L	N	1	**2.9**	0.3 U	**28**	**32**	**790J**	**40J**	**30J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	**3800**	**14000**	**13000**	**1600**	**1700**	**1400**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Carbon disulfide	ug/L	N	700	0.3 UJ	0.3 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	10 U	10 U	10 U	2 U	1 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.3 UJ	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	8 U	8 U	8 U	1 U	0.5 U	1 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	1 J	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	18 J	8 U	8 U	1 U	0.5 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	8 U	8 U	8 U	1 U	0.5 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Cyclohexane	ug/L	N	NA	1 J	1 U	18	19	520J	17 J	5 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	370	420	630	7 J	2 U	4 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	2 U	5 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	20 U	20 U	20 U	1 U	0.5 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.45 J	0.4 U	0.9 J	0.9 J	**1800J**	1 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	**1100**	**2800**	**2400**	**860**	230	340
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	1 U	1 U	99 J	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	51	110	78	61	7	9 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	10 U	10 U	10 U	2 U	1 U	2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	5 U	5 U	5 U	1 U	0.5 U	1 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	5	6	360J	3 J	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	230	230	280	6 J	1 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	3 J	2 U	5 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	20 U	20 U	20 U	4 U	2 U	4 U
Styrene	ug/L	N	100	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	10 U	10 U	10 U	2 U	1 U	2 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	8 U	8 U	8 U	1 U	0.5 U	1 U
Toluene	ug/L	N	600	0.32 J	0.2 U	1 J	0.8 J	120 J	0.7 U	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	**4500**	**12000**	**11000**	510	**1200**	**1300**
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	8 U	8 U	8 U	1 U	0.5 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	2 U	5 U	2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	20 U	20 U	20 U	1 U	0.5 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	10 U	10 U	10 U	1 U	0.5 U	1 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	18	3 J	**4000J**	1 J	6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	**5600**	**15000**	**13000**	**3800**	**1200**	**1700**
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	170 J	11000 J	420 J	160 J	0 U	0 U	0 U	0 U	-	0 U	100 J	-	0 U	0 U	-	14000 J	16000 J	13000 J	1200 J	2800 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-342	MW-342	MW-342
			Field Sample ID	M341A7X	M341A8X	M341A9X	M341B1X	M341B2X	M341B3X	M341B4X	M341B6X	M341B8X	M341B9X	M341C1X	M341C2X	D0807198	M341C3X	M341C4X	M341C5X	M341C6X	M341C7X	M341C8	M341C9	M342A1X	M342A2X	D0116148
			Sample Date	10/24/2014	01/21/2015	04/13/2015	07/08/2015	10/20/2015	04/20/2016	09/15/2016	04/12/2017	10/20/2017	01/15/2018	04/02/2018	03/08/2019	08/07/2019	08/07/2019	11/04/2019	02/12/2020	08/12/2020	02/09/2021	08/18/2021	03/01/2022	01/22/2013	03/28/2013	01/16/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 UJ	0.6 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	16 U	16 U	16 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 U	2 U	2 UJ	2 U	2 U	4 U	10 U	10 U	10 U	10 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	-	-	-	-	40 U	40 U	40 U
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.3 U	0.3 UJ	0.3 UJ	0.6 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	20 U	20 U	20 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 U	2 U	2 UJ	2 U	2 U	4 U	10 U	10 U	10 U	10 U	0.3 U	0.3 UJ	0.3 UJ	0.6 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	40 U	40 U	40 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 UJ	0.6 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	20 U	20 U	20 U
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	**2**	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	45 J	3 U	3 U	4 J	3 U	3 U	8 J	15 U	15 U	36 J	19 J	5 J	10 J	8 J	5 J	0.3 U	1.8 J	0.3 U	0.99 J	0.5 U	60 U	60 U	60 U
2-Hexanone	ug/L	N	40	3 UJ	3 U	3 U	3 UJ	3 UJ	3 U	6 U	15 U	15 U	15 U	15 U	3 J	2 J	0.3 UJ	0.6 U	0.3 U	1.2 J	5.7 J	0.40 U	0.4 U	60 U	60 U	60 U
4-Methyl-2-pentanone	ug/L	N	NA	5 J	14	7 J	3 J	3 UJ	3 U	6 U	15 U	15 U	15 U	15 U	0.5 U	2 J	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	60 U	60 U	60 U
Acetone	ug/L	N	6000	200 J	6 U	6 U	6 UJ	6 U	6 U	26 J	39 J	32 J	120	37 J	18 J	27 J	24 J	18 J	6 J	5 J	14 J	2.0 J	0.7 U	120 U	120 U	120 U
Benzene	ug/L	N	1	**92J**	**11**	**2**	**12J**	**56**	**19**	**220**	**260**	**320**	**470**	**740**	**15**	**8J**	**8J**	**6**	1	0.42 J	**4.9**	**2.5**	0.3 U	**7800**	**13000**	**17000**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
Bromoform	ug/L	N	4	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	1 UJ	1 UJ	2 U	1 U	1 U	1 U	1.0 U	1 U	20 U	20 U	20 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 UJ	0.6 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	20 U	20 U	20 U
Carbon disulfide	ug/L	N	700	1 UJ	1 U	1 U	1 J	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.4 J	0.2 UJ	0.2 UJ	1 J	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
Chlorobenzene	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
Chloroform	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
Cyclohexane	ug/L	N	NA	2 J	2 J	2 J	5 J	27	5	98	67	76	88	140	52	41 J	44 J	45	35	32	49	6.2	1 U	550	820	720
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	1 U	3 U	3 U	3 U	3 U	0.2 UJ	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	40 U	40 U	40 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	37 J	8	5	6 J	9	54	**2000**	**1200**	**1100**	**1400**	**1400**	96	140 J	150 J	82	7	21	5.5	2.8	0.4 J	**2600**	**2500**	**2900**
Isopropylbenzene	ug/L	N	700	1 J	1 U	1 U	1 UJ	1 U	3 J	110	87	79	92	91	8	13 J	14 J	20	2 J	4.7 J	2 J	1.6 J	0.26 J	89 J	68 J	76 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	20 U	20 U	20 U
Methyl-t-butyl ether	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	2 J	2 J	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	10 U	10 U	10 U
Methylcyclohexane	ug/L	N	NA	1 J	1 U	1 U	1 UJ	8	2 J	97	78	53	63	120	91 J	76 J	87 J	130	74	64	93	15	14	390	450	410
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	2 U	2 U	2 UJ	2 U	2 U	4 U	10 U	3 U	3 U	3 U	0.3 U	2 J	2 J	1 J	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	40 U	40 U	40 U
Styrene	ug/L	N	100	1 UJ	1 U	1 U	1 UJ	1 U	1 U	2 U	5 U	5 U	5 U	5 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
Toluene	ug/L	N	600	64 J	0.9 J	0.5 U	0.5 UJ	7	39	**1200**	**1200**	**1000**	**1800**	**1200**	92	68 J	64 J	41	9	4.4	5.3	0.33 J	0.2 U	**16000**	**17000**	**19000**
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	16 U	16 U	16 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U	20 U	20 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 U	40 U	40 U	40 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	0.2 U	0.2 UJ	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	20 U	20 U	20 U
Xylene (total)	ug/L	N	1000	200 J	13	4	1 J	14	290	**10000**	**6700**	**6900**	**8400**	**6900**	**1300**	**1500J**	**1600J**	**2800**	**1700**	**1300**	**2900**	170	3.7	**12000**	**11000**	**12000**
Total TIC VOCS	ug/L	N	NA	1300 J	-	230 J	-	240 J	510 J	-	12000 J	18000 J	15000 J	12000 J	3000 J	5100 J	5400 J	7700 J	5100 J	-	-	-	-	-	11000 J	9600 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-343
			Field Sample ID	M342A3X	M342A4X	M342A5X	M342A6X	M342A7X	M342A8X	M342A9X	M342B1X	M342B2X	M342B3X	M342B4X	M342B6X	M342B8X	M342B9X	M342C1X	M342C2X	M342C3X	M342C4X	M342C5X	M342C6X	M342C7	M342C8	D0116137
			Sample Date	01/16/2014	08/22/2014	09/16/2014	09/29/2014	10/24/2014	01/21/2015	05/07/2015	07/08/2015	10/21/2015	04/18/2016	09/16/2016	04/12/2017	10/26/2017	01/18/2018	04/03/2018	03/08/2019	08/13/2019	02/12/2020	08/12/2020	02/10/2021	08/18/2021	03/01/2022	01/16/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
1,1,1-Trichloroethane	ug/L	N	30	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	20 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
1,1,2-Trichloroethane	ug/L	N	3	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	**7**	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	40 U	2 U	10 U	4 U	2 UJ	2 U	2 U	2 UJ	2 U	200 U	40 U	20 U	4 U	10 U	20 U	0.4 U	0.2 U	0.2 U	-	-	-	-	50 U
1,1-Dichloroethane	ug/L	N	50	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
1,2,4-Trichlorobenzene	ug/L	N	9	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	25 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	40 U	2 U	10 U	4 U	2 UJ	2 U	2 U	2 UJ	2 U	200 U	40 U	20 U	4 U	10 U	20 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	50 U
1,2-Dibromoethane	ug/L	N	0.03	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
1,2-Dichloroethane	ug/L	N	2	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	25 U
1,2-Dichloropropane	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
1,4-Dichlorobenzene	ug/L	N	75	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	60 U	29	15 U	12 J	10 J	3 J	3 U	3 J	14	300 U	60 U	30 U	6 U	19 J	31 J	4 J	4 J	1 J	2.3 J	0.3 U	1.2 J	0.5 U	75 U
2-Hexanone	ug/L	N	40	60 U	10 UJ	15 U	6 U	3 UJ	3 U	3 U	3 UJ	5 J	300 U	60 U	**76 J**	19 J	24 J	30 U	1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	75 U
4-Methyl-2-pentanone	ug/L	N	NA	60 U	5 UJ	15 U	6 U	3 UJ	3 U	9 J	4 J	12	300 U	60 U	30 U	6 U	15 U	30 U	1 U	1 J	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	75 U
Acetone	ug/L	N	6000	120 U	79	60 J	56	53 J	6 U	6 U	10 J	17 J	600 U	120 J	77 J	12 U	45 J	60 U	22 J	12 J	3 J	3.4 J	3.8 J	4.7 UJ	0.7 U	150 U
Benzene	ug/L	N	1	**16000**	**1200**	**580**	**280**	**950J**	**280**	**280**	**140J**	**440**	**850**	**1300**	**910**	**710**	**1200**	**1300**	**3**	0.7 J	0.7 J	**2.7**	0.2 U	0.30 U	0.3 U	**11000**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
Bromoform	ug/L	N	4	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	1 U	1 U	1 U	1 U	1.0 U	1 U	25 U
Bromomethane (Methyl bromide)	ug/L	N	10	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	25 U
Carbon disulfide	ug/L	N	700	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
Carbon Tetrachloride	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 UJ	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
Chlorobenzene	ug/L	N	50	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
Chloroethane	ug/L	N	NA	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
Chloroform	ug/L	N	70	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
Chloromethane (Methyl chloride)	ug/L	N	NA	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
cis-1,2-Dichloroethene	ug/L	N	70	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
cis-1,3-Dichloropropene	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
Cyclohexane	ug/L	N	NA	630	27	68	15	44 J	78	63	59 J	88	200 U	460	170	170	260	250	27	3 J	5 J	2.8 J	1 U	1.0 U	1 U	580
Dibromochloromethane	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	40 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	50 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	**2900**	550	**1100**	510	290 J	280	210	92 J	290	**2900**	**3400**	**1500**	**1300**	**1600**	**1800**	14	5	10	6.7	2.8	1.3	0.4 U	**2500**
Isopropylbenzene	ug/L	N	700	68 J	37	62	40	19 J	20	15	9 J	11	150 J	210	74	74	79	95	1 J	0.4 J	0.7 J	0.78 J	0.5 J	0.23 J	0.2 U	78 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	25 U
Methyl-t-butyl ether	ug/L	N	70	10 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	13 U
Methylcyclohexane	ug/L	N	NA	320	20	96	14	43 J	83	49	52 J	76	240J	830	210	170	230	280	43 J	4 J	8	2.3 J	1.3 J	0.50 U	0.5 U	260
Methylene chloride (Dichloromethane)	ug/L	N	3	40 U	2 U	10 U	4 U	2 UJ	2 U	2 U	2 UJ	2 U	200 U	40 U	20 U	**11**	3 U	5 U	0.6 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	50 U
Styrene	ug/L	N	100	20 U	1 U	5 U	2 U	1 UJ	1 U	1 U	1 UJ	1 U	100 U	20 U	10 U	2 U	5 U	10 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
Tetrachloroethene	ug/L	N	1	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
Toluene	ug/L	N	600	**20000**	**1400**	**2500**	560	**610 J**	40	10	41 J	**710**	**5000**	**5500**	**3600**	**1800**	**3600**	**4500**	1 J	0.2 J	0.2 U	0.31 J	0.2 U	0.20 U	0.2 U	**13000**
trans-1,2-Dichloroethene	ug/L	N	100	16 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	20 U
trans-1,3-Dichloropropene	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	25 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	40 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 U	50 U
Vinyl chloride (Chloroethene)	ug/L	N	1	20 U	0.5 U	3 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	50 U	10 U	5 U	1 U	3 U	5 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	25 U
Xylene (total)	ug/L	N	1000	**12000**	**2900**	**7300**	**2600**	**1700J**	820	380	210 J	**1300**	**21000**	**15000**	**14000**	**12000**	**10000**	**17000**	160	22	11	12	4.7 J	0.40 U	0.4 U	**12000**
Total TIC VOCS	ug/L	N	NA	9700 J	4200 J	9900 J	7500 J	3400 J	-	1500 J	-	1300 J	46000 J	-	14000 J	13000 J	11000 J	17000 J	3400 J	1400 J	600 J	-	-	-	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343
			Field Sample ID	M343A1X	M343A2X	M343A3X	M343RA4X	M343A5X	M343A6X	M343A7X	M343A8X	M343A9X	M343B1X	M343B2X	M343B3X	M343B4X	M343B6X	M343B8X	M343B9X	M343C1X	M343C2X	M343C3X	M343C4X	M343C5X	M343C6	M343C7
			Sample Date	01/16/2013	05/15/2013	01/15/2014	08/22/2014	09/16/2014	09/29/2014	10/24/2014	01/29/2015	04/13/2015	07/08/2015	10/20/2015	04/15/2016	09/15/2016	04/06/2017	10/20/2017	04/04/2018	02/15/2019	08/13/2019	02/07/2020	08/20/2020	03/01/2021	08/18/2021	02/28/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	20 U	40 U	20 U	4 U	5 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	20 U	40 U	20 U	4 U	5 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	**2.1**	0.30 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	51 J	60 U	30 U	22	8 U	7 J	5 J	4 J	3 U	4 J	3 UJ	3 U	3 U	3 U	3 U	3 U	8 J	0.3 U	1 J	15	0.3 U	0.50 U	0.5 U
2-Hexanone	ug/L	N	40	30 U	60 U	30 U	6 U	8 U	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	1.7 J	0.3 U	0.40 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	30 U	60 U	68 J	6 U	8 U	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	7 J	6 J	3 U	3 U	3 U	2 J	0.5 U	0.5 U	1.1 J	1.6 J	0.50 U	0.5 U
Acetone	ug/L	N	6000	140 J	190 J	60 U	63	21 J	33	26 J	10 J	6 U	13 J	9 J	6 U	6 U	14 J	6 U	17 J	22	3 J	7 J	31	2.4 J	0.70 U	0.7 U
Benzene	ug/L	N	1	**12000**	**12000**	**14000**	**300**	**110**	**200**	**310J**	**260**	**210**	**33J**	**56J**	**30**	**48**	**73**	**45**	**44**	**120**	**230**	**130**	**200**	**81**	**210**	**830**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Bromoform	ug/L	N	4	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U	1.0 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U
Carbon disulfide	ug/L	N	700	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Chlorobenzene	ug/L	N	50	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Chloroethane	ug/L	N	NA	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Chloroform	ug/L	N	70	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Cyclohexane	ug/L	N	NA	720	690	570	10 J	12 J	18	54 J	110	66	64 J	44 J	38	15	25 J	19	19	100	40	33	42	29	32	130
Dibromochloromethane	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	20 U	40 U	20 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	**3000**	**2900**	**2400**	600	160	320	200 J	70	65	51 J	58 J	56	22	47	52	39	44	13	37	21	25	31	63
Isopropylbenzene	ug/L	N	700	130	100	91	53	12 J	29	26 J	12	8	8 J	5 J	3 J	1 U	2 J	2 J	2 J	4 J	1 J	5 J	2.4 J	3.2 J	3.0 J	3.2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	5 U	10 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Methylcyclohexane	ug/L	N	NA	360	440	250	7 J	10 J	16	50 J	44	38	47 J	33 J	23	6	10	5 J	4 J	28	12	9	14	7.5	9.9	44
Methylene chloride (Dichloromethane)	ug/L	N	3	20 U	40 U	20 U	4 U	5 U	2 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U
Styrene	ug/L	N	100	10 U	20 U	10 U	2 U	3 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Tetrachloroethene	ug/L	N	1	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Toluene	ug/L	N	600	**13000**	**12000**	**12000**	220	90	41	49 J	30	6	3 J	4 J	6	2	10	9	3	11	19	8	10	6.5	13	130
trans-1,2-Dichloroethene	ug/L	N	100	8 U	16 U	8 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	20 U	40 U	20 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	10 U	20 U	10 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U
Xylene (total)	ug/L	N	1000	**14000**	**14000**	**16000**	**2500**	560	1000	560 J	150	66	56 J	46 J	97	11	69	86	22	15	16	25	25	24	26	340
Total TIC VOCS	ug/L	N	NA	-	14000 J	17000 J	13000 J	4300 J	7300 J	4800 J	2200 J	2200 J	-	1200 J	890 J	-	840 J	900 J	900 J	1200 J	730 J	770 J	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	D0423138	M347A1X	M347A2X	D1029138	M347A3X	D0112168	M347A5X	D0211168	M347A7X	D0613168	M347A8X	D0913168	D0913168	M347A9X	D1208168BX	M347B1X	D0228178B	M347B2X	D0605178	M347B4X	M347B5X	M347B8X	M347B9X
			Sample Date	04/23/2013	04/23/2013	05/21/2013	10/29/2013	10/29/2013	01/12/2016	01/12/2016	02/11/2016	02/11/2016	06/13/2016	06/13/2016	09/13/2016	09/13/2016	09/13/2016	12/08/2016	12/08/2016	02/28/2017	02/28/2017	06/05/2017	06/05/2017	09/13/2017	06/08/2018	10/04/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	4 U	10 U	20 U	20 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	2 U	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	4 U	10 U	20 U	20 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	2 U	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	**5**	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	2 U	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	2 U	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	11	12	3 U	32 J	43 J	120	110	30 U	30 U	10 J	18	3 U	3 U	30 UJ	13	14	4 J	4 J	15 J	11 J	3 UJ	5 J	6 J
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	6 U	15 U	30 U	30 U	3 U	3 U	3 U	3 U	30 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	6 U	15 U	30 U	30 U	3 U	3 U	3 U	3 U	30 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	20	23	6 J	49 J	66 J	300	320	60 U	60 U	26	53	6 U	6 U	60 UJ	11 J	15 J	13 J	12 J	27 J	17 J	7 J	17 J	7 J
Benzene	ug/L	N	1	**130**	**150**	**140**	**180**	**200**	**73**	**68**	**120**	**100**	**84**	**71**	0.5 U	0.5 U	**110J**	**60**	**55**	**48**	**45**	**36**	**35**	**35**	**33**	**47**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	4 J	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	3 J	8 J	5 U	5 U	0.5 U	1	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	18 J	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	150	140	210	140J	200J	54	51	83	77	93	100	2 U	2 U	38 J	79	92	88	75	71	68	51	63	54
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	7	8	9	6	7	2	3 J	6 J	5 U	6	5	0.5 U	0.5 U	5 UJ	4	4	5	4	7	7	4	5	4
Isopropylbenzene	ug/L	N	700	21	22	28	29	32	4 J	5 U	13 J	11 J	21	23	1 U	1 U	14 J	16	20	18	16	18	18	18	20	20
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	2 U	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	130	120	140	130	150	36	33	55	51	69	78	1 U	1 U	26 J	64	78	78	72	75	72	46	62	38
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	4 U	10 U	20 U	20 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	2 U	5 U	10 U	10 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	18	19	21	17	19	11	10	8 J	8 J	11	13	0.5 U	0.5 U	5 UJ	10	10	6	6	11	10	2	10	8
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	1 U	3 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	**7J**	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	50	54	74	53	59	15	16	19 J	12 J	18	20	0.5 U	0.5 U	5 UJ	19	21	16	15	19	19	16	21	20
Total TIC VOCS	ug/L	N	NA	1000 J	1000 J	1400 J	1100 J	1200 J	400 J	370 J	280 J	350 J	600 J	670 J	0 U	0 U	490 J	720 J	800 J	870 J	850 J	1000 J	980 J	810 J	950 J	960 J

Notes:

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			Field Sample ID	D10121815	M347C1X	M347C2X	M347C3X	M347C4X	M347C5X	M347C6X	M347C7X	M347C8X	D0914201	M347C9X	M347D1X	M347D2X	D0505211	M347D3	M347D4	M348A1X	D0109148	M348A2X	M348A3X	M348A4X	M348A5X	M348A6X
			Sample Date	10/12/2018	10/12/2018	12/05/2018	03/18/2019	06/17/2019	09/16/2019	12/11/2019	03/20/2020	06/15/2020	09/14/2020	09/14/2020	12/11/2020	03/10/2021	05/05/2021	05/05/2021	10/28/2021	10/30/2013	01/09/2014	01/09/2014	01/12/2016	02/19/2016	06/14/2016	09/12/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**0.4J**	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.6 J	0.7 J	0.3 U	0.3 U	1	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.37 J	0.45 J	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 J	2 J	0.3 U	5 J	5 J	0.3 U	7 J	0.3 U	7.9 J	0.3 U	7.1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	3 U	3 UJ	4 J	4 J	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	12 J	7 J	5 UJ	4 UJ	8 J	4 J	6 J	7 J	16 J	6.6 UJ	6.2 UJ	7.1 J	1.5 UJ	1.2 J	0.7 U	5.1 J	6 U	6 U	6 J	19 J	6 U	19 J	6 J
Benzene	ug/L	N	1	**40**	**40**	**28**	**32**	**32**	**41**	**36**	**26**	**32**	**25J**	**16J**	**63**	**25**	**22**	**21**	**72**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1.2J**	**1.6J**	0.2 U	**1.7**	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 J	0.23 J	0.23 J	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	3 J	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	48	49	18	17	20	58	49	78 J	74	21 J	15 J	83	1 U	19	20	78	3 J	5 J	5	3 J	2 U	10	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	4.8 J	-	6.1	-	-	-	-	8.2	8.9	8	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	1 U	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	4	3	1	1	1	3	2	2	2.5	2 J	1.2 J	5.6	1.2	0.8 J	0.83 J	1.8	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	19	19	17	17	13	19	17	17	20	24	23	28	17	20	21	5.6	10	9	10	6	12	4 J	4 J
Methane	ug/L	N	NA	-	-	-	-	5700	6200	6300	4100	4900	7300	7700	9100	10000	11000	9900	8700 J	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	35	36	7	4 J	9	42	37	42	21	8.8 J	3.5 J	37	0.5 U	2.8 J	3.6 J	25	59	62	62 UJ	26	23	1 J	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.41 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	6	6	1	2	5	9	8	8	10	3.1 J	1.7 J	9	3.1	2.3	2.4	18	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	18	18	9	10	11	25	27	24	20	17	15	29	12	13	13	18	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	1000 J	990 J	740 J	680 J	590 J	-	990 J	860 J	-	-	-	-	-	-	-	-	590 J	580 J	560 J	360 J	430 J	150 J	400 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381
			Field Sample ID	M348A7X	M348A8X	M348A9X	D0831178B	M348B1X	D0216188	M348B3X	M348B4X	M348B5X	M348B6X	M348C3	M348C4	M348C6	M348C7	M381A1X	M381A2X	M381A3X	M381A4X	M381A5X	M381A6X	M381A7X	M381A8X	M381A9X
			Sample Date	12/08/2016	02/27/2017	06/06/2017	08/31/2017	08/31/2017	02/16/2018	02/16/2018	06/08/2018	10/01/2018	12/05/2018	05/05/2021	08/18/2021	11/22/2021	03/18/2022	01/14/2014	04/18/2014	07/15/2014	04/15/2015	06/25/2015	09/03/2015	11/05/2015	05/13/2016	11/08/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	7 J	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 J	6 U	6 U	6 U	6 U	4 U	1 UJ	0.7 U	2.5 UJ	0.7 U	0.7 U	6 U	6 U	9 J	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.22 J	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 J	0.2 U	1 U	22	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	4.9 J	6.6	8.1	7.3	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	3 J	3 J	1 J	5 J	4 J	4 J	4 J	7	5 J	3 J	2.5 J	2.4 J	2.4 J	1.9 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	5000	7400	9300	9300	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U	2 J	2 J	1.2 J	1.2 J	1.4 J	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	380 J	550 J	320 J	550 J	450 J	320 J	330 J	520 J	290 J	350 J	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-381	MW-381	MW-381	MW-381	MW-381	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384
			Field Sample ID	M381B1X	M381B2X	M381B3	D1025211A	M381B4	M382A1X	M382A2X	M382A3X	M382A4X	D0625151	M382A5X	M382A6X	M382A7X	M382A8X	M382A9X	M382B1X	M382B2X	M384A1X	M384A2X	M384A3X	M384A4X	M384A5X	D1103151
			Sample Date	06/13/2017	12/07/2017	05/12/2021	10/25/2021	10/25/2021	01/14/2014	04/18/2014	07/15/2014	04/15/2015	06/25/2015	06/25/2015	09/01/2015	11/03/2015	05/13/2016	11/09/2016	06/06/2017	12/07/2017	01/14/2014	04/18/2014	07/15/2014	06/25/2015	09/01/2015	11/03/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
Acetone	ug/L	N	6000	6 U	6 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	1 U
Methane	ug/L	N	NA	-	-	62	21	37 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	0.5 U	0.5 UJ	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	1.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	6 J	0 U	6 J	0 U	5 J	6 J	5 J	0 U	-	-	-	-	0 U	0 U	0 U	0 U	52 J	18 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-384	MW-384	MW-384	MW-384	MW-384	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-386	MW-386	MW-386	MW-386
			Field Sample ID	M384A6X	M384A7X	M384A8X	M384A9X	M384B1X	M385A1X	M385A2X	M385A3X	M385A4X	M385A5X	M385A6X	M385A7X	M385A8X	M385A9X	M385B1X	M385B3X	M385B4	M385B5X	M385B6	M386A1X	M386A2X	M386A3X	M386A4
			Sample Date	11/03/2015	05/13/2016	11/09/2016	06/06/2017	12/07/2017	10/28/2013	01/08/2014	01/12/2016	02/17/2016	06/14/2016	09/13/2016	12/08/2016	02/28/2017	06/05/2017	08/31/2017	02/16/2018	06/08/2018	10/02/2018	12/07/2018	11/07/2013	12/20/2013	06/23/2014	03/16/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 UJ	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	2 U	2 U	2 UJ	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	1 U	1 U	1 UJ	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.3 U	0.3 U	2 U	2 U	2 UJ	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 UJ	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	1 U	1 U	0.5 UJ	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 UJ	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 UJ	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	110	3 U	0.3 U	0.3 U	3 U	3 U	3 UJ	-
2-Hexanone	ug/L	N	40	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	3 U	3 U	3 UJ	-
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	3 U	3 U	3 UJ	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	7 J	6 U	6 U	6 U	6 U	6 U	6 U	7 J	57	18 J	4 J	0.7 U	6 U	6 U	6 UJ	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	**6**	**8**	0.7 J	-
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	1 U	1 U	0.5 UJ	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 UJ	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Chloroform	ug/L	N	70	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	11	11	9 J	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	2 U	2 U	0.5 UJ	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	1 J	0.8 U	0.5 UJ	-
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 J	1 U	1 U	0.8 J	0.2 U	1 U	1 U	1 UJ	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20000
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 UJ	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	-
Methylcyclohexane	ug/L	N	NA	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	10	12	6 J	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	2 U	2 UJ	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 UJ	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.2 U	0.7 U	0.7 U	0.5 UJ	-
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.8 U	0.8 U	0.5 UJ	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	5 J	3 J	0.9 J	-
Total TIC VOCS	ug/L	N	NA	12 J	-	-	-	-	19 J	11 J	120 J	5 J	100 J	18 J	120 J	74 J	370 J	130 J	130 J	0 U	130 J	0 U	46 J	74 J	18 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R
			Field Sample ID	M386A5	M386A6X	M386A7	M386A8X	M386A9X	M386RB1	M386RB1X	M386RB2	M386RB2X	M386RB4X	M386RB5X	M386RB6X	M386RB7X	M386RB8X	D1205188A	M386RB9X	D0325191	M386RC1X	D0610191	M386RC2X	D1204191	M386RC3X	D0317201
			Sample Date	06/29/2015	07/20/2015	10/05/2015	10/29/2015	12/01/2015	06/06/2016	06/07/2016	09/06/2016	09/06/2016	12/02/2016	03/06/2017	06/08/2017	12/05/2017	06/05/2018	12/05/2018	12/05/2018	03/25/2019	03/25/2019	06/10/2019	06/10/2019	12/04/2019	12/04/2019	03/17/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	20 U	-	2 U	2 U	-	2 UJ	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	10 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	20 U	-	2 U	2 U	-	2 UJ	-	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	10 U	-	1 U	1 U	-	21 J	-	11	7	2 J	1 U	3 J	1 U	0.5 J	0.4 J	0.6 J	0.5 J	2 J	2 J	0.2 U	0.2 U	2 J
1,2-Dichloroethane	ug/L	N	2	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	10 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	10 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	30 U	-	3 U	3 U	-	32 J	-	6 J	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.9 J
2-Hexanone	ug/L	N	40	-	30 U	-	3 U	3 U	-	**41 J**	-	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	30 U	-	3 U	3 U	-	7 J	-	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	60 U	-	36	10 J	-	66 J	-	18 J	10 J	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	1 UJ	0.7 U	0.7 U	0.7 U	0.7 U	2 J
Benzene	ug/L	N	1	-	**10J**	-	**180**	**98**	-	**270J**	-	**180**	**94**	**59**	**12**	**47**	**6**	**6**	**5**	**9**	**9**	**14**	**13**	**2**	**2**	**10**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	-	10 U	-	1 U	1 U	-	2 J	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	5 U	-	0.5 U	0.5 U	-	0.7 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	5 U	-	0.5 U	0.5 U	-	2 J	-	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	20 U	-	29	14	-	210J	-	48	29	13	2 U	10	2 U	0.9 J	0.8 J	2 J	2 J	3 J	3 J	1 U	1 U	5
Dibromochloromethane	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	-	5 U	-	11	4	-	80 J	-	47	48	24	6	36	10	5	4	7	6	13	13	1	1	20
Isopropylbenzene	ug/L	N	700	-	10 U	-	1 U	1 U	-	5 J	-	2 J	2 J	1 U	1 U	1 J	1 U	0.3 J	0.2 J	0.3 J	0.3 J	0.5 J	0.4 J	0.2 U	0.2 U	0.8 J
Methane	ug/L	N	NA	22000	-	16000 J	-	-	7730 J	-	5700	-	-	-	-	-	-	-	-	290	340	-	-	-	-	890
Methyl acetate	ug/L	N	7000	-	10 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	10 U	-	11	3 J	-	180J	-	43	13	4 J	1 U	2 J	1 U	0.4 J	0.2 U	0.4 J	0.3 J	0.5 J	0.5 J	0.5 U	0.5 U	1 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	20 U	-	2 U	2 U	-	2 UJ	-	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	10 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	-	5 U	-	3	2	-	76 J	-	36	51	28	3	18	3	1	1	2	2	4	4	0.5 J	0.5 J	7
trans-1,2-Dichloroethene	ug/L	N	100	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	**5J**	-	**2**	1	0.7 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	-	10 J	-	37	16	-	750 J	-	170	160	72	10	73	21	5 J	4 J	11	10	30	28	1 U	2 J	40
Total TIC VOCS	ug/L	N	NA	-	0 U	-	260 J	250 J	-	4800 J	-	2000 J	1500 J	420 J	240 J	640 J	170 J	160 J	81 J	150 J	110 J	290 J	270 J	96 J	100 J	410 J

Notes:

1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
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Chevron Perth Amboy Facility

			Location ID	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R
			Field Sample ID	M386RC4X	M386RC5X	M386RC6X	M386RC7X	M386RC8X	M386RC9	M386RD1	M387A1X	D1219138	M387A2X	D0720158	M387A4X	D1030158A	M387A5X	M387A5XA	M387A6X	D0607168	M387RA7	M387RA7X	D0907168	M387RA8	M387RA8X	M387RB1X
			Sample Date	03/17/2020	06/09/2020	09/11/2020	12/15/2020	03/10/2021	05/28/2021	10/29/2021	11/07/2013	12/19/2013	12/19/2013	07/20/2015	07/20/2015	10/30/2015	10/30/2015	10/30/2015	11/30/2015	06/07/2016	06/07/2016	06/07/2016	09/07/2016	09/07/2016	09/07/2016	12/05/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U	10 UJ	10 UJ	10 U	10 U	20 UJ	100 UJ	2 UJ	-	2 UJ	2 U	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	5 UJ	5 UJ	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	**0.93J**	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	10 UJ	10 UJ	10 U	10 U	20 UJ	100 UJ	2 UJ	-	2 UJ	2 U	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 J	1.1 J	0.51 J	0.75 J	0.68 J	0.77 J	0.2 U	1 U	1 U	1 U	5 UJ	5 UJ	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	5 UJ	5 UJ	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	5 UJ	5 UJ	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.8 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	210	8 J	7 J	**930J**	**910J**	**810**	**870**	**840J**	**400J**	3 UJ	-	3 UJ	3 U	-	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	7 J	3 U	3 U	35 J	**43 J**	25 J	27 J	30 UJ	150 UJ	3 UJ	-	3 UJ	3 U	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 J	3 U	3 U	23 J	23 J	15 U	15 U	30 UJ	150 UJ	3 UJ	-	3 UJ	3 U	-	3 U	3 U
Acetone	ug/L	N	6000	3 J	0.7 U	0.79 J	0.7 U	1.6 J	0.7 U	0.7 U	94	9 J	8 J	4200 J	3900 J	5800	5100	5700 J	2700 J	6 UJ	-	6 UJ	6 U	-	6 U	6 U
Benzene	ug/L	N	1	**10**	**6.3**	**1.7**	**7**	**4.8**	**3.5**	0.3 U	**670**	**190**	**200**	**340J**	**360J**	**74**	**83**	**57J**	**110J**	0.5 J	-	0.5 UJ	1	-	1	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	3 UJ	3 UJ	**12**	**16**	6 J	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	5 UJ	5 UJ	11 J	14 J	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	3 J	6	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 J	4 J	6	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	220	250	190 J	160 J	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	11	2 J	3 J	6 J	6 J	3 U	3 J	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	5	2 J	1 U	1.4 J	1.5 J	1.5 J	1 U	85	46	50	39 J	52 J	13 J	12 J	20 UJ	100 UJ	2 UJ	-	2 UJ	2 U	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	9.7	1.7 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	20	8	2.3	5.1	6.4	5	0.4 U	280	68 J	89 J	120 J	140 J	35	36	22 J	48 J	0.5 UJ	-	0.5 UJ	3 J	-	4 J	0.5 U
Isopropylbenzene	ug/L	N	700	0.8 J	0.42 J	0.27 J	0.39 J	0.25 J	0.3 J	0.2 U	20	4 J	5	7 J	8 J	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
Methane	ug/L	N	NA	820	440	170	480	380	340	47	-	-	-	-	-	-	-	-	-	100 J	73 J	-	1300	1300	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	5 UJ	5 UJ	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	65	37	40	28 J	42 J	16 J	15 J	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	10 UJ	10 UJ	10 U	10 U	20 UJ	100 UJ	2 UJ	-	2 UJ	2 U	-	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	5 UJ	5 UJ	5 U	5 U	10 UJ	50 UJ	1 UJ	-	1 UJ	1 U	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Toluene	ug/L	N	600	7	1.6	0.39 J	2	2.3	1.5	0.2 U	**630**	83	79	320 J	350 J	47	50	44 J	84 J	0.7 J	-	0.6 J	0.5 U	-	0.6 J	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	**9**	**3J**	**4J**	**4J**	**5J**	3 U	**3J**	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	3 UJ	3 UJ	3 U	3 U	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**3J**	1 U	1 U	**3J**	**3J**	3 U	**3J**	5 UJ	25 UJ	0.5 UJ	-	0.5 UJ	0.5 U	-	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	40	11	3.2 J	12	12	12	0.4 U	**1900**	670	660	610 J	690 J	190	180	120 J	250 J	1 J	-	0.7 J	1 J	-	2 J	0.5 U
Total TIC VOCS	ug/L	N	NA	410 J	-	-	-	-	-	0 U	2200 J	1700 J	1600 J	800 J	950 J	580 J	470 J	140 J	0 U	26 J	-	8 J	14 J	-	41 J	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388
			Field Sample ID	M387RB2X	D0607178	M387RB3X	M387RB4X	D0606188	M387RB5X	M387RB6X	M387RB7X	M387RB8X	M388A1X	M388A2X	M388A3	M388A4	M388A5X	M388A6	M388A7X	D1130158	M388A9	M388A9X	M388B1	M388B1X	M388B3X	M388B4X
			Sample Date	03/02/2017	06/07/2017	06/07/2017	12/06/2017	06/06/2018	06/06/2018	12/04/2018	06/24/2019	12/12/2019	11/07/2013	12/19/2013	03/17/2015	06/29/2015	07/20/2015	10/05/2015	10/29/2015	11/30/2015	06/07/2016	06/07/2016	09/07/2016	09/07/2016	11/30/2016	03/02/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 UJ	-	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 UJ	-	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	-	-	3 U	-	3 U	3 U	-	3 UJ	-	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	-	-	3 U	-	3 U	3 U	-	3 UJ	-	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-	-	3 U	-	3 U	3 U	-	3 UJ	-	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	6 U	6 U	-	-	6 U	-	6 U	6 U	-	6 UJ	-	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	6	6	-	-	6	-	4 J	5	-	4 J	-	2 U	3 J	3 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	2 J	4 J	-	-	1 U	-	1 U	1 J	-	1 UJ	-	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	12000	16000	-	15000 J	-	-	11000 J	-	10000	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	5 J	6	-	-	5	-	3 J	4 J	-	3 J	-	1 J	2 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	-	2 U	-	2 U	2 U	-	2 UJ	-	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	1 U	1 U	-	1 UJ	-	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	2 U	2 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	0.8 U	0.9 J	-	-	0.9 J	-	0.5 J	0.8 J	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	5 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	480 J	560 J	-	-	430 J	-	280 J	350 J	-	200 J	-	94 J	120 J	190 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389
			Field Sample ID	M388B5X	M388B6X	M388B7X	D0605191	M388B8X	M388B9X	M388C3	M388C4	M388C5	M388C6	M389A1X	M389A2X	M389A3	M389A4	M389A5X	M389A6	M389A7X	M389A8X	M389A9	M389A9X	M389B1	M389B1X	M389B3X
			Sample Date	06/08/2017	12/05/2017	06/04/2018	06/05/2019	06/05/2019	12/12/2019	05/20/2021	09/23/2021	12/28/2021	03/18/2022	11/05/2013	12/20/2013	03/18/2015	06/30/2015	07/20/2015	10/06/2015	10/28/2015	12/01/2015	06/08/2016	06/08/2016	09/07/2016	09/07/2016	12/02/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 U	0.2 U	0.4 U	-	-	-	-	2 U	2 U	-	-	2 U	-	20 U	2 U	-	2 U	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 UJ	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	-	2 U	-	20 U	2 U	-	2 U	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	-	-	3 U	-	30 U	3 U	-	3 U	-	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	-	-	3 U	-	30 U	3 U	-	3 U	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	-	-	3 U	-	30 U	3 U	-	3 U	-	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	0.7 J	1 J	1 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	-	-	6 U	-	60 U	6 U	-	6 U	-	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	4 J	2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	2 J	2 J	-	-	2 U	-	20 U	2 U	-	2 U	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	250	2000	9600	37	-	-	21000	20000	-	12000	-	-	21000	-	14000	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	3 J	1 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	2 J	-	-	1 J	-	10 U	1 U	-	1 U	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	-	-	2 U	-	20 U	2 U	-	2 U	-	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	1 U	-	10 U	1 U	-	1 U	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.6 J	0.5 U	1 U	1 U	3 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	-	-	0.5 U	-	5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	180 J	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	38 J	34 J	-	-	39 J	-	0 U	14 J	-	0 U	-	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-399	MW-399	MW-399	MW-399	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R
			Field Sample ID	M389B4X	M389B5X	M389B6X	M389B7X	M389B8X	D1212198	M389B9X	M389C3	M389C4	M389C5	M389C6	M399A1X	M399A2X	M399A3X	D0910198	M399RA4X	M399RA5X	D1203188	M399RA6X	M399RA7X	M399RA8X	M399RA9X	D1211198
			Sample Date	03/06/2017	06/09/2017	12/07/2017	06/05/2018	06/05/2019	12/12/2019	12/12/2019	05/19/2021	09/24/2021	12/27/2021	03/17/2022	12/16/2015	12/29/2016	02/02/2017	09/10/2019	06/07/2018	09/05/2018	12/03/2018	12/03/2018	03/14/2019	06/05/2019	09/10/2019	12/11/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.3 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 UJ	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	0.2 U	2 U	-	-	-	-	2 U	4 U	2 U	0.2 U	2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	0.3 U	1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	2 U	0.3 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	1 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.3 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 UJ	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	0.3 U	0.3 U	3 U	0.3 U	0.5 U	0.5 U	0.5 U	4 J	6 U	10 J	0.3 U	3 U	0.3 UJ	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	0.3 U	0.3 U	3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	6 U	3 U	0.3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	6 U	3 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	10 J	1 J	7 U	2.7 J	3.2 J	0.7 U	0.7 U	7 J	13 J	16 J	0.7 U	6 U	0.9 J	0.8 UJ	0.7 U	1 UJ	1 UJ	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	**1100**	**1200**	**1000**	0.5 J	**11**	**3J**	0.2 U	0.2 U	0.2 U	0.2 U	**2J**	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	10 U	1 U	1 U	1 U	1 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 UJ	0.3 U	0.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	1 U	10 U	1 U	1 U	1 U	1 U	180	220	270	1 U	2 U	2 J	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	1.2 J	1 U	1 U	1.1 J	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	250	250	190	0.4 U	5	6 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	200	210	230	0.3 J	2 J	8 J	0.2 U	0.2 J	0.3 J	0.3 J	0.7 J	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	17000	13000	19000	19000	-	-	-	-	-	-	-	-	-	-	-	3 U
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	0.2 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	160	160	200	0.5 U	1 J	3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	2 U	0.3 UJ	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	6 J	0.2 U	0.2 U	0.2 U	0.2 U	19	34	30	0.2 U	0.6 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	14 U	1.4 U	0.4 U	0.4 U	0.4 U	460	**1400**	480	1 U	0.6 J	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	5100 J	4300 J	0 U	56 J	140 J	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400
			Field Sample ID	M399RB1X	D0311208	M399RB2X	M399RB3X	M399RB4X	M399RB5X	M399RB6	M399RB7	M399RB8	M399RB9	M400A3X	D0201178B	M400A2X	D0219188	M400A4X	D0417188	M400A5X	M400A6X	M400A7X	M400A8X	M400A9X	M400B1X	D0909198
			Sample Date	12/11/2019	03/11/2020	03/11/2020	06/16/2020	09/10/2020	02/19/2021	05/19/2021	09/24/2021	01/10/2022	03/24/2022	12/28/2016	02/01/2017	02/01/2017	02/19/2018	02/19/2018	04/17/2018	04/17/2018	06/12/2018	09/04/2018	12/03/2018	03/15/2019	06/04/2019	09/09/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	0.6 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	6 J	5 J	4 J	3 U	8 J	6 J	7 J	27	3 J	0.6 U	5 J	12	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	13 J	18 J	19 J	110	140 J	18 J	30 J	63	13 J	1 U	15 UJ	41	10 J
Benzene	ug/L	N	1	0.2 U	1 J	0.9 J	0.2 U	0.56 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**770J**	**510**	**520**	**500**	**480**	**600**	**630**	**540**	**430**	**630**	**740**	**430**	**370**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.4 U	0.2 U	0.4 J	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	520J	450	450	410	380	260	270	280	130	260	460	220	210
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	10	-	12	8.2	-	-
Ethene	ug/L	N	NA	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.21 J	0.2 U	-	1 U	-	-	1 UJ	1 U
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	96 J	85	83	21	21	19	20	23	10	16	23	12	10
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	140 J	140	140	100	100	110	97	130	110	150	150	120	120
Methane	ug/L	N	NA	3 U	-	-	-	-	-	16	7.3	5.6 J	7.3	-	-	-	-	-	11000	9700	9600	5500	12000	10000	11000 J	7400
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	290J	280	260	180	180	100	89	98	54	140	220	100	99
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.3 U	0.3 U	**5**
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 J	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	8 J	6	6	5	5	4	4	5	6	8	8	5	8
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	57 J	47	46	33	33	35	32	31	24	34	43	20	24
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	1300 J	1300 J	1100 J	1100 J	1100 J	1200 J	1100 J	1000 J	1300 J	1500 J	1400 J	1000 J	1300 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-401	MW-401	MW-401	MW-401	MW-401	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R
			Field Sample ID	M400B2X	M400B3X	M400B4X	M400B5X	M400B6X	D0301218XC	M400B7X	M400B8	M400B9	M400C2	M400C3	M401A1X	M401A2X	D1228168X	M401A3X	M401A4X	D1115178	M401RA5X	D0305188	M401RA6X	D0607188	M401RA7X	M401RA8X
			Sample Date	09/09/2019	12/12/2019	03/16/2020	06/17/2020	09/10/2020	03/01/2021	03/01/2021	05/26/2021	09/24/2021	12/15/2021	03/24/2022	08/24/2015	07/14/2016	12/28/2016	12/28/2016	02/01/2017	11/15/2017	11/15/2017	03/05/2018	03/05/2018	06/07/2018	06/07/2018	09/04/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.24 J	0.2 U	**2.2**	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	2 U	0.2 U	**37**	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	20 U	2 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	3 U	0.94 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	**17J**	**17**	**11**	1	1	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	8 J	0.3 U	3 J	3 U	5.5 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	30 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	6 J	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	30 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.58 J	0.66 J	0.5 U	0.5 U	30 U	3 J	3 U	6 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	10 J	16 J	0.7 U	22 J	10 UJ	8.2 J	2.5 J	12 J	2.8 J	0.7 U	0.7 U	60 U	6 U	6 U	12 U	12 U	6 U	6 U	6 U	6 U	6 U	6 U	1 J
Benzene	ug/L	N	1	**340**	**440**	**260**	**350**	**280**	**360**	**320**	**270**	**22**	**79**	**230**	**12000**	**1800**	**2200J**	**2200**	**670**	**360**	**380**	**250J**	**350J**	**38**	**31**	0.8 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
Chloroform	ug/L	N	70	0.2 U	2	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	220	230	260	140	93	290	220	63	4.3 J	17	56	30 J	11	33 J	21	15	9	8	4 J	7 J	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	8.3	-	-	-	13	3.6 J	13	13	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	1 U	1 U	1 U	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	11	13	8	11	7.9	10	9.8	6.8	0.41 J	1.5	3.3	240	130	130 J	120	40	13	11	6 J	11 J	4 J	3 J	0.4 U
Isopropylbenzene	ug/L	N	700	120	130	67	33 J	130	87	120	110	10	87	84	10 U	6	6 J	5 J	2 J	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	8700	15000	8400	11000	12000	13000	13000	11000	3000	12000	15000	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	100	210	120	33 J	34	100	81	21	1.3 J	0.5 U	0.5 U	24 J	8	18 J	14	8 J	9	7	4 J	8 J	2 J	1 J	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U	4 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	8	8	3	4 J	9.7	6	5.4	4.8	0.85 J	2.5	2.1	96	2	42 J	40	8	28	26	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	25	34	14	14 U	11	20	19	11	0.4 U	4.7	3.1	790	12	170 J	170	62	180	170	0.6 J	0.5 U	0.5 U	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	1400 J	1300 J	930 J	-	-	-	-	-	-	-	-	1300 J	770 J	800 J	700 J	360 J	120 J	110 J	16 J	46 J	0 U	0 U	5 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-408	MW-408	MW-408	MW-408	MW-408	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R
			Field Sample ID	M401RA9X	M401RB1X	M401RB2X	M401B3X	M401RB4X	M401RB5X	M401RB6X	M401RB7X	M401RB8X	M401RB9	M401RC1	M401RC2	M408A1X	D0413188	M408A3X	D0611188B	M408A4X	D1114198	M408RA5X	M408RA6X	M408RA7X	M408RA8X	M408RA9X
			Sample Date	12/03/2018	02/26/2019	06/03/2019	09/09/2019	12/10/2019	03/11/2020	06/05/2020	09/11/2020	03/01/2021	05/27/2021	09/01/2021	12/15/2021	11/19/2015	04/13/2018	04/13/2018	06/11/2018	06/11/2018	11/14/2019	11/14/2019	05/20/2020	08/26/2020	11/10/2020	03/02/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U	2 U	4 U	0.2 UJ	0.2 UJ	0.2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 J	0.5 J	0.2 J	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	2 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	4 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.6 J	0.3 U	0.4 J	0.49 J	0.56 J	0.3 U	0.38 J	0.3 J	0.33 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 J	2 J	0.3 U	**4.9**	**3.8**	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	4 J	3 U	3 U	13	23	99 UJ	110 J	85	100	22	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	6 U	18 J	21 J	0.3 U	0.3 U	2.8 J	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	6 U	34 J	39 J	32	26	8.1 J	1.9 J
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.8 UJ	0.7 U	0.7 U	0.7 U	0.7 U	1.8 J	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	12 J	21	33 J	840 J	810 J	700	470	380	24
Benzene	ug/L	N	1	0.4 J	**10**	**2**	0.3 J	0.2 U	0.2 U	0.2 U	**11J**	0.2 U	0.2 U	0.3 U	0.3 U	**2300**	**320**	**270**	**250**	**230**	**350J**	**370J**	**190**	**160**	**150**	**110**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	2 U	1 J	1 J	0.7 J	0.68 J	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.6 J	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	3 J	3 J	0.9 J	0.27 J	0.2 U	0.2 UJ
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	2 J	3 J	1	1	1.1	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	96	52	49	54	35	11 J	10 J	4 J	1 U	5.6 J	15 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	**910**	40	51	44	40	150 J	150 J	46	40	65	44
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	75	19	14	13	5 J	10 J	10 J	3 J	2.9 J	4.6 J	11
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	12 J	7.6 UJ	15	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	2 U	0.2 UJ	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	83	47	55	60	34	12 J	13 J	7	6.7	9.4	7.3
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.5 U	0.5 U	0.5 U	1 U	3 J	3 J	3	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	130	20	16	13	8	29 J	29 J	18	13	8.3	5.2
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	**2500**	170	180	130	110	260 J	270 J	100	81	62	65
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	2600 J	1400 J	1300 J	1500 J	1100 J	860 J	870 J	510 J	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-408R	MW-408R	MW-408R	MW-408R	MW-409	MW-409	MW-409	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R	MW-409R
			Field Sample ID	M408RB1	M408RB2	M408RB3	M408RB4	M409A1X	M409A2X	M409A3X	M409RA4X	M409RA5X	M409RA6X	M409RA7X	M409RA8	M409RA9X	M409RB2X	M409RB3X	D1008188	M409RB4X	M409RB5	M409RB6X	M409RB7X	M409RB8X	M409RB9X	M409RC1X
			Sample Date	05/13/2021	08/20/2021	11/09/2021	02/01/2022	12/03/2014	11/24/2015	02/10/2016	10/12/2016	02/02/2017	04/14/2017	07/05/2017	10/17/2017	01/22/2018	04/17/2018	07/02/2018	10/08/2018	10/08/2018	01/28/2019	04/23/2019	08/09/2019	10/21/2019	01/23/2020	04/23/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 J	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	20	11	4.7 J	5.5 J	3 U	52	36	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	4.7 J	2.8 J	0.5 U	1.2 J	12	10 J	26	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	150	66	28	27	6 U	68	72	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	6 J	1 J	4 J	0.7 U
Benzene	ug/L	N	1	**220**	**230**	**240**	**260**	**27**	**63**	**130**	**3**	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.23 J	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.25 J	0.2 U	0.32 J	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	1.1 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.4 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	11	4.9 J	9.3	8.4	110	74	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	61	63	67	71	1 J	3	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	5.9	5.1	7.4	5.8	2 J	2 J	3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	3	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	5	6.3	5.7	5.6	100	63	85	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.77 J	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	8.2	4	3.8	2.6	2	5	11	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	74	44	29	22	4	9	22	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	1200 J	650 J	1000 J	18 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	13 J	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-410	MW-411	MW-413	MW-442	MW-442	MW-442	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443
			Field Sample ID	M410A1X	M411A1X	M413A1X	D1124158	M442A1X	M442A2X	M443A1X	M443A2X	M443A3X	D0203178B	M443A4X	D0414178	M443A5X	D0705178B	M443A6X	D1017178	M443A7	M443A8X	M443B1X	M443B2X	M443B3X	M443B4	M443B5
			Sample Date	08/19/2014	08/18/2014	08/18/2014	11/24/2015	11/24/2015	02/10/2016	11/23/2015	02/10/2016	10/12/2016	02/03/2017	02/03/2017	04/14/2017	04/14/2017	07/05/2017	07/05/2017	10/17/2017	10/17/2017	01/22/2018	04/12/2018	07/02/2018	10/08/2018	01/28/2019	04/23/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	3 U	3 U	3 U	3 U	11	9 J	8 J	8 J	8 J	8 J	8 J	7 J	3 U	4 J	3 U	5 J	3 J	0.3 UJ	0.3 U	16
2-Hexanone	ug/L	N	40	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 UJ	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	-	6 U	6 U	6 U	11 J	40	26	22	23	22	24	29	23	13 J	13 J	6 U	15 J	11 J	17 J	6 J	45
Benzene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	**27**	**27**	**71**	**28**	**28**	**24**	**23**	**15J**	**9J**	**15J**	**10J**	**7**	**24**	**8**	**10**	**13**	**11**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	-	2 U	2 U	2 U	43	82	120	82	80	31	30	29 J	19 J	41 J	28 J	59	43	13	22	47	32
Dibromochloromethane	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	-	-	-	0.5 U	0.5 U	0.5 U	13	9	20	6	6	4	4	4 J	2 J	5 J	3 J	3	3	1	2	4	3
Isopropylbenzene	ug/L	N	700	-	-	-	1 U	1 U	1 U	21	31	69	33	33	17	15	13 J	8 J	27 J	19 J	29	21	6	14	26	17
Methane	ug/L	N	NA	10000	1400	9000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	5	5	7	4	7	5	2	2	1 J	0.9 J	0.8 J	0.5 U	1	1	1	1	0.5 U	0.5 J	0.6 J	0.5 J
Methylcyclohexane	ug/L	N	NA	-	-	-	1 U	1 U	1 U	25	27	60	27	25	12	11	10 J	7 J	16 J	11 J	12	10	5	8	12	10
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	-	-	-	0.5 U	0.5 U	0.5 U	11	21	34	16	17	9	8	6 J	4 J	11 J	8 J	11	13	3	7	13	8
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	-	-	-	0.5 U	0.5 U	0.5 U	16	20	25	12	12	7	6	4 J	3 J	8 J	5 J	8	9	2	5 J	9	5
Total TIC VOCS	ug/L	N	NA	-	-	-	0 U	0 U	0 U	850 J	980 J	1700 J	1000 J	1000 J	490 J	460 J	410 J	280 J	690 J	470 J	850 J	610 J	180 J	370 J	790 J	380 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444
			Field Sample ID	M443B6X	M443B7X	M443B8X	M443B9X	M443C1X	M443C2X	M443C3X	M443C4	M443C5	M443C6	M443C7	M444A1X	M444A2X	M444A3X	M444A4X	D0521208	M444A5X	M444A6X	M444A7X	M444A8X	M444A9	M444B1
			Sample Date	08/09/2019	10/21/2019	01/23/2020	04/23/2020	07/30/2020	10/28/2020	01/25/2021	04/14/2021	10/05/2021	12/27/2021	03/25/2022	11/19/2015	02/20/2018	04/18/2018	11/15/2019	05/21/2020	05/21/2020	08/26/2020	11/10/2020	03/02/2021	05/13/2021	08/20/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	4 U	20 U	0.2 U	0.4 U	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	1 U	2 U	10 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	2 U	4 U	20 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	1 U	2 U	10 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.4 J	0.8 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.3 U	0.6 U	0.3 U	1	0.42 J	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	1 U	2 U	10 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	1 U	2 U	10 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 J	4 J	0.3 U	0.3 U	3.9 J	0.3 U	0.3 U	0.3 U	0.5 U	-	0.5 U	3 J	8 J	30 U	0.3 U	4 J	3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	-	0.4 U	3 U	6 U	30 U	12	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	1 J	1 J	0.5 U	0.5 U	0.55 J	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	3 U	6 U	30 U	5 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	28 J	0.7 U	0.7 U	0.7 U	13 J	0.7 U	8.4 J	2.1 UJ	0.7 U	-	0.7 U	8 J	24 J	60 U	34	4 J	6 J	9.8 J	4.1 UJ	0.7 U	0.7 U	0.86 UJ
Benzene	ug/L	N	1	**37J**	**13**	**5**	**9**	**11**	0.2 U	**9.6**	**14**	**1.1**	-	**4.8**	**59**	**35**	**12**	**50**	1 J	1	**35**	**11**	0.2 U	0.2 U	**1.5**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.38 J	0.2 U	0.39 J	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.31 J	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	0.5 U	1 U	5 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 UJ	0.2 U	0.2 U	0.2 U	0.26 J	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	1 U	2 U	10 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	1 J	0.9 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	60 J	18	10	6	6.2	1 U	9.6	6.6	1.2 J	-	1 U	66	53	20 U	65	6 J	8 J	43	14 J	1 UJ	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	1 U	1.5 J	-	1 U	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	12 J	7	5	3	5.9	1.1	3.9	2.8	0.57 J	-	0.56 J	94	31	51	17	0.8 U	0.5 J	3.1	0.93 J	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	40 J	32	22	15	32	13	31	21	14	6 J	7.3	62	49	68	38	3 J	5	5	13	0.2 U	1.4 J	2.4 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	880	2400	-	880	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	1 U	2 U	10 U	0.2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	9	1 J	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	28 J	8	2 J	2 J	1.9 J	1.1 J	0.5 U	0.5 U	0.5 U	-	0.5 U	89	50	39 J	63	16 J	21 J	35	22	0.5 U	7.1	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	1 UJ	**4**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	2 U	1 U	5 U	0.3 U	0.6 U	1	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	1 U	2 U	10 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	12 J	4	0.7 J	0.6 J	2.3	0.5 J	1.6	1.5	0.28 J	-	0.57 J	18	15	6 J	7	0.4 U	0.4 J	2.8	1.7	0.2 U	0.2 U	0.39 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	-	0.3 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.5 U	1 U	5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	12 J	5 J	2 J	1 U	2.6 J	1.4 U	2.5 J	1.4 U	0.48 J	-	0.4 U	33	21	20	10	3 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	1100 J	650 J	550 J	490 J	-	-	-	-	-	-	-	1600 J	2400 J	3600 J	1500 J	540 J	610 J	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-444	MW-444	MW-445	MW-445	MW-446	MW-446	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R
			Field Sample ID	M444B2	M444B3	M445A1X	M445A2X	M446A1X	M446A2X	D1012168	M446RA3X	M446RA4X	M446RA5X	M446RA6X	M446RA8	D0123188	M446RA9X	M446RB1	D0702188	M446RB2X	M446RB3X	M446RB4	M446RB5	M446RB6X	M446RB7X	M446RB8X
			Sample Date	11/09/2021	02/08/2022	11/23/2015	02/10/2016	11/24/2015	02/09/2016	10/12/2016	10/12/2016	02/03/2017	04/14/2017	07/05/2017	10/17/2017	01/23/2018	01/23/2018	04/13/2018	07/02/2018	07/02/2018	10/08/2018	01/28/2019	04/23/2019	08/09/2019	10/21/2019	01/23/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.5 J	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.8 J	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	0.7 J	0.5 J	0.3 U	0.3 UJ	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	6 U	6 U	12 U	6 U	6 U	6 U	6 U	6 U	7 J	6 U	6 UJ	6 UJ	6 U	6 U	6 UJ	7 J	1 J	3 UJ	4 J	1 J	0.7 U
Benzene	ug/L	N	1	**1.4**	0.3 U	0.5 U	0.5 U	**19**	**8**	**4**	**4**	**3**	**2**	0.7 J	0.5 U	0.5 U	0.5 U	**2**	0.5 U	0.5 UJ	0.2 U	1	1	0.3 J	0.2 U	1
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	2	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2.7 J	1 U	2 U	3 J	58	47	7	6	2 U	2 U	3 J	3 J	2 U	2 U	2 U	5 J	4 J	2 J	0.8 J	0.2 U	4 J	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.5 U	0.5 U	6	3	3	3	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.4 U	0.4 U	0.7 J	0.4 UJ	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	12	0.81 J	1 U	1 U	38	25	6	6	1 J	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.4 J	0.2 U	0.7 J	1 J	0.3 J	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	3	1	3	4	2	2	0.5 J	0.5 U	0.5 U	0.5 U	0.6 J	0.6 J	0.5 U	0.5 U	0.5 UJ	0.3 J	0.2 J	0.2 U	0.2 J	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	1 U	1 U	58	41	10	9	1 U	1 U	3 J	2 J	1 U	1 U	1 U	3 J	2 J	2 J	0.6 J	0.2 U	3 J	0.7 J	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U
Styrene	ug/L	N	100	0.3 U	0.3 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Toluene	ug/L	N	600	0.29 J	0.2 U	0.5 U	0.5 U	5	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.5 U	0.5 U	9	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	0 U	32 J	1300 J	820 J	310 J	300 J	130 J	100 J	120 J	38 J	16 J	23 J	44 J	13 J	35 J	33 J	6 J	0 U	47 J	0 U	11 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-447	MW-447	MW-447	MW-447	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-448	MW-448	MW-448
			Field Sample ID	M446RB9X	M446RC1X	M446RC2X	M446RC3X	M446RC4	M446RC5	M447A1X	D0221188	M447A2X	M447A3X	M447RA4X	M447RA5X	M447RA6X	M447RA7X	M447RA8X	M447RA9	M447RB1	M447RB2	M447RB3	M448A1X	M448A2X	M448A3X
			Sample Date	04/23/2020	07/30/2020	10/28/2020	01/25/2021	04/15/2021	12/30/2021	11/24/2015	02/21/2018	02/21/2018	04/18/2018	11/14/2019	05/19/2020	08/28/2020	11/09/2020	03/03/2021	05/12/2021	08/25/2021	11/09/2021	02/01/2022	01/11/2016	07/05/2016	07/26/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 UJ	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	2	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	1	3 UJ	0.77 J	0.3 U	0.83 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	30	28	23	17	6 J	5 J	3 UJ	0.3 U	0.3 U	0.3 U	9.4 J	8.6 J	16	3 U	4 J	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	5 J	18	13	3 U	0.3 U	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	10	7 J	10	0.5 U	1 J	5 UJ	0.57 J	15	4.7 J	1.6 J	0.5 U	4.6 J	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.78 J	0.7 U	0.79 J	1.6 UJ	0.7 U	110	57	51	55	13 UJ	13 J	10 J	6.4 UJ	9.3 J	12 J	7.5 J	0.7 U	12 J	6 U	25	19 J
Benzene	ug/L	N	1	0.4 J	**4.3J**	0.2 U	**1.3**	**2**	0.3 U	**470**	**70**	**51**	**120**	**250**	**75**	**71J**	**72**	**69**	**140**	**150**	**160**	**130**	1	1	0.9 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.33 J	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	2 J	2 UJ	0.43 J	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	12	6	2 UJ	2.5	0.96 J	1.6	1	1.2	1.2	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 J	1 U	1 U	1 U	1 U	1 UJ	170	160	120	100	100	40	10 UJ	22	66 J	52	71	54	74	9	46	35
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.71 J	0.4 U	66	14	7	2	36	17	14 J	14	6.1	19	21	19	29	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.4 J	0.2 U	0.2 U	0.32 J	1.7 J	0.2 U	79	52	28	5 J	39	30	21 J	22	3.6 J	20	21	25	32	1 U	1 U	1 J
Methane	ug/L	N	NA	-	-	-	-	1600	1900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	0.9 J	0.7 J	1	0.3 J	0.5 J	2 UJ	0.33 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.6 J	0.51 J	0.5 U	0.5 U	0.5 U	0.5 UJ	120	110	83	90	90	46	9.8 J	17	40	36	34	29	43	1 J	7	8
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.5 U	0.5 U	0.5 U	0.7 J	0.3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	49	15	9	6	9	2	2.1 J	2	3.4	5.6	4.5	6.4	5	0.6 J	2	2
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	39	17	10	5	26	6	14 UJ	5.6 J	5.6 J	11	9	13	11	2	4	5
Total TIC VOCS	ug/L	N	NA	33 J	-	-	0 U	-	0 U	2400 J	2000 J	1500 J	1700 J	2900 J	1400 J	-	-	-	-	-	-	-	-	160 J	160 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449
			Field Sample ID	M448A4X	M448A5X	M448A6X	M448A7X	M448A8X	M448A9X	M448B1X	M448B2X	M448B3X	D0728208	M448B4X	M448B5X	M448B6X	M448B7	M448B8	M448B9	M448C1	M449A1X	M449A2X	M449A3X	M449A4X	M449A5X	M449A6X
			Sample Date	01/19/2018	04/10/2018	07/13/2018	10/10/2018	01/24/2019	04/03/2019	08/01/2019	01/24/2020	04/06/2020	07/28/2020	07/28/2020	10/23/2020	01/19/2021	04/05/2021	07/16/2021	10/14/2021	01/25/2022	04/14/2016	07/14/2016	07/27/2017	09/07/2017	01/30/2018	04/10/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.26 U	0.26 U	0.2 U	0.20 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,1,1-Trichloroethane	ug/L	N	30	1 U	0.5 U	0.5 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.24 U	0.24 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.37 U	0.37 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,1,2-Trichloroethane	ug/L	N	3	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.43 U	0.43 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	2 U	2 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	20 U	2 U	10 U	20 UJ	20 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.26 U	0.26 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	4	5 U	0.5 U	3 U	5 UJ	5 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	1 U	1 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.37 U	0.37 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	5 U	10 UJ	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.38 U	0.38 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	20 U	2 U	10 U	20 UJ	20 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.43 U	0.43 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	5 U	10 UJ	10 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.43 U	0.43 U	0.3 U	0.30 U	0.3 U	**2.3**	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.35 U	0.35 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.34 U	0.34 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	5 U	10 UJ	10 U
1,4-Dichlorobenzene	ug/L	N	75	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.33 U	0.33 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	5 U	10 UJ	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	6 U	3 U	3 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.9 U	1.9 U	0.3 U	0.30 U	0.3 U	250	0.5 U	0.5 U	3 U	30 U	18	140	**840J**	**500**
2-Hexanone	ug/L	N	40	6 U	3 U	3 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.1 U	1.1 U	0.3 U	0.30 U	0.3 U	2.8 J	0.4 U	0.4 U	3 U	30 U	12	15 U	**310J**	**170**
4-Methyl-2-pentanone	ug/L	N	NA	6 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1.3 U	1.3 U	0.5 U	0.50 U	0.5 U	3.2 J	0.5 U	0.5 U	3 U	30 U	3 U	15 U	110J	49 J
Acetone	ug/L	N	6000	12 U	6 U	6 U	4 U	4 J	12 J	5 J	0.7 U	3 J	22	31	1.4 J	0.74 UJ	13 J	1400E	1.1 J	0.7 U	63	60 U	41	640	3900 J	3800
Benzene	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	**2.4**	0.3 U	0.3 U	**1600**	**120**	**450**	**150**	**120J**	**93**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.34 U	0.34 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	1 UJ	1 U	1 U	0.54 UJ	0.54 UJ	1 U	1.0 U	1 U	1 U	1 U	1 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.55 U	0.55 U	0.3 U	0.30 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Carbon disulfide	ug/L	N	700	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.82 U	0.82 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	5 U	10 UJ	10 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.21 U	0.21 U	0.2 U	0.20 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 UJ	5 U	0.5 U	3 U	5 UJ	5 U
Chlorobenzene	ug/L	N	50	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.38 U	0.38 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.32 U	0.32 U	0.2 U	0.20 UJ	0.2 U	0.94 J	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	13 J	9 J
Chloroform	ug/L	N	70	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.33 U	0.33 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	20	5 UJ	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.4 U	0.4 U	0.2 U	0.20 U	0.2 U	30	0.2 U	0.2 U	0.5 U	5 U	0.5 U	12	100 J	71
cis-1,2-Dichloroethene	ug/L	N	70	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.22 U	0.22 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.22 U	0.22 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Cyclohexane	ug/L	N	NA	4 J	2 U	2 U	1 U	0.2 U	0.2 U	1 UJ	1 U	1 U	0.32 U	0.32 U	1 U	1.0 U	1 UJ	1 U	1 U	1 U	560	150	78	230	59 J	45 J
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.28 U	0.28 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.31 U	0.31 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1 U	0.5 U	0.5 U	2 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.3 U	0.3 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	330	14	75	70	35 J	49
Isopropylbenzene	ug/L	N	700	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	2 J	0.34 U	0.34 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	92	10 U	3 J	10 J	10 UJ	10 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.79 U	0.79 U	0.3 U	0.30 U	0.3 U	3.7 J	0.3 U	0.3 U	1 U	10 U	1 U	5 U	10 UJ	10 U
Methyl-t-butyl ether	ug/L	N	70	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.47 U	0.47 U	0.2 U	0.20 U	0.2 U	0.67 J	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Methylcyclohexane	ug/L	N	NA	2 U	1 U	1 U	1 U	0.2 J	0.2 U	0.5 UJ	0.5 U	0.5 U	0.26 U	0.26 U	0.5 U	0.50 U	0.62 J	0.5 U	0.5 U	0.5 U	230	73	33	210	24 J	23 J
Methylene chloride (Dichloromethane)	ug/L	N	3	1 U	0.5 U	0.5 U	2 U	0.3 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.32 U	0.32 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	20 U	2 U	10 U	5 UJ	5 U
Styrene	ug/L	N	100	2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.42 U	0.42 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	5 U	10 UJ	10 U
Tetrachloroethene	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.25 U	0.25 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Toluene	ug/L	N	600	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.38 U	0.38 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	92	6 J	20	18	31 J	34
trans-1,2-Dichloroethene	ug/L	N	100	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.24 U	0.24 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.49 U	0.49 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.31 U	0.31 U	0.2 U	0.20 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	0.5 U	0.5 U	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.32 U	0.32 U	0.2 U	0.20 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.17 U	0.17 U	0.2 U	0.20 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	3 U	5 UJ	5 U
Xylene (total)	ug/L	N	1000	1 U	0.5 U	0.5 U	5 U	1 U	1 U	1 UJ	1 U	1 U	0.65 U	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	600	69	470	130	140 J	220
Total TIC VOCS	ug/L	N	NA	10 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	43 J	0 U	0 U	0 U	0.0 U	0 U	-	0 U	0 U	4800 J	980 J	550 J	1000 J	1200 J	960 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450
			Field Sample ID	M449A7X	M449A8X	D0403198	M449B1X	M449B2X	M449B3X	M449B4X	M449B5X	M449B6X	M449B7X	M449B8	M449B9	M449C1	M449C2	M450A1X	D0707168	M450A2X	D0727178	M450A3X	M450A4X	M450A5X	D0713188	M450A6X
			Sample Date	07/12/2018	10/10/2018	04/03/2019	04/03/2019	08/01/2019	02/20/2020	04/06/2020	08/26/2020	10/22/2020	01/20/2021	04/05/2021	07/16/2021	10/14/2021	01/25/2022	12/09/2015	07/07/2016	07/07/2016	07/27/2017	07/27/2017	01/19/2018	04/09/2018	07/13/2018	07/13/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.35 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	240	4 J	9 J	11	4 J	3 J	1 J	15	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	9 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	13 J	0.3 U	1 J	0.9 J	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	7 J	0.5 U	2 J	2 J	0.5 UJ	0.5 U	0.5 U	1.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	1000	20	44 J	73 J	11 J	7 J	9 J	34	1.7 J	0.7 U	1.1 J	2.7 J	0.7 U	1.8 J	31	6 U	6 U	6 U	6 U	290	6 U	6 U	40
Benzene	ug/L	N	1	**22**	0.6 J	**30**	**30**	**8J**	**2**	0.7 J	**5**	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	2 U	0.3 J	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	1 U	1	0.4 J	0.5 J	0.2 UJ	0.2 J	0.2 U	1.1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	6	2	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	36	0.2 U	38 J	17 J	2 J	10	3 J	25	1 U	1 U	2.2 J	1 U	1 U	1 U	300	6 J	12 J	6	10	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	18	0.4 U	6 J	12 J	3 J	0.4 U	0.4 U	0.94 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	150	5 J	8 J	3	4	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	2 U	0.2 U	0.2 U	0.3 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	29	1 J	2 J	1 J	2 J	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	21	2 J	20 J	9 J	2 J	7	1 J	13	0.5 U	0.5 U	1.3 J	0.5 U	0.5 U	0.5 U	240	2 J	5 J	3 J	3 J	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	1 U	0.3 U	0.3 U	0.3 U	0.7 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Styrene	ug/L	N	100	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	6	0.2 U	1 J	2 J	0.4 J	0.2 U	0.2 U	0.25 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	32	1 U	8 J	13 J	3 J	1 U	1 U	1.4 J	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	180	2 J	4 J	2	2	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	200 J	97 J	93 J	48 J	0 U	25 J	28 J	-	0 U	0 U	0 U	0 U	-	0 U	1800 J	150 J	210 J	110 J	100 J	120 J	6 J	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451
			Field Sample ID	M450A7X	D0122198	M450A8X	M450A9X	M450B1X	M450B2X	M450B3X	M450B4X	M450B5X	M450B6X	M450B7	M450B8	M450B9	M450C1	M451A1X	M451A2X	M451A3X	D0118188	M451A4X	M451A5X	M451A6X	M451A7X	M451A8X
			Sample Date	10/12/2018	01/22/2019	01/22/2019	04/05/2019	07/24/2019	01/23/2020	04/07/2020	07/22/2020	10/26/2020	01/21/2021	04/06/2021	07/19/2021	10/15/2021	01/24/2022	01/11/2016	07/06/2016	07/25/2017	01/18/2018	01/18/2018	04/10/2018	07/13/2018	10/10/2018	01/23/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	-	-	-	-	-	-	-	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**0.3J**	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	6 J	26	10 J	9 J	3 U	3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	4 J	2 J	22	5 UJ	3 J	0.7 U	2 J	4.4 U	0.9 UJ	2.5 UJ	3.6 J	7.5 J	0.7 U	0.7 U	6 U	6 U	83	6 U	6 U	6 U	19 J	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**3**	1	**2**	**2**	**2**	0.9 J	0.6 J	0.5 J	0.7 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 UJ	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	26	6	7	22	22	18	6	0.2 U	5 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2	2	4	2	2	4	3	0.5 J	2
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 J	0.6 J	0.34 U	0.22 J	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	6	4 J	11	12	12	7	7	6	9
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.5 U	0.7 J	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	100	39	110	59	57	60	40	30	75
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.9 J	1	2	1	1	0.8 J	0.9 J	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	9 J	21 J	0 U	0 U	0 U	0 U	-	0 U	-	-	410 J	1000 J	980 J	940 J	720 J	510 J	650 J	810 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452
			Field Sample ID	M451A9X	M451B1X	M451B2X	M451B3X	M451B4X	M451B5X	M451B8X	M451B9	M451C1	M451C2	M451C3	M452A1X	M452A2X	M452A3X	D0908178A	M452A4X	M452A5X	M452A6X	M452A7X	D1010188	M452A9X	M452B1X	M452B2X
			Sample Date	04/04/2019	08/01/2019	01/24/2020	04/07/2020	07/27/2020	10/23/2020	01/20/2021	04/05/2021	07/21/2021	10/14/2021	01/24/2022	01/07/2016	07/11/2016	07/25/2017	09/08/2017	09/08/2017	01/19/2018	04/10/2018	07/12/2018	10/10/2018	10/10/2018	01/23/2019	04/03/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 UJ	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	3 UJ	3 UJ	0.6 U	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 UJ	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 UJ	-	-	-	-	-	-	-	20 U	4 U	2 U	100 UJ	100 UJ	40 UJ	4 U	4 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 UJ	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.3 J
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 UJ	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	3 UJ	3 UJ	0.6 U	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 UJ	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	4 U	2 U	100 UJ	100 UJ	40 UJ	4 U	4 UJ	3 UJ	3 UJ	0.6 U	0.3 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 UJ	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	**3**	**7J**	**9J**	**9J**	**5**	**3J**
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 UJ	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 UJ	6 J	0.3 U	1.9 U	8.9 J	0.3 U	6.1 J	0.5 U	0.5 U	0.5 U	30 U	17 J	6 J	150 UJ	150 UJ	**1700J**	170	230 J	96 J	99 J	26	110 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	30 U	6 U	3 U	150 UJ	150 UJ	**200J**	**190**	6 UJ	3 UJ	3 UJ	0.6 U	10 J
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 J	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	3.1 J	0.5 U	0.5 U	0.5 U	30 U	6 U	3 U	150 UJ	150 UJ	140J	6 U	14 J	8 J	7 J	4 J	6 J
Acetone	ug/L	N	6000	0.7 U	10 J	0.7 U	0.7 U	72	18 J	0.7 U	0.7 U	3.8 UJ	0.7 U	0.7 U	60 U	38 J	17 J	300 UJ	300 UJ	**7500J**	1000	1800 J	420 J	680 J	98	1200 J
Benzene	ug/L	N	1	0.5 J	0.2 UJ	0.7 J	0.5 J	0.2 U	0.51 J	0.83 J	**1.7**	**51**	0.87 J	0.36 J	**1400**	**1300**	**400**	25 UJ	25 UJ	**23J**	**110**	**110J**	**190J**	**170J**	**180**	**270J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Bromoform	ug/L	N	4	0.2 UJ	1 UJ	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 UJ	0.3 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	**32J**	**25**	6 J	3 UJ	3 UJ	0.6 U	0.3 UJ
Carbon disulfide	ug/L	N	700	0.2 U	0.2 UJ	0.2 U	0.5 J	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	2 UJ	2 UJ	3 J	8 J
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Chlorobenzene	ug/L	N	50	0.2 U	0.2 UJ	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.6 J	0.7 J
Chloroethane	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	25 J	62	94 J	61 J	59 J	58	28 J
Chloroform	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	450 J	860	260 J	14 J	20 J	8	47 J
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Cyclohexane	ug/L	N	NA	8	1 UJ	1 U	1 U	1.2	1 U	1 U	13	19	4.4 J	5	440	260	130	100 UJ	100 UJ	40 UJ	120	150J	240J	200J	300	140J
Dibromochloromethane	ug/L	N	1	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2	0.4 UJ	1	1	0.3 U	0.91 J	0.57 J	0.4 U	0.4 U	0.4 U	1.2	360	450	130	25 UJ	25 UJ	76 J	370	410 J	**710J**	**730J**	**1000**	590 UJ
Isopropylbenzene	ug/L	N	700	8	1 J	14	8	2.9	14	5	2.5 J	0.29 J	0.2 U	15	52	41	10	50 UJ	50 UJ	20 UJ	26	22 J	28 J	28 J	57	53 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 UJ	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 UJ	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Methylcyclohexane	ug/L	N	NA	70	7 J	110	54	11	72	31	7.1	7.3	0.5 U	87	180	83	46	50 UJ	50 UJ	20 UJ	86	77 J	120J	98 J	160	200J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 UJ	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.52 J	0.3 U	0.3 U	20 U	4 U	2 U	100 UJ	100 UJ	10 UJ	**4**	1 UJ	3 UJ	3 UJ	0.6 U	0.3 UJ
Styrene	ug/L	N	100	0.2 U	0.2 UJ	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	2 U	1 U	50 UJ	50 UJ	20 UJ	2 U	2 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Toluene	ug/L	N	600	0.2 U	0.2 UJ	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.48 J	0.2 U	0.2 U	69	50	21	25 UJ	25 UJ	10 UJ	16	9 J	10 J	9 J	15	11 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 UJ	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 UJ	0.2 U	0.2 U	0.17 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.5 U	25 UJ	25 UJ	10 UJ	1 U	1 UJ	2 UJ	2 UJ	0.4 U	0.2 UJ
Xylene (total)	ug/L	N	1000	1 U	1 UJ	1 U	1 U	0.65 U	1.8 J	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	270	620	250	25 UJ	25 UJ	67 J	630	530 J	540 J	620 J	760	520 J
Total TIC VOCS	ug/L	N	NA	740 J	200 J	1200 J	810 J	-	-	-	-	-	-	-	-	10000 J	660 J	0 U	0 U	3300 J	2500 J	1700 J	1700 J	1800 J	2200 J	1700 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453
			Field Sample ID	M452B3X	M452B4X	M452B5X	M452B6X	M452B7X	M452B8X	M452B9	M452C1	M452C2	M452C3	M453A1X	M453A2X	M453A3X	M453A4X	M453A5X	M453A6X	M453A7X	M453A8X	M453A9X	M453B1X	M453B2X	D0407208	M453B3X
			Sample Date	07/30/2019	03/02/2020	04/07/2020	07/27/2020	10/22/2020	01/21/2021	04/06/2021	07/19/2021	10/14/2021	01/25/2022	01/07/2016	07/08/2016	07/26/2017	01/19/2018	04/09/2018	07/13/2018	10/12/2018	01/23/2019	04/04/2019	07/31/2019	02/03/2020	04/07/2020	04/07/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.26 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	3 UJ	0.24 U	0.3 UJ	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.37 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	2 UJ	0.43 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	2 UJ	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 UJ	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.2 J	0.2 U	2 UJ	0.26 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	3 UJ	0.37 U	0.3 UJ	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	3 UJ	0.38 U	0.3 UJ	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	2 UJ	0.5 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	2 UJ	0.43 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	2	0.9 J	3 UJ	**3**	0.96 J	0.91 J	3 U	0.75 J	0.73 J	0.3 U	0.5 U	0.5 U	0.5 U	2	2	2	**4J**	0.3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.35 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	2 UJ	0.34 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	2 UJ	0.33 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	22	68	38 J	110	10 J	7.7 J	30 J	21	32 J	18	3 U	3 U	3 U	3 U	9 J	54	120 J	1 J	2 J	4 J	6 U	3 J	3 J
2-Hexanone	ug/L	N	40	0.3 U	13	3 UJ	1.1 U	30 J	0.3 U	6.4 J	4.5 J	8.3 J	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	2 J	8 J	5 UJ	1.3 U	9 J	4.3 J	5 U	4.4 J	3 J	2.2 J	3 U	3 U	3 U	3 U	3 U	3 U	2 J	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	67	360	330 J	810	31 J	28	260	150	170 J	110	22	7 J	6 U	7 J	56	290	1100 J	15 J	26	22	140 J	68	78
Benzene	ug/L	N	1	**260**	**6**	**5J**	**2.2**	**57J**	**260**	**140**	**290**	**300J**	**210**	**2**	0.5 U	0.5 U	0.8 J	**3**	**6**	**4J**	0.2 U	0.2 U	0.2 U	4 U	0.3 J	0.3 J
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.34 U	0.2 UJ	0.2 U	2 U	0.46 J	0.2 UJ	0.2 U	**7**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	10 UJ	0.54 U	1 UJ	1 U	10 U	1 U	1 UJ	1 U	3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 UJ	1 U	20 UJ	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	5	5 J	0.55 J	0.3 UJ	0.3 U	3 U	0.3 U	0.5 J	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	1	9 J	0.3 U	0.3 U	0.3 U	6 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 J	2 J	2 UJ	0.82 U	0.2 UJ	0.2 U	2 U	0.3 U	0.47 J	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J	0.2 U	0.2 U	0.2 U	4 U	0.2 UJ	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.21 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	2 UJ	0.38 U	0.2 UJ	0.2 U	2 U	0.3 U	0.31 J	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	27	13	15 J	0.98 J	7.8 J	9.1	5.6 J	5.1	5.2 J	2.3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	0.2 U	0.2 U	0.2 UJ	4 U	0.2 UJ	0.2 J
Chloroform	ug/L	N	70	0.2 U	2	2 UJ	0.33 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	**290**	**140**	12	0.5 U	0.5 U	0.9 J	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	3	75	66 J	60	5.5 J	1.6	58	16	37 J	30	0.5 U	0.5 U	0.5 U	0.5 U	3	11	120 J	1	2	2	4 U	3	3
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	2 UJ	0.22 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.22 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	180	14	14 J	0.32 U	57 J	190	140	120	210J	210	2 U	2 U	2 U	2 U	160	99	1 J	0.2 U	0.2 U	1 U	20 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.28 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	**2**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	4 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 UJ	0.31 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	550	10	7 J	0.3 U	63 J	300	320	220	380 J	200	0.5 U	0.5 U	0.5 U	0.6 J	2	18	0.4 UJ	0.4 U	0.4 U	0.4 U	8 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	22	0.8 J	2 UJ	0.34 U	2.7 J	13	11 J	10	22 J	16	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	3 UJ	2 J	0.3 UJ	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	6 J	0.2 U	0.2 U	0.2 U	6 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	2 UJ	0.91 J	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	72	14	8 J	0.26 U	21 J	100	48 J	55	86 J	86	1 U	1 U	1 U	1 U	69	49	0.3 J	0.2 U	0.2 U	0.5 U	10 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	3 UJ	0.32 U	0.3 UJ	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.4 UJ	6 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	2 UJ	0.42 U	0.42 J	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.25 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Toluene	ug/L	N	600	1	0.5 J	2 UJ	0.38 U	2.3 J	6.5	5.7 J	5.9	5.9 J	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	2	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	2 UJ	0.24 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.49 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.31 U	0.2 UJ	0.2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 UJ	0.32 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	4 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	2 UJ	0.17 U	0.2 UJ	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	4 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	33	23	14 UJ	0.65 U	140 J	510	450	280	300 J	110	0.5 U	0.5 U	0.5 U	0.6 J	0.9 J	38	1 UJ	1 U	1 U	1 U	28 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	600 J	440 J	74 J	0 U	-	-	-	-	-	-	-	0 U	0 U	0 U	210 J	180 J	28 J	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455
			Field Sample ID	M453B4X	D1022208	M453B5X	D0120218	M453B6X	M453B7	M453B8	M453B9	D0124228A	M453C1	M455A2	M455A3X	M455A4X	M455A5X	D0411188	M455A6X	M455A7X	M455A8X	M455A9X	M455B1X	D0724198	M455B2X
			Sample Date	08/31/2020	10/22/2020	10/22/2020	01/20/2021	01/20/2021	04/02/2021	07/16/2021	10/12/2021	01/24/2022	01/24/2022	12/16/2015	07/18/2016	07/26/2017	01/19/2018	04/11/2018	04/11/2018	07/13/2018	10/09/2018	01/23/2019	04/05/2019	07/24/2019	07/24/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,2-Dichloroethane	ug/L	N	2	**2.1**	0.3 U	0.3 U	0.3 U	0.3 U	**3.2**	0.3 U	**3.7J**	**4**	**4**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	88	2.8 J	3.4 J	3.2 J	3 J	240	0.5 U	300 J	290	280	8 J	23	16	5 J	14	20	3 U	9 J	6 J	0.3 U	9 J	10 J
2-Hexanone	ug/L	N	40	0.86 J	0.3 U	0.3 U	0.3 U	0.3 U	3.4 J	0.4 U	3.3 J	2.2 J	3.4 J	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	1.1 J	0.5 U	0.5 U	0.5 U	0.5 U	3.4 J	0.5 U	3.2 J	3.3 J	3.4 J	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ
Acetone	ug/L	N	6000	690	23 J	26	27	25	1300	2.5 J	1700 J	1400	1500	25	34	52	10 J	45	50	6 U	27	19 J	0.7 U	32 J	31 J
Benzene	ug/L	N	1	**1.4**	0.2 U	0.2 U	0.2 U	0.2 U	**3.9**	0.3 U	**3.5J**	**3.5**	**3.6**	**4**	**7**	**6**	**6**	**10**	**14**	**4**	**4**	**8**	**4**	**12J**	**5J**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.5 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.27 J	0.3 U	0.3 UJ	0.3 U	0.3 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Chloroethane	ug/L	N	NA	0.56 J	0.2 U	0.2 U	0.2 UJ	0.2 UJ	1.5	0.2 U	1.1 J	1.2	1.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2.1	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	5 J
Chloromethane (Methyl chloride)	ug/L	N	NA	30	0.87 J	1.1	0.89 J	0.83 J	44	0.2 U	49 J	42	45	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	0.5 U	0.4 J	0.5 J	0.4 J	0.5 J	0.2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	81	170	130	150	190	230	110	75	110	95	260J	150J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	33	41	11	11	22	50	7	3	8	3	22 J	7 J
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	13	34	21	24	36	48	21	15	30	14	71 J	30 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3.1 J	0.3 U	5.3 J	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.81 J	0.2 U	0.75 J	0.69 J	0.68 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	65	120	100	160	180	210	120	62	96	89	210J	100 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.9 J	1 J	1 J	1	2	2	0.9 J	0.8 J	1	0.8 J	2 J	1 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	3	3	3	3	4	6	3	3 J	4 J	3 J	9 J	4 J
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	0 U	0 U	-	0 U	-	-	-	790 J	1400 J	1200 J	1600 J	1600 J	1800 J	1200 J	940 J	1500 J	1200 J	2200 J	960 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458
			Field Sample ID	M455B3X	M455B4X	M455B5X	M455B6X	M455B7X	M455B8	M455B9	M455C1	M455C2	M458A3X	M458A4X	M458A5X	M458A6X	M458A7X	M458A8X	D1020178X	M458A9X	M458B1X	M458B2X	M458B3X	M458B4X	M458B5X	M458B6X
			Sample Date	03/03/2020	04/06/2020	07/22/2020	10/26/2020	01/22/2021	04/06/2021	07/21/2021	10/15/2021	01/26/2022	09/01/2016	10/20/2016	12/07/2016	01/25/2017	04/20/2017	07/12/2017	10/20/2017	10/20/2017	01/10/2018	05/24/2018	08/28/2018	11/19/2018	02/05/2019	05/08/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	**6.1**	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	4.1 J	6.5 J	0.3 U	6.1 J	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	5.9	0.7 U	0.7 U	0.7 U	17 J	0.7 U	0.7 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	16 J	1 J	0.7 U	4 J
Benzene	ug/L	N	1	**5**	**6**	**5.3**	**3.1**	**4.2**	**4.7**	**7.1**	**5.5**	**3.9**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 J	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.7 J	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	5	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.4 J	0.2 U	0.36 J	0.2 U	0.21 J	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	130	130	82	89	140	100	42	99	140	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3	7	3.4	1.6	3.1	3	0.63 J	1.7	1.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	17	26	6.4 J	11	22	17	7.1	16	16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	100	120	65	49	100	80	35	68	82	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	1	1	1.1	0.74 J	1.2	0.94 J	0.85 J	1.1	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	4 J	4 J	3.5	2.8 J	3.4 J	2.4 J	0.4 U	2.1	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	1400 J	960 J	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464
			Field Sample ID	M458B7X	M458B8X	M458B9X	D0824218	M458C4	M458C2	M464A1X	D0208168	M464A2X	M464A3X	M464A4X	M464A5X	M464A6X	M464A7	M464A8X	M464B1X	M464B2X	M464B3X	M464B4	M464B5	M464B6X	M464B7X	M464B8X
			Sample Date	08/05/2019	09/09/2020	02/03/2021	08/24/2021	08/24/2021	02/09/2022	11/23/2015	02/08/2016	02/08/2016	10/12/2016	02/03/2017	04/25/2017	07/05/2017	10/17/2017	01/22/2018	04/13/2018	07/02/2018	10/08/2018	01/28/2019	04/23/2019	08/09/2019	10/21/2019	01/23/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 UJ	-	-	-	-	-	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.4 J	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	**0.3J**	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	5 J	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.7 J	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 UJ	0.2 U	0.2 UJ	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	2.5 UJ	2.5 UJ	0.5 U	30 U	3 U	3 U	17	30 U	3 U	4 J	9 J	3 U	3 U	4 J	0.3 U	4 J	22	14 J	4 J	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	2 UJ	2 UJ	0.4 U	30 U	3 U	3 U	3 U	30 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	2 J	0.3 UJ	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	2.5 UJ	2.5 UJ	0.5 U	30 U	3 U	3 U	4 J	30 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.9 J	2 J	0.5 UJ	0.5 U	0.5 U
Acetone	ug/L	N	6000	1 J	0.7 U	0.7 U	3.5 UJ	3.5 UJ	0.7 U	60 U	6 U	6 U	46	69 J	6 U	10 J	14 J	7 J	6 U	9 J	7 J	3 J	54	28 J	0.7 U	6 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	**45**	**51J**	**70J**	**70**	**30**	**14**	**14**	**19**	**9**	**18**	**15**	**54**	**17**	**14**	**25J**	**10**	**6**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	5 UJ	5 UJ	1 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.9 J	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	2	0.2 UJ	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 UJ	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	5 UJ	5 UJ	1 U	70	100 J	150J	78	87	47	49	29	20	49	27	38	25	29	45 J	33	13
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	2 UJ	2 UJ	0.4 U	69	27	32	15	18	5	7	4	2	3	2	3	2	3	3 J	8	2
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	62	27	31	24	13 J	10	16	8	6	13	10	11	9	15	8 J	36	5
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	2 J	3 J	2	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.5 U	0.2 U	0.2 U	0.5 J	0.2 UJ	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	2.5 UJ	2.5 UJ	0.5 U	95	140	130	73	130	57	60	35	21	50	29	46	25	25	44 J	29	15
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	1.5 UJ	1.5 UJ	0.3 U	20 U	2 U	2 U	2 U	20 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.5 UJ	3	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 UJ	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	12	10 J	14 J	19	8 J	3	6	4	3	6	4	4	4	7	4 J	3	0.8 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1.5 UJ	1.5 UJ	0.3 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 UJ	1 UJ	0.2 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1.4 U	1.4 U	2 UJ	2 UJ	0.4 U	380	130 J	100 J	79	180	45	46	29	10	14	6	16	9	8	24 J	9	5 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 UJ	0 UJ	0 U	4700 J	2100 J	2200 J	2000 J	2200 J	1100 J	1300 J	660 J	850 J	950 J	690 J	780 J	720 J	590 J	1200 J	1300 J	560 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-473
			Field Sample ID	M464B9X	M464C1X	M464C2X	M464C3	M464C4	D1229218	M464C5	M464C6	M465A1X	M465A2X	M465A3X	M465A4X	M465A5X	M465A6X	D1110208	M465A7X	M465A8X	M465A9	M465B1	M465B2	M465B3	M473A1X
			Sample Date	04/23/2020	10/28/2020	01/25/2021	04/14/2021	10/01/2021	12/29/2021	12/29/2021	03/25/2022	11/19/2015	02/21/2018	04/19/2018	11/15/2019	05/20/2020	08/31/2020	11/10/2020	11/10/2020	03/03/2021	05/14/2021	08/20/2021	11/09/2021	02/03/2022	12/16/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.35 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	**0.93J**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1.2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.8 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	5.6 J	0.5 U	4 J	3 U	10	0.3 U	5 J	0.3 U	7.9 J	0.3 U	0.3 U	3.6 J	0.5 U	0.5 U	0.5 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	4.5 J	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	7.4 J	8.4 J	3.5 J	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	0.7 U	6.2 J	7.1 J	5.6 UJ	0.98 J	0.7 U	0.7 U	0.7 U	12 J	44	31	0.7 U	18 J	6.3 J	19 UJ	13 J	9.8 J	7.4 J	1.3 J	0.7 U	0.7 U	6 U
Benzene	ug/L	N	1	**17**	**18**	**8.2**	**9.9**	**7.3**	**7.2**	**7.3**	**4.2**	**59**	**43**	**61**	**32**	**30**	**14**	**45**	**38**	**16**	**14**	**11**	**23**	**16**	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	**1.6**	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Cyclohexane	ug/L	N	NA	55	59	70	11	8.5	14	14	13	68	62	63	67	54	33	48 J	43 J	81 J	38	26	43	58	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	1 U	1 U	1.4 J	1.3 J	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	2.1	1.8	2.8	1.3	2.1	2	1	46	34	31	5	3	1.6	12	9.2	3.4	2.7	1.7	3.5	2.7	0.5 U
Isopropylbenzene	ug/L	N	700	2 J	5	2.3 J	14	5.5	23	23	14	32	19	25	31	25	13	15	15	5.4	8.3	7.4	9.5	18	1 U
Methane	ug/L	N	NA	-	-	-	3300	6100	4900	4900	3700	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J	3	2	2	2	0.88 J	0.46 J	0.56 J	0.2 U	0.45 J	0.62 J	0.2 U	0.96 J	0.5 U
Methylcyclohexane	ug/L	N	NA	67	40	68	25	12	10	10	17	43	28	40	42	29	15	69	61	58	17	9.7	37	31	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
Toluene	ug/L	N	600	2	2.8	1.9	1.5	1.1	1.4	1.4	0.91 J	22	15	18	22	16	8.8	13	12	4.7	7.4	9	8.4	13	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Xylene (total)	ug/L	N	1000	19	15	17	9.7	5.9	3.7	3.8	0.91 J	130	110	110	42	25	14	54	42	33	12	9.3	14	14	0.5 U
Total TIC VOCS	ug/L	N	NA	1300 J	-	-	-	-	-	-	-	1600 J	770 J	1000 J	1300 J	1100 J	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473
			Field Sample ID	D0715168	M473A2X	M473A3X	M473A4X	M473A6X	D0611188A	M473A7X	M473A8X	M473A9X	M473B1X	M473B2X	D0603198	M473B3X	M473B4X	D1211198A	M473B5X	D0312208	M473B6X	D0605208	M473B7X	D0911208	M473B8X	M473B9
			Sample Date	07/15/2016	07/15/2016	12/28/2016	01/27/2017	03/06/2018	06/11/2018	06/11/2018	09/04/2018	12/04/2018	02/26/2019	03/18/2019	06/03/2019	06/03/2019	09/09/2019	12/11/2019	12/11/2019	03/12/2020	03/12/2020	06/05/2020	06/05/2020	09/11/2020	09/11/2020	03/24/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	-	2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	-	1 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	-	2 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	-	3 U	0.3 U	0.3 U	0.3 U	-	0.7 J	0.3 U	0.3 U	0.4 J	0.5 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	-	3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	-	3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	-	6 U	0.7 J	0.7 U	0.7 U	-	2 UJ	4 UJ	0.7 U	3 J	2 J	0.7 U	1 UJ	0.7 U	0.7 U	1.1 J	1.2 J	0.7 U
Benzene	ug/L	N	1	**2**	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	-	2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	0.27 J	0.28 J	-	1 U	-	1 U	-	-	-	-	-	-	-	1 U	1 U	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	1 U	-	-	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	-	1 U	1 U	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.4 U	0.4 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	200	200	180	100	-	3 U	100 J	61 J	350	66	51 J	390	370	160	220 J	44	43	1300
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	0.5 U	-	0.5 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	-	1 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 UJ	1.4 UJ	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-490	MW-490	MW-491	MW-491	MW-494	MW-494	MW-495	MW-495
			Field Sample ID	D0724188	M476A1X	M476A2X	M476A3X	M476A4X	M476A5X	D0205208	M476A6X	M476A7X	M476A8X	M476A9X	M476B1X	M476B1	M476B3	M476B4	M490A1	M490A2	M491A1	M491A2	M494A1X	M494A2X	M495A1X	M495A2X
			Sample Date	07/24/2018	07/24/2018	02/19/2019	05/21/2019	08/12/2019	11/05/2019	02/05/2020	02/05/2020	05/13/2020	08/17/2020	11/13/2020	02/11/2021	04/29/2021	08/19/2021	10/13/2021	06/17/2016	09/08/2016	06/17/2016	09/08/2016	09/14/2016	12/27/2016	09/15/2016	12/21/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	20 UJ	4 UJ	2 UJ	20 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	10 UJ	2 UJ	1 UJ	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	20 UJ	4 UJ	2 UJ	20 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	10 UJ	2 UJ	1 UJ	10 U
1,2-Dichloroethane	ug/L	N	2	**5**	**6**	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**2.6**	0.3 U	0.3 U	1.6	1.9	1.6	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	10 UJ	2 UJ	1 UJ	10 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	10 UJ	2 UJ	1 UJ	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	-	-	-	30 UJ	6 UJ	3 UJ	30 U
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	-	-	-	30 UJ	6 UJ	3 UJ	30 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	30 UJ	6 UJ	3 UJ	30 U
Acetone	ug/L	N	6000	6 U	6 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.3 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-	-	-	-	60 UJ	61 J	14 J	60 U
Benzene	ug/L	N	1	**70**	**110**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	**100J**	**61**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	-	-	-	-	10 UJ	35 J	1 UJ	10 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Cyclohexane	ug/L	N	NA	28	43	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 UJ	-	-	-	-	20 UJ	4 UJ	170J	96
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	3.5 J	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	-	-	-
Ethylbenzene	ug/L	N	700	9	15	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	-	-	-	10 J	2 J	33 J	19
Isopropylbenzene	ug/L	N	700	2J	3J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	10 UJ	2 UJ	94 J	54
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	540	2100	6800	9900	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	10 UJ	2 UJ	1 UJ	10 U
Methyl-t-butyl ether	ug/L	N	70	0.8 J	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	14 J	15
Methylcyclohexane	ug/L	N	NA	5 J	7	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	10 UJ	2 UJ	190J	91
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	20 UJ	4 UJ	2 UJ	20 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	10 UJ	2 UJ	1 UJ	10 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Toluene	ug/L	N	600	3	4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	3 J	23 J	16
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	5 UJ	1 UJ	0.5 UJ	5 U
Xylene (total)	ug/L	N	1000	6	8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	-	-	-	-	37 J	8 J	23 J	12
Total TIC VOCS	ug/L	N	NA	190 J	290 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	210 J	690 J	1800 J	1000 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-496	MW-496	MW-496	MW-499	MW-499	MW-499	MW-499	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501
			Field Sample ID	M496A1X	D1221168X	M496A2X	M499A1X	M499A2X	M499A3X	M499A4X	M500A1X	M500A2X	M500A3X	M500A4X	M500A6	M500A7	D0331221B	M500A9	D1117178	M501A1X	M501A2X	M501A3X	M501A4X	M501A5X	M501A6X	M501A7X
			Sample Date	09/15/2016	12/21/2016	12/21/2016	11/27/2017	01/31/2018	03/14/2019	05/22/2019	11/16/2017	01/30/2018	03/11/2019	05/10/2019	06/02/2021	09/24/2021	03/31/2022	03/31/2022	11/17/2017	11/17/2017	01/30/2018	03/12/2019	05/22/2019	08/16/2019	10/31/2019	02/11/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 U	1 U	1 U	1 U	0.3 U	0.3 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 U	2 U	2 U	2 U	0.3 U	0.3 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.5 J	0.5 U	0.5 U	**16**	0.3 U	0.3 U	**2.7**	**11**	**7.7**	0.5 U	0.5 U	0.5 U	2	0.3 U	0.3 U	0.3 UJ	**4**
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	3 U	3 J	3 U	3 U	0.3 U	0.3 U	3 U	3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
2-Hexanone	ug/L	N	40	3 UJ	3 U	3 U	3 U	3 UJ	0.3 U	0.3 U	3 U	3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Acetone	ug/L	N	6000	14 J	6 U	14 J	6 U	6 U	2 UJ	3 UJ	49	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	0.7 U	1 J	0.7 U	0.7 UJ	0.7 U
Benzene	ug/L	N	1	**35J**	**20**	**17**	0.5 U	0.5 U	0.2 U	0.2 U	**2**	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	1	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Bromoform	ug/L	N	4	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U
Carbon disulfide	ug/L	N	700	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Chlorobenzene	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Chloroform	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	8	1	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Cyclohexane	ug/L	N	NA	25 J	29	30	2 U	2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 UJ	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 U
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 UJ	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	6 J	4	4	0.5 U	0.5 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U
Isopropylbenzene	ug/L	N	700	120 J	120	110	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3 U	4.5 J	12	7.3 J	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	0.24 J	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Methylcyclohexane	ug/L	N	NA	510J	650J	480J	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.4 UJ	0.3 UJ	0.3 U
Styrene	ug/L	N	100	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Toluene	ug/L	N	600	7 J	4	4	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Xylene (total)	ug/L	N	1000	76 J	61	52	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 UJ	1 U
Total TIC VOCS	ug/L	N	NA	1200 J	1500 J	1100 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-501	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-506	MW-506	MW-506	MW-510
			Field Sample ID	M501A8X	M504A2X	M504A3X	M504A4X	M504A5X	M504A6X	M504A7X	M504A8X	M504A9X	M504B1X	M504B2X	M504B3X	M504B4X	M504B5X	M504B6X	M504B7X	M504B8X	M504B9	M504C1	M506A7	M506A8	M506B1	M510A1X
			Sample Date	05/15/2020	08/31/2016	10/17/2016	12/07/2016	01/20/2017	04/18/2017	07/12/2017	10/18/2017	01/09/2018	05/25/2018	08/17/2018	11/15/2018	02/05/2019	05/06/2019	08/06/2019	09/04/2020	02/03/2021	08/24/2021	02/04/2022	06/03/2021	09/24/2021	03/23/2022	12/29/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 UJ	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.4 J	0.4 J	0.5 J	0.3 J	0.5 J	0.55 J	0.35 J	0.42 J	0.28 J	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.21 J	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	2 J	2 J	2 J	2 J	2 J	2 J	2 UJ	2 J	2 J	2 J	2 J	2 J	1 J	2 J	2 J	1.5 J	1.3 J	0.3 U	0.3 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	6 UJ	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	0.7 U	6 UJ	6 UJ	6 U	6 U	6 U	6 U	12 UJ	6 U	6 U	2 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.92 J	2 UJ	0.7 U	0.7 U	0.7 U	0.7 U	6 U
Benzene	ug/L	N	1	0.2 U	**8J**	**9**	**7**	**6**	**7**	**5**	**2J**	0.8 J	0.9 J	1	0.7 J	0.9 J	1	**2**	**2**	0.86 J	**2.1**	**2.2**	0.3 U	0.3 U	0.3 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Bromoform	ug/L	N	4	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	12 J	8	11	10	9	11	11 J	10	8	10	9	10	5	10	12	8.1	8.4	4.8	0.3 U	0.3 U	0.3 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.7 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	4 J	3 J	5 J	7	5	2 U	4 UJ	2 J	3 J	1 J	2 J	1 J	0.8 J	1 J	1.2 J	1 U	1 U	1.3 J	1 U	1 U	1 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1 J	1 U	1 J	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	1 J	1	1	1	1 J	0.5 U	1 UJ	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	15 J	10	17	16	14	16	14 J	14	16	16	13	17	10	15	8 J	9.7	6.8	6.5	1.4 J	0.66 J	0.36 J	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200	2700	740	-
Methyl acetate	ug/L	N	7000	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 J	0.24 J	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	11 J	8	18	20	15	4 J	6 J	6	3 J	3 J	2 J	3 J	1 J	2 J	1.6 J	0.73 J	0.5 U	0.66 J	0.5 U	0.5 U	0.5 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Toluene	ug/L	N	600	0.2 U	4 J	3	2	0.9 J	0.5 U	0.5 J	1 UJ	0.5 U	0.5 U	0.3 J	0.2 J	0.2 U	0.4 J	0.3 J	0.36 J	0.2 J	0.24 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	4 J	3	5	4	4	2	3 J	3	2	2 J	1 J	2 J	1 J	2 J	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	240 J	310 J	280 J	270 J	240 J	240 J	170 J	200 J	160 J	160 J	160 J	250 J	110 J	140 J	-	-	-	-	-	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-511	MW-511	MW-511	MW-511	MW-511
			Field Sample ID	M510A2X	M510A3X	M510A4X	M510A5X	D0315198	M510A6X	M510A7X	M510A8X	M510A9X	M510B1X	M510B2X	M510B3X	M510B4X	D0602211	M510B5	M510B6	M510B7	M510B8	M511A1X	M511A2X	M511A3X	M511A4X	D1204188
			Sample Date	02/02/2017	06/12/2018	09/04/2018	12/03/2018	03/15/2019	03/15/2019	06/06/2019	09/10/2019	12/11/2019	03/12/2020	06/15/2020	09/10/2020	02/26/2021	06/02/2021	06/02/2021	09/24/2021	12/17/2021	03/22/2022	12/29/2016	01/27/2017	06/08/2018	09/07/2018	12/04/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.3 U	0.5 J
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	0.7 U	0.7 U	3 UJ	2 UJ	1 J	0.7 U	0.7 U	1 UJ	2 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	0.7 U	2 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**11**	0.5 U	0.5 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	23	2 U	2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	0.3 J	-	1 U	10 U	10 U	-	-	-	-	1 U	-	-	1 U	1 U	1 U	1 U	1 U	-	-	0.2 U	-	1 U
Ethene	ug/L	N	NA	-	-	1 U	-	-	-	100 UJ	1 U	1 U	1 U	-	1 U	-	-	-	-	-	-	-	-	0.2 U	1 U	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	1 U	1 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	98	130	200	30 U	30 U	560 J	100	21	5.3	60	430	-	28	30 J	75	75	6	-	-	13	3 U	14
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9	1 U	1 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	8	0.5 U	0.5 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	0 U	0 U	0 U	100 J	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512
			Field Sample ID	M511A5X	M511A6X	M511A7X	M511A8X	M511A9X	M511B1X	M511B2X	M511B3X	M512A1X	M512A2X	M512A3X	M512A4X	M512A5X	M512A6X	M512A7X	M512A8X	M512A9X	M512B1X	D0616208	M512B2X	M512B3X	M512B4X	M512B5
			Sample Date	12/04/2018	03/18/2019	06/04/2019	09/10/2019	12/13/2019	03/12/2020	06/17/2020	09/09/2020	03/13/2017	05/05/2017	06/08/2018	09/20/2018	12/05/2018	03/07/2019	06/05/2019	09/10/2019	12/11/2019	03/12/2020	06/16/2020	06/16/2020	09/08/2020	02/19/2021	06/01/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	-	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 J	0.3 U	-	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	4 J	10	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 J	0.6 J	0.3 U	0.62 J	0.3 U	5.9 J	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	-	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 J	0.5 U	0.9 J	0.5 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	2.3 J	0.5 U
Acetone	ug/L	N	6000	2 UJ	0.7 U	-	1 J	0.7 UJ	0.7 U	0.7 U	0.7 U	6 U	34	6 U	2 J	1 UJ	5 J	3 UJ	0.7 U	2 J	3 UJ	2.2 J	4.7 J	2.4 UJ	29	2.4 J
Benzene	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**12**	**10**	**5**	**20**	**3**	**8**	**2**	**7**	**4**	1	0.83 J	**3.5J**	0.73 J	0.44 J	0.3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 UJ	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	54	41	4 J	22	4 J	5	0.6 J	3 J	3 J	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	1 U	1 U	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	1 UJ	1 U	1 U	1 U	-	1 U	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2	1	0.5 U	1	0.4 U	0.4 J	0.4 U	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	21	19	4 J	12	2 J	4 J	1 J	2 J	2 J	0.4 J	0.2 U	0.51 J	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	3.5 J	3 U	4.1 UJ	46	280	3 U	3 U	3 U	-	-	-	-	-	-	-	-	830	-	-	-	-	-	120
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	-	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	100	94	4 J	25	3 J	3 J	0.4 J	2 J	3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	-	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 U	1 J	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3	2	0.6 J	3	0.4 J	0.8 J	0.2 U	1	0.5 J	0.2 U	0.2 U	0.4 J	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	-	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	-	1 U	1 U	1 U	1.4 U	1.4 U	12	9	1	6	1 U	2 J	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	600 J	450 J	83 J	240 J	6 J	43 J	0 U	0 U	14 J	0 U	0 U	0 U	0 U	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
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Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-512	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526
			Field Sample ID	M512B6	M525A1X	M525A2X	M525A3X	M525A4X	M525A5X	M525A6X	M525A7X	M525A8X	M525A9X	M525B1X	M525B2X	M525B2	M525B5	M526A1X	M526A2X	M526A3X	M526A4X	M526A5X	M526A6X	M526A7X	M526A8X	M526A9
			Sample Date	10/25/2021	11/27/2017	01/29/2018	03/01/2019	05/20/2019	08/14/2019	10/29/2019	02/04/2020	05/11/2020	08/11/2020	11/19/2020	01/27/2021	04/26/2021	10/12/2021	11/27/2017	01/29/2018	03/05/2019	05/16/2019	08/14/2019	10/28/2019	02/04/2020	05/14/2020	04/30/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.78 J	1 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	2 U	4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	2 U	2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.5 U	1 U	0.5 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 U	0.3 U	0.3 UJ	0.3 U	**7**	**5**	**5**	2	**4J**	**4**	**4**	2	**2.5J**
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	3 U	7 J	0.3 U	0.3 U	0.3 U	0.9 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.5 U	3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.4 U	3 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.4 U	3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	2 J	6 U	12 U	1 J	2 J	1 UJ	3 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	6 U	6 U	0.9 J	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.99 J	**36**	**1100**	**6**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	**5**	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	0.5 U	1 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	0.3 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.3 U	25	2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	6	120	1 J	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U	2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.5 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.5 U	2	0.4 U	0.4 U	0.4 U	11	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	1 U	2 U	0.2 U	0.2 U	0.2 U	5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	1400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
Methyl acetate	ug/L	N	7000	0.3 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.78 J	0.2 U	0.2 U	0.39 J	0.47 J	0.9 J	0.7 J	0.7 J	0.3 J	0.3 J	0.4 J	0.5 J	0.2 U	0.31 J
Methylcyclohexane	ug/L	N	NA	0.5 UJ	3 J	82	0.7 J	0.2 U	0.5 U	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U	1 U	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.5 U	1 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.3 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1 U	1 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.22 J	0.5 U	9	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.5 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.3 J	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.4 U	0.5 U	11	1 U	1 U	1 U	10	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 UJ	0.4 U	0.5 U	0.5 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	33 J	970 J	0 U	0 U	0 U	1300 J	0 U	0 U	-	0 U	0 U	-	-	0 U	0 U	0 U	0 U	0 UJ	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-526	MW-526	MW-526	MW-526	MW-534	MW-534	MW-534	MW-534	MW-534	MW-534	MW-534	MW-534	MW-537	MW-537	MW-537	MW-537	MW-537	MW-537	MW-537	MW-537	MW-545	MW-545
			Field Sample ID	D0526218	D092220211C	M526B1	M526B3	M534A1X	M534A2X	M534A3X	M534A4X	M534A5X	M534A6X	M534A7	M534A8	M537A1X	M537A2X	M537A3X	M537A4X	M537A5X	M537A6X	M537A7	M537A8	M545A1X	M545A2X
			Sample Date	05/26/2021	09/22/2021	09/22/2021	03/21/2022	11/20/2018	02/15/2019	08/19/2019	02/12/2020	08/18/2020	02/08/2021	08/18/2021	02/23/2022	11/20/2018	02/15/2019	08/19/2019	02/12/2020	08/18/2020	02/12/2021	08/18/2021	02/23/2022	04/13/2018	06/12/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.33 J	0.3 U	0.8 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.7 J	0.5 U	0.5 U	0.5 U	0.8 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.50 U	0.5 U	0.3 U	5 J	3 J	1 J	0.3 U	1.8 J	0.50 U	0.5 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	0.3 U	3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.40 U	0.4 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	5 J	0.9 J	0.5 U	0.5 U	0.62 J	0.50 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	2.3 J	4.6 UJ	2.6 UJ	0.7 U	5 J	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.70 U	0.7 U	5 J	10 J	0.7 U	3 J	0.7 UJ	2.9 UJ	0.70 U	0.7 U	6 U	6 U
Benzene	ug/L	N	1	**53**	0.3 U	0.3 U	0.3 U	**2**	0.2 U	0.2 U	0.8 J	**1.2**	0.2 U	0.30 U	0.3 U	**2**	**11**	**4**	0.2 U	**1.4**	**1.1**	0.74 J	0.3 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 J	0.20 U	0.2 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1.0 U	1 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1.0 U	1 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 UJ
Carbon disulfide	ug/L	N	700	0.2 U	0.3 U	0.3 U	0.3 U	0.3 J	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 J	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	37	1 U	1 U	1 U	5	0.2 U	1 U	1 U	1 U	1 U	1.0 U	1 U	3 J	74	18	1 U	1 U	3 J	1.4 J	1 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	9	0.4 U	0.4 U	0.4 U	1	0.4 U	0.6 J	4	0.55 J	0.4 U	0.40 U	0.4 U	2	5	120	2	0.47 J	7.7	4.2	0.4 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	15	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.20 U	0.2 U	0.5 J	0.8 J	5 J	0.2 U	0.4 J	2.1 J	0.90 J	0.2 U	1 U	1 U
Methane	ug/L	N	NA	-	3 U	100 J	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	28	0.5 U	0.5 U	0.5 U	3 J	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	3 J	52	2 J	0.5 U	0.5 U	0.52 J	0.50 U	0.5 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U
Styrene	ug/L	N	100	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
Toluene	ug/L	N	600	3.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 J	2	4	0.2 U	0.2 U	0.49 J	0.20 U	0.2 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.30 U	0.3 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	21	0.4 U	0.4 U	0.4 U	3 J	1 U	4 J	23	1.4 U	1.4 U	0.40 U	0.4 U	2 J	88	12	1 U	1.4 U	2.3 J	0.40 U	0.4 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	0 U	0 U	0 U	0 U	30 J	0 U	0 U	0.0 U	0 U	200 J	450 J	350 J	0 U	-	-	-	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-548	MW-548	MW-548	MW-548	MW-548	MW-548	MW-548	MW-548	MW-548	MW-549	MW-549	MW-549	MW-549	MW-549	MW-549	MW-549	MW-549	MW-549	P14TP1	P14TP1	P14TP1R	P14TP1R
			Field Sample ID	D1016188	M548A1X	M548A2X	D0316208	M548A3X	M548A4X	M548A5X	M548A6	M548A7	M549A1X	D1206188	M549A2X	M549A3X	D0929208	M549A4X	M549A5X	M549A6	M549A7	P14TP1A7X	P14TP1A9X	P14TP1RB1	P14TP1RB2
			Sample Date	10/16/2018	10/16/2018	12/06/2018	03/16/2020	03/16/2020	09/30/2020	03/05/2021	08/26/2021	03/03/2022	10/17/2018	12/06/2018	12/06/2018	03/16/2020	09/29/2020	09/29/2020	03/04/2021	08/27/2021	03/03/2022	05/10/2012	12/17/2015	06/17/2016	06/07/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	3 U	4 J	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 U
Acetone	ug/L	N	6000	1 J	1 J	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.83 J	0.9 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-	6 UJ	14 J	17 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**2J**	**51**	**16**	**4**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 J	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	-	19	11	11
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	4	3	2
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	66	54	55
Methane	ug/L	N	NA	3 U	3 U	3 U	-	-	-	-	-	-	1600	31	23	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	1	2
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	250	290	180	230
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	8	6	5
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	-	22	12	15
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	P14TP1R	P14TP1R	P14TP1R	P14TP1R	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP1	P15TP3	P15TP3
			Field Sample ID	P14TP1RB3	P14TP1RB4X	P14TP1RB5X	P14TP1RB6	P15TP1A2	P15TP1A3	P15TP1A4X	P15TP1A5	P15TP1A6	P15TP1A7X	P15TP1A8	P15TP1A9	P15TP1B1	P15TP1B2	P15TP1B3X	P15TP1B4X	P15TP1B5X	P15TP1B6X	P15TP1B7	P15TP1B8	P15TP3A2	P15TP3A3
			Sample Date	06/05/2018	06/11/2019	06/10/2020	06/23/2021	09/05/2012	06/13/2014	12/19/2014	06/18/2015	06/17/2016	11/23/2016	06/07/2017	12/08/2017	06/05/2018	12/06/2018	06/12/2019	12/03/2019	06/11/2020	12/11/2020	06/23/2021	12/22/2021	06/13/2014	06/18/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.3 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.2 U	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.2 U	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	0.3 U	-	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	0.3 U	-	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	0.2 U	-	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.3 J	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.2 U	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	0.2 U	-	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	0.2 U	-	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 J	13	-	6.8 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	0.3 U	-	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	0.5 U	-	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	15 J	42	-	9.5 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U
Benzene	ug/L	N	1	**2**	**3**	**5.1**	**3.4**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**3**	**3**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.2 U	-	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.3 U	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	0.2 U	-	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.21 J	0.2 U	0.3 U	0.3 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.2 U	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	4 J	14	-	16	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	9	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.2 U	-	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	1	-	0.81 J	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.7 J	0.8 J
Isopropylbenzene	ug/L	N	700	54	52	-	24	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	30	47
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	0.2 U	-	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	2	3	-	2.6	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J	1
Methylcyclohexane	ug/L	N	NA	240	210	170	130	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	64	51 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.3 U	-	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
Styrene	ug/L	N	100	1 U	0.2 U	-	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
Toluene	ug/L	N	600	5	4	-	3.7	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2	2
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.2 U	-	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.2 U	-	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 J	0.3 U	0.3 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.2 U	-	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.2 U	-	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	15	16	-	10	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	6	6
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	0 U	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	P15TP3	P15TP3	P15TP3	P15TP3	P15TP3	P15TP3	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4	P15TP4
			Field Sample ID	P15TP3A4	P15TP3A5	P15TP3A6	P15TP3A7X	P15TP3A8X	P15TP3A9	P15TP4A2	P15TP4A3	P15TP4A4X	P15TP4A4	P15TP4A5	P15TP4A7X	P15TP4A8	P15TP4A9	P15TP4B1	P15TP4B2	P15TP4B3X	P15TP4B4X	P15TP4B5X	P15TP4B6X	P15TP4B7	P15TP4B8
			Sample Date	06/17/2016	06/07/2017	06/05/2018	06/12/2019	06/11/2020	06/24/2021	09/06/2012	06/13/2014	12/19/2014	06/18/2015	06/17/2016	11/23/2016	06/07/2017	12/08/2017	06/05/2018	12/06/2018	06/11/2019	12/03/2019	06/10/2020	12/11/2020	06/23/2021	12/22/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.45 J	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	19	0.3 U	0.5 U	6 J	3 U	3 U	3 U	6 J	3 U	5 J	3 U	3 U	21	15	12	6.9 J	0.3 U	3.7 J	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 J	0.3 U	0.4 U	4 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	1 J	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	15 J	14 J	11 J	46	8.5 J	5.2 J	6 U	6 U	6 U	10 J	20	6 U	18 J	6 U	6 U	43 J	32	30	17 UJ	4.7 J	5.9 UJ	0.92 J
Benzene	ug/L	N	1	**3**	**3**	**2**	1	**1.7**	**1.4**	**6**	**7**	**5**	**5**	**5**	**5**	**6**	**5**	**4**	**4**	**3**	**4**	**3.3**	**3.6**	**3.3**	**1.4**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1.7**	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.4 J	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1.5	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	7	4 J	4 J	1 U	2 J	2 U	18	2 U	2 U	7	11	12	9 J	5 J	9	13	12	6	6.2	1 U	7.5
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	0.9 J	0.6 J	0.5 J	0.61 J	0.4 U	2 J	3	3	3	2	1	2	2	2	1	1	1	1.4	1.2	0.84 J	0.46 J
Isopropylbenzene	ug/L	N	700	53	32	21	36	37	22	75	74	68	77	84	46	79	66	74	58	66	58	67	50	40	18
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	2	1 J	0.5 U	0.4 J	0.41 J	0.2 U	0.8 J	0.8 J	21	2	2	3	0.8 J	1	0.6 J	0.8 J	0.5 J	0.8 J	0.61 J	1	0.2 U	0.94 J
Methylcyclohexane	ug/L	N	NA	37	68	42	25	25	11	150	300	230	260J	270	210	270	260	290	230	240	240	260	190	120	120
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	0.5 U	0.6 J	0.3 U	**5.1**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	2	2	1	1	1.4	1.3	3 J	5	3	3	3	2	3	3 J	3	3	3	2	2.4	2.1	2.1	0.88 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	6	5	5	3 J	3.8 J	1.2	11	12	10	11	10	7	10	8	10	8	9	8	7.4	6.6	5	1.2
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	920 J	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	P15TP5	P15TP5	P15TP5	P15TP5	P15TP5	P15TP5	P15TP5	P15TP5	RW-61	RW-61	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-81	RW-81	RW-81	RW-81	RW-81
			Field Sample ID	P15TP5A2	P15TP5A3	P15TP5A4	P15TP5A5	P15TP5A6	P15TP5A7X	P15TP5A8X	P15TP5A9	R061D2X	R061D3X	R061RD4X	R061RD5X	R061RD6X	R061RD7X	R061RD8X	R061RD9	R061RE1	R061RE2	R081B2X	R081B3X	R081B5X	R081B6X	R081B7X
			Sample Date	06/13/2014	06/18/2015	06/17/2016	06/07/2017	06/05/2018	06/11/2019	06/10/2020	06/24/2021	05/08/2012	04/30/2013	09/27/2016	03/07/2017	03/28/2018	03/20/2019	06/09/2020	06/24/2021	09/16/2021	11/23/2021	07/11/2013	09/25/2014	06/21/2016	09/19/2016	12/19/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	10 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	1 U	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	2 U	10 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	1 U	5 UJ
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	1 U	5 UJ
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	1 U	5 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	12	3 U	11	14	9.9 J	0.5 U	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	-	-	-	3 U	15 UJ
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 J	0.3 U	0.3 U	0.4 U	-	-	-	-	-	-	-	0.4 U	0.4 U	0.4 U	-	-	-	3 U	15 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	-	-	-	3 U	15 UJ
Acetone	ug/L	N	6000	6 U	11 J	50	19 J	26	29	31 UJ	3.8 J	-	-	-	-	-	-	-	1.2 UJ	0.73 J	0.7 U	-	-	-	6 U	30 UJ
Benzene	ug/L	N	1	**8**	**5**	**6**	**5**	**6**	**4**	**3.9**	**3.5**	**270**	**210**	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	-	0.5 U	3 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	1 U	5 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	1	0.5 U	0.5 U	0.3 J	0.41 J	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Cyclohexane	ug/L	N	NA	19	2 U	3 J	17	16	16	11	1 U	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	-	2 U	10 UJ
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1.1 J	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3	2	3	2	3	2	2.1	0.94 J	150	460	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	3 UJ
Isopropylbenzene	ug/L	N	700	62	60	60	63	81	72	76	39	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	2 J	5 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3800	9800	12000	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	1 U	5 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 U	20	7	3	1	1 J	1	0.67 J	-	-	-	-	-	-	-	0.2 J	0.29 J	0.59 J	-	-	-	0.5 U	3 UJ
Methylcyclohexane	ug/L	N	NA	270	240J	42	270	220	260	250	150	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	-	-	-	1 U	5 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	2 U	10 UJ
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	1 U	5 UJ
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
Toluene	ug/L	N	600	5	4	3	4	6	4	3.8	2.5	**670**	**1000**	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U	3 UJ
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	3 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	3 UJ
Xylene (total)	ug/L	N	1000	15	15	14	17	23	16	19	10	910	**2900**	0.5 U	0.5 U	0.5 U	1 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	1	3 UJ
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	0 U	-	-	-	-	-	170 J	1500 J

Notes:

1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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6. U - Not detected

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Chevron Perth Amboy Facility

			Location ID	RW-81	RW-81	RW-81	RW-81	RW-82	RW-82	RW-82	RW-82	RW-82	RW-82	RW-82	RW-82	RW-82	RW-82	RW-82	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83R
			Field Sample ID	R081B8X	R081B9X	R081C1X	R081C2	R082B2X	R082B3X	R082B4X	R082B5	R082B6X	R082B7X	R082B8	R082B9	R082C1X	R082C2X	R082C3	R083B3X	R083B4X	R083B5X	R083B6X	R083B7X	R083B8X	R083B9X	R083RC1X
			Sample Date	06/08/2017	02/04/2020	09/10/2020	02/07/2022	06/14/2012	05/31/2013	09/25/2014	06/03/2016	09/21/2016	12/20/2016	06/08/2017	05/25/2018	05/28/2019	05/12/2020	05/25/2021	06/14/2012	05/29/2013	09/25/2014	06/03/2016	09/20/2016	12/20/2016	06/08/2017	05/25/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	10 U	2 U	-	-	-	-	-	-	-	-	-	2 U	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	10 U	2 U	-	-	-	-	-	-	-	-	-	2 U	2 U	-	2 UJ
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	15 U	3 U	-	-	-	-	-	-	-	-	-	3 U	3 U	-	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	15 U	3 U	-	-	-	-	-	-	-	-	-	3 U	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	15 U	3 U	-	-	-	-	-	-	-	-	-	3 U	3 U	-	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	30 U	6 U	-	-	-	-	-	-	-	-	-	6 U	6 U	-	6 U
Benzene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.2 J	0.2 J	0.33 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**7**
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	10 U	2 U	-	-	-	-	-	-	-	-	-	2 U	2 U	-	15 J
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	34	38	-	-	-	-	-	-	-	-	-	1 U	1 U	-	48
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 J
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	43 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	10 U	2 U	-	-	-	-	-	-	-	-	-	2 U	2 U	-	0.5 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	5 U	1 U	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.5 U	0.2 J	0.2 J	0.2 U	0.7 U	0.7 U	0.7 J	0.7 J	3 U	0.6 J	0.5 U	0.5 U	0.3 J	0.2 U	0.42 J	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	3 U	0.5 U	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	1 U	1.4 U	0.4 U	0.8 U	0.8 U	0.5 J	2	3 U	2	1	1	1 U	1 U	3 J	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	770 J	180 J	-	-	-	-	-	-	-	-	-	0 U	0 U	-	530 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-91	RW-91	RW-91	RW-91	RW-91	RW-91	RW-92	RW-92	RW-92	RW-92	RW-92
			Field Sample ID	R83RC2	R83RC3X	R083RC4	D0530191	R083RC5X	R083RC6X	R083RC7X	R083RC8	R83RD2X	R83RD3X	R083RD5X	R083RD7X	R091B3X	R091B4X	R091B6	R091B7X	R091B9X	R091C1	R092B1X	R092B2X	R092B3X	R092B4X	R092B5X
			Sample Date	08/23/2018	11/20/2018	03/25/2019	05/30/2019	05/30/2019	08/30/2019	11/13/2019	02/11/2020	05/26/2020	08/06/2020	11/18/2020	02/26/2021	06/19/2013	11/05/2013	12/15/2015	03/01/2017	03/26/2019	06/29/2021	05/30/2012	10/30/2013	01/13/2014	09/30/2014	03/04/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**2.9**	0.2 U	0.23 J	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	-	-	-	-	-	10 U	2 U	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	-	2 U	-	-	-	0.3 U	-	10 U	2 U	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
1,2-Dichloroethane	ug/L	N	2	0.3 UJ	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	3 J	3 J	0.3 U	0.3 U	0.3 U	2 J	0.3 U	1.6 J	0.3 U	-	3 U	-	-	-	0.5 U	-	15 U	3 U	-	-
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	-	3 U	-	-	-	0.4 U	-	15 U	3 U	-	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	3 UJ	-	-	-	0.5 U	-	15 U	3 U	-	-
Acetone	ug/L	N	6000	6 UJ	5 J	6 J	17 J	18 J	0.7 U	0.7 U	0.7 U	8 J	3.7 J	6 J	3 J	-	6 U	-	-	-	0.8 UJ	-	30 U	10 J	-	-
Benzene	ug/L	N	1	**5**	**6**	**6**	**4**	**5**	**6**	**7**	**5**	**4**	**3.6**	**3.1**	**2.4**	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.5 U	3 U	0.5 U	5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	-	-	1 U	-	5 U	1 U	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
Cyclohexane	ug/L	N	NA	9	9	13	10	9	10	8	10	10	6.5	11	13	-	2 U	-	-	-	1 U	-	10 U	2 U	-	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	-	-	-	0.2 U	-	10 U	2 U	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 J	0.4 U	0.4 U	0.4 J	0.5 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	4 U	0.8 U	5 U	0.5 U
Isopropylbenzene	ug/L	N	700	57	45	56	53	53	61	56	55	46	13 J	47	44	-	1 U	-	-	-	0.2 U	-	9 J	7	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
Methyl-t-butyl ether	ug/L	N	70	0.2 J	0.4 J	0.4 J	0.3 J	0.2 J	0.4 J	0.4 J	0.4 J	0.3 J	0.2 U	0.2 J	0.24 J	-	0.5 U	-	-	-	0.2 U	-	3 U	0.5 UJ	-	-
Methylcyclohexane	ug/L	N	NA	31	31	63	54	52	76	54	69	64	42	57	60	-	1 U	-	-	-	0.5 U	-	11 J	12	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	-	-	-	0.3 U	-	10 U	2 U	-	-
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
Toluene	ug/L	N	600	1	2	2	2	2	2	2	2	1	1.4	1.6	1.4	0.7 U	0.7 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	4 U	0.7 U	5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	-	-	0.3 U	-	4 U	0.8 U	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.3 U	-	5 U	1 U	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	2 U	-	-	-	0.2 U	-	10 U	2 U	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	-	0.2 U	-	5 U	1 U	-	-
Xylene (total)	ug/L	N	1000	7	7	8	7	7	8	8	7	6 J	4.5 J	5.7 J	5.5 J	0.8 U	0.8 U	0.5 U	0.5 U	1 U	0.4 U	0.8 U	4 U	0.8 U	5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	480 J	410 J	450 J	460 J	460 J	590 J	700 J	620 J	520 J	-	-	-	-	0 U	-	-	-	0 U	-	470 J	760 J	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-92	RW-92	RW-92	RW-92	RW-92	RW-93	RW-93	RW-93	RW-93	RW-93	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94	SB-10	SB-10
			Field Sample ID	R092B6	R092B7	R092B8	R092C1X	R092C2	D1201151	R093B2X	R093B3X	R093B5X	R093B6X	R094B4X	R094B5X	R094B6	R094B7X	R094B8X	R094B9X	R094C1X	R094C2X	R094C3X	R094C7X	R094C8	SB10212X	SB10412X
			Sample Date	03/01/2017	02/16/2018	02/08/2019	06/26/2020	06/25/2021	12/01/2015	12/01/2015	03/01/2017	03/26/2019	02/19/2021	05/30/2012	06/19/2013	08/16/2013	06/27/2014	09/07/2016	03/01/2017	02/16/2018	02/05/2019	01/30/2020	02/04/2021	02/07/2022	04/13/2012	10/02/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	6 U	-	-	-	-	-	-	-	-	6 U	6 U
Benzene	ug/L	N	1	3 U	0.5 U	0.3 J	0.21 J	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3 U	0.5 U	0.4 J	0.3 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	12000	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	6	7
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
Toluene	ug/L	N	600	3 U	0.5 U	0.2 U	0.38 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	1 U	1 U
Xylene (total)	ug/L	N	1000	3 U	0.5 U	4 J	1.5 J	0.4 U	0.5 U	0.5 U	0.5 U	1 U	1.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.4 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	10 J	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	SB-10	SB-10	SB-10	SB-10	SB-10	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-15
			Field Sample ID	SB10413X	SB10214X	SB10414X	SB10215X	SB10415X	SB13B112X	SB13B212X	SB13B312X	SB13B412X	SB13B113X	SB13B213X	SB13B313X	SB13B413X	SB13114X	SB13214X	SB13314X	SB13B414X	SB13115X	SB13B215X	SB13B315X	SB13B415X	SB15112X
			Sample Date	10/18/2013	05/16/2014	10/03/2014	05/01/2015	10/06/2015	01/20/2012	04/13/2012	07/17/2012	10/04/2012	01/15/2013	05/02/2013	07/16/2013	10/18/2013	02/18/2014	04/29/2014	07/24/2014	10/03/2014	01/16/2015	05/01/2015	07/21/2015	10/06/2015	01/20/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 UJ	2 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 UJ	2 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 UJ	3 U	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 UJ	3 U	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-	3 UJ	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 UJ	3 U	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-	3 UJ	-	-	-
Acetone	ug/L	N	6000	6 U	6 U	12 J	6 UJ	6 U	-	6 U	-	-	-	6 U	-	-	-	6 U	-	-	-	6 U	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Carbon disulfide	ug/L	N	700	1 J	4 J	1 J	1 UJ	3 J	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 UJ	2 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	2 U	-	-	-	2 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
Methyl-t-butyl ether	ug/L	N	70	5	5	5	5 J	6	-	2 J	-	-	-	1 J	-	-	-	1	-	-	-	1	-	-	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 UJ	2 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 UJ	1 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	2 U	-	-	-	2 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R
			Field Sample ID	SB15212X	SB15312X	SB15412X	SB15A1X	SB15113X	SB15A3X	SB15A4X	SB15A5X	SB15114X	SB15R214X	SB15RA6X	SB15R414X	SB15RA8X	D0331151	SB15R115X	SB15R215X	SB15RA9X	SB15R315X	D1006151	SB15R415X	SB15R116X	SB15R117X
			Sample Date	04/13/2012	07/17/2012	10/02/2012	11/12/2012	01/18/2013	05/10/2013	07/03/2013	12/09/2013	03/04/2014	05/16/2014	07/10/2014	10/03/2014	02/12/2015	03/31/2015	03/31/2015	05/01/2015	07/14/2015	07/21/2015	10/06/2015	10/06/2015	03/01/2016	01/31/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	-	2 U	-	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	2 U	2 U	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	-	2 U	-	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	2 U	2 U	-	-	-	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	-	3 U	-	3 U	3 U	3 U	-	3 U	3 U	-	3 U	-	-	3 U	3 U	-	-	-	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	-	-	3 U	-	3 U	3 U	3 U	-	3 U	3 U	-	3 U	-	-	3 UJ	3 U	-	-	-	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	-	3 U	-	3 U	3 U	3 U	-	3 U	3 U	-	3 U	-	-	3 UJ	3 U	-	-	-	3 U	3 U
Acetone	ug/L	N	6000	6 U	-	-	6 U	-	6 U	6 U	6 U	-	6 U	6 U	-	6 U	-	-	6 U	6 U	-	-	-	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.9 J	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.8 J	0.5 U	0.6 J	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	-	-	1 U	-	1 U	1 UJ	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Carbon disulfide	ug/L	N	700	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	1 J	-	1	0.8 J	-	0.5 U	-	-	0.5 U	0.6 J	-	-	-	0.5 J	0.5 U
Chloroethane	ug/L	N	NA	1 U	-	-	1 U	-	1 U	1 UJ	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	-	-	2 U	-	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	2 U	2 U	-	-	-	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	-	-	2 U	-	2 U	2 U	2 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 J	-	-	4 J	-	0.5 U	0.5 U	0.5 U	-	0.7 J	0.5 U	-	6	-	-	3	0.5 U	-	-	-	4	5
Methylcyclohexane	ug/L	N	NA	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	-	2 U	-	2 U	2 U	2 U	-	2 U	2 U	-	2 U	-	-	2 U	2 U	-	-	-	2 U	2 U
Styrene	ug/L	N	100	1 U	-	-	1 U	-	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	-	1 U	1 U	-	-	-	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	-	-	0.8 U	-	0.8 U	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	-	-	2 U	-	2 U	2 U	2 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	-	-	1 U	-	1 U	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.5 U	-	-	-	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	0	-	0	0 U	0 U	-	-	0 U	-	-	-	-	-	0 U	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16
			Field Sample ID	SB15R118X	SB15RB3X	SB15RB6X	SB15RB7X	SB15RB8	SB15RB9	SB16112X	SB16212X	SB16312X	SB16412X	SB16113X	SB16213X	SB16313X	SB16413X	SB16114X	SB16214X	SB16314X	D1009141	SB16414X	SB16115X	SB16215X	SB16315X	SB16415X
			Sample Date	02/07/2018	02/01/2019	08/19/2020	02/03/2021	08/25/2021	02/09/2022	01/24/2012	04/19/2012	07/12/2012	10/04/2012	01/15/2013	05/02/2013	07/17/2013	10/11/2013	02/18/2014	04/29/2014	07/24/2014	10/09/2014	10/09/2014	01/16/2015	05/01/2015	07/21/2015	10/06/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	0.2 U	-	-	-	-	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	-	2 U	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	0.5 U	-	1 U	-	-	-	-	1 U	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	-	2 U	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	0.5 U	-	1 U	-	-	-	-	1 U	-	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	0.5 U	-	1 U	-	-	-	-	1 U	-	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	0.5 U	-	1 U	-	-	-	-	1 U	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	0.3 U	0.3 U	0.3 UJ	0.50 U	0.5 U	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-	-	3 U	-	-
2-Hexanone	ug/L	N	40	3 U	0.3 U	0.3 U	0.3 UJ	0.40 U	0.4 U	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-	-	3 UJ	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	-	3 U	-	-	-	3 U	-	-	-	3 U	-	-	-	-	3 UJ	-	-
Acetone	ug/L	N	6000	6 U	0.7 U	1 UJ	1 J	0.70 U	0.7 U	-	6 U	-	-	-	6 U	-	-	-	6 U	-	-	-	-	9 J	-	-
Benzene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.22 J	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	22 U	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Bromoform	ug/L	N	4	0.5 U	0.2 U	1 U	1 UJ	1.0 U	1 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Carbon disulfide	ug/L	N	700	1 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	-	1 U	-	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Chlorobenzene	ug/L	N	50	0.5 U	0.2 J	0.2 U	0.38 J	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Chloroethane	ug/L	N	NA	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Chloroform	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Cyclohexane	ug/L	N	NA	2 U	0.2 U	1 U	1 UJ	1.0 U	1 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	-	2 U	-	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	2 U	-	-	-	2 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.4 U	0.4 U	0.4 UJ	0.40 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J
Isopropylbenzene	ug/L	N	700	1 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	2 J	-	-	-	1 U	-	-	-	1 U	-	-	-	-	1 U	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	0.2 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	-	1 U	-	-
Methyl-t-butyl ether	ug/L	N	70	6	1	0.47 J	3.6 J	2.1	2.7	-	0.5 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Methylcyclohexane	ug/L	N	NA	1 U	0.2 U	0.5 U	0.5 UJ	0.50 U	0.5 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	-	1 U	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	-	2 U	-	-	-	2 U	-	-	-	2 U	-	-	-	-	2 U	-	-
Styrene	ug/L	N	100	1 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	-	1 U	-	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Toluene	ug/L	N	600	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.30 U	0.3 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	2 U	-	-	-	2 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	-	1 U	-	-	-	1 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-
Xylene (total)	ug/L	N	1000	0.5 U	1 U	1.4 U	1.4 UJ	0.40 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	3
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	0 U	0.0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17
			Field Sample ID	D1209158A	SB16A1X	SB16116X	SB16A2X	SB16A3X	SB16A6X	SB16218X	SB16318X	SB1641X	D1213181	SB16A7X	D0201191A	D0822191	SB16B1X	SB17212X	SB17312X	SB17412X	SB17113X	D0425131	SB17213X	SB17313X	SB17413X	SB17114X
			Sample Date	12/09/2015	12/09/2015	03/17/2016	07/06/2016	07/27/2017	01/12/2018	04/27/2018	07/25/2018	10/15/2018	12/13/2018	12/13/2018	02/01/2019	08/22/2019	08/22/2019	04/03/2012	07/12/2012	10/04/2012	01/18/2013	04/25/2013	04/25/2013	07/17/2013	10/11/2013	03/27/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	-	-	-	2 U	2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	-	-	1 U	1 U	-	0.6 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	-	-	-	2 U	2 U	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	0.6 U	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	1 J	0.3 U	0.4 J	0.3 U	1	0.8 J	1 U	-	-	-	1 U	1 U	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	0.6 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	0.6 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	-	-	-	3 U	3 U	-	-	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	-	-	-	3 U	3 U	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	-	-	-	3 U	3 U	-	-	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	2 UJ	2 UJ	0.7 U	0.8 J	2 J	6 U	-	-	-	6 U	6 U	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23 U	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	-	-	-	1 U	1 U	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	-	-	-	1 U	1 U	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 J	0.2 U	0.3 J	0.3 J	1 U	1 U	2 U	-	-	-	2 U	2 U	-	-	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	-	-	-	2 U	2 U	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.5 U	-	-	-	0.5 U	0.5 U	-	-	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 J	1 U	1 U	1 U	0.4 J	0.2 U	0.2 J	0.3 J	0.6 J	0.5 U	1 U	-	-	-	1 U	1 U	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	-	-	-	2 U	2 U	-	-	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	-	-	-	0.8 U	0.8 U	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	-	-	-	2 U	2 U	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	-	-	-	1 U	1 U	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Total TIC VOCS	ug/L	N	NA	23 J	35 J	-	25 J	30 J	13 J	18 J	12 J	0 U	0 U	0 U	10 J	17 J	14 J	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A3 East Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17
			Field Sample ID	SB17214X	SB17314X	SB17414X	SB17115X	SB17215X	SB17315X	SB17415X	SB17116X	SB17117X	SB17218X	SB17119X	D0207201X	SB17120X	SB17121X	SB17122
			Sample Date	05/15/2014	07/24/2014	10/09/2014	03/31/2015	05/05/2015	07/21/2015	10/08/2015	03/17/2016	03/30/2017	04/27/2018	03/28/2019	02/07/2020	02/07/2020	01/21/2021	02/03/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	-	-	2 U	-	-	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	-	-	2 U	-	-	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	-	-	3 U	-	-	3 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	-	-	-	3 UJ	-	-	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	-	-	3 UJ	-	-	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	-	-	-	6 U	-	-	6 U	6 U	6 U	4 UJ	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Benzidine	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon disulfide	ug/L	N	700	1 U	-	-	-	1 U	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	-	-	-	2 U	-	-	2 U	2 U	2 U	0.2 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	-	-	1 U	-	-	1 UJ	1 U	1 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	-	-	2 U	-	-	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	-	-	1	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R
			Field Sample ID	MP01A1X	MP01A3X	MP01A4X	MP01A5X	MP01A6X	MP01A7X	MP01RB5X	MP01RB7X	D0119178X	MP01RB8X	MP01RB9X	MP01RC1X	MP01RC2X	MP01RC3X	MP01RC4X	MP01RC5X	MP01RC6X	D0208198	MP01RC7X	D0506198	MP01RC8X	MP01RC9X	D0218208	MP01RD2X	D0515208	MP01RD3X
			Sample Date	11/13/2012	05/10/2013	07/09/2013	10/17/2013	12/11/2013	04/01/2014	09/01/2016	12/07/2016	01/19/2017	01/19/2017	04/25/2017	07/12/2017	10/19/2017	01/09/2018	05/22/2018	08/17/2018	11/12/2018	02/08/2019	02/08/2019	05/06/2019	05/06/2019	08/02/2019	02/18/2020	02/18/2020	05/15/2020	05/15/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	**2000**	-	**4600**	-	**340**	-	**500**	**110J**	28 J	49 J	31	48	0.5 U	4	3 U	3 U	14	3 U	3 U	3 U	3 UJ	15	3 U	3 UJ	4 U	3 U
2,4-Dinitrophenol	ug/L	N	40	330 U	-	50 U	-	210 U	-	11 U	10 UJ	10 U	10 UJ	10 U	11 U	10 U	10 U	15 U	14 U	14 U	14 U	14 U	14 U	15 UJ	14 U	16 U	15 UJ	17 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	33 U	-	5 U	-	21 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	13 U	-	2 U	-	8 U	-	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 UJ	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	**170J**	-	**270**	-	**430**	-	0.1 U	**100 J**	**51**	**48**	**75**	**32**	0.1 U	0.6	0.6	0.1 U	0.1 U	0.1 J	0.4 J	0.1 J	0.2 J	0.1 U	1	1	4	4
2-Methylphenol (o-Cresol)	ug/L	N	NA	580	-	970	-	73	-	79	9 J	0.7 J	3 J	0.5 U	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 J	0.5 UJ	0.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	4 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	4 U	3 U
3-Nitroaniline	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	4 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	170 U	-	25 U	-	100 U	-	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	9 UJ	8 U	9 U	9 UJ	10 U	9 U
4-Bromophenylphenylether	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	17 U	-	3 U	-	10 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	5 U	4 UJ	5 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	**650**	-	**1700**	-	**110**	-	**470**	35 J	0.8 J	0.5 UJ	0.5 U	16	0.5 U	1	0.5 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	35	0.5 UJ	2 J	3 J
4-Nitroaniline	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.9 U	1 U	1 UJ	1 U	1 U
4-Nitrophenol	ug/L	N	NA	330 U	-	50 U	-	210 U	-	11 U	10 UJ	10 U	10 UJ	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 UJ	10 U	12 U	11 UJ	12 U	11 U
Acenaphthene	ug/L	N	400	6 J	-	9	-	17	-	0.1 U	0.6 J	0.7 J	1	0.5 J	0.9	0.1 U	0.6	0.3 J	0.7	0.8	0.6	0.6	0.7	0.9	0.5	0.1 U	0.1 UJ	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	3 U	-	6	-	2 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	5 U	6 J	5 U	4 U
Anthracene	ug/L	N	2000	3 U	-	5	-	12	-	0.1 U	0.4 J	0.1 U	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.3 J	0.1 J	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	33 U	-	5 U	-	21 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	5 J	12	4 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	**4J**	-	**5J**	-	**7J**	-	0.1 U	0.1 UJ	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**4J**	-	**3**	-	**5J**	-	0.1J	0.1 UJ	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	3 U	-	**2J**	-	**3J**	-	0.1 U	0.1 UJ	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	3 U	-	2 J	-	3 J	-	0.1 U	0.1 UJ	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	3 U	-	0.5 U	-	2 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**3800**	-	**5600**	-	**14000**	-	**6**	**5J**	**4J**	**9**	**5J**	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**15**	**8J**	6 U	**6J**
Butylbenzylphthalate	ug/L	N	100	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	170 U	-	25 U	-	100 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 UJ	6 U	5 U
Carbazole	ug/L	N	NA	17 U	-	5 J	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
Chrysene	ug/L	N	5	**7J**	-	**8**	-	**12**	-	0.1 J	0.2 J	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 UJ	6 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	3 U	-	0.5 U	-	2 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	17 U	-	5	-	12 J	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	67 U	-	10 U	-	41 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	17 U	-	5 J	-	10 U	-	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	4 U	3 U
Fluoranthene	ug/L	N	300	4 J	-	7	-	9 J	-	0.1 J	0.2 J	0.1 J	0.2 J	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	11 J	-	15	-	29	-	0.1 U	1 J	0.6	0.8	0.4 J	0.6	0.6	0.6	0.2 J	0.6	0.6	0.4 J	0.6 J	0.4 J	0.6	0.5 J	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	3 U	-	0.5 U	-	2 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	170 U	-	25 U	-	100 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 UJ	6 U	5 U
Hexachloroethane	ug/L	N	7	33 U	-	5 U	-	21 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	3 U	-	0.5 U	-	2 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.8 UJ	0.9 U	0.8 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.8 UJ	0.9 U	0.8 U
Naphthalene	ug/L	N	300	220	**460**	290	250	160	90	13	250 J	120	110	190	120	82	42	13	10	7	2	2	2 J	3	5	11	13	17	17
Nitrobenzene	ug/L	N	6	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	17 U	-	3 U	-	10 U	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2 U	2 UJ	2 U	2 U
Pentachlorophenol	ug/L	N	0.3	33 U	-	5 U	-	21 U	-	1 U	1 UJ	1 U	1 UJ	**6**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U
Phenanthrene	ug/L	N	NA	26	-	43	-	68	-	0.1 J	4 J	0.5 J	0.9	0.6	0.9	0.7	0.5	0.1 J	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.3 J	0.4 J
Phenol	ug/L	N	2000	190	-	**2600**	-	250	-	210	0.5 UJ	0.5 U	2 J	3	20	0.5 U	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	4	51	2 J	4	4
Pyrene	ug/L	N	200	11 J	-	17	-	25	-	0.2 J	0.4 J	0.2 J	0.4 J	0.2 J	0.1 J	0.1 U	0.2 J	0.1 U	0.6	0.1 J	0.1 U	0.3 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	120000 J	-	2500 J	-	9800 J	-	1800 J	1200 J	670 J	540 J	-	900 J	340 J	-	440 J	620 J	320 J	190 J	320 J	110 J	210 J	290 J	-	-	190 J	200 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R
			Field Sample ID	MP01RD4X	MP01RD5X	MP01RD6X	MP01RD7	MP01RD8	MP01RD9	MP01RE1	MP02A1X	MP02A3X	MP02A4X	MP02A5X	MP02A6X	MP02A7X	MP02RB5X	D1206168BX	MP02RB7X	MP02RB8X	MP02RB9X	MP02RC1X	MP02RC2X	MP02RC3X	MP02RC4X	MP02RC5X	MP02RC6X	MP02RC7X	MP02RC8X
			Sample Date	09/04/2020	11/06/2020	02/04/2021	05/18/2021	08/25/2021	11/12/2021	02/08/2022	11/13/2012	05/10/2013	07/09/2013	10/17/2013	12/12/2013	04/03/2014	08/30/2016	12/06/2016	12/06/2016	01/18/2017	04/17/2017	07/11/2017	10/18/2017	01/09/2018	05/22/2018	08/27/2018	11/12/2018	02/08/2019	05/07/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	2	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	2.9 U	3.1 U	-	3.0 U	-	5.3 J	2 U	-	**490**	-	6	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	15 U	-	14 U	-	14 U	33 U	-	50 U	-	11 U	-	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	14 U	14 U	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	0.98 U	1 U	-	0.99 U	-	1 U	3 U	-	5 U	-	1 U	-	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.39 U	0.42 U	-	0.40 U	-	0.4 U	1 U	-	2 U	-	0.4 U	-	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.8 J	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	1.9	0.81	0.85	-	3.4	-	4.9	**32 J X**	-	**250**	-	0.1 U	-	0.7	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.49 U	0.52 U	-	0.75 J	-	2	2 U	-	92	-	2	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.1 U	2 U	1 U	-	0.99 U	-	1 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3.2 U	2.9 U	1 U	-	0.99 U	-	1 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3.2 U	2.9 U	4.2 U	-	4.0 U	-	4 U	7 U	-	10 U	-	2 U	-	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3.2 U	2.9 U	2.1 U	-	2.0 U	-	2 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.4 U	7.8 U	8.3 U	-	7.9 U	-	8 U	17 U	-	25 U	-	6 U	-	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 U	3.9 U	4.2 U	-	4.0 U	-	4 U	2 U	-	3 U	-	0.6 U	-	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	1.8 J	2.4	-	9.3	-	9.1	2 U	-	**420**	-	7	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.95 U	0.88 U	0.94 U	-	0.89 U	-	0.9 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U
4-Nitrophenol	ug/L	N	NA	11 U	9.8 U	10 U	-	9.9 U	-	10 U	33 U	-	50 U	-	11 U	-	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	8	-	5	-	0.3 J	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	0.3 U	-	3	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	6.9 J	4.7 J	1 U	-	0.99 U	-	1 U	2 U	-	3 U	-	1	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	2 J	-	5	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2.1 U	2 U	1 U	-	0.99 U	-	1 U	7 U	-	10 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	5.8 J	4.2 J	1 U	-	0.99 U	-	1 U	3 U	-	5 U	-	1 U	-	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	**1J**	-	**6J**	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	**0.3J**	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.098 U	0.11 U	-	0.11 U	-	0.11 U	**2**	-	**6**	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	**0.2J**	**0.4J**	0.1J	0.1J	**0.5**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	**1J**	-	**2J**	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.2J	**0.6**	0.1J	0.1 UJ	**0.6**	0.1 U	0.1J	0.2J	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	1 J	-	4	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.2 J	0.3 J	0.1 U	0.1 U	0.4 J	0.1 J	0.1 U	0.1 J	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	0.3 J	-	0.5 U	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 J	0.2 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.3 U	4.9 U	2.1 U	-	2.0 U	-	2.8 J	**29**	-	**24J**	-	**7**	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 J	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2.1 U	-	2.0 U	-	2 U	7 U	-	10 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U
Caprolactam	ug/L	N	4000	5.3 U	5.1 J	3.1 U	-	3.0 U	-	3 U	17 U	-	25 U	-	6 U	-	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	3	-	**10**	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.2 J	0.6	0.1 J	0.1 UJ	0.5 J	0.1 J	0.1 J	0.1 J	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	3.7 UJ	2.1 U	-	2.0 U	-	2 U	7 U	-	10 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.3 U	4.9 U	5.2 U	-	5.0 U	-	5 U	7 U	-	10 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	0.3 U	-	**0.9J**	-	0.1 U	-	0.1 UJ	0.1 U	0.1 UJ	0.1J	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	3	-	4 J	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2.1 U	-	2.0 U	-	2 U	7 U	-	10 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	2.1 U	-	2.0 U	-	2 U	7 U	-	10 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.2 U	2.9 U	0.52 U	-	0.50 U	-	0.5 U	2 J	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	2 J	-	4	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.2 J	0.7	0.2 J	0.2 J	0.8	0.2 J	0.1 J	0.2 J	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.11 U	0.098 U	0.13 U	-	0.14 J	-	0.12 U	7	-	9	-	0.1 J	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.098 U	0.11 U	-	0.11 U	-	0.11 U	0.3 U	-	0.5 U	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 U	4.9 U	5.2 U	-	5.0 U	-	5 U	17 U	-	25 U	-	6 U	-	5 U	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1.1 U	0.98 U	0.52 U	-	0.50 U	-	0.5 U	3 U	-	5 U	-	1 U	-	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.098 U	0.11 U	-	0.11 U	-	0.11 U	0.3 U	-	**1J**	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.2J	**0.3J**	0.1 U	0.1 U	**0.5J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.74 U	0.68 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.74 U	0.68 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	14	5.5	5.3	25 J	37	26 J	39 J	19	20 U	20 U	15 J	10 U	3 J	3	0.1 U	0.5 J	0.1 U	0.3 J	0.1 J	0.3 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.53 U	0.49 U	0.52 U	-	0.50 U	-	0.5 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.7 U	1.6 U	1 U	-	0.99 U	-	1 U	2 U	-	3 U	-	0.6 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	0.98 U	1 U	-	0.99 U	-	1 U	3 U	-	5 U	-	1 U	-	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.23 J	0.3 J	0.23 J	-	0.21 J	-	0.14 J	10	-	27	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.3 J	0.3 J	0.1 U	0.1 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.53 U	7	5.5	-	11	-	7.6	2 U	-	320	-	7	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.098 U	0.1 U	-	0.099 U	-	0.1 U	5	-	17	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.2 J	0.8	0.2 J	0.2 J	0.8	0.2 J	0.2 J	0.2 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	1100 J	-	1400 J	-	88 J	-	220 J	-	240 J	87 J	-	0 U	110 J	-	38 J	-	83 J	0 U	14 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R
			Field Sample ID	MP02RC9X	MP02RD2X	MP02RD3X	MP02RD4X	D1106208	MP02RD5X	D0204218	MP02RD6X	MP02RD8	MP02RE1	MP03A1X	MP03A3X	MP03A4X	MP03A5X	MP03A6X	MP03A7X	MP03A8X	MP03RB5X	MP03RB7X	MP03RB8X	MP03RB9X	MP03RC1X	MP03RC2	MP03RC3X	MP03RC4X	MP03RC5X
			Sample Date	08/02/2019	02/18/2020	05/15/2020	09/01/2020	11/06/2020	11/06/2020	02/04/2021	02/04/2021	08/25/2021	02/08/2022	11/13/2012	05/13/2013	07/02/2013	10/16/2013	12/11/2013	04/01/2014	07/10/2014	08/29/2016	12/05/2016	01/17/2017	04/17/2017	07/07/2017	10/19/2017	01/09/2018	05/21/2018	08/27/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3.1 U	3 U	3 U	14	3.1 U	3.0 U	3 U	17 U	-	9 J	-	8	-	-	0.7 J	0.5 UJ	0.5 U	0.5 U	1 J	0.5 U	0.5 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	330 U	-	100 U	-	11 U	-	-	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	0.99 UJ	1 U	1.0 U	1 U	33 U	-	10 U	-	1 U	-	-	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 UJ	0.41 U	0.41 U	0.4 U	13 U	-	4 U	-	0.4 U	-	-	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.55 J	0.1 U	0.10 U	0.1 U	15 J	-	5	-	0.9	-	-	0.3 J	0.1 UJ	0.1 U	0.3 J	0.3 J	0.1 U	0.1 U	0.8	0.7
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	3.3	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	5	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2.1 U	2 U	2 U	0.99 UJ	1 U	1.0 U	1 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3.1 U	3 U	3 U	0.99 U	1 U	1.0 U	1 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3.1 U	3 U	3 U	4 UJ	4.1 U	4.1 U	4 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3.1 U	3 U	3 U	2 UJ	2 U	2.0 U	2 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	8.2 U	8 U	8.1 U	7.9 U	8.1 U	8.1 U	8 U	170 U	-	50 U	-	5 U	-	-	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4.1 U	4 U	4 U	4 UJ	4.1 U	4.1 U	4 U	17 U	-	5 U	-	0.5 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	4	1.4 J	2.1	0.98 J	65	3.2	0.51 U	0.5 U	17 U	-	5 U	-	1	-	-	0.5 U	0.5 UJ	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.9 U	0.93 U	0.9 U	0.91 U	0.89 UJ	0.92 U	0.91 U	0.91 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	9.9 U	10 U	10 U	10 U	330 U	-	100 U	-	11 U	-	-	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 UJ	0.1 U	0.10 U	0.1 U	3 U	-	1 U	-	0.6	-	-	0.1 U	0.1 J	0.1 U	0.6	0.8	0.5 J	0.3 J	1	1
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 UJ	0.1 U	0.10 U	0.1 U	3 U	-	1 U	-	0.1 U	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4.1 U	4 U	4 U	0.99 UJ	1 U	1.0 U	1 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 UJ	0.1 U	0.10 U	0.1 U	3 U	-	1 U	-	0.2 J	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2.1 U	2 U	2 U	0.99 UJ	1 U	1.0 U	1 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3.1 U	3 U	3 U	0.99 UJ	1 U	1.0 U	1 U	33 U	-	10 U	-	1 U	-	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.2J**	**0.2J**	0.1 U	**0.17J**	**0.15J**	**0.28J**	**0.13J**	0.10 U	0.1 U	3 U	-	1 U	-	**0.2J**	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**0.3J**	**0.2J**	0.1 U	**0.23J**	**0.17J**	**0.37J**	**0.17J**	0.11 U	0.11 U	3 U	-	1 U	-	0.1J	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	**0.4J**	**0.3J**	**0.31J**	**0.31J**	**0.26J**	**0.48J**	**0.23J**	0.10 U	0.1 U	3 U	-	1 U	-	0.1J	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 J	0.2 J	0.1 U	0.1 U	0.2 J	0.14 J	0.26 J	0.15 J	0.10 U	0.1 U	3 U	-	1 U	-	0.1 U	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.17 J	0.1 J	0.10 U	0.1 U	3 U	-	1 U	-	0.1 U	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	**16**	5 U	5.1 U	5 U	5 U	**4.2J**	2 U	2.0 U	2 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2.0 U	2 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	8 J	10 J	5 U	17	8.2 J	8.5	3.0 U	3 U	170 U	-	50 U	-	5 U	-	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.8 J	0.9 J
Chrysene	ug/L	N	5	0.1 U	0.4 J	0.2 J	0.1 U	0.2 J	0.21 J	0.33 J	0.21 J	0.10 U	0.1 U	3 U	-	1 U	-	0.3 J	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2.1 U	2.9 UJ	4 UJ	2 UJ	2 U	2.0 U	2 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5.1 U	5 U	5 U	5 UJ	5.1 U	5.1 U	5 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 UJ	0.1 U	0.10 U	0.1 U	3 U	-	1 U	-	0.1 U	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.7 J	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2.0 U	2 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2.0 U	2 U	67 U	-	20 U	-	2 U	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3.1 U	3 U	3 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 J	0.5 J	0.3 J	0.1 U	0.3 J	0.32 J	0.57 J	0.27 J	0.10 U	0.1 U	3 U	-	1 U	-	0.3 J	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.12 U	0.12 U	4 J	-	1 J	-	1	-	-	0.2 J	0.1 J	0.1 U	0.5 J	0.5	0.4 J	0.3 J	0.8	1
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.11 U	0.11 U	3 U	-	1 U	-	0.1 U	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5.1 U	5 U	5 U	5 UJ	5.1 U	5.1 U	5 U	170 U	-	50 U	-	5 U	-	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	0.5 UJ	0.51 U	0.51 U	0.5 U	33 U	-	10 U	-	1 U	-	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.2J	0.2J	0.1 U	0.18J	0.14J	**0.21J**	0.12J	0.11 U	0.11 U	3 U	-	1 U	-	0.1 U	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.72 U	0.7 U	0.71 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.72 U	0.7 U	0.71 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	0.1 U	1.1 J	0.12 J	0.15 J	0.1 U	38	60	32	7 J	6	3 J	4 J	1	0.8 J	0.8	1	1	0.2 J	0.1 U	3	2
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.51 U	0.5 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	2 U	2 U	1.6 U	1.6 U	1.6 U	0.99 U	1 U	1.0 U	1 U	17 U	-	5 U	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	0.99 U	1 U	1.0 U	1 U	33 U	-	10 U	-	1 U	-	-	1 U	1 UJ	4J	1 U	1 U	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.13 J	0.32 J	0.16 J	0.11 U	0.11 U	8 J	-	1 J	-	2	-	-	0.1 J	0.1 J	0.1 U	0.1 J	0.3 J	0.1 U	0.1 U	0.6	0.8
Phenol	ug/L	N	2000	0.5 U	0.5 U	2	0.51 U	0.5 U	0.5 U	12	0.8 J	0.51 U	0.5 U	17 U	-	7 J	-	12	-	-	0.5 U	0.5 UJ	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.2 J	0.5 J	0.4 J	0.1 U	0.38 J	0.4 J	0.61 J	0.3 J	0.10 U	0.1 U	3 J	-	1 J	-	0.5 J	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
Total TIC SVOCS	ug/L	N	NA	33 J	-	26 J	-	-	-	-	-	-	-	11600 J	-	1400 J	-	1100 J	-	-	65 J	55 J	2200 J	-	10 J	18 J	-	15 J	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-04	MP-04	MP-04R	MP-04R	MP-04R	MP-04R	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR
			Field Sample ID	MP03RC6X	D0903208	MP03RD1X	MP03RD2X	MP03RD3	D020420228A	MP03RD4	MP04A1X	MP04A3X	MP04A4X	MP04A5X	MP04A6X	MP04A7X	MP04RRB6X	MP04RRB8X	MP04RRB9X	MP04RRC1X	MP04RRC2X	MP04RRC3X	MP04RRC5X	MP04RRC6X	D1115188	MP04RRC7X	MP04RRC8X	MP04RRC9X
			Sample Date	11/13/2018	09/03/2020	09/03/2020	02/04/2021	08/25/2021	02/04/2022	02/04/2022	11/13/2012	05/13/2013	08/01/2013	10/16/2013	12/11/2013	04/03/2014	08/29/2016	12/07/2016	01/25/2017	04/17/2017	07/10/2017	10/18/2017	05/21/2018	08/27/2018	11/15/2018	11/15/2018	02/07/2019	05/07/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3.1 U	3.1 U	3.2 U	3.2 U	3.2 U	25 J	-	**1900**	-	**240**	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	14 U	15 U	15 U	15 U	330 U	-	50 U	-	11 U	-	10 U	10 UJ	10 UJ	10 U	10 U	10 U	14 U	14 UJ	14 UJ	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	0.99 UJ	1 U	1 U	1.1 U	1.1 U	1.1 U	33 U	-	5 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.51 UJ	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.41 U	0.41 U	0.43 U	0.42 U	0.43 U	13 U	-	2 U	-	0.4 U	-	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 UJ	0.51 UJ	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	1	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.5 J	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	**160J**	-	**160**	-	**60**	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	460	-	98	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 UJ	2 U	1 U	1.1 U	1.1 U	1.1 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 UJ	3.1 U	1 U	1.1 U	1.1 U	1.1 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 UJ	3 U	3 U	3 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 UJ	3.1 U	4.1 U	4.3 U	4.2 U	4.3 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3 UJ	3.1 U	2 U	2.2 U	2.1 U	2.1 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	7.9 UJ	8.2 UJ	8.2 U	8.6 U	8.4 U	8.5 U	170 U	-	25 U	-	5 U	-	5 U	5 UJ	5 UJ	5 U	5 U	5 U	8 U	8 UJ	8 UJ	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 UJ	4 UJ	4.1 U	4.1 U	4.3 U	4.2 U	4.3 U	17 U	-	3 U	-	0.5 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.54 U	1.1 J	1.4 J	17 U	-	**890**	-	**160**	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.89 UJ	0.92 U	0.92 U	0.97 U	0.95 U	0.96 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	9.9 U	10 U	10 U	11 U	11 U	11 U	330 U	-	50 U	-	11 U	-	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	1	0.62 UJ	0.95	1.2	0.52 J	0.45 J	0.51 J	13 J	-	6	-	2	-	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	3 U	-	5	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 UJ	4.1 U	1 U	1.1 U	1.1 U	1.1 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	6 J	-	0.7 J	-	1	-	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	1 U	1.1 U	1.1 U	1.1 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 UJ	3.1 U	1 U	1.1 U	1.1 U	1.1 U	33 U	-	5 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	**6J**	-	**0.7J**	-	**0.7**	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1J	**0.2J**	**0.2J**	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.099 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	**5J**	-	**0.6J**	-	**0.5**	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1J	**0.2J**	**0.2J**	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	**6J**	-	**0.5J**	-	**0.4J**	-	0.1 U	0.1 UJ	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1J	**0.3J**	0.2J	0.1J
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	5 J	-	1 J	-	0.5 J	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.1 J	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	3 U	-	0.5 U	-	0.1 J	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.1 J	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	0.51 UJ	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.51 UJ	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 UJ	5.1 U	2 U	2.2 U	2.1 U	2.1 U	**150J**	-	**38**	-	**73**	-	**5J**	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2.2 U	2.1 U	2.1 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	20	3.1 U	3.2 U	9.1	7.3 J	170 U	-	25 U	-	5 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.6 J	0.5 UJ	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	**12J**	-	3	-	1	-	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 J	0.3 J	0.2 J	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 U	2 U	2.2 U	2.1 U	2.1 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 UJ	5.1 U	5.1 U	5.4 U	5.3 U	5.3 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	3 U	-	0.5 U	-	0.1J	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 J	0.5 UJ	0.51 U	0.52 J	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	2	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2 U	2.2 U	2.1 U	2.1 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2.2 U	2.1 U	2.1 U	67 U	-	10 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 UJ	3.1 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	7 J	-	0.9 J	-	0.7	-	0.1 U	0.1 UJ	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.3 J	0.4 J	0.4 J	0.1 J
Fluorene	ug/L	N	300	0.6	0.099 UJ	0.17 J	0.24 J	0.13 U	0.13 U	0.13 U	23	-	12	-	4	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.099 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	3 U	-	0.5 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5.1 U	5.1 U	5.4 U	5.3 U	5.3 U	170 U	-	25 U	-	5 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	0.99 UJ	1 U	0.51 U	0.54 U	0.53 U	0.53 U	33 U	-	5 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.099 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	3 U	-	0.5 U	-	0.2J	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.2J	0.1J	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.51 UJ	0.51 U	0.54 U	0.53 U	0.53 UJ	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.69 UJ	0.71 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.69 UJ	0.71 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	2	0.11 UJ	0.23 J	0.43 J	0.17 J	0.11 U	0.11 U	89	100 U	65 J	21 J	18 J	12 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.51 U	0.51 U	0.54 U	0.53 U	0.53 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	1.6 U	1.6 U	1 U	1.1 U	1.1 U	1.1 U	17 U	-	3 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	0.99 U	1 U	1 U	1.1 U	1.1 U	1.1 U	33 U	-	5 U	-	1 U	-	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.5	0.099 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	39	-	10	-	4	-	0.1 U	0.1 UJ	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.3 J	0.3 J	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.51 U	0.51 U	0.54 U	1.4 J	0.53 U	17 U	-	700	-	230	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.099 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	19	-	4	-	2	-	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.3 J	0.4 J	0.3 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	87 J	-	-	-	-	-	-	76000 J	-	2800 J	-	1700 J	-	160 J	44 J	140 J	-	86 J	37 J	42 J	-	110 J	110 J	35 J	22 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MW-0043	MW-0043	MW-0043	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-8	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-14	MW-14	MW-14	MW-14
			Field Sample ID	MP04RRD1X	MP04RRD2X	MP04RRD3X	MP04RRD4	MP04RRD5	M043F2	M043F3	M043F4	D1218128	M090C8	M090D5X	M090D6X	M090D7X	M008C1X	M010B6	M010B7X	M010C3X	D0421167	M010C5X	M010C6X	M010C8X	M010C9X	D0629211	M014D5	M014D6	M014D7
			Sample Date	08/05/2019	09/01/2020	02/05/2021	08/24/2021	02/03/2022	05/12/2021	12/27/2021	02/03/2022	12/18/2012	12/18/2012	11/21/2017	02/01/2018	03/05/2019	11/01/2013	03/28/2013	01/14/2014	10/21/2015	04/21/2016	04/21/2016	09/13/2016	10/26/2017	02/13/2019	06/29/2021	06/29/2021	09/27/2021	12/22/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.52 UJ	0.49 U	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.52 UJ	0.49 U	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.52 UJ	0.49 U	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 UJ	3 U	3.1 UJ	5.4 J	6.4 J	3 U	3.2 U	3.3 U	0.5 U	-	0.5 U	0.5 U	3 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3.1 UJ	3.1 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 UJ	14 U	15 UJ	14 U	13 U	14 U	15 U	15 U	11 U	-	10 U	10 U	15 U	12 U	-	10 U	10 U	10 U	10 U	10 U	10 U	14 U	14 U	14 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	0.97 UJ	0.93 U	1 U	1.1 U	1.1 U	1 U	-	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.42 U	0.39 UJ	0.37 U	0.4 U	0.42 U	0.44 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.5 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.52 UJ	0.49 U	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	1	-	0.5 J	0.1 J	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.52 UJ	1.2 J	1.8 J	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	1 U	0.97 UJ	0.93 U	1 U	1.1 U	1.1 U	0.5 U	-	0.5 U	0.5 U	2 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 UJ	3 U	1 UJ	0.97 U	0.93 U	1 U	1.1 U	1.1 U	0.5 U	-	0.5 U	0.5 U	3 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	1 U	1 U	1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	4.2 U	3.9 UJ	3.7 U	4 U	4.2 U	4.4 U	2 U	-	2 U	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	3 U	4 U	4.1 U	4.2 U	4 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	2.1 U	1.9 UJ	1.9 U	2 U	2.1 U	2.2 U	0.5 U	-	0.5 U	0.5 U	3 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	2 U	2.1 U	2.1 U	2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 UJ	8.1 U	8.3 UJ	7.8 UJ	7.4 U	8.1 U	8.5 U	8.8 U	5 U	-	5 U	5 U	8 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8.3 U	8.4 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4.2 U	3.9 UJ	3.7 U	4 U	4.2 U	4.4 U	0.5 U	-	2 U	2 U	4 U	0.6 U	-	0.5 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4.1 U	4.2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.52 UJ	0.61 J	0.72 J	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.91 U	0.94 U	0.88 UJ	0.83 U	0.91 U	0.95 U	0.99 U	0.5 U	-	0.5 U	0.5 U	0.9 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.93 U	0.94 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 UJ	10 U	10 UJ	9.7 U	9.3 U	10 U	11 U	11 U	11 U	-	10 U	10 U	10 U	12 U	-	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.2 J	-	0.6	0.2 J	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 UJ	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	1 U	0.97 UJ	0.93 U	1 U	1.1 U	1.1 U	0.5 U	-	0.5 U	0.5 U	4 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	1 U	1 U	1 U	1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.2 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	1 U	0.97 UJ	0.93 U	1 U	1.1 U	1.1 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	1 U	0.97 UJ	0.93 U	1 U	1.1 U	1.1 U	1 U	-	1 U	1 U	3 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**0.7**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**0.8**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**1**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.6	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.5 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	2.1 U	1.9 UJ	1.9 U	2 U	2.1 U	2.2 U	2 U	-	2 U	2 U	5 U	**4J**	-	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2.1 U	2.1 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.1 U	1.9 UJ	1.9 U	2 U	2.1 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	3.1 U	2.9 UJ	2.8 U	3 U	3.2 U	3.3 U	5 U	-	5 U	5 U	5 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 U	3.1 U	3.1 U	3 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 J	0.1 U	0.1 U	1	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.1 U	1.9 UJ	1.9 U	2 U	2.1 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5.2 U	4.9 UJ	4.6 U	5 U	5.3 U	5.5 U	2 U	-	2 U	2 U	5 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5.2 U	5.2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.1 U	1.9 UJ	1.9 U	2 U	2.1 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.1 U	1.9 UJ	1.9 U	2 U	2.1 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	3 U	0.6 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.52 U	0.52 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	1	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.12 U	0.12 UJ	0.11 U	0.12 U	0.13 U	0.13 U	0.2 J	-	0.1 U	0.2 J	0.1 U	0.2 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5.2 U	4.9 UJ	4.6 U	5 U	5.3 U	5.5 U	5 U	-	5 UJ	5 U	5 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	1 U	-	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.52 U	0.52 U	0.5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**0.6J**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.71 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.7 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.52 U	0.52 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.71 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.7 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.52 U	0.52 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.097 UJ	0.91	0.1 U	0.11 U	0.11 U	11 J	2 J	2	1	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.22 UJ	0.24 UJ	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.52 U	0.49 UJ	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	1.6 U	1 UJ	0.97 U	0.93 U	1 U	1.1 U	1.1 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 UJ	0.97 UJ	0.93 U	1 U	1.1 U	1.1 U	1 U	-	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.6 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 U	0.52 UJ	0.49 U	0.46 U	0.5 U	0.53 U	0.55 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.097 UJ	0.093 U	0.1 U	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	1	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	0.0 U	-	-	-	200 J	220 J	22 J	-	21 J	-	-	-	-	0 U	-	-	-	-	0 U

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-14	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-132	MW-132	MW-132	MW-132
			Field Sample ID	M014D8	D1108138	M131B9X	M131C1X	M131C8X	D020416HS1	M131RD1X	M131RD2X	D1201168B	M131RD4X	M131RD6X	M131RD7X	M131RD8X	M131RE1X	M131RE2X	M131RE4X	D121220191	M131RE5X	M131RE9	M131RF1	M131RF2	M131RF3	M132C2X	D1114127	M132C3X	D0510138
			Sample Date	02/03/2022	11/08/2013	11/08/2013	01/08/2014	12/02/2015	02/05/2016	06/06/2016	09/06/2016	12/01/2016	12/01/2016	03/03/2017	06/06/2017	12/06/2017	06/04/2018	12/04/2018	06/24/2019	12/12/2019	12/12/2019	06/30/2021	10/05/2021	12/16/2021	02/11/2022	04/23/2012	11/14/2012	11/14/2012	05/10/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 UJ	0.51 U	6 U	0.6 U	0.6 U	11 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
2,4-Dimethylphenol	ug/L	N	100	3.2 U	0.6 U	0.6 U	5	3 U	0.5 U	1	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3 U	3.3 U	3.1 U	**1500J**	94	**110**	**9800J**
2,4-Dinitrophenol	ug/L	N	40	15 U	11 U	13 U	12 U	51 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	12 U	14 U	14 U	14 U	14 U	14 U	15 U	14 U	15 U	14 U	110 U	12 U	11 U	220 UJ
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	5 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 U	11 U	1 U	1 U	22 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
2-Chloronaphthalene	ug/L	N	600	0.43 U	0.4 U	0.5 U	0.5 U	2 UJ	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.43 U	0.41 U	4 U	0.5 U	0.4 U	9 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	2 J	0.5 J	0.1 UJ	0.1 U	0.1 J	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	**45 J**	**37**	**54 JX**	**87 J**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	2	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	1300	160	210	3300J
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1.1 U	1 U	6 U	0.6 U	0.6 U	11 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	3 U	3 U	3 U	3 U	3 U	1.1 U	1 U	1.1 U	1 U	6 U	0.6 U	0.6 U	11 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	4.3 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	4.2 U	4 U	4.3 U	4.1 U	22 U	2 U	2 U	44 UJ
3-Nitroaniline	ug/L	N	NA	2.1 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	3 U	3 U	3 U	3 U	3 U	2.1 U	2 U	2.2 U	2 U	6 U	0.6 U	0.6 U	11 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.6 U	6 U	6 U	6 U	26 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	6 U	8 U	8 U	8 U	8 U	8 U	8.4 U	8.1 U	8.7 U	8.2 U	56 U	6 U	6 U	110 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
4-Chloroaniline	ug/L	N	30	4.3 U	0.6 U	0.6 U	0.6 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4.2 U	4 U	4.3 U	4.1 U	6 U	0.6 U	0.6 U	11 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.6 U	0.6 U	0.6 J	3 U	0.5 U	3	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	**590**	23	24	**2500J**
4-Nitroaniline	ug/L	N	NA	0.96 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.95 U	0.91 U	0.98 U	0.92 U	6 U	0.6 U	0.6 U	11 UJ
4-Nitrophenol	ug/L	N	NA	11 U	11 U	13 U	12 U	51 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	12 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 UJ	10 U	110 U	12 U	11 U	220 UJ
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 U	1	1 J	2	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	1	1	2 UJ
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.1 U	0.1 U	2 UJ
Acetophenone	ug/L	N	700	1.1 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.7 J	1 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	4 U	4 U	4 U	4 U	4 U	1.1 U	1 U	1.1 U	1 U	6 U	0.6 U	0.6 U	11 UJ
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.2 J	0.5 UJ	0.4 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.3 J	0.8 J	2 UJ
Atrazine	ug/L	N	3	1.1 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1.1 U	1 U	22 U	2 U	2 U	44 UJ
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 U	5 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	1.1 U	1 U	1.1 U	1 U	19 J	1 U	1 U	22 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	**0.2J**	**0.6J**	0.1J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	**0.3J**	**1J**	**3J**
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	1 U	**0.2J**	**1J**	**3J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.2J	**0.7J**	2 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.2 J	1 J	3 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.1 U	0.2 J	2 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	2.1 U	2 U	2.2 U	2 U	22 U	**5J**	**20J**	**49J**
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2 U	22 U	2 U	2 U	44 UJ
Caprolactam	ug/L	N	4000	3.2 U	6 U	6 U	6 U	26 UJ	5 U	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	6 U	5 U	5 U	5 U	9 J	5 U	3.2 U	3 U	3.3 U	3.1 U	56 U	6 U	6 U	110 UJ
Carbazole	ug/L	N	NA	0.53 U	2	2	1 J	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 J	0.4 J	2 J	4 J
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2 U	22 U	2 U	2 U	44 UJ
Di-n-octylphthalate	ug/L	N	100	5.3 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	5.4 U	5.1 U	22 U	2 U	2 U	44 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.1 U	**0.4J**	2 UJ
Dibenzofuran	ug/L	N	NA	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.8 J	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.7 J	0.6 U	11 UJ
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2 U	22 U	2 U	2 U	44 UJ
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	3 U	2 U	10 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2 U	22 U	2 U	2 U	44 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	3 U	3 U	3 U	3 U	3 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.2 J	0.6 J	0.4 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.2 J	0.6	5 J
Fluorene	ug/L	N	300	0.13 U	0.1 U	1 J	0.9	1 J	3	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.12 U	0.13 U	0.12 U	2 J	2	2	4 J
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	1 U	0.1 U	0.1 U	2 UJ
Hexachlorobutadiene	ug/L	N	1	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5.3 U	6 U	6 U	6 U	26 UJ	5 U	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	5.4 U	5.1 U	56 U	6 U	6 U	110 UJ
Hexachloroethane	ug/L	N	7	0.53 U	1 U	1 U	1 U	5 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	0.5 U	0.54 U	0.51 U	11 U	1 U	1 U	22 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.1 U	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	1 U	0.1 U	**0.3J**	2 UJ
Isophorone	ug/L	N	40	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
Naphthalene	ug/L	N	300	0.11 U	5	6	2 J	1 J	0.1 U	4 J	0.5 J	0.2 J	0.4 J	0.3 J	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.36 J	0.11 U	0.1 U	68	74	69	70 J
Nitrobenzene	ug/L	N	6	0.53 U	0.6 U	0.6 U	0.6 U	3 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	6 U	0.6 U	0.6 U	11 UJ
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	0.6 U	0.6 U	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 U	1 U	1.1 U	1 U	6 U	0.6 U	0.6 U	11 UJ
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 U	11 U	1 U	1 U	22 UJ
Phenanthrene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.3 J	0.5 UJ	2	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	2 J	2 J	4 J	11
Phenol	ug/L	N	2000	0.53 U	9 J	0.6 UJ	5	3 U	0.5 U	0.9 J	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.54 U	0.51 U	140	5	5	1400 J
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.4 J	0.4 J	1 J	0.5	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	1 U	0.5 J	2 J	8 J
Total TIC SVOCS	ug/L	N	NA	0.0 U	450 J	360 J	360 J	-	-	130 J	32 J	-	-	410 J	5 J	110 J	5 J	83 J	35 J	37 J	11 J	-	-	-	-	-	390 J	400 J	8500 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R
			Field Sample ID	M132C5X	D0703138	M132C6X	D1018138	M132C7X	D1212138	M132C8X	D0403148	M132C9X	D0830168	M132RD6X	M132RD8X	M132RD9X	M132RE1X	M132RE2X	M132RE3X	M132RE4X	M132RE5X	M132RE6X	M132RE8X	M132RE9X	D0201191B	M132RF1X	D0509191	M132RF2X	D0226201X
			Sample Date	05/10/2013	07/03/2013	07/03/2013	10/18/2013	10/18/2013	12/12/2013	12/12/2013	04/03/2014	04/03/2014	08/30/2016	08/30/2016	12/06/2016	01/26/2017	04/18/2017	07/06/2017	10/18/2017	01/09/2018	04/27/2018	05/24/2018	08/28/2018	11/19/2018	02/01/2019	02/01/2019	05/09/2019	05/09/2019	02/26/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	**2200J**	**4600**	**4100**	**360**	**340**	**270**	**370**	-	-	9 J	34 J	4 J	7	0.8 J	2	0.6 U	0.5 U	0.6 J	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	220 U	5000 U	5000 U	11 U	11 U	50 U	50 U	-	-	10 UJ	10 UJ	10 U	10 U	10 U	10 U	11 U	10 U	10 U	14 U	14 UJ	15 U	14 UJ	14 UJ	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	22 U	500 U	500 U	1 U	1 U	5 U	5 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	9 U	200 U	200 U	0.4 U	0.5 U	2 U	2 U	-	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 UJ	0.5 UJ	0.8 J	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	23 J	**98 J**	**96 J**	**55 J**	**44 J**	**69**	**72**	-	-	3	4	0.1 U	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.2 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	470J	1200	960	61	65	53	48	-	-	0.5 UJ	0.5 UJ	1	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	44 U	1000 U	1000 U	2 U	2 U	10 U	10 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	110 U	2500 U	2500 U	5 U	6 U	25 U	25 U	-	-	5 UJ	5 UJ	5 U	5 U	5 U	5 U	6 U	5 U	5 U	8 U	8 UJ	8 U	8 UJ	8 UJ	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	11 U	250 U	250 U	0.5 UJ	0.6 UJ	3 U	3 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 UJ	4 U	4 UJ	4 UJ	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	**3200**	**4100**	**4200**	**1200**	**820**	**550**	**630**	-	-	0.6 J	0.8 J	10	0.9 J	0.6 J	2	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.9 U	0.9 UJ	1 U	0.9 UJ	0.9 UJ	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	220 U	5000 U	5000 U	11 U	11 U	50 U	50 U	-	-	10 UJ	10 UJ	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 UJ	11 U	10 UJ	10 UJ	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	2 U	50 U	50 U	2 J	1	2 J	3	-	-	0.3 J	0.4 J	0.3 J	0.2 J	0.1 U	0.2 J	0.2 J	0.3 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.3 J
Acenaphthylene	ug/L	N	NA	2 U	50 U	50 U	0.1 U	0.1 U	0.5 U	0.5 U	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	11 U	250 U	250 U	27	32	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	4 U	4 UJ	4 U	4 UJ	4 UJ	4 U	4 U	4 U
Anthracene	ug/L	N	2000	2 U	50 U	50 U	2 J	0.8 J	0.5 U	0.5 U	-	-	0.1 U	0.1 J	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.2 J
Atrazine	ug/L	N	3	44 U	1000 U	1000 U	2 U	2 U	10 U	10 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	22 U	500 U	500 U	27	23	5 U	5 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	2 U	50 U	50 U	**4J**	**2J**	**4**	**5J**	-	-	0.1 U	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	**0.3J**
Benzo(a)pyrene	ug/L	N	0.1	2 U	50 U	50 U	**4J**	**2J**	**5**	**6J**	-	-	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	**0.3J**
Benzo(b)fluoranthene	ug/L	N	0.2	2 U	50 U	50 U	**2J**	**0.8J**	**2J**	**2J**	-	-	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	**0.3J**
Benzo(g,h,i)perylene	ug/L	N	NA	2 U	50 U	50 U	3	2	4	5 J	-	-	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 J
Benzo(k)fluoranthene	ug/L	N	0.5	2 U	50 U	50 U	0.3 J	0.2 J	0.5 U	0.5 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 J
bis(2-Chloroethoxy)methane	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	44 U	1000 U	1000 U	**360J**	**160J**	**160J**	**350J**	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	44 U	1000 U	1000 U	2 U	2 U	10 U	10 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	110 U	2500 U	2500 U	5 U	6 U	25 U	25 U	-	-	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	18
Carbazole	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	2 U	50 U	50 U	**8J**	3 J	**7**	**9**	-	-	0.1 U	0.1 U	0.1 U	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.2 J
Di-n-butylphthalate	ug/L	N	700	44 U	1000 U	1000 U	2 U	2 U	10 U	10 UJ	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	44 U	1000 U	1000 U	2 U	2 U	10 U	10 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	2 U	50 U	50 U	**0.7J**	**0.4J**	0.5 U	0.5 UJ	-	-	0.1 UJ	0.1 UJ	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	11 U	250 U	250 U	1	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	44 U	1000 U	1000 U	2 U	2 U	10 U	10 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	44 U	1000 U	1000 U	2 U	2 U	10 U	10 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	5 J	50 U	50 U	2 J	1 J	0.5 U	3 J	-	-	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 J
Fluorene	ug/L	N	300	2 U	50 U	50 U	3	2	0.5 U	4 J	-	-	0.3 J	0.3 J	0.1 U	0.3 J	0.1 U	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 J	0.1 U	0.3 J	0.3 J	0.1 U	0.1 U	0.1 J
Hexachlorobenzene	ug/L	N	0.02	2 U	50 U	50 U	0.1 UJ	0.1 UJ	0.5 U	0.5 U	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	110 U	2500 U	2500 U	5 U	6 U	25 U	25 U	-	-	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	22 U	500 U	500 U	1 U	1 U	5 U	5 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	2 U	50 U	50 U	**0.3J**	0.2J	0.5 U	**2J**	-	-	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1J
Isophorone	ug/L	N	40	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	74 J	110 J	74 J	55	48 J	59	52	140	150	9	15	0.4 J	0.4 J	0.4 J	0.4 J	0.4 J	0.6	0.1 U	0.1 J	0.3 J	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.4 J
Nitrobenzene	ug/L	N	6	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	11 U	250 U	250 U	0.5 U	0.6 U	3 U	3 U	-	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	2 U
Pentachlorophenol	ug/L	N	0.3	22 U	500 U	500 U	1 U	1 U	5 U	5 U	-	-	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	7 J	50 U	50 U	10 J	5 J	9	12	-	-	0.3 J	0.4 J	0.1 U	3	0.1 U	0.1 U	0.3 J	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.3 J
Phenol	ug/L	N	2000	**2600J**	**2900**	**3100**	1200	940	400	470	-	-	1 J	1 J	37 J	2	3	9	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	4 J	50 U	50 U	8 J	4 J	8	10 J	-	-	0.1 U	0.1 U	0.1 U	1	0.1 J	0.1 J	0.1 J	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.5 J
Total TIC SVOCS	ug/L	N	NA	3700 J	0 U	0 U	170 J	700 J	2400 J	3200 J	-	-	200 J	380 J	270 J	150 J	-	50 J	110 J	-	-	37 J	32 J	-	190 J	230 J	-	-	590 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-132R	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-14	MW-14	MW-14	MW-14	MW-14	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-144
			Field Sample ID	M132RF7X	M132RRF9X	M132RRG1X	M132RRG2X	M132RRG3X	D0517218	M132RRG4	M132RRG5	M132RRG6	M132RG7	D0629211	M014D5	M014D6	M014D7	M014D8	M142B6X	M142B7X	M142B8X	M142B9X	M142C1X	M142C2X	M142C3X	M142C4X	M142C5X	M142C6X	M144C5X
			Sample Date	02/26/2020	05/19/2020	08/19/2020	11/06/2020	02/04/2021	05/17/2021	05/17/2021	08/26/2021	11/23/2021	02/03/2022	06/29/2021	06/29/2021	09/27/2021	12/22/2021	02/03/2022	06/05/2012	07/16/2013	11/14/2014	12/08/2015	02/11/2016	03/02/2017	02/21/2018	02/21/2019	02/20/2020	01/28/2021	09/14/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	4 U	3 U	3.5 U	3.3 UJ	3.1 U	3 U	3.1 U	3.1 U	3.1 UJ	3 U	3 U	3.1 UJ	3.1 U	3 U	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3.2 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	17 U	15 U	16 U	15 UJ	14 U	14 U	14 U	14 U	15 UJ	14 U	14 U	14 U	15 U	14 U	15 U	9 U	11 U	11 U	10 U	10 U	10 U	10 U	14 U	15 U	15 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.2 U	1.1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.47 U	0.44 UJ	0.41 U	0.4 U	0.41 U	0.41 UJ	0.41 UJ	0.4 U	0.4 U	0.41 U	0.42 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.2 J	0.1 J	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 UJ	0.56 J	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2.3 U	2.2 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.1 U	0.5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	4 U	3 U	3.5 U	3.3 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	1.1 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	3 U	3.5 U	3.3 UJ	4.1 U	4 U	4.1 U	4.1 UJ	4.1 UJ	4 U	4 U	4.1 U	4.2 U	4 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	4.2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	4 U	3 U	3.5 U	3.3 UJ	2 U	2 U	2 U	2 UJ	2.1 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	2.1 U	0.5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	10 U	9 U	9.3 U	8.8 UJ	8.2 U	8.1 U	8.2 U	8.2 U	8.3 UJ	8 U	8 U	8.3 U	8.4 U	8 U	8.6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	9 U	8.5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	5 U	4 U	4.7 U	4.4 UJ	4.1 U	4 U	4.1 U	4.1 UJ	4.1 UJ	4 U	4 U	4.1 U	4.2 U	4 U	4.3 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	4 U	4 U	4.2 U	2 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.56 J	9	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	1 U	1 U	0.99 UJ	0.92 U	0.91 U	0.92 U	0.92 UJ	0.93 UJ	0.9 U	0.9 U	0.93 U	0.94 U	0.9 U	0.96 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.95 U	0.5 UJ
4-Nitrophenol	ug/L	N	NA	12 U	11 U	12 U	11 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	9 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.2 J	0.3 J	0.2 J	0.11 J	0.11 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Acetophenone	ug/L	N	700	5 U	4 U	4.7 U	4.4 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	1.1 U	0.5 UJ
Anthracene	ug/L	N	2000	0.2 J	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.2 J
Atrazine	ug/L	N	3	2 U	2 U	2.3 U	2.2 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	2 UJ
Benzaldehyde	ug/L	N	NA	4 U	3 U	3.5 U	3.3 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	1.1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	**0.3J**	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	**0.3J**	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.11 UJ	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	**0.3J**	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	**0.17J**	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.2 J	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.24 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 J	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.21 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	6 U	6 U	5.8 U	5.5 UJ	2 U	2 U	2 U	2 UJ	2.1 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	2.1 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.3 U	2.2 UJ	2 U	2 U	2 U	2 UJ	2.1 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ
Caprolactam	ug/L	N	4000	20	6 U	5.8 U	5.5 UJ	3.1 U	3 U	3.1 U	3.1 UJ	3.1 UJ	3 U	3 U	3.1 U	3.1 U	3 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	3.2 U	5 UJ
Carbazole	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
Chrysene	ug/L	N	5	0.3 J	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.14 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.3 U	2.2 UJ	2 U	2 U	2 U	2 UJ	2.1 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	6 U	6 U	5.8 U	5.5 UJ	5.1 U	5.1 U	5.1 U	5.1 UJ	5.2 UJ	5 U	5 U	5.2 U	5.2 U	5 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	5.3 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.26J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.3 U	2.2 UJ	2 U	2 U	2 U	2 UJ	2.1 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.3 U	2.2 UJ	2 U	2 U	2 U	2 UJ	2.1 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	4 U	3 U	3.5 U	3.3 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.53 U	0.5 UJ
Fluoranthene	ug/L	N	300	0.5 J	0.1 U	0.41 J	0.24 J	0.14 J	0.1 U	0.1 U	0.11 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J
Fluorene	ug/L	N	300	0.1 J	0.2 J	0.22 J	0.12 J	0.15 J	0.12 U	0.12 U	0.12 UJ	0.12 UJ	0.12 U	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.09 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.11 UJ	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	6 U	6 U	5.8 U	5.5 UJ	5.1 U	5.1 U	5.1 U	5.1 UJ	5.2 UJ	5 U	5 U	5.2 U	5.2 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.3 U	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1.2 U	1.1 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.2J	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.2J	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ
Isophorone	ug/L	N	40	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5	0.53 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.8 U	0.8 U	0.81 U	0.77 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.53 U	0.5 UJ
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.8 U	0.8 U	0.81 U	0.77 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.53 U	0.5 UJ
Naphthalene	ug/L	N	300	0.5 J	0.6	0.12 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.14 J	0.11 J	0.32 J	0.22 UJ	0.24 UJ	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.1 UJ
Nitrobenzene	ug/L	N	6	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	2 U	2 U	1.9 U	1.8 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.1 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.2 U	1.1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U
Phenanthrene	ug/L	N	NA	0.3 J	0.1 U	0.17 J	0.11 UJ	0.15 J	0.11 U	0.11 U	0.11 UJ	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.09 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ
Phenol	ug/L	N	2000	0.6 U	0.6 U	0.58 U	0.55 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 UJ	6.3	0.5 U	0.52 U	0.52 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U
Pyrene	ug/L	N	200	0.5 J	0.1 U	0.41 J	0.29 J	0.11 J	0.1 U	0.1 U	0.1 UJ	0.12 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.2 J
Total TIC SVOCS	ug/L	N	NA	22 J	11 J	-	0 U	-	-	-	-	0 U	0 U	-	-	-	0 U	0.0 U	-	-	-	-	-	-	-	31 J	-	-	82 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-144	MW-144	MW-144	MW-144	MW-145	MW-146	MW-146	MW-146	MW-146	MW-148	MW-148	MW-148	MW-148	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149	MW-149
			Field Sample ID	M144C6X	M144D9	M144E1	M144E2	M145B8X	M146B9X	M146C3X	M146C4X	M416C5X	M148D2	D0917211	M148D3	M148D4	M149C6X	M149C7X	M149C9	M149D1	M149D2	M149D3X	M149D5X	M149D6X	M149D7X	D0219201X	M149D8X	M149D9X	M149E1X	D1118201
			Sample Date	12/27/2016	06/23/2021	09/23/2021	12/21/2021	11/20/2015	11/20/2015	02/15/2018	04/19/2018	06/18/2020	06/03/2021	09/17/2021	09/17/2021	12/20/2021	09/21/2016	12/20/2016	02/22/2018	05/30/2018	08/28/2018	11/20/2018	05/03/2019	08/30/2019	11/13/2019	02/19/2020	02/19/2020	05/26/2020	08/19/2020	11/18/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3.3 U	3.4 U	3.2 U	0.6 UJ	0.6 U	0.5 U	0.5 U	3.0 UJ	3.3 U	3.5 U	3.3 U	3 U	0.5 UJ	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	16 U	3.1 U	3.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	15 U	16 U	15 U	12 UJ	11 U	10 U	10 U	14 UJ	16 U	16 U	15 U	14 U	10 UJ	10 U	10 U	14 U	14 U	14 UJ	14 U	14 U	15 U	14 U	14 U	73 U	14 UJ	16 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1.0 UJ	1.1 U	1.2 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1.2 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.44 U	0.45 U	0.42 U	0.5 U	0.4 U	0.4 U	0.4 U	0.40 UJ	0.44 U	0.46 U	0.43 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.41 U	0.46 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	1.1 U	1.1 U	1.1 U	0.6 U	0.6 U	0.5 U	0.5 U	2.0 UJ	1.1 U	1.2 U	1.1 U	1 U	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2.1 U	2.3 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	1.1 U	1.1 U	1.1 U	0.6 UJ	0.6 U	0.5 U	0.5 U	3.0 UJ	1.1 U	1.2 U	1.1 U	1 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	16 U	3.1 U	3.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	4.4 U	4.5 U	4.2 U	2 U	2 U	2 U	2 U	3.0 UJ	4.4 U	4.6 U	4.3 U	4 U	2 UJ	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	16 U	3.1 U	3.5 U
3-Nitroaniline	ug/L	N	NA	0.5 U	2.2 U	2.2 U	2.1 U	0.6 U	0.6 U	0.5 U	0.5 U	3.0 UJ	2.2 U	2.3 U	2.2 U	2 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	16 U	3.1 U	3.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8.8 U	9 U	8.5 U	6 UJ	6 U	5 U	5 U	8.1 UJ	8.9 U	9.2 U	8.7 U	8.1 U	5 UJ	5 U	5 U	8 U	8 U	8 U	8 U	8 U	9 U	8 U	8 U	42 U	8.3 U	9.3 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
4-Chloroaniline	ug/L	N	30	2 U	4.4 U	4.5 U	4.2 U	2 U	2 U	2 U	2 U	4.0 UJ	4.4 U	4.6 U	4.3 U	4 U	2 UJ	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	21 U	4.1 U	4.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.99 U	1 U	0.95 U	0.6 U	0.6 U	0.5 U	0.5 U	0.91 UJ	1 U	1 U	0.98 U	0.91 U	0.5 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	5 U	0.93 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	11 U	11 U	12 UJ	11 U	10 U	10 U	10 UJ	11 U	12 U	11 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	52 U	10 U	12 U
Acenaphthene	ug/L	N	400	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.16 J	0.2 J	0.2 J	0.1 U	0.4 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.29 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Acetophenone	ug/L	N	700	0.5 U	1.1 U	1.1 U	1.1 U	0.6 U	0.6 U	0.5 U	0.5 U	4.0 UJ	1.1 U	1.2 U	1.1 U	1 U	0.5 UJ	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	21 U	4.1 U	4.6 U
Anthracene	ug/L	N	2000	0.3 J	0.11 U	0.34 J	0.35 J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Atrazine	ug/L	N	3	2 U	1.1 U	1.1 U	1.1 U	2 U	2 U	2 U	2 U	2.0 UJ	1.1 U	1.2 U	1.1 U	1 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2.1 U	2.3 U
Benzaldehyde	ug/L	N	NA	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	3.0 UJ	1.1 U	1.2 U	1.1 U	1 U	1 UJ	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	16 U	3.1 U	3.5 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.12 U	0.13 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.11 U	0.11 U	0.41 J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	5.0 UJ	2.2 U	2.3 UJ	2.2 UJ	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U	5.2 U	5.8 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.0 UJ	2.2 U	2.3 UJ	2.2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2.1 U	2.3 U
Caprolactam	ug/L	N	4000	5 U	3.3 U	16	7.3 J	6 U	6 U	5 U	5 U	5.0 UJ	3.3 U	3.5 U	3.3 U	3 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U	5.2 U	5.8 U
Carbazole	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
Chrysene	ug/L	N	5	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.0 UJ	2.2 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2.1 U	2.3 U
Di-n-octylphthalate	ug/L	N	100	2 U	5.5 U	5.6 U	5.3 U	2 U	2 U	2 U	2 U	5.0 UJ	5.5 U	5.8 U	5.4 U	5.1 U	2 UJ	2 U	2 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	26 U	5.2 U	5.8 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
Diethylphthalate	ug/L	N	6000	2 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.0 UJ	2.2 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2.1 U	2.3 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.0 UJ	2.2 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2.1 U	2.3 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	3.0 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	16 U	3.1 U	3.5 U
Fluoranthene	ug/L	N	300	0.1 J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Fluorene	ug/L	N	300	0.1 U	0.13 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.13 U	0.14 U	0.13 U	0.12 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.12 U	0.13 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.5 U	5.6 U	5.3 U	6 U	6 U	5 U	5 U	5.0 UJ	5.5 U	5.8 U	5.4 U	5.1 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U	5.2 U	5.8 U
Hexachloroethane	ug/L	N	7	1 U	0.55 U	0.56 U	0.53 U	1 U	1 U	1 U	1 U	1.0 UJ	0.55 U	0.58 U	0.54 U	0.51 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1.2 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.12 U	0.12 U	0.15J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.12 U	0.13 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.71 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	4 U	0.72 U	0.81 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.71 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	4 U	0.72 U	0.81 U
Naphthalene	ug/L	N	300	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Nitrobenzene	ug/L	N	6	0.5 U	0.55 U	0.56 U	0.53 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	1.1 U	1.1 U	1.1 U	0.6 UJ	0.6 U	0.5 U	0.5 U	1.6 UJ	1.1 U	1.2 U	1.1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	8 U	1.7 U	1.9 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	1.1 U	1.1 U	1 UJ	1 U	1 U	1 U	1.0 UJ	1.1 U	1.2 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1.2 U
Phenanthrene	ug/L	N	NA	0.1 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.12 U	0.13 U	0.12 U	0.11 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Phenol	ug/L	N	2000	0.5 U	0.55 U	0.56 U	0.53 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.55 U	0.58 U	0.54 U	0.51 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.52 U	0.58 U
Pyrene	ug/L	N	200	0.1 J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.11 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.12 U
Total TIC SVOCS	ug/L	N	NA	19 J	-	-	-	230 U	120 J	0 U	0 U	-	-	-	-	-	12 J	17 J	66 J	240 J	200 J	130 J	320 J	36 J	82 J	140 J	85 J	0 U	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-149	MW-149	MW-149	MW-149	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-153	MW-153	MW-155R	MW-155R	MW-155R	MW-156	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R
			Field Sample ID	M149E2X	M149E3	M149E4	M149E5	M151C2	M151C3X	M151C4X	M151E1X	M151E3X	M151E6X	D0315191	M151E8X	M151F4	M151F5	M151F6	M151F7	M153E1	M153E2	M155RA1X	M155RA3X	M155RA4X	M156C1X	M156A1X	M156RA2X	M156RA3X	M156RA4X	M156RA5X
			Sample Date	11/18/2020	06/21/2021	12/17/2021	03/31/2022	08/16/2013	10/30/2013	01/09/2014	09/22/2017	02/16/2018	10/09/2018	03/15/2019	03/15/2019	05/27/2021	07/29/2021	10/22/2021	03/23/2022	05/27/2021	10/20/2021	07/26/2016	03/09/2017	03/29/2018	06/08/2012	11/05/2015	03/18/2016	03/09/2017	03/29/2018	03/27/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.4 U	3.1 U	3 U	3.1 U	-	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	3.3 U	3.1 U	3.1 U	**690**	**710**	**430**	-	3 U	0.5 U	0.5 U	0.5 U	3 U
2,4-Dinitrophenol	ug/L	N	40	16 U	14 U	14 U	14 U	-	12 U	11 U	11 U	10 U	14 U	15 U	14 U	14 U	15 U	14 U	15 U	14 U	14 U	110 U	10 U	11 U	-	54 U	10 U	10 U	10 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	11 U	1 U	1 U	-	5 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.46 U	0.41 U	0.41 U	0.41 U	-	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.41 U	0.44 U	0.41 U	0.41 U	4 U	0.4 U	0.4 U	-	2 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	-	0.3 J	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**570**	**470**	**310**	-	0.5 U	0.1 U	0.1 J	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	5	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.3 U	1 U	1 U	1 U	-	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3.4 U	1 U	1 U	1 U	-	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	1 U	1 U	1 U	1.1 U	1 U	1 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3.4 U	4.1 U	4.1 U	4.1 U	-	2 U	2 U	2 U	2 U	3 U	3 U	3 U	4.1 U	4.2 U	4.1 U	4.4 U	4.1 U	4.1 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	3 U
3-Nitroaniline	ug/L	N	NA	3.4 U	2 U	2 U	2 U	-	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	2.1 U	2.1 U	2 U	2.2 U	2 U	2 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9.2 U	8.1 U	8.1 U	8.2 U	-	6 U	5 U	5 U	5 UJ	8 U	8 U	8 U	8.3 U	8.3 U	8.1 U	8.7 UJ	8.2 U	8.2 U	53 U	5 U	5 U	-	27 U	5 U	5 U	5 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.6 U	4.1 U	4.1 U	4.1 U	-	0.6 U	0.5 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.2 U	4.1 U	4.4 U	4.1 U	4.1 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	2	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	0.92 U	0.91 U	0.92 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.9 U	0.93 U	0.93 U	0.91 U	0.98 U	0.92 U	0.92 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 U	-	12 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	110 U	10 U	11 U	-	54 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.29 J	0.1 U	0.1 U	0.1 U	-	0.1 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.48 J	0.11 U	0.1 U	0.1 U	140	99	82	-	8	8	4	0.1 U	4
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	-	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	5 J	4	2	-	0.5 U	0.3 J	0.2 J	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4.6 U	1 U	1 U	1 U	-	0.6 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	1 U	1 U	1 U	1.1 U	1 U	1 U	5 U	2	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	4 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 U	-	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	23	16	12	-	3	0.6	0.7	0.1 U	0.1 U
Atrazine	ug/L	N	3	2.3 U	1 U	1 UJ	1 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3.4 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	3 U	3 U	3 U	1 U	1 U	1 U	1.1 U	1 U	1 U	11 U	1 U	1 U	-	5 U	1 U	1 U	1 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	-	**1**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**3J**	**1**	**0.7**	-	**4**	0.1 U	**2**	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.11 U	0.11 U	-	**1**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	**1J**	**0.4J**	**0.3J**	-	**4**	0.1 U	**1**	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	-	**1**	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	1 U	**0.4J**	0.1 U	-	**4**	0.1 U	**1**	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	-	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	1 U	0.1 J	0.1 U	-	3	0.1 U	0.3 J	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	-	**0.6**	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	1 U	0.2 J	0.1 U	-	**2J**	0.1 U	0.5 J	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.57 U	0.51 U	0.51 UJ	0.51 UJ	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 UJ	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 UJ	-	3 U	0.5 U	0.5 U	0.5 UJ	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.7 U	2 U	2 U	2 U	-	3 J	2 U	2 U	2 U	5 U	5 U	5 U	2.1 U	2.1 U	2 U	2.2 U	2 U	2 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	5 U
Butylbenzylphthalate	ug/L	N	100	2.3 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2 U	2 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5.7 U	3.1 U	3 U	3.1 U	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	3.1 U	3.1 U	3 U	3.3 U	3.1 U	3.1 U	53 U	5 U	5 U	-	27 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	170	150	130	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	-	1	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	3 J	1	0.9	-	4	0.1 U	2	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.3 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2 U	2 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.7 U	5.1 U	5.1 U	5.1 U	-	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.2 U	5.2 U	5.1 U	5.5 U	5.1 U	5.1 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	-	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	-	**0.6J**	0.1 U	0.1J	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	80	53	39	-	4 J	3	2	0.5 U	2 J
Diethylphthalate	ug/L	N	6000	2.3 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.8 J	2.1 U	2 U	2.2 U	2 U	2 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.3 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2 U	2 U	21 U	2 U	2 U	-	11 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.4 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	35	27	17	-	3 U	0.5 U	0.5 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	-	1	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.27 J	0.11 U	0.1 U	0.1 U	13	9	7	-	8	0.6	2	0.7	0.6
Fluorene	ug/L	N	300	0.11 U	0.12 U	0.12 U	0.12 U	-	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	110	69	51	-	7	5	0.5 J	0.1 U	1
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.11 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	1 U	0.1 U	0.1 U	-	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.7 U	5.1 U	5.1 U	5.1 U	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U	5.1 U	5.5 U	5.1 U	5.1 U	53 U	5 U	5 U	-	27 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1.1 U	0.51 U	0.51 U	0.51 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	11 U	1 U	1 U	-	5 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.11 U	0.11 U	-	**0.6**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	1 U	0.1 U	0.1 U	-	**2J**	0.1 U	**0.3J**	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.8 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.8 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.7 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	1 U	1 U	1 U	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**5000**	**4600**	**2700**	0.1 U	1 J	0.5 J	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.8 U	1 U	1 U	1 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.1 U	1 U	1 U	5 U	0.5 U	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	11 U	1 U	1 U	-	5 U	3J	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.11 U	0.11 U	-	1	0.2 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	120	81	62	-	9	0.8	0.3 J	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.57 U	0.51 U	0.51 U	0.51 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	0.55 U	0.51 U	0.51 U	5 U	1 J	0.5 U	-	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 U	-	2	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.24 J	0.11 U	0.1 U	0.1 U	11	7	5	-	7	0.4 J	3	0.4 J	0.5
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	620 J	10 J	49 J	0 U	120 J	43 J	39 J	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	390 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-157	MW-157	MW-172	MW-172	MW-172	MW-172	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-178	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
			Field Sample ID	D0324201	M156RA7X	M156RA8	M156RA9	M156RB1	M157C3X	M157C4X	M172B9X	M172C1X	M172D9	M172E1	M178B2X	M178B3X	M178B3X	M178B4X	M178B5X	M178B6X	M178B7	M178B8	M178B9	M178C1X	M213A2X	M213A3X	M213A4X	M213B3X	M213B6X	M213D7X	M213B9X
			Sample Date	03/24/2020	03/24/2020	05/03/2021	10/22/2021	02/14/2022	10/16/2018	12/06/2018	06/20/2012	09/07/2012	05/26/2021	09/24/2021	06/05/2012	07/02/2013	09/17/2014	12/08/2015	02/11/2016	03/03/2017	03/13/2018	03/06/2019	06/26/2020	01/29/2013	05/09/2013	07/10/2013	09/01/2016	12/07/2016	01/16/2017	04/24/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	17 U	18 U	3.2 U	3 U	3.1 U	3 U	3 UJ	0.6 UJ	0.5 U	3 U	3.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.1 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dinitrophenol	ug/L	N	40	80 U	82 U	15 U	14 U	14 UJ	15 U	14 UJ	13 UJ	10 U	14 U	16 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	14 U	15 U	-	-	-	10 U	10 UJ	10 UJ	10 U
2,4-Dinitrotoluene	ug/L	N	10	6 U	6 U	1.1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	2 U	2 U	0.43 U	0.41 U	0.41 UJ	0.4 U	0.4 UJ	0.5 UJ	0.4 U	0.41 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	-	-	-	0.4 U	0.4 UJ	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.6 U	0.6 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.2 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	11 U	12 U	1.1 U	1 U	1 UJ	2 U	2 UJ	0.6 UJ	0.5 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2.1 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	17 U	18 U	1.1 U	1 U	1 U	3 U	3 UJ	0.6 UJ	0.5 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.1 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	17 U	18 U	4.3 U	4.1 U	4.1 UJ	3 U	3 UJ	3 UJ	2 U	4.1 U	4.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3.1 U	-	-	-	2 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	17 U	18 U	2.1 U	2 U	2.1 UJ	3 U	3 UJ	0.6 UJ	0.5 U	2 U	2.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.1 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	46 U	47 U	8.6 U	8.1 U	8.3 U	8 U	8 UJ	6 UJ	5 U	8.1 U	9 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8.3 U	-	-	-	5 U	5 UJ	5 UJ	5 U
4-Bromophenylphenylether	ug/L	N	NA	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	23 U	23 U	4.3 U	4.1 U	4.1 UJ	4 U	4 UJ	0.6 UJ	0.5 U	4.1 U	4.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	4 U	4.2 U	-	-	-	2 U	2 UJ	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	5 U	5 U	0.97 U	0.91 U	0.93 UJ	1 U	0.9 UJ	0.6 UJ	0.5 U	0.91 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.94 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	57 U	58 U	11 U	10 U	10 U	11 U	10 UJ	13 UJ	10 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	-	-	-	10 U	10 UJ	10 UJ	10 U
Acenaphthene	ug/L	N	400	8	6	6.3	6.1	1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 J	0.4 J	0.2 J	0.1 J
Acenaphthylene	ug/L	N	NA	0.6 U	0.6 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	23 U	23 U	1.1 U	1 U	1 UJ	4 U	4 UJ	0.6 UJ	0.5 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4.2 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
Anthracene	ug/L	N	2000	4	3	1.2	0.91	0.27 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	11 U	12 U	1.1 U	1 U	1 UJ	2 U	2 UJ	3 UJ	2 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	-	-	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	17 U	18 U	1.1 U	1 U	1 UJ	3 U	3 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3.1 U	-	-	-	1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**2J**	**2J**	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.6 U	**2J**	0.12 U	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.6 U	**2J**	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	1 J	1 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.6 U	**1 J**	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	29 U	29 U	2.1 U	2 U	2.1 UJ	5 U	5 UJ	3 UJ	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5.2 U	-	-	-	2 U	2 UJ	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	11 U	12 U	2.1 U	2 U	2.1 UJ	2 U	2 UJ	3 UJ	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	-	-	2 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	29 U	29 U	3.2 U	4.3 J	3.1 UJ	5 U	5 UJ	6 UJ	5 U	3 U	3.4 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5.2 U	-	-	-	5 U	5 UJ	5 U	5 U
Carbazole	ug/L	N	NA	3 U	3 U	0.61 J	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
Chrysene	ug/L	N	5	1 J	2 J	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	11 U	12 U	2.1 U	2 U	2.1 UJ	2 U	2 UJ	3 UJ	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	-	-	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	29 U	29 U	5.4 U	5.1 U	5.2 UJ	5 U	5 UJ	3 UJ	2 U	5.1 U	5.7 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5.2 U	-	-	-	2 U	2 UJ	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.6 U	0.6 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	5 J	5 J	4.5	4.1	0.62 J	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	11 U	12 U	2.1 U	2 U	2.1 UJ	2 U	2 UJ	3 UJ	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	-	-	2 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	11 U	12 U	2.1 U	2 U	2.1 UJ	2 U	2 UJ	3 UJ	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	-	-	2 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	17 U	18 U	0.54 U	0.51 U	0.52 UJ	3 U	3 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.1 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	4	4	0.78	0.98	0.22 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.6 U	2 J	0.66	0.12 U	0.19 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 J	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.6 U	0.6 U	0.12 U	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	29 U	29 U	5.4 U	5.1 U	5.2 UJ	5 U	5 UJ	6 UJ	5 U	5.1 U	5.7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	-	-	-	5 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	6 U	6 U	0.54 U	0.51 U	0.52 UJ	1 U	1 UJ	1 UJ	1 U	0.51 U	0.57 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**1J**	**1J**	0.12 U	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	4 U	4 U	0.54 U	0.51 U	0.52 UJ	0.7 U	0.7 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.73 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	4 U	4 U	0.54 U	0.51 U	0.52 UJ	0.7 U	0.7 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.73 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.6 U	0.6 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	3 U	3 U	0.54 U	0.51 U	0.52 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	9 U	9 U	1.1 U	1 U	1 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	6 U	6 U	1.1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	1 U	1 UJ	1 UJ	1 U
Phenanthrene	ug/L	N	NA	3 J	2 J	0.26 J	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Phenol	ug/L	N	2000	3 U	3 U	0.54 U	0.51 U	0.52 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.51 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	-	-	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	4	5	0.5 J	0.64	0.16 J	0.1 U	0.1 UJ	0.6 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-	0.1 U	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	36 J	120 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 J	48 J	52 J	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R
			Field Sample ID	M213C1X	M213C2X	M213C3X	M213C5X	M213C7X	M213C8X	M213RD4X	D0216211X	M213D5X	M213D6	M213D8	D0423123	M214A1X	M214A2X	M214A3X	M214A5X	M214A6X	M214A7X	M214A8X	M214A9X	M214RB7X	M214RB9X	M214RC1X	D0420178	M214RC2X	M214RC3X	M214RC4
			Sample Date	07/11/2017	10/19/2017	01/10/2018	05/10/2018	08/29/2018	11/06/2018	08/18/2020	02/16/2021	02/16/2021	08/25/2021	02/09/2022	04/23/2012	04/23/2012	06/21/2012	11/14/2012	05/10/2013	07/03/2013	10/17/2013	12/18/2013	03/31/2014	08/29/2016	12/05/2016	01/17/2017	04/20/2017	04/20/2017	07/07/2017	10/19/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	0.5 U	0.5 U	0.5 U	3	-	87	-	5	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	14 U	14 U	14 U	14 U	14 U	14 U	15 U	14 U	10 U	9 U	9 U	10 U	-	100 U	-	11 U	-	10 U	10 UJ	10 U	10 U	10 U	10 U	10 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	0.9 U	0.9 U	1 U	-	10 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U	0.4 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	-	4 U	-	0.4 U	-	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.3 J	0.8 J	0.5 J	4	-	5 J	-	5	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	17	-	1	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	3 U	3 U	3 U	3 U	4.1 U	4 U	4.2 U	4.1 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2 U	2 U	2.1 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	8 U	8 U	8 U	8.1 U	8.1 U	8 U	8.3 U	8.1 U	5 U	5 U	5 U	5 U	-	50 U	-	5 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.1 U	4 U	4.2 U	4.1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	**140**	-	4	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.91 U	0.91 U	0.9 U	0.94 U	0.91 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9 U	9 U	10 U	-	100 U	-	11 U	-	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.5 J	0.1 U	0.3 J	0.1 J	0.1 U	0.32 J	0.18 J	0.23 J	0.10 U	0.1 U	1	1	2	1	-	1 J	-	0.2 J	-	1	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.2 J	0.09 U	0.1 U	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.1 U	1 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	4	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.09 U	0.1 J	0.3 J	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1.0 U	1 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1.0 U	1 U	1 U	0.9 U	0.9 U	1 U	-	10 U	-	2 J	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	**0.3J**	**0.2J**	0.09 U	**1**	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.11 U	**0.6**	**0.3J**	**0.3J**	**3**	-	1 U	-	**0.2J**	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.2J	0.1J	0.1J	**1**	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.6	0.2 J	0.2 J	3	-	1 U	-	0.2 J	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.09 U	0.09 U	0.1 U	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	5 U	5 U	5 U	5.1 UJ	2 U	2 U	2.1 U	2 U	**41**	**24**	**18**	**180**	-	**63**	-	**15**	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	3 U	3 U	3.1 U	3 U	5 U	5 U	5 U	5 U	-	50 U	-	5 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.5 J	0.3 J	0.3 J	2	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.1 U	5 U	5.2 U	5.1 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.09 U	0.09 U	**0.8**	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	-	20 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 J	0.1 J	0.1 J	0.3 J	-	1 U	-	0.1 J	-	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.12 U	0.7	0.8	0.7	0.9	-	1 J	-	0.2 J	-	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.09 U	0.09 U	0.1 U	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5 U	5.2 U	5.1 U	5 U	5 U	5 U	5 U	-	50 U	-	5 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.5 U	0.52 U	0.51 U	1 U	0.9 U	0.9 U	1 U	-	10 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.09 U	0.09 U	**0.6**	-	1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.71 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.71 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 J	0.23 J	0.10 U	0.1 U	0.1 U	0.09 U	1	1 J	50 U	50 U	6	7	3 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	0.9 U	0.9 U	1 U	-	10 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.09 U	0.09 U	0.6	-	1 J	-	0.7	-	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	-	120	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.9	0.6	0.5	3	-	2 J	-	0.3 J	-	0.1 U	0.2 J	0.1 J	0.1 U	0.1 J	0.1 U	0.1 J
Total TIC SVOCS	ug/L	N	NA	15 J	17 J	-	9 J	19 J	27 J	-	-	-	-	-	-	-	-	660 J	-	740 J	-	300 J	-	22 J	22 J	93 J	-	-	0 U	5 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-227R	MW-227R	MW-235	MW-235	MW-235	MW-235	MW-235
			Field Sample ID	M214RC5X	M214RC6X	M214RC7X	M214RC8X	M214RC9X	M214RD1X	M214RD2X	M214RD3X	M214RD4X	M214RD5	M214RD6	M215A1X	D0620123	M215A2	M215A3X	M215A5X	M215A6X	M215A7X	M215A8X	M215A9X	M227RA5	M227RA6	M235A9X	M235B1X	M235B2X	M235B3X	M235B4X
			Sample Date	01/11/2018	05/23/2018	08/27/2018	11/13/2018	02/07/2019	05/08/2019	08/02/2019	09/03/2020	02/05/2021	08/25/2021	02/09/2022	04/23/2012	06/20/2012	06/20/2012	11/14/2012	05/13/2013	07/02/2013	10/15/2013	12/16/2013	03/31/2014	05/25/2021	10/28/2021	06/27/2012	09/05/2012	05/10/2013	10/02/2013	08/12/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 UJ	3.2 U	3.2 U	14	5 UJ	11 J	34	-	250 U	-	22	-	3.3 U	3.1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	14 U	14 U	14 U	15 U	14 U	14 U	14 U	15 UJ	15 U	15 U	110U	95 UJ	10 UJ	110 U	-	5000 U	-	10 U	-	15 U	14 U	11 U	11 U	11 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1.1 U	1.1 U	11U	10 UJ	1 UJ	11 U	-	500 U	-	1 U	-	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.42 U	0.42 U	4U	4 UJ	0.4 UJ	4 U	-	200 U	-	0.4 U	-	0.43 U	0.41 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 UJ	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.6 J	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	3.1J	3 J	2 J	13	-	50 U	-	0.9	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1.1 U	1.1 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	1.1 U	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1.1 UJ	1.1 U	1.1 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	1.1 U	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4.2 U	4.2 U	4.2 U	21U	19 UJ	2 UJ	22 U	-	1000 U	-	2 U	-	4.3 U	4.1 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2.1 U	2.1 U	2.1 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	2.2 U	2 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8 U	8 U	8 U	8 U	8 U	8.1 UJ	8.5 UJ	8.5 U	8.4 U	53U	48 UJ	5 UJ	55 U	-	2500 U	-	5 U	-	8.7 U	8.2 U	6 U	5 U	6 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.2 U	4.2 U	4.2 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	4.3 U	4.1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 U	5U	8 J	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.53 U	0.53 U	12	5 UJ	0.5 UJ	94	-	860	-	10	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.91 U	0.96 U	0.95 U	0.95 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.98 U	0.92 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 UJ	11 U	11 U	110U	95 UJ	10 UJ	110 U	-	5000 U	-	10 U	-	11 U	10 U	11 U	11 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 J	0.14 J	0.11 U	9.1	7 J	8 J	48	-	50 U	-	12	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	1U	1 J	1 J	1 U	-	50 U	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	1.1 U	1.1 U	1.1 U	5U	5 UJ	1 J	6 U	-	250 U	-	3	-	1.1 U	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	2.3J	2 J	2 J	20	-	50 U	-	4	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	1.1 U	1.1 U	1.1 U	21U	19 UJ	2 UJ	22 U	-	1000 U	-	2 U	-	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1.1 U	1.1 U	1.1 U	11U	10 UJ	1 UJ	11 U	-	500 U	-	1 U	-	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1J	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	2J	**2J**	**2J**	**18**	-	50 U	-	**3**	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.12 U	0.12 U	1J	**2J**	**0.7J**	**8**	-	50 U	-	**1**	-	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	1J	1 UJ	**0.8J**	**9**	-	50 U	-	**1**	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	1U	1 UJ	0.4 J	6	-	50 U	-	0.8	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	1U	1 UJ	0.3 J	**4J**	-	50 U	-	0.5 J	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 UJ	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**4J**	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.1 U	2.1 U	2.1 U	**1480**	**1300J**	**1500J**	**13000**	-	**12000**	-	**1900**	-	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.1 U	21U	19 UJ	14 J	85	-	1000 U	-	16	-	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.2 U	3.2 U	3.2 U	53U	48 UJ	21 J	55 U	-	2500 U	-	5 U	-	3.3 U	3.1 U	6 U	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	2.4J	2 J	2 J	**17**	-	50 U	-	3	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.1 U	21U	19 UJ	3 J	22 U	-	1000 U	-	4 J	-	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.3 U	5.3 U	21U	19 UJ	2 UJ	48 J	-	1000 U	-	2 U	-	5.4 U	5.1 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	1U	1 UJ	0.1J	**2J**	-	50 U	-	0.2J	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 U	5J	5 UJ	4 J	28	-	250 U	-	7	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	4 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	21U	19 UJ	2 UJ	22 U	-	1000 U	-	2 U	-	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	21U	19 UJ	2 UJ	22 U	-	1000 U	-	2 U	-	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.2 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	5.6	4 J	5 J	49	-	50 U	-	10	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	0.13 U	7.1	6 J	6 J	51	-	50 U	-	8	-	0.13 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	1U	1 UJ	0.1 UJ	1 U	-	50 U	-	0.1 U	-	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.3 U	5.3 U	53U	48 UJ	5 UJ	55 U	-	2500 U	-	5 U	-	5.4 U	5.1 U	6 U	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.53 U	0.53 U	0.53 U	11U	10 UJ	1 UJ	11 U	-	500 U	-	1 U	-	0.54 U	0.51 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	1U	1 UJ	**0.3J**	**3J**	-	50 U	-	**0.4J**	-	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 UJ	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 U	0.53 U	0.53 U	0.53 U	5U	7 J	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.8	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	1J	3 J	2 J	1 J	1 U	1 U	1 U	1 U	1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.53 U	0.53 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.1 UJ	1.1 U	1.1 U	5U	5 UJ	0.5 UJ	6 U	-	250 U	-	0.5 U	-	1.1 U	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 UJ	1.1 U	1.1 U	11U	10 UJ	1 UJ	11 U	-	500 U	-	1 U	-	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	10.8	9 J	9 J	83	-	50 U	-	16	-	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.53 U	0.53 U	8.8J	5 UJ	24 J	16	-	730	-	13	-	0.54 U	0.51 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.2 J	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	5.9	5 J	6 J	53	-	50 U	-	10	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	5 J	-	39 J	51 J	8 J	18 J	-	-	-	-	-	-	-	6200 J	-	15000 J	-	2200 J	-	-	-	-	-	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236
			Field Sample ID	M235B5X	M235B6X	M235B7X	M235B8X	M235B9X	M235C1X	M235C2X	M235C3X	M235C4X	M235C5X	M235C6X	D0828201X	M235C8X	M235C9X	M236B2X	M236B3X	M236B4X	M236B6X	M236B7X	M236C1X	M236C4X	M236C6X	M236D1X	M236D2X	D0831171	M236D3X
			Sample Date	11/05/2014	07/15/2015	02/10/2016	08/19/2016	02/28/2017	08/31/2017	02/15/2018	08/28/2018	01/29/2019	08/20/2019	01/27/2020	08/28/2020	08/28/2020	01/28/2021	05/03/2012	09/05/2012	05/10/2013	10/04/2013	11/06/2013	11/05/2014	07/10/2015	01/05/2016	09/07/2016	02/28/2017	08/31/2017	08/31/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 UJ	3 U	3 U	3 U	3.5 UJ	3.2 UJ	3.1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	14 U	14 U	14 U	15 U	16 U	15 U	15 U	11 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 UJ	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.46 UJ	0.43 UJ	0.42 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.3 J	0.1 J	26	0.2 J	0.2 J	7	0.9	0.4 J	0.6	3	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2 U	2 U	2 U	2 U	2.3 UJ	2.1 UJ	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3.5 UJ	3.2 UJ	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	3 U	3 U	3 U	3 U	3.5 U	3.2 U	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3.5 UJ	3.2 UJ	2.1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	8 U	8 U	8 U	9 U	9.2 UJ	8.5 UJ	8.4 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U	4 U	4 U	4 U	4.6 UJ	4.3 UJ	4.2 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.9 U	0.9 U	0.9 U	1 U	1 UJ	0.96 UJ	0.94 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	11 U	12 U	11 U	10 U	11 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	1	0.1 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.8	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	4 U	4 U	4 U	4 U	4.6 UJ	4.3 UJ	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 UJ	2.1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	3 U	3 U	3 U	3 U	3.5 UJ	3.2 UJ	1 U	1 U	1 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	5 U	5 U	5 U	5 U	5.8 UJ	5.3 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 UJ	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.8 U	5.3 U	3.1 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 UJ	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	5 U	5 U	5 U	5 U	5.8 UJ	5.3 UJ	5.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 UJ	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3.5 UJ	3.2 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.13 U	0.1 U	0.1 U	0.7	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.53 U	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.8 UJ	5.3 UJ	5.2 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.81 UJ	0.75 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.81 UJ	0.75 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.4 J	0.2 J	14	0.2 J	1 U	1	0.3 J	0.4 J	0.7	1	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 UJ	0.53 UJ	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.8 UJ	1.7 UJ	1 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1.2 UJ	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.11 U	0.1 U	0.1 U	0.6	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.53 U	0.52 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	100 J	-	-	-	-	-	-	-	-	-	290 J	-	-	-	-	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-246	MW-246	MW-246	MW-246
			Field Sample ID	M236D4X	M236D5X	M236D6X	M236D8X	M236D9X	M236E1X	M236E2X	M245B2X	M245B3X	M245B4X	M245B8X	M245C1X	M245C6X	M245C8X	M245C9X	M245D1X	M245D2X	M245D3X	D0722191	M245D4X	M245D5X	M245D6X	M245D7X	M246B3X	M246B4X	M246B6X	M246B7X
			Sample Date	02/15/2018	08/30/2018	01/29/2019	09/26/2019	01/24/2020	07/24/2020	01/22/2021	05/03/2012	08/31/2012	10/04/2013	12/01/2015	02/19/2016	09/07/2016	01/27/2017	08/03/2017	02/07/2018	07/25/2018	01/30/2019	07/22/2019	07/22/2019	01/30/2020	08/17/2020	02/05/2021	06/06/2012	08/31/2012	11/06/2013	01/08/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 UJ	3 U	3 U	3 U	3.1 U	3.2 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3.2 U	3.1 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	10 U	14 U	14 U	14 U	16 U	14 U	15 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 U	10 U	14 UJ	16 U	15 UJ	14 UJ	14 U	15 U	15 U	10 U	11 U	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.42 U	0.42 U	0.4 U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	3 J	0.1 J	0.1 U	0.14 J	0.17 J	0.7	0.2 J	0.4 J	3	0.9	1	0.6	0.3 J	0.4 J	0.2 J	0.1 J	0.1 UJ	0.1 UJ	0.4 J	0.46 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2 U	2.1 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.2 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3.2 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3.1 U	3.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 UJ	3 UJ	3 U	3.2 U	4.2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.2 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3.2 U	2.1 U	0.5 U	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8 U	8 U	9 U	8.2 U	8.6 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	8 U	9 U	9 UJ	8 UJ	8 U	8.4 U	8.4 U	5 U	5 U	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 U	4 U	4.1 U	4.3 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 UJ	4 UJ	4 U	4.2 U	4.2 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.92 U	0.97 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	1 UJ	0.9 UJ	0.9 U	0.95 U	0.94 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 UJ	10 UJ	10 U	11 U	10 U	10 U	11 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.2 J	0.1 U	0.7	0.1 U	0.3 J	0.1 U	0.26 J	3	1	3	5	4	5	4	2	2	2	0.9	0.4 J	0.5 J	2	3.8	0.21 J	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 U	4 U	4.1 U	4.3 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 UJ	4 UJ	4 U	4.2 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.6	0.3 J	0.5 J	0.5 J	0.4 J	0.4 J	0.7	0.4 J	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.3 J	0.38 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	1 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 U	3 U	3.1 U	3.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 UJ	3 UJ	3 U	3.2 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.3J**	**0.3J**	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	**0.2J**	**0.11J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	5 U	5 U	6 U	5.1 U	5.4 U	2 U	2 U	2 U	2 U	2 U	3 J	2 U	2 U	**4J**	5 U	6 U	5 UJ	5 UJ	5 U	5.3 U	2.1 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	6 U	5.2 J	5.4 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 UJ	5 UJ	5 U	5.3 U	3.1 U	5 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	1	0.8 J	2	0.7 J	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.2 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	6 U	5.1 U	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	5 UJ	5 UJ	5 U	5.3 U	5.2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.7 J	0.5 U	0.6 J	2	2	2	2	0.7 J	0.6 J	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.7 J	1.2 J	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.2 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3.2 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.7	0.6	0.5 J	0.5 J	0.3 J	1	0.7	0.8	0.3 J	0.3 J	0.1 J	0.1 UJ	0.1 UJ	0.8	0.69	0.17 J	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.2 J	0.1 U	0.5 J	0.1 U	0.1 J	0.1 U	0.26 J	1	1	1	3	2	3	3	2	0.1 U	1	0.6	0.2 J	0.2 J	1	2.4	0.14 J	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 UJ	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	6 U	5.1 U	5.4 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 UJ	6 U	5 UJ	5 UJ	5 U	5.3 U	5.2 U	5 U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1.1 U	0.52 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.72 U	0.75 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.7 UJ	0.7 UJ	0.7 U	0.74 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.72 U	0.75 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.7 UJ	0.7 UJ	0.7 U	0.74 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.3 J	0.1 U	0.1 U	0.2 J	0.1 U	0.15 J	0.11 U	3	0.7	2	12	4	8	2	0.9	2	0.4 J	0.8	0.1 UJ	0.1 UJ	1	1.6	0.13 J	0.1 U	0.1 U	1 U	1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U	1.7 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	2 U	1.7 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.11 J	1	0.4 J	0.7	2	2	1	1	1	0.9	0.6	0.1 U	0.1 UJ	0.1 UJ	0.8	1.8	0.19 J	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.54 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.7	0.9	0.4 J	0.4 J	0.3 J	1	0.5	0.9	0.3 J	0.3 J	0.2 J	0.1 UJ	0.1 UJ	1	0.6	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	1000 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 J	-	-	-	-	-	-	-	25 J	57 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-246	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-247	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R
			Field Sample ID	M246C2X	M246RC6X	D0303178B	M246RC8X	M246RC9X	D1207178A	M246R1DX	M246RD3X	D0625191	M246RD5X	M246RD6X	M246RD7X	M246RE1	M246RE2	D122120211A	M246RE3	D031820221A	M246RE4	M247RA4X	M248RA5X	M248RA6X	M248RA7X	M248RA8X	M248RA9X	M248RB1X	M248RB2X
			Sample Date	12/01/2015	11/29/2016	03/03/2017	03/03/2017	06/07/2017	12/07/2017	12/07/2017	06/06/2018	06/25/2019	06/25/2019	09/06/2019	12/13/2019	06/24/2021	09/27/2021	12/21/2021	12/21/2021	03/18/2022	03/18/2022	05/25/2012	09/07/2012	07/03/2013	09/30/2014	10/02/2015	02/11/2016	03/03/2017	03/13/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 J	0.6 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3 U	3.3 U	3.1 U	3 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 UJ	10 U	10 U	11 U	11 U	10 U	15 U	14 U	14 U	14 U	14 U	14 U	14 U	14 U	16 U	14 U	14 U	10 U	11 U	11 U	11 UJ	10 U	10 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U	0.4 U	0.44 U	0.41 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 UJ	0.4 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	4.1 U	4.1 U	4 U	4.4 U	4.1 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 UJ	5 U	5 U	5 U	6 U	5 U	9 U	8 U	8 U	8 U	8 U	8.2 U	8.1 U	8 U	8.9 U	8.2 U	8.1 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4.1 U	4.1 U	4 U	4.4 U	4.1 U	4 U	0.5 U	0.6 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.92 U	0.91 U	0.9 U	1 U	0.92 U	0.91 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 UJ	10 U	10 U	11 U	11 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.3 J	0.3 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	4 U	4 U	4 U	4 U	4 U	1 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	3.1 U	3 U	4 J	4.1 J	3.1 U	3 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5 U	5.5 U	5.1 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	3 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.12 U	0.12 U	0.12 J	0.13 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5 U	5.5 U	5.1 U	5.1 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 J	2	2	2	0.1 J	0.2 J	1	0.8	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.5 J	0.7	0.1 U	0.1 U	0.1 U	0.4 J	0.9	0.7
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.8 UJ	0.6 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.5 U	0.55 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	80 J	64 J	52 J	30 J	31 J	-	-	630 J	57 J	190 J	69 J	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-249	MW-250	MW-250	MW-250	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R
			Field Sample ID	M248RB3X	M248RB4X	M248RB6X	M248RC1X	M248RC3X	M249B1X	M250C7X	M250C8X	M250D2X	M252B3X	M252B4X	M252B6X	M252B7X	M252B8X	M252B9X	M252C1X	M252RC6X	D0711178B	M252RC7X	M252RC8X	D0110188	M252RC9X	D0523188X	M252RD1X	D0828188	M252RD2X
			Sample Date	10/15/2018	12/07/2018	03/15/2019	10/15/2020	03/31/2021	05/25/2012	11/22/2017	01/26/2018	02/13/2019	04/23/2012	11/12/2012	05/09/2013	07/09/2013	10/15/2013	12/09/2013	07/10/2014	01/18/2017	07/11/2017	07/11/2017	10/18/2017	01/10/2018	01/10/2018	05/23/2018	05/23/2018	08/28/2018	08/28/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3 U	3.2 U	0.5 U	10	17 J	3 UJ	0.5 U	0.5 U	-	0.6 J	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	15 U	14 U	15 U	10 U	10 U	10 UJ	14 UJ	10 U	10 U	-	12 U	-	10 U	-	10 U	10 U	10 U	11 U	10 U	10 U	15 U	14 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.5 U	-	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.3 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.9	0.8	0.1 U	0.1 U	0.8	-	0.2 J	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	1.1 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3 U	1.1 U	0.5 U	0.5 U	0.5 UJ	3 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	4.2 U	2 U	2 U	2 U	3 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3 U	2.1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	8 U	8.5 U	5 U	5 U	5 UJ	8 UJ	5 U	5 U	-	6 U	-	5 U	-	5 U	5 U	5 U	6 U	5 U	5 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4 U	4.2 U	0.5 U	2 U	2 U	4 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	8	4	4	0.5 U	0.5 U	1 J	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.9 U	0.9 U	0.95 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	-	12 U	-	10 U	-	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.2 J	0.2 J	0.1 U	0.17 J	0.21 UJ	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	1.1 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 U	1.1 U	1 U	1 UJ	1 U	3 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 UJ	1 U	1 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	5 U	2.1 U	2 U	2 U	2 U	5 U	2 U	**20**	-	**4J**	-	2 J	-	2 U	2 U	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	-	6 U	-	5 U	-	5 U	5 U	5 U	6 UJ	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5 U	5.3 U	2 U	2 U	2 U	5 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	4 J	7 J	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5.3 U	5 U	5 UJ	5 U	5 U	5 U	5 U	-	6 U	-	5 U	-	5 U	5 UJ	5 UJ	6 UJ	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	0.53 U	1 U	1 UJ	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.53 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.53 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.4 UJ	0.3 J	0.7	0.1 U	0.35 J	0.1 U	52	26	0.1 U	0.1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1.6 U	1.1 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	-	0.1 J	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	6 J	0.5 UJ	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	38 J	44 J	24 J	-	-	-	-	780 J	-	-	600 J	-	400 J	-	920 J	-	18 J	1500 J	360 J	4500 J	-	-	12 J	3400 J	470 J	400 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-254	MW-254
			Field Sample ID	M252RD3X	M252RD7X	M252RD8X	M252RD9	M252RC1	M253B1X	M253B2X	M253B3X	M253B4X	M253B5X	M253B6X	D0912168	M253B7X1	M253B8X	M253B9X	M253C1X	M253C4X	M253C6X	M253C7X	M253D2X	M253D4X	M253D7X	M253D9	M253E1	M253F2	M254B6X	M254B7X
			Sample Date	11/13/2018	09/02/2020	02/05/2021	08/25/2021	02/09/2022	06/20/2012	05/31/2013	09/24/2014	07/10/2015	02/11/2016	08/18/2016	09/12/2016	09/12/2016	12/27/2016	03/09/2017	09/13/2017	04/27/2018	10/15/2018	04/25/2019	09/19/2019	04/27/2020	09/15/2020	05/27/2021	09/21/2021	12/20/2021	09/20/2016	12/15/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3.0 U	3 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3.3 U	3.3 U	3.2 U	3.1 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	14 U	14 U	10 U	10 U	11 UJ	11 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	15 U	14 U	14 UJ	15 U	15 U	15 U	15 U	15 U	10 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.43 U	0.44 U	0.42 U	0.42 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1	0.6
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 UJ	2 U	2.2 U	1.1 U	1.1 U	1 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3.3 U	1.1 U	1.1 U	1 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	4 U	4.0 U	4 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 UJ	3 U	3.3 U	4.4 U	4.2 U	4.2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3 U	2 U	2.0 U	2 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3.3 U	2.2 U	2.1 U	2.1 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8.1 U	8 U	8.0 U	8 U	5 U	5 U	6 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	9 U	8 U	8 UJ	9 U	8.7 U	8.7 U	8.4 U	8.3 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 UJ	4.1 U	4 U	4.0 U	4 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 UJ	4 U	4.3 U	4.4 U	4.2 U	4.2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	1	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.91 U	0.9 U	0.90 U	0.9 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 UJ	1 U	0.98 U	0.98 U	0.95 U	0.94 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	11 U	11 U	11 U	11 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.6	0.6	0.4 J	0.1 U	0.5 J	0.1 UJ	0.2 J	0.1 J	0.3 J	0.2 J	0.1 U	0.3 J	0.1 U	0.3 J	0.1 UJ	0.5	0.11 U	0.12 J	0.11 U	0.1 U	2	1
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4.1 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 UJ	4 U	4.3 U	1.1 U	1.1 U	1 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.3 J	0.2 J	0.3 J	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	0.5 J	0.11 U	0.11 U	0.11 U	0.1 U	1	0.7
Atrazine	ug/L	N	3	2 U	2 U	1 U	1.0 U	1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.2 U	1.1 U	1.1 U	1 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	1 U	1.0 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 UJ	3 U	3.3 U	1.1 U	1.1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.4J**	0.11 U	0.11 U	0.11 U	0.1 U	**1**	**0.6**
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.5J**	0.11 U	0.12 U	0.12 U	0.11 U	**0.8**	**0.5J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	**0.8**	**0.4J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.3 J	0.2 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.2 J	0.1 J
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5.1 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 UJ	5 U	5.4 U	2.2 U	2.1 U	2.1 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5.1 U	3 U	3.0 U	3 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5.4 U	3.3 U	24	3.1 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.4 J	0.11 U	0.11 U	0.11 U	0.1 U	2	1
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5.1 U	5 U	5.0 U	5 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 UJ	5 U	5.4 U	5.5 U	5.3 U	5.2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1J	0.1J
Dibenzofuran	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.7 J	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3.3 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.3 J	0.3 J	0.3 J	0.2 J	0.2 J	0.4 J	0.3 J	0.3 J	0.3 J	0.2 J	0.2 J	0.3 J	0.4 J	0.2 J	0.3 J	1	0.11 U	0.14 J	0.11 U	0.1 U	2	0.9
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.3 J	0.4 J	0.4 J	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J	0.1 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.11 U	0.13 U	0.13 U	0.13 U	2	2
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.12 U	0.12 U	0.11 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.1 U	5 U	5.0 U	5 U	5 U	5 U	6 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 U	5.4 U	5.5 U	5.3 U	5.2 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	0.5 U	0.50 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1.1 U	0.55 U	0.53 U	0.52 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.4J**	0.11 U	0.12 U	0.12 U	0.11 U	0.2J	0.1J
Isophorone	ug/L	N	40	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.71 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 UJ	0.7 U	0.76 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.71 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 UJ	0.7 U	0.76 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.2 J	0.1 U	0.1 U	0.10 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.21 J	0.11 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	1.6 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	2 U	1.7 U	1.1 U	1.1 U	1 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.7	0.7	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.3 J	0.11 U	0.12 U	0.12 U	0.11 U	5	3
Phenol	ug/L	N	2000	0.5 U	0.51 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.54 U	0.55 U	0.53 U	0.52 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 J	0.3 J	0.1 U	0.2 J	0.3 J	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	1	0.11 U	0.25 J	0.11 U	0.1 U	2	1
Total TIC SVOCS	ug/L	N	NA	200 J	-	-	-	-	-	-	-	-	-	-	9 J	19 J	21 J	-	-	-	50 J	-	-	-	-	0 U	-	-	460 J	330 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-255	MW-255	MW-255	MW-255	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256
			Field Sample ID	M254C3X	M254C4X	M254C5X	M254C6X	M254C8X	M254C9	M254D1	D1124218	M254D2	M254D3	M255B7X	M255B8X	M255C3X	M255C4	M256B1X	M256B2X	M256B3	D0627141	M256B5X	M256B8X	D0219161	M256C2X	M256C5X	M256C6X	M256C7X	M256C9X	M256D3X
			Sample Date	03/31/2020	05/27/2020	08/06/2020	11/10/2020	02/17/2021	05/11/2021	08/06/2021	11/24/2021	11/24/2021	02/22/2022	09/19/2016	12/15/2016	05/13/2020	05/25/2021	05/02/2012	05/30/2013	08/15/2013	06/27/2014	06/27/2014	07/08/2015	02/19/2016	02/19/2016	10/04/2016	02/22/2017	08/29/2017	02/20/2018	08/21/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3.2 U	15 U	3.1 U	3.1 U	3.1 U	3.1 U	3 U	0.5 U	0.5 U	3 U	3 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	14 U	15 U	71 U	14 U	15 U	14 U	15 U	14 U	10 U	10 U	14 U	14 U	11 U	10 U	-	10 U	11 U	10 U	11 U	11 U	10 UJ	10 U	10 U	11 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1.1 U	5.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.41 U	0.43 U	2 U	0.41 U	0.42 U	0.41 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.5	0.52	0.11 U	0.51 U	0.1 U	0.45 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	1 J	0.2 J	0.4 J	2 J	0.1 U	0.78	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2.2 U	5.1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	2 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3.2 U	5.1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	3 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 UJ	3 U	3.2 U	20 U	4.1 U	4.2 U	4.1 U	4.2 UJ	4 U	2 U	2 U	3 U	4 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3.2 U	10 U	2.1 U	2.1 U	2 U	2.1 U	2 U	0.5 U	0.5 U	3 U	2 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	8 U	8.1 U	8.6 U	41 U	8.2 U	8.3 U	8.2 U	8.4 U	8 U	5 U	5 U	8 U	8 U	6 U	5 U	-	5 U	5 U	5 U	6 U	6 U	5.1 UJ	5 U	5 U	5 UJ	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4.1 U	4.3 U	20 U	4.1 U	4.2 U	4.1 U	4.2 U	4 U	2 U	2 U	4 U	4 U	0.6 U	0.5 U	-	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	3.7	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	0.9 U	0.91 U	0.97 U	4.6 U	0.93 U	0.94 U	0.92 U	0.94 U	0.9 U	0.5 U	0.5 U	0.9 U	0.9 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	11 U	51 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	-	10 U	11 U	10 U	11 U	11 U	10 UJ	10 UJ	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	1	0.9	1	0.94	1 J	0.8	0.69	0.95	1.1	0.73	0.1 U	0.1 U	0.1 U	0.1 U	3	3	-	5	4	4	6 J	4 J	4.7	3	4	4	4
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.11 U	0.51 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	4.1 U	4.3 U	5.1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	4 U	1 U	0.6 U	0.5 U	-	0.5 U	2 J	1	0.6 U	0.6 U	0.51 U	0.5 U	0.8 J	0.5 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.2 J	0.19 J	0.11 U	0.57 J	0.17 J	0.17 J	0.29 J	0.23 J	0.15 J	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.5	-	2 J	0.6 J	1	3 J	0.6 J	1.7	0.4 J	0.8	0.7	0.9
Atrazine	ug/L	N	3	2 U	2 U	2 U	2.2 U	5.1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	1 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3.2 U	5.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.11 U	**0.63J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	**2J**	0.1J	**1**	**3J**	0.1 U	**1.6**	0.1 U	0.1J	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.11 U	**0.61J**	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	**1J**	0.1 U	**0.7**	**3J**	0.1 U	**1.6**	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.11 U	**0.58J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	-	**1J**	0.1 U	**0.7**	**3J**	0.1 U	**1.4**	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.11 U	0.51 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.7 J	0.1 U	0.5 J	1 J	0.1 U	0.75	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.11 U	0.51 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	**0.6 J**	0.1 U	0.3 J	**1 J**	0.1 U	**0.54**	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.51 U	0.54 UJ	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	6 U	5 U	5.1 U	5.4 U	10 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**4J**	5 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	2 U	2.2 U	10 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	5.1 U	5.4 U	15 U	3.1 U	3.1 U	3.1 U	3.1 U	3 U	5 U	5 U	5 U	3 U	6 U	5 U	-	5 U	5 U	5 U	6 U	6 U	5.1 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.11 U	1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	2 J	0.2 J	1	3 J	0.1 U	1.9	0.1 U	0.1 J	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2.2 U	10 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	6 U	5 U	5.1 U	5.4 U	25 U	5.1 U	5.2 U	5.1 U	5.2 U	5 U	2 U	2 U	5 U	5 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.11 U	0.51 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.2J	0.1 U	0.1 U	**0.4J**	0.1 U	0.18J	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	1 J	-	2 J	0.9 J	2	2 J	1 J	1.6	0.9 J	1	0.9 J	1 J
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2.2 U	10 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2.2 U	10 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3.2 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.6	0.1 J	0.16 J	0.11 U	0.82 J	0.17 J	0.1 J	0.17 J	0.22 J	0.15 J	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.6	-	4 J	0.6 J	3	7 J	0.5 J	3.7	0.4 J	0.7	0.4 J	0.7
Fluorene	ug/L	N	300	1	0.9	1.1	0.93	1.2 J	0.87	0.8	1.1	1	0.72	0.1 U	0.1 U	0.1 U	0.12 U	3	4	-	6 J	3 J	5	9 J	4 J	6.2	3	4	4	4
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.11 U	0.56 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5.1 UJ	5.4 U	25 U	5.1 U	5.2 U	5.1 U	5.2 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	-	5 U	5 U	5 U	6 U	6 U	5.1 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1.1 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	1 U	1 U	1 U	0.5 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.11 U	0.56 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	**0.5J**	0.1 U	**0.3J**	**1J**	0.1 U	**0.63**	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.8 U	0.7 U	0.71 U	0.75 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.8 U	0.7 U	0.71 U	0.75 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	2.5	0.5 U	0.5 U	0.5 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.11 U	0.51 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1	1 U	0.1 U	1 J	0.1 U	3 J	0.1 U	2	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	2 U	1.6 U	1.7 U	5.1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	2 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1.1 U	5.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	2	1	0.81	0.92	2.6	0.61	0.86	1.4	1.3	0.85	0.1 U	0.1 U	0.1 U	0.11 U	3	4	-	10 J	3 J	8	17 J	4 J	9.4	3	5	4	5
Phenol	ug/L	N	2000	0.6 U	0.5 U	0.51 U	0.54 U	2.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.7	0.2 J	0.33 J	0.11 U	1.2 J	0.13 J	0.1 U	0.31 J	0.31 J	0.13 J	0.1 U	0.1 U	0.1 J	0.1 U	0.6	0.5	-	5 J	0.7 J	3	9 J	0.5 J	4.4	0.5 J	0.7	0.5 J	0.7
Total TIC SVOCS	ug/L	N	NA	320 J	250 J	-	-	-	-	-	-	-	-	0 U	20 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	M256D4	M256D5X	D0828191	M256D6X	M256D7X	M256D8X	M256D9X	M256E1	M256E2	M256E3	M256E4	M257B2X	M257B3X	M257B4X	M257B5	M257B7X	M257B8X	M257C1X	M257D1X	M257D4X	M257D7X	M257D8X	M257D9X	M257E2X	M257E6X	M257E7	M257E8X
			Sample Date	10/02/2018	02/14/2019	08/28/2019	08/28/2019	01/30/2020	08/20/2020	01/29/2021	05/24/2021	09/17/2021	01/10/2022	03/22/2022	05/07/2012	09/07/2012	05/30/2013	08/15/2013	10/04/2013	06/19/2014	11/06/2014	07/08/2015	02/19/2016	10/04/2016	02/22/2017	08/29/2017	02/20/2018	08/21/2018	10/02/2018	02/15/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 UJ	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	15 U	15 U	3 U	3.5 U	3.3 U	3.1 U	3.1 U	3.1 U	3.1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	71 U	72 U	14 U	16 UJ	15 U	14 U	14 U	15 U	14 U	100 U	11 U	10 U	-	11 U	10 U	10 U	11 U	11 U	10 UJ	10 U	10 U	11 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	5 U	5 U	1 U	1.2 U	1.1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	2 U	2 U	0.4 U	0.47 U	0.44 U	0.41 U	0.41 U	0.42 U	0.41 U	4 U	0.5 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	10 U	10 U	2 U	2.3 U	1.1 U	1 U	1 U	1 U	1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	15 U	15 U	3 U	3.5 U	1.1 U	1 U	1 UJ	1 U	1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	15 U	15 U	3 U	3.5 U	4.4 U	4.1 U	4.1 U	4.2 U	4.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	15 U	15 U	3 U	3.5 U	2.2 U	2.1 U	2.1 U	2.1 U	2.1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	40 U	41 U	8 U	9.3 U	8.7 U	8.2 U	8.3 U	8.3 U	8.2 U	50 U	6 U	5 U	-	6 U	5 U	5 U	5 U	5 U	5.1 UJ	5 U	5 U	5 UJ	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	20 U	21 U	4 U	4.7 U	4.4 U	4.1 U	4.1 U	4.2 U	4.1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	5 U	5 U	0.9 U	1 U	0.98 U	0.92 U	0.93 U	0.94 U	0.93 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	50 U	51 U	10 U	12 U	11 U	10 U	10 U	10 U	10 U	100 U	11 U	10 U	-	11 U	10 U	10 U	11 U	11 U	10 UJ	10 UJ	10 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	3	2	3	3	4	0.12 U	2.3	2.4	2.4	2.1	2	1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.22 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	20 U	21 U	4 U	4.7 U	1.1 U	1 U	1 U	1 U	1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.5 J	0.3 J	1 J	1 J	2	0.36 J	0.5 J	0.36 J	0.56	0.1 U	0.47 J	1 U	0.1 U	0.1 U	-	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	10 U	10 U	2 U	2.3 U	1.1 U	1 U	1 U	1 UJ	1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	15 U	15 U	3 U	3.5 U	1.1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	**1J**	**1J**	**3**	**0.54J**	**0.51J**	0.1 U	**0.35J**	0.1 U	0.1 U	**1J**	**0.2J**	0.1 U	-	**0.4J**	0.1 U	0.1 U	**0.5J**	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	**1J**	**1J**	**2**	**0.44J**	**0.59**	0.11 U	0.11 U	0.11 U	0.11 U	1 U	**0.2J**	0.1 U	-	**0.4J**	0.1 U	0.1 U	**0.5J**	0.1 U	0.1 U	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.5 U	0.5 U	**2**	**0.42J**	**0.56**	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.2J	0.1 U	-	**0.5J**	0.1 U	0.1 U	**0.6**	0.1 U	0.1 U	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.5 U	0.5 U	1	0.12 U	0.34 J	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	-	0.3 J	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.5 U	0.5 U	**0.6**	0.17 J	0.24 J	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	-	0.2 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	25 U	26 U	5 U	5.8 U	2.2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**4J**	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	10 U	10 U	2 U	2.3 U	2.2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	25 U	26 U	5 U	5.8 U	3.3 U	3.1 U	3.1 U	3.1 UJ	3.1 U	50 U	6 U	5 U	-	6 U	5 U	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	2 J	1 J	3	0.62	0.6	0.1 U	0.31 J	0.1 U	0.1 U	1 U	0.2 J	0.1 U	-	0.4 J	0.1 U	0.1 U	0.6	0.2 J	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	10 U	10 U	2 U	2.3 U	2.2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	25 U	26 U	5 U	5.8 U	5.5 U	5.1 U	5.2 UJ	5.2 U	5.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.5 U	0.5 U	0.3J	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	1 J	0.8 J	3 U	3 U	2 J	0.58 U	0.7 J	0.8 J	0.87 J	0.75 J	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	10 U	10 U	2 U	2.3 U	2.2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	10 U	10 U	2 U	2.3 U	2.2 U	2.1 U	2.1 U	2.1 U	2.1 U	20 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	15 U	15 U	3 U	3.5 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.5	0.3 J	2 J	2 J	4	1.2 UJ	0.81	0.29 J	0.56	0.18 J	0.45 J	1 J	0.1 J	0.1 U	-	0.6	0.1 U	0.1 U	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	4	3	5 J	3 J	6	0.49 J	3.1	3.4	3.4	3	2.9	1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.5 U	0.5 U	0.1 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	25 U	26 U	5 U	5.8 U	5.5 U	5.1 U	5.2 U	5.2 U	5.1 U	50 U	6 U	5 U	-	6 U	5 U	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	5 U	5 U	1 U	1.2 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	10 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	**0.7J**	0.5 U	**1**	0.12 U	**0.28J**	0.11 U	0.11 U	0.11 U	0.11 U	1 U	0.1 U	0.1 U	-	0.2J	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	4 U	4 U	0.7 U	0.81 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	4 U	4 U	0.7 U	0.81 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	1	0.1 U	0.5 U	0.5 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	1 U	0.1 J	0.3 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 U	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	2 U	1.9 U	1.1 U	1 U	1 U	1 U	1 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	5 U	5 U	1 U	1.2 U	1.1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	4	2	7 J	2 J	9	1.1	2.4	3	3.6	2.7	2.7	1 U	0.1 J	0.1 U	-	0.4 J	0.1 U	0.1 U	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	3 U	3 U	0.5 U	0.58 U	0.55 U	0.51 U	0.52 U	0.52 UJ	0.51 U	5 U	0.6 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.6	0.4 J	4	3	5	1.9	1.3	0.35 J	0.84	0.3 J	0.48 J	1 J	0.2 J	0.1 U	-	0.6	0.1 U	0.1 U	0.7	0.2 J	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	750 J	400 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83 J	34 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270
			Field Sample ID	M257E9X	D0131201X	M257F2X	M257F5X	M257F8X	M257F9	M257G1	D1020211B	M257G2	M257G3	M270B8X	M270C2X	M270D2X	M270D4X	D0920167	M270D5X	M270D7X	M270E1X	M270E3X	M270E4X	M270E5X	M270E7X	M270E9X	M270F2X	M270F6	M270F7
			Sample Date	08/28/2019	01/31/2020	01/31/2020	08/20/2020	01/27/2021	05/25/2021	09/17/2021	10/20/2021	10/20/2021	02/04/2022	12/20/2012	01/16/2014	10/22/2015	04/15/2016	09/20/2016	09/20/2016	04/13/2017	10/30/2017	01/16/2018	04/05/2018	02/28/2019	08/08/2019	02/06/2020	08/19/2020	08/19/2021	10/13/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	0.5 U	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	4 U	3.3 U	3.4 U	-
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	15 U	14 UJ	14 U	15 U	15 U	14 U	14 U	14 U	11 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	15 U	15 U	18 U	15 U	16 U	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	-
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.42 U	0.41 U	0.41 U	0.41 U	0.41 U	0.4 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.44 U	0.45 U	-
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	15	23	6 J	2 J	2	2	0.5	0.4 J	0.3 J	0.7	0.1 U	0.1 U	0.1 U	0.11 U	13 J	12 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2.1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	3 U	2.2 U	1.1 U	-
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3.1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	4 U	3.3 U	1.1 U	-
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3.1 U	4 U	4.2 U	4.1 U	4.1 U	4.1 U	4.1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	4 U	3.3 U	4.5 U	-
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3.1 U	2 U	2.1 U	2.1 U	2.1 U	2.1 U	2 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	4 U	3.3 U	2.2 U	-
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	9 U	8.3 U	8.1 U	8.4 U	8.3 U	8.2 U	8.2 U	8.2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	10 U	8.8 U	9 U	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4.1 U	4 U	4.2 U	4.1 U	4.1 U	4.1 U	4.1 U	0.5 U	0.6 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	5 U	4.4 U	4.5 U	-
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	1 U	0.93 U	0.91 U	0.94 U	0.93 U	0.92 U	0.93 U	0.92 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.99 U	1 U	-
4-Nitrophenol	ug/L	N	NA	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	13 U	11 U	11 U	-
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4.1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	11	0.5 UJ	0.5 UJ	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	5 U	4.4 U	1.1 U	-
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Atrazine	ug/L	N	3	2 U	2 U	2 U	2.1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2.2 U	1.1 U	-
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	4 U	3.3 U	1.1 U	-
Benzo(a)anthracene	ug/L	N	0.1	**0.2J**	0.1 U	0.1 U	**0.22J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1J	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Benzo(a)pyrene	ug/L	N	0.1	**0.2J**	0.1 U	0.1 U	**0.19J**	**0.2J**	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	**0.2J**	**0.2J**	**0.2J**	**0.2J**	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	**0.24J**	**0.21J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.2J	0.2J	0.2J	**0.3J**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	6 U	5.2 U	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	**28J**	2 J	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5.5 U	2.2 U	-
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2.2 U	2.2 U	-
Caprolactam	ug/L	N	4000	5 U	5 U	6 U	5.2 U	3 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	5 U	6 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.5 U	3.4 U	-
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
Chrysene	ug/L	N	5	0.2 J	0.1 U	0.1 U	0.24 J	0.18 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J	0.1 J	0.3 J	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2.2 U	2.2 U	-
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	6 U	5.2 U	5 U	5.2 U	5.2 UJ	5.1 U	5.1 U	5.1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5.5 U	5.6 U	-
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2.2 U	2.2 U	-
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2.2 U	2.2 U	-
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3.1 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	4 U	3.3 U	0.56 U	-
Fluoranthene	ug/L	N	300	0.2 J	0.1 J	0.1 J	0.3 UJ	0.23 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.2 J	0.3 J	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.13 U	-
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	6 U	5.2 U	5 U	5.2 U	5.2 U	5.1 U	5.1 U	5.1 U	5 U	6 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.5 U	5.6 U	-
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.56 U	-
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	**0.3J**	0.2J	0.2J	0.1J	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.8 U	0.72 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.9 U	0.77 U	0.56 U	-
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.8 U	0.72 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.9 U	0.77 U	0.56 U	-
Naphthalene	ug/L	N	300	0.1 U	0.6	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	53	73	3	0.7 J	0.6	0.3 J	0.3 J	0.5 J	0.1 U	1	1	0.1 U	0.1 U	0.11 U	0.11 U	-
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	0.5 U	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	2 U	2 U	1.7 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.8 U	1.1 U	-
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.1 U	1.1 U	-
Phenanthrene	ug/L	N	NA	0.2 J	0.1 U	0.1 U	0.23 J	0.17 J	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.52 U	0.52 U	0.51 U	0.51 U	0.51 U	16	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.56 U	-
Pyrene	ug/L	N	200	0.3 J	0.1 J	0.2 J	0.46 J	0.28 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.2 J	0.4 J	0.2 J	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	820 J	-	270 J	-	-	-	16 J	-	93 J	270 J	11 J	-	0 U	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-270	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-275	MW-275	MW-275	MW-276	MW-277	MW-282	MW-282	MW-282
			Field Sample ID	M270F8	M271B9X	M271C2X	M271D1X	M271D2X	M271D3X	M271D5X	M271D8X	M271E1X	M271E2X	M271E4X	M271E6X	M271E8X	M271E9X	M271F1X	M271F1	M271F3	M271F4	M271F5	M275C3X	M275C4X	M275C5X	M276B5X	M277B7X	M282B6	M282B7X	M282C6X
			Sample Date	02/23/2022	12/20/2012	01/17/2014	10/21/2015	04/15/2016	09/21/2016	04/13/2017	10/30/2017	04/05/2018	02/28/2019	08/08/2019	02/12/2020	08/20/2020	11/18/2020	02/10/2021	04/30/2021	08/19/2021	10/13/2021	02/15/2022	11/22/2017	02/01/2018	03/06/2019	03/12/2019	02/26/2019	12/18/2012	01/13/2014	10/15/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.54 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 UJ	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.54 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 UJ	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.54 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 UJ	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	48	2	6	2 J	5.6 UJ	5 UJ	0.5 U	0.7 J	5 J	3 U	17 U	33 U	3.1 UJ	20	41	37	3.1 U	3.2 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	11 U	10 U	10 U	10 UJ	110 UJ	100 UJ	10 U	10 U	14 U	14 U	77 U	160 U	14 UJ	14 U	17 U	15 U	15 U	15 U	10 U	11 U	14 U	14 U	14 U	11 U	12 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1 U	11 UJ	10 U	1 U	1 U	1 U	1 U	6 U	11 U	1 U	1 UJ	1.2 U	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 UJ	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	4.4 UJ	4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	4.4 U	0.41 U	0.41 U	0.48 U	0.43 U	0.41 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.54 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 UJ	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	11 J	21	28	12 J	1	4.4 UJ	1 U	5	0.1 J	0.5 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.85	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	3	0.1 U	0.1 U	1	0.5 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.54 U	0.5 U	0.6 J	6	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	28	0.5 U	3 U	5.6 U	0.52 UJ	7.6	0.6 U	0.53 U	2.8	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	2 U	2 U	11 U	22 U	2.1 U	1 U	1.2 U	1.1 U	1 U	1.1 U	0.5 U	0.5 U	2 U	2 U	2 U	0.5 U	0.6 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 UJ	0.5 U	0.5 U	3 U	3 U	17 U	33 U	3.1 UJ	5.1 J	1.2 U	1.1 U	1 U	1.1 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.3 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	3 U	3 U	17 U	33 U	3.1 U	4.1 U	4.8 U	4.3 U	4.1 U	4.3 U	2 U	2 U	3 U	3 U	3 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	3 U	3 U	17 U	33 U	3.1 U	2.1 U	2.4 U	2.1 U	2.1 U	2.1 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.6 U	5 U	5 U	5 U	5 UJ	56 UJ	51 UJ	5 U	5 U	8 U	8 U	44 U	89 U	8.3 UJ	8.3 U	9.6 U	8.5 U	8.3 U	8.5 U	5 U	5 U	8 U	8 U	8 U	5 U	6 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.3 U	0.5 U	0.5 U	2 U	2 U	22 UJ	20 U	2 U	2 U	4 U	4 U	22 U	44 U	4.1 U	4.1 U	4.8 U	4.3 U	4.1 U	4.3 U	2 U	2 U	4 U	4 U	4 U	0.5 U	0.6 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.54 U	0.5 U	0.9 J	8	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	34	0.5 U	3 U	5.6 U	0.52 UJ	0.52 U	0.6 U	0.53 U	0.52 UJ	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.97 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.9 U	0.9 U	5 U	10 U	0.93 U	0.93 U	1.1 U	0.96 U	0.93 U	0.96 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.5 U	0.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	10 U	10 U	10 U	110 UJ	100 UJ	10 U	10 U	10 U	10 U	55 U	110 U	10 UJ	10 U	12 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 U	11 U	12 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 J	0.1 J	0.2 J	0.1 U	1.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	21	5 J	22 U	44 U	4.1 U	11	39	1.1 U	6.8	1.1 U	0.5 U	0.5 U	4 U	4 U	4 U	0.5 U	0.6 U	0.5 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	2 U	2 U	11 U	22 U	2.1 U	1 UJ	1.2 U	1.1 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	8	1 U	11 UJ	10 U	1 U	1 U	3 U	3 U	17 U	33 U	3.1 U	1 U	1.2 U	1.1 U	1 U	1.1 U	1 UJ	1 U	3 U	3 U	3 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1J	**0.2J**	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	**1.6J**	1 U	0.1 U	0.1J	**0.2J**	0.1 U	0.6 U	1.1 U	0.1 U	0.11 U	0.13 U	0.12 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1J	**2.1J**	1 U	0.2J	0.2J	0.2J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J	1.1 UJ	1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	2 U	2 U	2 U	2 J	22 UJ	20 U	**5**	**9**	5 U	5 U	**34J**	**59J**	5.2 U	2.1 U	2.4 U	2.1 U	2.1 U	2.1 U	2 U	2 U	5 U	5 U	5 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.2 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	2 U	2 U	11 U	22 U	2.1 U	2.1 U	2.4 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	27	5 U	5 U	5 U	5 U	56 UJ	51 U	5 U	5 U	5 U	5 U	28 U	56 U	5.2 U	3.1 U	3.6 U	3.2 U	3.1 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U
Carbazole	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1.3 J	1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.2 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	2 U	2 U	11 U	22 U	2.1 U	2.1 U	2.4 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.4 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	5 U	5 U	28 U	56 U	5.2 U	5.2 U	6 U	5.3 U	5.2 U	5.3 U	2 U	2 U	5 U	5 U	5 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1 U	0.2J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.2 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	2 U	2 U	11 U	22 U	2.1 U	2.1 UJ	2.4 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	2 U	2 U	2 U	2 U	22 UJ	20 U	2 U	2 U	2 U	2 U	11 U	22 U	2.1 U	2.1 U	2.4 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	3 U	3 U	17 U	33 U	3.1 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.5 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J	1.9 J	1 U	0.2 J	0.3 J	0.3 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.32 J	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.13 U	0.3 J	0.1 J	0.1 J	0.1 J	1.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	1.1 U	0.1 U	0.12 U	0.14 U	0.13 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	1.1 U	0.1 U	0.11 U	0.13 U	0.12 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 UJ	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.4 U	5 U	5 U	5 U	5 U	56 UJ	51 U	5 U	5 U	5 U	5 U	28 U	56 U	5.2 U	5.2 U	6 U	5.3 U	5.2 U	5.3 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5 U
Hexachloroethane	ug/L	N	7	0.54 U	1 U	1 U	1 U	1 U	11 UJ	10 U	1 U	1 U	1 U	1 U	6 U	11 U	1 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	0.1J	0.2J	0.1 U	0.6 U	1.1 U	0.1 U	0.11 U	0.13 U	0.12 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.7 U	0.7 U	4 U	7.8 U	0.72 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.5 U	0.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.7 U	0.7 U	4 U	7.8 U	0.72 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.5 U	0.6 U	0.5 U
Naphthalene	ug/L	N	300	0.89	73	85	46	16	11 J	5 J	5	1	2	0.1 U	2 J	1.1 U	0.1 U	12 J	36 J	22	14	6.7	0.1 U	0.1 U	10	0.1 U	0.1 U	9	1	0.1 U
Nitrobenzene	ug/L	N	6	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	5.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.6 U	0.52 U	0.52 U	0.6 U	0.53 U	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5.6 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	9 U	18 U	1.7 UJ	1 U	1.2 U	1.1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 UJ	11 UJ	10 UJ	1 U	1 U	1 UJ	1 U	6 U	11 U	1 UJ	1 U	1.2 U	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.4 J	0.2 J	0.1 J	0.1 J	1.5 J	1 U	0.1 U	0.1 J	0.3 J	0.1 U	0.6 U	1.1 U	0.1 U	0.11 U	0.63	0.12 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.54 U	20	2	12	2 J	11 J	5 UJ	0.5 U	2	58	0.5 U	3 U	5.6 U	0.52 UJ	32	9.2	7.9	0.52 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J	2.6 J	1 J	0.3 J	0.3 J	0.3 J	0.1 U	0.6 U	1.1 U	0.1 U	0.1 U	0.21 J	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	1200 J	-	880 J	-	-	540 J	130 J	1400 J	180 J	-	-	-	-	-	-	-	-	-	100 J	670 J	86 J	170 J	-	79 J	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283
			Field Sample ID	M282C8X	M282C9X	M282D1X	M282D2X	M282D4X	M282D5X	D0301198	M282D6X	M282D8X	M282E1X	D0824208	M282E3X	M282E9	M283B5X	M283B7X	M283C6X	M283C7X	M283C8X	M283C9X	D1101177X	M283D1X	D0201188	M283D3X	M283D4X	M283D7X	M283D9X	M283E2X
			Sample Date	04/19/2016	09/12/2016	04/11/2017	11/01/2017	02/01/2018	04/06/2018	03/01/2019	03/01/2019	08/14/2019	02/10/2020	08/24/2020	08/24/2020	03/17/2022	12/20/2012	01/13/2014	10/15/2015	04/19/2016	09/12/2016	04/11/2017	11/01/2017	11/01/2017	02/01/2018	02/01/2018	04/05/2018	02/13/2019	08/14/2019	02/11/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	3.1 U	3.1 U	3 U	-	0.5 U	4	8 J	0.5 U	9	0.5 U	0.5 U	0.5 UJ	1	1	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 UJ	10 UJ	10 UJ	10 U	10 U	10 U	14 UJ	14 UJ	14 U	14 U	15 U	14 U	14 U	-	11 U	10 U	10 UJ	10 U	10 U	10 U	10 U	11 UJ	10 U	10 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.41 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	-	3	1	2	2	5	2 J	3 J	11	2 J	5	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UUJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.8 J	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	3.1 UJ	3.1 UJ	1 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	4 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	8 UJ	8 UJ	8 U	8 U	8.3 UJ	8.3 UJ	8.1 U	-	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.2 U	4.1 U	4 U	-	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	1 J	0.8 J	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 J	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.94 U	0.93 U	0.91 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 UJ	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	-	11 U	10 U	10 UJ	10 U	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.2 J	0.1 U	0.4 J	0.3 J	0.4 J	0.1 U	0.1 U	0.4 J	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4.2 U	4.1 U	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	1 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	1 U	-	1 U	1 U	1 U	1 U	2 J	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 UJ	0.52 UJ	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	**11**	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 J	5.2 U	5.2 U	3 U	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U	5.1 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U	5.1 U	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.72 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.72 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	20 U	5	4	16	51	29	18	21	15	8 J	11	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	2 U	1.7 U	1.7 U	1 U	-	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	-	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.52 U	0.52 U	0.51 U	-	22	37	0.5 UJ	17	79	28 J	15 J	0.9 J	28 J	29	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	170 J	-	-	60 J	70 J	56 J	260 UJ	270 UJ	540 J	0 U	-	-	0 U	-	840 J	-	1600 J	-	-	610 J	540 J	1200 J	1000 J	1100 J	-	8 J	11 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-283	MW-283	MW-283	MW-283	MW-283	MW-284	MW-284	MW-285	MW-285	MW-285	MW-286	MW-286	MW-287	MW-287	MW-287	MW-288	MW-288	MW-288	MW-288	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289
			Field Sample ID	M283E4X	D0820218B	M283E8	D0215228	M283F1	M284B8X	M284B9X	M285B6X	M285B7X	M285B8X	M286B7X	M286B8X	M287B6X	M287B7X	M287B8X	M288B8X	M288B9X	M288C1	M288C2	M289B8X	M289B9X	M289C1X	D0522198	M289C2X	M289C3X	D1029198
			Sample Date	08/25/2020	08/20/2021	08/20/2021	02/15/2022	02/15/2022	11/20/2017	01/29/2018	11/21/2017	01/29/2018	03/06/2019	11/16/2017	02/02/2018	11/17/2017	02/02/2018	03/11/2019	11/27/2017	01/31/2018	06/29/2021	10/21/2021	11/15/2017	01/26/2018	03/07/2019	05/22/2019	05/22/2019	08/16/2019	10/29/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
2,4-Dichlorophenol	ug/L	N	20	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3 U	3.3 UJ	3.1 U	3.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 UJ	3.2 U	3.1 U	10 U	0.5 U	3 U	30 U	30 U	3 U	30 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	15 UJ	14 U	17 U	10 U	10 U	10 U	10 U	14 U	10 U	11 U	10 U	10 U	14 U	10 UJ	11 UJ	15 UJ	14 U	200 U	10 U	14 U	140 U	140 U	14 U	140 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	20 U	1 U	1 U	10 U	10 U	1 U	10 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.4 U	0.44 U	0.41 U	0.49 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.43 U	0.41 U	8 U	0.4 U	0.4 U	4 U	4 U	0.4 U	4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	**20000J**	**53**	**200**	**160**	**180**	**61**	**5500J**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.1 U	1 U	1.1 U	1 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 UJ	1.1 U	1 U	10 U	0.5 U	2 U	20 U	20 U	2 U	20 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3.1 U	1 U	1.1 UJ	1 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 UJ	1.1 UJ	1 U	10 U	0.5 U	3 U	30 U	30 U	3 U	30 U
3,3'-Dichlorobenzidine	ug/L	N	30	3.1 U	4 U	4.4 U	4.1 U	4.9 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	3 U	2 U	2 UJ	4.3 U	4.1 U	40 U	2 U	3 U	30 U	30 U	3 U	30 U
3-Nitroaniline	ug/L	N	NA	3.1 U	2 U	2.2 U	2 U	2.4 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	2.2 U	2 U	10 UJ	0.5 U	3 U	30 U	30 U	3 U	30 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.3 U	8 U	8.8 UJ	8.2 U	9.7 U	5 U	5 U	5 U	5 U	8 U	5 U	5 U	5 U	5 U	8 U	5 UJ	5 UJ	8.7 UJ	8.1 U	100 U	5 U	8 U	81 U	81 U	8 U	80 U
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
4-Chloroaniline	ug/L	N	30	4.2 U	4 U	4.4 U	4.1 U	4.9 U	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	4 U	2 U	2 UJ	4.3 U	4.1 U	40 U	2 U	4 U	40 U	40 U	4 U	40 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	2.9	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
4-Nitroaniline	ug/L	N	NA	0.94 U	0.9 U	0.99 U	0.92 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 UJ	0.97 U	0.92 U	10 UJ	0.5 U	0.9 U	9 U	9 U	0.9 U	9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 UJ	10 U	12 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 UJ	11 UJ	11 UJ	10 U	200 U	10 U	10 U	100 U	100 U	10 U	100 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.11 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	2 U	0.4 J	0.1 U	1 U	1 U	0.1 U	1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	140J	0.1 U	0.1 U	1 U	1 U	0.1 U	1 U
Acetophenone	ug/L	N	700	4.2 U	1 U	1.1 U	1 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 UJ	1.1 U	1 U	10 U	0.5 U	4 U	40 U	40 U	4 U	40 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	2 U	0.2 J	0.1 U	1 U	1 U	0.1 U	1 U
Atrazine	ug/L	N	3	2.1 U	1 U	1.1 U	1 U	1.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	1.1 U	1 U	40 U	2 U	2 U	20 U	20 U	2 U	20 U
Benzaldehyde	ug/L	N	NA	3.1 U	1 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	1 U	1 U	3 U	1 UJ	1 UJ	1.1 U	1 U	20 U	1 U	3 U	30 U	30 U	3 U	30 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	**26J**	**0.2J**	0.1 U	1 U	1 U	0.1 U	1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	**37J**	**0.2J**	0.1 U	1 U	1 U	0.1 U	**13J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	**42J**	**0.3J**	0.1 U	1 U	1 U	0.1 U	1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	18 J	0.3 J	0.1 U	1 U	1 U	0.1 U	1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	**14J**	0.1 U	0.1 U	1 U	1 U	0.1 U	1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.2 U	2 UJ	2.2 UJ	2 U	2.4 U	2 U	2 U	2 U	2 U	5 U	2 U	**4J**	2 U	2 U	5 U	2 U	2 UJ	2.2 U	2 U	40 U	2 U	5 U	51 U	50 U	5 U	50 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2.2 U	2 U	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2 U	40 U	2 U	2 U	20 U	20 U	2 U	20 U
Caprolactam	ug/L	N	4000	5.2 U	3 U	3.3 U	3.1 U	3.6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	3.2 U	3.1 U	100 U	5 U	5 U	51 U	50 U	5 U	50 U
Carbazole	ug/L	N	NA	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	**50J**	0.2 J	0.1 U	1 U	1 U	0.1 U	1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2.2 U	2 U	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2 U	40 U	2 U	2 U	20 U	20 U	2 U	20 U
Di-n-octylphthalate	ug/L	N	100	5.2 U	5 U	5.5 U	5.1 U	6.1 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	5 U	2 U	2 UJ	5.4 U	5.1 U	40 U	2 U	5 U	51 U	50 U	5 U	50 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	**8J**	0.1 U	0.1 U	1 U	1 U	0.1 U	1 U
Dibenzofuran	ug/L	N	NA	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2.2 U	2 U	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2 U	40 U	2 U	2 U	20 U	20 U	2 U	20 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	2.2 U	2 U	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2 U	40 U	2 U	2 U	20 U	20 U	2 U	20 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.1 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	0.54 U	0.51 U	56 J	0.5 U	3 U	30 U	30 U	3 U	30 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	50 J	0.3 J	0.9	2 J	3 J	0.2 J	21 J
Fluorene	ug/L	N	300	0.1 U	0.12 U	0.13 U	0.12 U	0.15 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.13 U	0.12 U	120 J	0.6	2	1 U	1 U	0.1 U	1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	2 U	0.1 U	0.1 U	1 U	1 U	0.1 U	1 U
Hexachlorobutadiene	ug/L	N	1	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 U	5 U	5.5 U	5.1 U	6.1 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5.4 U	5.1 U	100 U	5 U	5 U	51 U	50 U	5 U	50 U
Hexachloroethane	ug/L	N	7	1 U	0.5 U	0.55 U	0.51 U	0.61 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	0.54 U	0.51 U	20 U	1 U	1 U	10 U	10 U	1 U	10 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	**20J**	**0.3J**	0.1 U	1 U	1 U	0.1 U	1 U
Isophorone	ug/L	N	40	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.73 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.7 U	7 U	7 U	0.7 U	7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.73 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 U	0.5 U	0.7 U	7 U	7 U	0.7 U	7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.1 U	0.29 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.4 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 UJ	0.11 U	0.76	**11000J**	34	110	120	120	72	**2600J**
Nitrobenzene	ug/L	N	6	0.52 U	0.5 U	0.55 U	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.54 U	0.51 U	10 UJ	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
p-Chloro-m-cresol	ug/L	N	NA	1.7 U	1 U	1.1 UJ	1 U	1.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	1.1 UJ	1 U	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 UJ	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1.1 UJ	1 U	20 U	1 U	1 U	10 U	10 U	1 U	10 U
Phenanthrene	ug/L	N	NA	0.1 U	0.11 U	0.12 U	0.11 U	0.23 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	160J	0.8	2	3 J	4 J	0.4 J	62 J
Phenol	ug/L	N	2000	0.52 U	0.5 U	0.55 UJ	0.51 U	0.61 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	16	10 U	0.5 U	0.5 U	5 U	5 U	0.5 U	5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	100 J	0.7	2	3 J	4 J	0.2 J	27 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	100 J	-	10 J	31 J	-	46 J	-	610 J	210 J	-	0 U	-	-	34000 J	880 J	3100 J	2900 J	3200 J	1400J	18000 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-291	MW-291	MW-291
			Field Sample ID	M289C4X	M289C5X	M289C6X	M289C7X	M289C8X	M289C9X	D0503218	M289D1	M289D2	D1015218	M289D3	M289D4	M290A9X	M290B8X	M290E2X	M290C2X	M290C4X	M290C7X	M290C9X	M290D1X	M290D2X	M290D3X	M290D4X	M290D5X	M291D1X	M291D9X	M291C1X
			Sample Date	10/29/2019	02/11/2020	05/12/2020	08/07/2020	11/18/2020	01/26/2021	05/03/2021	05/03/2021	08/17/2021	10/15/2021	10/15/2021	03/01/2022	01/14/2014	10/20/2015	04/18/2016	09/14/2016	04/06/2017	10/27/2017	04/04/2018	02/13/2019	08/14/2019	02/07/2020	08/21/2020	01/28/2021	01/14/2014	10/19/2015	04/18/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	10 U	5 U	0.5 UJ	0.56 UJ	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	10 U	5 U	0.5 UJ	0.56 UJ	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	10 U	5 U	0.5 UJ	0.56 UJ	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	61 U	30 U	3 UJ	10 J	3.1 U	3 UJ	3.2 U	3.2 U	3.2 U	3.3 U	3.2 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	3 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	290 U	140 U	14 UJ	16 U	14 U	14 UJ	15 U	15 U	15 U	15 U	15 U	14 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	15 U	14 U	14 U	15 U	14 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	20 U	10 UJ	1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	10 U	5 UJ	0.5 U	0.56 UJ	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	8 U	4 UJ	0.4 U	0.44 U	0.41 U	0.4 U	0.43 U	0.43 U	0.43 U	0.44 U	0.43 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	10 U	5 U	0.5 UJ	0.56 UJ	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	**1300J**	**1300J**	**97**	**72**	**250**	**80**	**250**	**200**	18	0.11 U	0.11 U	**85**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	10 U	5 U	0.5 UJ	0.56 U	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	41 U	20 UJ	2 U	2.2 U	2 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.1 U	1 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	61 U	30 U	3 UJ	3.3 UJ	3.1 U	1 UJ	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	1 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	61 U	30 UJ	3 U	3.3 U	3.1 U	4 U	4.3 U	4.3 U	4.3 U	4.4 U	4.3 U	4 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.2 U	4 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	61 U	30 UJ	3 U	3.3 U	3.1 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	2 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	160 U	80 U	8 UJ	8.9 U	8.1 U	8 UJ	8.6 U	8.7 U	8.5 U	8.8 U	8.6 U	8 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	9 U	8 U	8 U	8.6 U	8.1 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	82 U	40 UJ	4 U	4.4 U	4.1 U	4 U	4.3 U	4.3 U	4.3 U	4.4 U	4.3 U	4 U	0.5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.3 U	4 U	0.5 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	10 U	5 U	0.5 UJ	0.56 U	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	18 U	9 UJ	0.9 U	1 U	0.92 U	0.9 U	0.97 U	0.97 U	0.96 U	0.99 U	0.96 U	0.9 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.97 U	0.91 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	200 U	100 U	10 UJ	11 U	10 U	10 UJ	11 U	11 U	11 U	11 U	11 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	2 U	8 J	0.1 U	1	0.1 U	0.33 J	2.1	2	0.4 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	2 U	1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	82 U	40 UJ	4 U	4.4 U	4.1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.3 U	1 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	2 U	1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.95	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	41 U	20 UJ	2 U	2.2 U	2 U	1 U	1.1 U	1.1 U	1.1 UJ	1.1 U	1.1 U	1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	61 U	30 UJ	3 U	3.3 UJ	3.1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.2 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	2 U	1 UJ	0.1 U	0.11 UJ	**0.5J**	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	2 U	**2J**	0.1 U	0.11 UJ	**0.63**	0.11 U	**0.88**	**0.72**	0.12 U	0.12 U	0.12 U	**0.15J**	0.1J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	2 U	**3J**	0.1 U	0.11 UJ	**0.59**	0.1 U	**0.71**	**0.66**	0.11 U	0.11 U	0.11 U	0.1 U	0.1J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	2 U	2 J	0.1 U	0.11 UJ	0.48 J	0.1 U	0.72	0.57	0.11 U	0.11 U	0.11 U	0.11 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	2 U	1 UJ	0.1 U	0.11 UJ	0.24 J	0.1 U	0.35 J	0.29 J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 UJ	0.53 UJ	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	100 U	50 UJ	5 U	5.6 UJ	5.1 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.4 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	41 U	20 UJ	2 U	2.2 UJ	2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	100 U	50 UJ	5 U	5.6 U	5.1 U	3 U	3.2 U	3.2 U	3.2 U	3.3 U	3.2 U	3 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	3 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	2 U	1 UJ	0.1 U	0.11 U	0.57	0.1 U	0.9	0.6	0.11 U	0.11 U	0.11 U	0.1 U	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	41 U	20 UJ	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	100 U	50 UJ	5 U	5.6 U	5.1 U	5 U	5.4 U	5.4 U	5.3 U	5.5 U	5.4 U	5 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.4 U	5 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	2 U	1 UJ	0.1 U	0.11 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	10 U	5 UJ	0.5 U	0.56 UJ	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	41 U	20 UJ	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	41 U	20 UJ	2 U	2.2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	61 U	30 UJ	3 U	3.3 UJ	3.1 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	2 U	4 J	0.3 J	0.82	1.1	0.1 U	1.6	1.3	0.11 U	0.11 U	0.11 U	0.16 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 J	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	2 U	11 J	0.6	0.11 U	0.1 U	0.12 U	2.5	0.13 U	0.39 J	0.13 U	0.13 U	0.5	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	2 U	1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	100 U	50 UJ	5 U	5.6 UJ	5.1 U	5 U	5.4 U	5.4 U	5.3 U	5.5 U	5.4 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	20 U	10 UJ	1 U	1.1 UJ	1 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	2 U	1 UJ	0.1 U	0.11 UJ	**0.46J**	0.11 U	**0.64**	**0.49J**	0.12 U	0.12 U	0.12 U	0.11 U	0.1J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	14 U	7 UJ	0.7 U	0.78 U	0.71 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	14 U	7 UJ	0.7 U	0.78 U	0.71 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.75 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	**700J**	**780J**	130	0.11 U	190	110	200	150	39	0.11 U	0.11 U	76	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	10 U	5 UJ	0.5 U	0.56 U	0.51 U	0.5 U	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	10 U	16 U	2 UJ	1.8 U	1.6 U	1 UJ	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	20 U	10 UJ	1 UJ	1.1 U	1 U	1 UJ	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	16 J	13 J	0.5	1.6	2.7	0.2 J	3.3	2.6	0.12 U	0.12 U	0.12 U	0.62	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 J	0.11 U	0.1 U	0.1 U	0.2 J
Phenol	ug/L	N	2000	10 U	5 U	0.5 UJ	0.56 U	0.51 U	0.5 UJ	0.54 U	0.54 U	0.53 U	0.55 U	0.54 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	8 J	6 J	0.1 U	0.9	1.5	0.1 U	2	1.7	0.2 J	0.11 U	0.11 U	0.34 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	15000 J	14000 J	4200 J	-	-	-	-	-	-	-	-	-	67 J	-	0 U	-	-	42 J	4 J	-	18 J	0 U	-	0 U	43 J	-	0 U

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-291	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-293R
			Field Sample ID	M291E3X	D0406177	M291E4X	M291E5X	M291E6X	M291E7X	M291E8X	M291E9X	M291F1X	M291F2X	M292RA3X	M292RA4X	M292RA5X	M292RA9X	M292RB4X	M292RB5X	M292RB6X	M292RB8X	M292RC1X	M292RC3X	M292RC4X	M292RC5X	M292RC6X	M292RC7X	D0208218	M292RC8X	M293RA9X
			Sample Date	09/13/2016	04/06/2017	04/06/2017	10/27/2017	04/04/2018	02/14/2019	08/20/2019	02/14/2020	08/10/2020	01/22/2021	01/15/2013	05/16/2013	01/15/2014	10/24/2014	10/16/2015	04/20/2016	09/15/2016	04/10/2017	10/20/2017	04/03/2018	02/20/2019	08/13/2019	02/12/2020	08/20/2020	02/08/2021	02/08/2021	01/21/2013
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	3 U	81	**480**	**290**	15 J	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 J	3 UJ	3 U	3.2 U	3 U	3 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 UJ	10 U	10 UJ	10 U	10 U	14 U	14 U	15 U	15 U	14 U	12 U	13 U	130 U	12 UJ	110 U	10 U	11 U	11 U	10 U	11 U	14 U	14 UJ	14 U	15 U	14 U	14 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	13 U	1 UJ	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.41 U	0.5 U	0.5 U	5 U	0.5 UJ	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**1200**	**2400**	**190**	**830J**	**1600**	**350**	**340**	**100**	**250**	**54**	0.1 U	0.3 J	0.8	0.38 J	0.1 U	0.1 U	0.6
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	27	290	54	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.2 U	2 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.1 U	1 U	1 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	3 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	1 U	1 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.2 U	3 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.2 U	4 U	4 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	3 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	2 U	2 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 U	5 UJ	5 U	5 U	8 U	8 U	9 U	8.7 U	8.1 U	6 U	6 U	63 U	6 UJ	54 U	5 U	5 U	5 U	5 U	5 U	8 U	8 UJ	8 U	8.5 U	8 U	8.1 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.3 U	4.1 U	0.6 U	0.6 U	6 U	0.6 UJ	22 U	2 U	2 U	2 U	2 U	2 U	4 U	4 UJ	4 U	4.3 U	4 U	4 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	12	**350**	**160**	15 J	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.97 U	0.91 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.96 U	0.9 U	0.91 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U	11 U	11 U	10 U	12 U	13 U	130 U	12 UJ	110 U	10 U	11 U	11 U	10 U	11 U	10 U	10 UJ	10 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	5	14	1 U	6 J	21	4	2	2	2	1	0.7	0.1 U	1	0.11 U	1.1	1.2	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	3	8	1 U	0.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.3 U	4.1 U	0.6 U	**2000**	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 UJ	4 U	4.3 U	1 U	1 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	5	8	1 U	4 J	26	2	0.8	2	2	0.3 J	0.1 UJ	0.4 J	0.3 J	0.11 U	0.14 J	0.24 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	1 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.2 U	3 U	1 U	1 U	13 U	1 UJ	11 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.2 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**0.8**	**2**	1 U	0.1 UJ	**6**	**0.4J**	**0.2J**	**0.4J**	**0.3J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**0.5J**	**0.8**	1 U	0.1 UJ	**3J**	**0.2J**	0.1J	**0.3J**	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**0.3J**	**0.9**	1 U	0.1 UJ	**2J**	0.2J	0.1J	0.2J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.4 J	0.7	1 U	0.1 UJ	3 J	0.1 J	0.1 J	0.4 J	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.3 J	1 U	0.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.4 U	5.1 U	3 J	3 J	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U	5.3 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.2 U	2 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5.1 U	6 U	6 U	63 U	6 UJ	54 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	3 U	3 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	4 J	5 U	0.5 U	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	1	3	1 U	0.2 J	**11**	0.6	0.2 J	0.6	0.6	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.4 U	5.1 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U	5.3 U	5 U	5 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1J	1 U	0.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	3	0.6 U	6 U	4 J	14	0.5 U	1	0.9 J	1	0.6 J	0.5 U	0.7 J	0.7 J	0.53 U	0.52 J	0.51 J	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	3 U	25 U	2 UJ	22 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U	3 U	8	13	6 U	8 J	15	3	3	0.6 J	2	0.5 U	3 U	3 U	3 U	3.2 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	2	4	1 U	1 J	17	1	0.3 J	1	1	0.2 J	0.4 J	0.1 U	0.1 J	0.11 U	0.1 U	0.14 J	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	14	20	1 J	14 J	47	5	4	3	5	2	0.1 U	2	2	0.11 U	1.5	1.6	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	1 U	0.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 UJ	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5.1 U	6 U	6 U	63 U	6 UJ	54 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	13 U	1 UJ	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1J	**0.3J**	1 U	0.1 UJ	1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 UJ	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.76 U	0.71 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.75 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.76 U	0.71 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.75 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.11 U	0.1 U	**630**	**720**	**480**	**630J**	**470**	**320**	**450**	63	240	130	0.1 U	13	28	1.7	12	10	1 J
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.6 U	0.6 U	0.6 U	6 U	0.6 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	2 U	1.7 U	1 U	1 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	13 U	1 UJ	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	23	49	3 J	39 J	170	14	7	6	10	2	0.5 J	0.9	2	0.11 U	0.39 J	0.43 J	0.1 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.6 U	740	120	13 J	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 UJ	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	5	10	1 U	3 J	45	3	0.6	4	3	0.4 J	1 J	0.7	0.3 J	0.11 U	0.28 J	0.5	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	120 J	91 J	21 J	4 J	47 J	34 J	14 J	0 U	0 U	-	1000 J	21000 J	-	-	510 J	-	-	-	190 J	430 J	370 J	-	-	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-293R	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-295	MW-295	MW-295
			Field Sample ID	M293RB2X	M293RB3X	M293RC3X	M293RC4X	M293RC5X	M293RC6X	M293RC7X	M293RC8X	M293RC9X	M293RD1X	M293RD2X	M293RD3X	M293RD4X	M294A7X	M294A8X	M294A9X	M294B2X	M294B3X	M294B4X	M294B5X	M294B6X	M294B7X	M294B8X	M294B9X	M295A7X	M295A8X	M295A9X
			Sample Date	05/14/2013	01/15/2014	10/21/2015	04/13/2016	09/16/2016	04/07/2017	10/20/2017	04/03/2018	02/20/2019	08/12/2019	02/13/2020	08/10/2020	02/10/2021	05/01/2012	08/28/2012	05/23/2013	06/17/2014	11/23/2015	02/10/2016	02/21/2017	02/13/2018	02/22/2019	02/07/2020	01/21/2021	05/01/2012	08/28/2012	05/23/2013
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	-	0.6 U	4	2	0.5 U	0.5 U	1	0.5 UJ	3 U	3 UJ	3 UJ	3.3 UJ	3 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3.1 U	0.5 UJ	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	-	11 U	10 U	10 U	10 U	10 U	10 U	10 UJ	14 U	14 UJ	14 UJ	15 UJ	14 UJ	10 U	10 U	11 U	12 U	10 U	10 U	10 U	10 U	14 U	15 U	15 U	10 UJ	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	-	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 UJ	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	-	2	**100 J**	13	**70**	27	9	0.5 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.5 J	0.5	0.5	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	0.6 U	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.2 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2.1 U	0.5 UJ	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	3 UJ	3 UJ	3.3 UJ	1 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3.1 U	0.5 UJ	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.3 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3.1 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.3 U	2 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3.1 U	0.5 UJ	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	8 U	8 UJ	8 UJ	8.7 UJ	8 UJ	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	8 U	8 U	8.4 U	5 UJ	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	-	0.6 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.3 U	4 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U	4 U	4 U	4.2 UJ	0.5 UJ	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	0.6 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.98 U	0.9 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.94 U	0.5 UJ	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	-	11 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 UJ	10 UJ	11 UJ	10 UJ	10 U	10 U	11 U	12 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	11 U	11 U
Acenaphthene	ug/L	N	400	-	0.1 U	0.8	0.5	0.5 J	0.7	0.7	0.3 J	0.1 U	0.1 U	0.1 J	0.11 U	0.1 U	1	2	0.9	0.9	0.1 UJ	0.5 J	0.4 J	0.6	0.3 J	0.6	0.58	0.1 UJ	0.1 U	0.2 J
Acenaphthylene	ug/L	N	NA	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.3 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4.2 U	0.5 UJ	0.5 U	0.6 U
Anthracene	ug/L	N	2000	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.3 J	0.3 J	0.1 J	0.1 J	0.1 UJ	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	-	1 U	39	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3.1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5.2 U	2 UJ	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	3 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 UJ	5 U	6 U
Carbazole	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
Chrysene	ug/L	N	5	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U	5.4 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5.2 U	2 UJ	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.8 J	0.8 J	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	-	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3.1 U	0.5 UJ	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.9	0.6	0.2 J	0.2 J	0.1 UJ	0.2 J	0.1 J	2	0.1 J	0.4 J	0.31 J	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	-	0.2 J	0.8	0.6	0.6	0.7	0.7	0.2 J	0.1 U	0.1 U	0.1 J	0.11 U	0.12 U	1	1	0.8	0.7	0.1 UJ	0.3 J	0.2 J	0.6	0.2 J	0.1 U	0.15 J	0.1 UJ	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 UJ	5 U	6 U
Hexachloroethane	ug/L	N	7	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	-	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.76 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.73 U	0.5 UJ	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.76 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.73 U	0.5 UJ	0.5 U	0.6 U
Naphthalene	ug/L	N	300	9	2	220	110	230	190	38	4 0	0.1 U	0.7 U	0.1 U	0.11 U	0.1 U	0.1 J	0.1 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U
Nitrobenzene	ug/L	N	6	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 UJ	1.7 UJ	1 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	0.5 UJ	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	-	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1.1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Phenanthrene	ug/L	N	NA	-	0.4 J	0.3 J	0.1 U	0.4 J	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.11 U	1	2	1	1	0.1 UJ	0.6	0.3 J	1	0.2 J	0.1 U	0.12 J	0.1 UJ	0.1 U	0.1 U
Phenol	ug/L	N	2000	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.5 U	0.6 U
Pyrene	ug/L	N	200	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.6	0.4 J	0.1 J	0.1 U	0.1 UJ	0.1 J	0.1 U	1	0.1 J	0.3 J	0.22 J	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	81 J	-	2200 J	-	-	-	130 J	83 J	32 U	26 J	-	-	-	-	-	-	14 J	-	-	-	80 J	-	-	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295R	MW-295R	MW-295R	MW-295R	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296
			Field Sample ID	M295B1X	M295B2X	M295B3X	M295B4X	M295B5X	M295B6X	M295RB8X	D0529201	M295RB9X	M295RC6X	M296A7X	M296A8X	M296A9X	M296B3X	M296B4X	M296B5X	M296B6X	M296B7X	M296B8X	M296B9X	M296C1X	M296C2X	D0830181	M296C3X	M296C4X	M296C5X	M296C6X
			Sample Date	06/17/2014	11/23/2015	02/10/2016	02/21/2017	02/13/2018	04/19/2018	12/06/2019	05/29/2020	05/29/2020	03/29/2021	05/01/2012	08/28/2012	04/30/2013	06/17/2014	08/07/2015	11/23/2015	02/10/2016	08/19/2016	02/21/2017	08/31/2017	02/13/2018	04/19/2018	08/30/2018	08/30/2018	02/04/2019	04/23/2019	09/17/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	15 U	3 U	3 U	3.2 U	1	0.5 U	0.5 U	4	0.5 U	0.5 UJ	2	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	3 UJ	3 UJ	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 UJ	10 UJ	10 UJ	11 UJ	10 UJ	10 U	71 U	14 U	14 U	15 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	14 U	14 U	14 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 UJ	1 UJ	1 U	1 U	5 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	2 UJ	0.4 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.3 J	6	5	2	2	3	1	0.9	0.1 U	0.4 J	0.3 J	0.1 U	0.7	0.7	0.5 J	0.1 U	0.5 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	0.6 J	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	1 J	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	10 UJ	2 U	2 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	15 U	3 U	3 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 UJ	2 UJ	2 U	2 U	15 UJ	3 U	3 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	15 UJ	3 U	3 U	2.1 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 U	40 U	8 U	8 U	8.5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 U	2 U	2 UJ	2 UJ	2 U	2 U	20 UJ	4 U	4 U	4.3 UJ	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	0.5 U	2	0.5 U	21	13	0.5 U	3	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	1 J	0.8 J	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.9 U	0.9 U	0.96 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 UJ	10 UJ	10 UJ	11 UJ	10 UJ	10 U	50 U	10 U	10 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.6	0.2 J	0.11 U	0.8	1	1	1	1	2	2	2	0.7	1	0.9	0.8	2 J	1 J	1	1	2
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	20 UJ	4 U	4 U	1.1 U	20	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.3 J	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J
Atrazine	ug/L	N	3	2 U	2 U	2 UJ	2 UJ	2 U	2 U	10 UJ	2 U	2 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 UJ	1 UJ	1 U	1 U	15 UJ	3 U	3 U	1.1 U	4 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.2J**	**0.3J**	0.1J	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.2J	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 UJ	2 UJ	2 U	2 U	25 UJ	5 U	5 U	2.1 U	2 U	2 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 UJ	2 U	2 U	10 UJ	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	5 UJ	5 UJ	5 U	5 U	25 UJ	5 U	5 U	3.2 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.3 J	0.2 J	0.1 U	0.1 U	0.4 J	0.4 J	0.5 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 UJ	2 UJ	2 U	2 U	10 UJ	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 UJ	2 U	2 U	25 UJ	5 U	5 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 J	0.5 U	0.6 U	0.5 U	0.7 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 J
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 UJ	2 U	2 U	10 UJ	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 UJ	2 U	2 U	10 UJ	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	15 UJ	3 U	3 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	2 J	0.6	0.1 J	0.11 U	0.1 U	0.3 J	0.3 J	0.1 U	0.1 U	0.7	0.8	0.5 J	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.2 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.6	0.2 J	0.13 U	0.5 J	0.8	0.8	0.4 J	0.6	1 J	1	0.8	0.3 J	0.4 J	0.5	0.2 J	0.7	0.5	0.6	0.5 J	1
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5 UJ	5 UJ	5 U	5 U	25 UJ	5 U	5 U	5.3 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 UJ	1 UJ	1 U	1 U	5 UJ	1 U	1 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	4 UJ	0.7 U	0.7 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	4 UJ	0.7 U	0.7 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.3 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.11 U	0.8	2	2	4	2	2	3	0.1 U	0.6	1	1	0.8	2	2	1	0.1 U	2
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	2 U	2 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	5 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.1 U	0.1 U	0.12 U	0.2 J	1	0.7	0.7	0.5 J	2	2	1	0.1 U	0.2 J	0.4 J	0.1 J	0.8 J	0.1 U	0.3 J	0.1 U	0.5
Phenol	ug/L	N	2000	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.53 U	2	0.5 U	0.5 U	5	17	0.5 U	9	4	0.9 J	8	0.5 U	2	8	8	0.5 U	0.5 U	4
Pyrene	ug/L	N	200	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.5 UJ	0.6	0.2 J	0.11 U	0.1 U	0.3 J	0.3 J	0.1 J	0.1 U	0.7 J	0.9	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 J
Total TIC SVOCS	ug/L	N	NA	-	190 J	-	-	170 J	4 J	3600 J	250 J	180 J	-	-	-	-	-	-	780 J	-	-	-	-	280 J	1000 J	-	-	680 J	400 J	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-296	MW-296	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R
			Field Sample ID	M296C8X	M296D1X	M297A7X	M297A8X	M297B2X	M297B3X	M297B6X	M297B7X	M297C2X	M305RA1X	D0516137	M305RA3X	M305RA4X	M305RA8X	D1016157	M305RB3X	D0413168	M305RB4X	M305RB5X	M305RB7X	M305RB9X	M305RC1X	M305RC2X	D0222198A	M305RC3X	M305RC5X
			Sample Date	05/28/2020	11/06/2020	05/03/2012	08/31/2012	02/24/2015	11/20/2015	02/13/2018	04/19/2018	05/28/2020	01/21/2013	05/16/2013	05/16/2013	01/15/2014	10/27/2014	10/16/2015	10/16/2015	04/13/2016	04/13/2016	09/20/2016	04/10/2017	10/23/2017	01/15/2018	04/02/2018	02/22/2019	02/22/2019	08/12/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	4 U	3.4 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	9	19	23	27	11 J	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U
2,4-Dinitrophenol	ug/L	N	40	19 U	16 UJ	11 U	10 U	11 U	11 U	10 U	10 U	14 U	13 U	12 U	12 U	12 U	10 UJ	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	14 UJ	14 UJ	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.45 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	5	0.1 U	**37 J**	**48**	**96 J**	2 J	3 J	0.3 J	0.4 J	0.1 U	0.1 U	0.1 U	1	0.1 U	0.1 U	0.1 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	7	37	33	30	8 J	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	3 U	2.2 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 UJ	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	4 U	3.4 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	3.4 UJ	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	4 U	3.4 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	11 U	8.9 UJ	5 U	5 U	5 U	5 U	5 U	5 U	8 U	7 U	6 U	6 U	6 U	5 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	8 UJ	8 UJ	9 U
4-Bromophenylphenylether	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	5 U	4.5 UJ	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	4 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 UJ	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3	32	29	30	13 J	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 UJ	1 U
4-Nitrophenol	ug/L	N	NA	14 U	11 UJ	11 U	10 U	11 U	11 U	10 U	10 U	10 U	13 U	12 U	12 U	12 U	10 UJ	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	11 U
Acenaphthene	ug/L	N	400	0.8	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	5 U	4.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.7 U	35	39	0.6 U	31 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 UJ	4 U
Anthracene	ug/L	N	2000	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	3 U	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	4 U	3.4 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	50 J	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	7 U	5.6 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	3 U	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	7 U	5.6 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 U	6 U	6 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	3 U	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	7 U	5.6 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Diethylphthalate	ug/L	N	6000	3 U	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	3 U	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	4 U	3.4 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.7 U	0.6 U	0.6 U	0.6 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.19 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.4 J	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.4 J	0.5 J	0.7 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	7 U	5.6 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7 U	6 U	6 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	1 U	0.78 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	1 U	0.78 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U
Naphthalene	ug/L	N	300	0.8	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	33	200	190	190	190 J	10	12	2	2	0.1 U	0.1 U	0.2 J	2	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	1.8 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.7 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.6	0.6 J	0.6	1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.7 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	36	98	92	43	48 J	0.9 J	0.7 J	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.25 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	270 J	-	-	-	-	110 J	5 J	0 U	16 J	-	1800 J	1400 J	2600 J	-	-	-	210 J	190 J	-	-	11 J	-	0 U	82 Y	180 Y	12 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-305R	MW-305R	MW-305R	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-306	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R
			Field Sample ID	D0212208	M305RC7XA	M305RC9X	M306A8X	M306A9X	M306B1X	M306B2X	M306B3X	M306B2	M306B5	M306B6	M306B7	M316RA2X	M316RA3X	M316RA4X	M316RA8X	M316RB3X	M316RB4X	M316RB5X	M316RB7X	M316RB9X	M316RC2X	M316RC3X	M316RC4X	M316RC5X	M316RC6X
			Sample Date	02/12/2020	02/12/2020	08/14/2020	03/31/2020	05/27/2020	08/14/2020	11/18/2020	01/27/2021	04/28/2021	09/08/2021	11/24/2021	02/22/2022	01/15/2013	05/14/2013	01/15/2014	10/23/2014	10/20/2015	04/20/2016	09/15/2016	04/07/2017	10/23/2017	04/03/2018	02/15/2019	08/13/2019	02/12/2020	08/21/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3.3 U	150 U	60 U	32 U	3.5 U	3 U	3.2 UJ	30 U	300 U	3.2 U	**260J**	**280**	11 U	**210**	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.6 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	15 U	700 U	280 U	150 U	16 U	14 U	15 UJ	140 U	1400 U	15 U	11 UJ	110 U	230 U	100 U	10 UJ	10 U	10 U	10 U	10 U	10 U	14 U	14 U	14 U	17 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.1 U	50 U	20 U	11 U	1.2 U	1 U	1.1 U	10 U	100 U	1.1 U	1 UJ	11 U	23 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.43 U	20 U	8 U	4.3 U	0.47 U	0.4 U	0.43 U	4 U	40 U	0.42 U	0.4 UJ	5 U	9 U	4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.48 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.11 U	5 U	2 U	1.1 U	0.12 U	0.1 U	0.11 U	1 U	**67 J**	0.11 U	**700 J**	**860**	**1400**	**1200**	**330 J**	**450**	**340**	0.1 U	**180**	0.1 U	0.1 U	0.1 U	0.1 J	0.12 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	17	0.5 UJ	0.5 U	0.8 J	0.5 U	2	0.5 U	0.5 U	5	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2.2 U	100 U	40 U	21 U	2.3 U	1 U	1.1 U	10 U	100 U	1.1 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.4 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3.3 U	150 U	60 U	32 U	3.5 U	1 U	1.1 UJ	10 U	100 U	1.1 U	0.5 UJ	6 U	11 U	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3.3 U	150 U	60 UJ	32 U	3.5 U	4 U	4.3 U	40 U	400 U	4.2 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.6 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3.3 U	150 U	60 U	32 U	3.5 U	2 U	2.1 U	20 U	200 U	2.1 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8.7 UJ	400 U	160 U	86 UJ	9.4 U	8 U	8.6 UJ	81 U	810 U	8.5 U	5 UJ	57 U	110 U	52 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	9.5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4.3 U	200 U	80 U	43 U	4.7 U	4 U	4.3 U	40 U	400 U	4.2 U	0.5 UJ	6 U	11 U	5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.8 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	18 J	130	11 U	98	5 J	0.5 U	3	0.5 U	14	0.5 U	0.5 U	3	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.98 U	45 U	18 U	9.7 U	1.1 U	0.9 U	0.96 U	9.1 U	91 U	0.95 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1.1 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	500 U	200 U	110 U	12 U	10 U	11 UJ	100 U	1000 U	11 U	11 UJ	110 U	230 U	100 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.11 U	45	73	98	1.9	2.3	2	21	120	1.4	5 J	8	13	7	3 J	5	2	0.7	3	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	5 U	2 U	1.1 U	0.12 U	0.1 U	0.11 U	1 U	10 U	0.11 U	3 J	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Acetophenone	ug/L	N	700	4 U	4 U	4.3 U	200 U	80 U	43 U	4.7 U	1 U	1.1 U	10 U	100 U	1.1 U	0.5 UJ	690	11 U	420	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.8 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.11 U	34	48	70	0.26 J	0.24 J	0.42 J	15	92	0.37 J	2 J	4 J	6 J	1 U	0.3 J	1	0.1 J	0.1 U	1	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Atrazine	ug/L	N	3	2 U	2 U	2.2 U	100 U	40 U	21 U	2.3 U	1 U	1.1 U	10 U	100 U	1.1 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3.3 U	150 U	60 U	32 U	3.5 U	1 U	1.1 U	10 U	100 U	1.1 U	1 UJ	11 U	23 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.6 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	**31**	**45J**	**57**	0.12 U	0.1 U	**0.17J**	**14**	**71**	**0.31J**	**0.4J**	1 U	2 U	1 U	0.1 UJ	**0.2J**	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	**22J**	**32J**	**43**	0.12 U	0.11 U	0.12 U	**9**	**54**	**0.23J**	**0.2J**	1 U	2 U	1 U	0.1 UJ	0.1J	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	5 U	**35J**	**40**	0.12 U	0.1 U	0.11 U	**7.4**	**47J**	**0.17J**	0.1 UJ	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	5 U	2 UJ	12	0.12 U	0.1 U	0.11 U	3.5 J	10 U	0.11 U	0.2 J	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.11 U	5 U	2 UJ	**21**	0.12 U	0.1 U	0.11 U	**3.4J**	**18J**	0.11 U	0.1 UJ	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5.4 U	250 U	100 U	54 U	5.9 U	2 U	2.1 U	20 U	200 U	2.1 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.2 U	100 UJ	40 U	21 U	2.3 U	2 U	2.1 U	20 U	200 U	2.1 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U
Caprolactam	ug/L	N	4000	5 U	5 U	5.4 U	250 U	100 U	54 U	5.9 U	3 U	3.2 U	30 U	300 U	9.5	5 UJ	57 U	110 U	52 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.6 J	6 U	11 U	7 J	0.9 J	0.6 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.11 U	**34**	**47**	**63**	0.12 U	0.1 U	0.22 J	**14**	**83**	0.26 J	0.8 J	1 J	2 U	1 U	0.1 UJ	0.4 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.2 U	100 U	40 U	21 U	2.3 U	2 U	2.1 U	20 U	200 U	2.1 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5.4 U	250 U	100 UJ	54 U	5.9 U	5 U	5.3 U	50 U	510 U	5.3 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.11 U	5 U	2 UJ	**8.3**	0.12 U	0.1 U	0.11 U	1 U	10 U	0.11 U	0.1 UJ	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.54 U	25 U	10 U	32	0.74 J	0.7 J	0.69 J	7.9 J	54 J	0.53 U	3 J	6 U	11 U	5 U	0.5 UJ	0.5 U	1	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.2 U	100 U	40 U	21 U	2.3 U	2 U	2.1 U	20 U	200 U	2.1 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.2 U	100 U	40 U	21 U	2.3 U	2 U	2.1 U	20 U	200 U	2.1 U	2 UJ	23 U	46 U	21 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3.3 U	150 U	60 U	32 U	3.5 U	0.5 U	0.53 U	5 U	51 U	0.53 U	6 J	6 J	13 J	9 J	0.9 J	1	1	0.5 U	1	0.5 U	3 U	3 U	3 U	3.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.11 U	64	95	130	0.23 J	0.21 J	0.38 J	27	160	0.67	1 J	1 J	2 J	1 U	0.1 UJ	0.6	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.11 U	5 U	77	77	1.7	1.9	1.7	21	120	1.1	11 J	15	24	9	3 J	5	2	0.1 U	3	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.11 U	5 U	2 U	1.1 U	0.12 U	0.11 U	0.12 U	1.1 U	11 U	0.12 U	0.1 UJ	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5.4 U	250 U	100 U	54 U	5.9 U	5 U	5.3 U	50 U	510 U	5.3 U	5 UJ	57 U	110 U	52 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1.1 U	50 U	20 U	11 U	1.2 U	0.5 U	0.53 U	5 U	51 U	0.53 U	1 UJ	11 U	23 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	5 U	2 UJ	**11**	0.12 U	0.11 U	0.12 U	**3.6J**	11 U	0.12 U	0.1 UJ	1 U	2 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 UJ	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.76 U	35 U	14 U	7.5 U	0.82 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.83 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.76 U	35 U	14 U	7.5 U	0.82 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.83 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.11 U	5 U	2 U	1.1 U	0.12 U	0.1 U	0.11 U	1 U	10 U	0.11 U	**530**	**960**	**1500**	**3500**	**670J**	**510**	**750**	9	270	0.1 U	0.1 U	0.1 U	0.7	0.12 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 U	5 U	51 U	0.53 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	2 U	1.7 U	80 U	32 U	17 U	1.9 U	1 U	1.1 UJ	10 U	100 U	1.1 U	0.5 UJ	6 U	11 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.9 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 U	50 U	20 U	11 U	1.2 U	1 U	1.1 UJ	10 U	100 U	1.1 U	1 UJ	11 U	23 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	96	170	240	1.5	1.2	1.9	47	300	1.6	19 J	27	43	10	2 J	8	2	0.1 U	3	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.54 U	25 U	10 U	5.4 U	0.59 U	0.5 U	0.53 UJ	5 U	51 U	0.53 U	50 J	110	11 U	42	0.5 UJ	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.11 U	67	110	150	0.2 J	0.18 J	0.47 J	30	180	0.63	3 J	4 J	7 J	1 U	0.2 J	1	0.1 U	0.3 J	1	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	12000 J	7800 J	-	-	-	-	-	-	-	-	16000 J	39000 J	-	-	1800 J	-	-	1200 J	180 J	65 J	670 J	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-316R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-318R	MW-318R	MW-318RR
			Field Sample ID	M316RC7X	M317RA2X	D03281310	M317RA3X	M317RA4X	D1027147	M317RA8X	M317RB3X	M317RB4X	M317RB5X	M317RB7X	D1024177	M317RB9X	M317RC1X	M317RC2X	M317RC3X	M317RC5X	M317RC7X	D0813208	M317RC9X	D0819218	M317RD4	M317RD6	M318RA1X	M318RA2X	M318RRA8X
			Sample Date	02/08/2021	01/22/2013	03/28/2013	03/28/2013	01/16/2014	10/27/2014	10/27/2014	10/22/2015	04/18/2016	09/20/2016	04/10/2017	10/24/2017	10/24/2017	01/16/2018	04/02/2018	02/19/2019	08/07/2019	02/05/2020	08/13/2020	08/13/2020	08/19/2021	08/19/2021	02/14/2022	01/07/2013	05/16/2013	04/19/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	**280J**	**210J**	**190J**	15	34 J	37 J	10 J	3 J	1	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3.3 U	3.3 U	3.2 U	3.3 U	3.2 U	**170**	**180**	8
2,4-Dinitrophenol	ug/L	N	40	14 U	110 UJ	110 UJ	220 UJ	120 U	11 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ	10 U	10 U	14 U	14 U	14 U	15 U	15 U	15 U	15 U	15 U	11 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	11 UJ	11 UJ	22 UJ	12 U	1 UJ	1 UJ	1U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	4 UJ	4 UJ	9 UJ	5 U	0.4 UJ	0.4 UJ	0.4U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.44 U	0.42 U	0.43 U	0.43 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	**1300J**	**820J**	**660J**	**540**	**74 J**	**82 J**	25 J	22	24	0.3 J	13 0	6 0	0.5 J	0.4 J	0.1 U	0.1 J	0.1 U	0.15 J	0.11 U	0.11 U	0.11 U	0.11 U	**42**	**84**	25
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	250J	140J	130J	15	17 J	19 J	0.5U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	43	75	4
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.2 U	2.2 U	1.1 U	1.1 U	1.1 U	0.6 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3.3 U	3.3 U	1.1 U	1.1 U	1.1 U	0.6 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.3 U	3.3 U	4.2 U	4.3 U	4.3 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.3 U	3.3 U	2.1 U	2.2 U	2.1 U	0.6 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	54 UJ	53 UJ	110 UJ	59 U	6 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 U	8 U	8 U	8 U	8.7 U	8.8 U	8.4 U	8.7 U	8.6 U	6 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.4 U	4.4 U	4.2 U	4.3 U	4.3 U	0.6 U	0.5 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	**210J**	**110J**	100 J	34	41 J	46 J	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	32	35	**260**
4-Nitroaniline	ug/L	N	NA	0.91 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.98 U	0.99 U	0.95 U	0.98 U	0.97 U	0.6 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	110 UJ	110 UJ	220 UJ	120 U	11 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	5 J	6 J	5 J	3 J	0.5 J	0.5 J	0.3J	0.3 J	0.3 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.4 J	0.6
Acenaphthylene	ug/L	N	NA	0.1 U	4 J	3 J	2 J	1 U	0.2 J	0.2 J	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.4 U	4.4 U	1.1 U	1.1 U	1.1 U	0.6 U	55	0.5 U
Anthracene	ug/L	N	2000	0.1 U	2 J	3 J	2 UJ	2 J	0.1 J	0.2 J	0.4J	0.1 J	0.2 J	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.3 J
Atrazine	ug/L	N	3	1 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	1.1 U	1.1 U	1.1 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	11 UJ	11 UJ	22 UJ	12 U	1 UJ	1 UJ	1U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.3 U	3.3 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**1J**	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	**0.2 J**	0.1 U	0.1J	0.1 U	0.1J	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.1 J	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.2J	0.1J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.2 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.5 U	5.5 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3 U	54 UJ	53 UJ	110 UJ	59 U	6 UJ	5 UJ	5U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5.5 U	3.2 U	3.3 U	3.2 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	5 UJ	5 UJ	11 UJ	6 U	2 J	2 J	0.8J	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.8 J
Chrysene	ug/L	N	5	0.1 U	2 J	1 UJ	2 UJ	2 J	0.1 UJ	0.2 J	0.4J	0.1 U	0.2 J	0.1 U	0.3 J	0.1 U	0.3 J	0.1 J	0.2 J	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.5 U	5.5 U	5.3 U	5.4 U	5.4 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2.1 U	2 J	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	22 UJ	21 UJ	44 UJ	24 U	2 UJ	2 UJ	2U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	9 J	6 J	11 UJ	6 U	0.7 J	0.7 J	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.3 U	3.3 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	2 J	2 J	2 UJ	1 U	0.1 J	0.1 J	0.3J	0.1 J	0.2 J	0.1 U	0.4 J	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.28 J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.2 J
Fluorene	ug/L	N	300	0.12 U	13 J	8 J	7 J	7	1 J	1 J	1	0.6	1	0.1 U	0.6 0	0.2 J	0.1 J	0.1 U	0.7	0.1 U	0.1 U	0.11 U	0.11 U	0.13 U	0.13 U	0.13 U	0.1 U	0.4 J	1
Hexachlorobenzene	ug/L	N	0.02	0.11 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.1U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	54 UJ	53 UJ	110 UJ	59 U	6 UJ	5 UJ	5U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 UJ	5.5 UJ	5.3 U	5.4 U	5.4 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.5 U	11 UJ	11 UJ	22 UJ	12 U	1 UJ	1 UJ	1U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	0.53 U	0.54 U	0.54 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	1 UJ	1 UJ	2 UJ	1 U	0.1 UJ	0.1 UJ	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.76 U	0.77 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.76 U	0.77 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	**460**	**380**	**330**	**710**	170 J	180 J	41	49	59	0.7	25 0	19 0	0.5 J	0.5	0.1 U	0.1 U	0.1 U	0.34 J	0.39 J	0.11 U	0.11 U	0.11 U	160	**400**	68
Nitrobenzene	ug/L	N	6	0.5 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	5 UJ	5 UJ	11 UJ	6 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.8 U	1.1 U	1.1 U	1.1 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	11 UJ	11 UJ	22 UJ	12 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	24 J	15 J	12 J	10	2 J	2 J	3	1	2	0.1 U	1 0	0.4 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.28 J	0.12 U	0.12 U	0.12 U	0.1 U	0.4 J	3
Phenol	ug/L	N	2000	0.5 U	280 J	110 J	89 J	20	23 J	25 J	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.53 U	0.54 U	0.54 U	32	83	0.5 U
Pyrene	ug/L	N	200	0.1 U	6 J	5 J	4 J	3 J	0.4 J	0.4 J	0.8	0.3 J	0.6	0.1 U	2 0	0.1 J	0.4 J	0.2 J	0.2 J	0.1 U	0.1 U	0.11 U	0.21 J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.3 J
Total TIC SVOCS	ug/L	N	NA	-	-	4100 J	42000 J	18000 J	-	-	-	530 J	-	-	440 J	600 J	-	24 J	340 J	27 J	-	-	-	-	-	-	-	710 J	1600 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-319	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R
			Field Sample ID	M318RRA9X	M318RRB2X	M318RRB4X	M318RRB5X	M318RRB6X	M318RRB7X	M318RRB9X	M318RRC2X	M318RRC4X	M318RRC8	M318RRD1	M319A3X	M319RA1X	M319RA2X	M319RA6X	M319RB1X	M319RB3X	M319RB5X	M319RB7X	M319RB8X	M319RB9X	M319RC1X	M319RC2X	M319RC3X	M319RC4X
			Sample Date	09/20/2016	04/12/2017	10/24/2017	01/18/2018	04/02/2018	02/19/2019	08/07/2019	02/05/2020	08/14/2020	08/19/2021	03/01/2022	01/15/2014	01/17/2013	05/14/2013	10/23/2014	10/20/2015	09/14/2016	04/07/2017	10/23/2017	04/04/2018	02/21/2019	08/13/2019	02/11/2020	08/21/2020	01/28/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	7	0.5 U	4	0.5 U	0.5 U	15 U	3 UJ	3 U	3.4 U	3.2 U	3 U	10 U	75	63	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3.3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	10 U	10 U	71 U	14 UJ	14 U	16 U	15 U	14 U	210 U	220 U	120 U	10 U	10 UJ	10 U	10 U	12 U	10 U	14 U	14 U	14 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.1 U	1.1 U	1 U	21 U	22 U	12 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.45 U	0.43 U	0.4 U	8 U	9 U	5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
2-Methylnaphthalene	ug/L	N	30	**59**	0.9	8	2	3	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	**790**	**690**	**1400**	1	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.11 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	2	0.5 U	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	2 U	2 U	2.3 U	1.1 U	1 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2.2 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 U	3 UJ	3 U	3.4 U	1.1 U	1 U	10 U	11 U	6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3.3 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	15 U	3 U	3 U	3.4 U	4.3 U	4 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.3 U	4.1 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 U	3 U	3 U	3.4 U	2.1 U	2 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3.3 U	2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	40 U	8 UJ	8 U	9 UJ	8.6 U	8.1 U	100 U	110 U	60 U	5 UJ	5 UJ	5 U	5 U	6 U	5 U	8 U	8 U	8 U	8.8 U	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	20 U	4 U	4 U	4.5 U	4.3 U	4 U	10 U	11 U	6 U	0.5 U	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.4 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	6	8	0.5 U	0.5 U	3	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	5 U	0.9 U	0.9 U	1 U	0.96 U	0.91 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.91 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	50 U	10 UJ	10 U	11 U	11 U	10 U	210 U	220 U	120 U	10 U	10 UJ	10 U	10 U	12 U	10 U	10 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	10 J	8 J	19	2	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	1 U	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	4 U	4 U	4.5 U	1.1 U	1 U	10 U	11 U	**1700**	0.5 U	0.7 J	0.5 U	0.5 U	0.6 U	0.5 U	4 U	4 U	4 U	4.4 U	1 U
Anthracene	ug/L	N	2000	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	5 J	4 J	12	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2.3 U	1.1 U	1 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 J	15 U	3 U	3 U	3.4 U	1.1 U	1 U	21 U	22 U	12 U	1 U	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.3 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	**1J**	0.1J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**42J**	2 U	**5**	2 U	**11**	25 U	5 U	**5J**	5.6 U	2.1 U	2 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.5 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2.3 U	2.1 U	2 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5.6 U	3.2 U	3 U	100 U	110 U	60 U	5 U	5 UJ	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5.5 U	3 U
Carbazole	ug/L	N	NA	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.6 J	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.2 J	0.1 U	0.2 J	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	2 J	0.3 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2.3 U	2.1 U	2 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	25 U	5 U	5 U	5.6 U	5.3 U	5 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.5 U	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	12	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2.3 U	2.1 U	2 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	10 UJ	2 U	2 U	2.3 U	2.1 U	2 U	42 U	44 U	24 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 U	3 U	3 U	3.4 U	0.53 U	0.5 U	13 J	11 U	19	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3.3 U	0.51 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.2 J	0.1 J	0.2 J	0.5 U	0.1 U	0.2 J	0.11 U	0.11 U	0.1 U	2 U	2 U	3 J	0.8	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Fluorene	ug/L	N	300	0.9	0.1 U	0.1 J	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.13 U	0.12 U	18	16	36	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5.6 U	5.3 U	5 U	100 U	110 U	60 U	5 U	5 UJ	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5.5 U	5.1 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.1 U	0.53 U	0.5 U	21 U	22 U	12 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.51 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	2 U	2 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 UJ	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.7 U	0.7 U	0.79 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U	0.7 U	0.7 U	0.77 U	0.51 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.7 U	0.7 U	0.79 U	0.53 U	0.5 U	**32**	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U	0.7 U	0.7 U	0.77 U	0.51 U
Naphthalene	ug/L	N	300	230	2	36	10	16	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	**770**	**800**	**880**	1	1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.11 J	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	2 U	1.8 U	1.1 U	1 U	10 U	11 U	6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	2 U	1.8 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	5 U	1 UJ	1 U	1.1 U	1.1 U	1 U	21 U	22 U	12 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U
Phenanthrene	ug/L	N	NA	1	0.1 U	0.2 J	0.1 U	0.2 J	0.5 U	0.1 U	0.2 J	0.11 U	0.12 U	0.11 U	34	28	71	2	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Phenol	ug/L	N	2000	16	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.56 U	0.53 U	0.5 U	10 U	11 U	15	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U
Pyrene	ug/L	N	200	0.1 J	0.1 J	0.3 J	0.1 J	0.2 J	0.5 U	0.1 U	0.2 J	0.11 U	0.11 U	0.1 U	4 J	3 J	9	0.6	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	590 J	-	89 J	200 J	160 J	-	-	-	-	19000 J	-	9400 J	-	-	-	-	0 J	4 J	95 J	20 J	19 J	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-319R	MW-319R	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R
			Field Sample ID	M319RC5	M319RC6	M321A1X	M321A2X	M321A3X	M321B2X	M321B4X	M321B5X	M321B9X	M321C1X	M321C2X	M321C3X	M329A1X	M329A2X	M329A3X	M329A5X	M329A6X	M329A7X	M329A8X	M329RB5X	M329RB7X	M329RB8X	M329RB9X	M329RC1X	M329RC2X	M329RC3X	M329RC4X
			Sample Date	08/19/2021	02/28/2022	01/07/2013	05/14/2013	01/14/2014	10/21/2015	04/20/2016	09/13/2016	10/25/2017	01/16/2018	02/21/2019	08/20/2019	04/23/2012	06/21/2012	11/14/2012	05/09/2013	07/02/2013	10/15/2013	12/18/2013	08/31/2016	12/07/2016	01/20/2017	04/18/2017	07/10/2017	10/18/2017	01/09/2018	05/22/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.3 U	3.4 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	0.8 J	-	0.6 U	2	0.5 UJ	0.5 U	0.5 UJ	3	0.6 U	0.5 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	16 U	11 U	-	10 U	10 U	10 U	10 UJ	10 U	11 U	14 U	14 U	10 U	9 U	11 U	-	12 U	-	11 U	10 U	10 UJ	10 U	10 UJ	10 U	11 U	10 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1.1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	-	1 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.44 U	0.45 U	0.5 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.5 U	-	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.11 U	0.2 J	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2 J	3	3	-	1	-	2	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1.1 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1.1 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.4 U	4.5 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U
3-Nitroaniline	ug/L	N	NA	2.2 U	2.2 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.7 U	9 U	6 U	-	5 U	5 U	5 U	5 UJ	5 U	5 U	8 U	8 U	5 U	5 U	5 U	-	6 U	-	6 U	5 U	5 UJ	5 U	5 UJ	5 U	6 U	5 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.4 U	4.5 U	0.6 U	-	0.5 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.55 U	1.3 J	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5 U	-	0.6 U	-	0.9 J	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.98 U	1 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	11 U	-	10 U	10 U	10 U	10 UJ	10 U	11 U	10 U	10 U	10 U	9 U	11 U	-	12 U	-	11 U	10 U	10 UJ	10 U	10 UJ	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2	2	2	-	2	-	2	0.3 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 J
Acenaphthylene	ug/L	N	NA	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.09 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	1.1 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	2 J	3	4	-	4	-	0.6 U	0.6 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	4 U
Anthracene	ug/L	N	2000	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5	0.09 U	0.6	-	0.1 J	-	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	1.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1.1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	1 U	0.9 U	1 U	-	1 U	-	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1J	**0.4J**	-	0.1 U	-	**0.3J**	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.09 U	**0.3J**	-	0.1 U	-	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1J	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.09 U	**0.3J**	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.4 J	-	0.1 U	-	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.2 J	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	**740**	**260**	**1700**	-	**320**	-	**1400**	**23**	**14J**	**13J**	2 U	**25**	**36**	**98**	**31**
Butylbenzylphthalate	ug/L	N	100	2.2 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.3 U	3.4 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-	6 U	-	6 U	5 U	5 UJ	5 U	5 U	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.6	-	0.1 U	-	0.3 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.2 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.5 U	5.6 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	2 U	2 U	5 J	-	2 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	-	0.1 U	-	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 J	0.7 J	-	0.6 U	-	0.6 J	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.2 U	2.2 U	7	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	2.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.11 J	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.09 U	0.8	-	0.4 J	-	0.6	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.2 J	0.3 J	0.1 U
Fluorene	ug/L	N	300	0.13 U	0.13 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1	0.8	1	-	0.8	-	1	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.5 U	5.6 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-	6 U	-	6 U	5 U	5 UJ	5 U	5 U	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.55 U	0.56 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	-	1 U	-	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.2J	-	0.1 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U
Naphthalene	ug/L	N	300	0.18 J	0.11 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	1 U	1 U	1 U	10 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U
Nitrobenzene	ug/L	N	6	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1.1 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1.1 U	1 U	-	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	-	1 U	-	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.12 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7	0.7	2	-	0.5 J	-	1	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.55 U	0.56 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 J	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.8	0.4 J	1	-	0.5 J	-	1	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.2 J	0.4 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	24 J	-	15 J	-	43 J	-	95 J	0 U	-	-	-	-	650 J	-	1200 J	-	160 J	110 J	-	360 J	440 J	-	370 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330
			Field Sample ID	M329RC5X	M329RC6X	M329RC7X	M329RC8X	D0806198	M329RC9X	M329RD1X	M329RD2X	M329RD3	M329RD4	M330A1X	M330A2X	M330A3X	M330B1X	M330B2X	M330B3X	M330B5X	M330B7X	D0405087	M330B9X	M330C3X	M330C4X	D0808198	M330C5X	M330C6X	M330C7X	D0512208
			Sample Date	08/28/2018	11/21/2018	02/11/2019	05/16/2019	08/06/2019	08/06/2019	09/08/2020	02/05/2021	08/25/2021	02/04/2022	01/17/2013	05/17/2013	01/17/2014	10/22/2015	04/13/2016	09/21/2016	04/13/2017	10/31/2017	04/05/2018	04/05/2018	02/27/2019	05/07/2019	08/08/2019	08/08/2019	11/05/2019	02/06/2020	05/12/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
2,4-Dimethylphenol	ug/L	N	100	5 J	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	3.1 U	3 U	**410**	-	**160**	**230**	**120**	5.4 UJ	5 U	0.5 U	5 U	0.5 U	**550**	**370**	62	52	29	41	15 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	14 U	14 U	14 U	15 U	15 U	14 U	14 U	1100 U	-	13 U	10 U	10 U	110 UJ	100 U	10 U	100 U	10 U	14 U	14 U	15 U	14 U	14 U	14 U	72 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	110 U	-	1 U	1 U	1 U	11 UJ	10 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.42 U	0.41 U	0.4 U	43 U	-	0.5 U	0.4 U	0.4 U	4.3 UJ	4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
2-Methylnaphthalene	ug/L	N	30	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	**4200**	-	**540**	**370J**	**380**	**9200J**	**1500**	**590**	**680J**	**380J**	**240**	**110**	**120**	**140**	**42**	**42**	**40 J**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	680	-	140	110	55	5.4 UJ	5 U	0.5 U	5 U	0.5 U	47	11	0.5 U	0.5 U	1 J	4	6 J
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	1.0 U	1 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	1 U	1.0 U	1 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 U	15 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	4.2 U	4.1 U	4 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	2.1 U	2.1 U	2 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	8 U	8 U	8 U	8.3 U	8.4 U	8.3 U	8.1 U	530 U	-	6 U	5 U	5 U	54 UJ	50 U	5 U	50 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	41 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4 U	4 U	4 U	4.2 U	4.2 U	4.1 U	4 U	53 U	-	0.6 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	21 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	2	7	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	**460**	-	**190**	**160**	**110**	5.4 UJ	56	0.5 U	5 U	0.5 U	33	16	6	9	18	77	49 J
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.94 U	0.94 U	0.93 U	0.91 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	1100 U	-	13 U	10 U	10 U	110 UJ	100 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	51 U
Acenaphthene	ug/L	N	400	0.3 J	0.1 U	0.1 U	0.2 J	0.3 J	0.3 J	0.1 U	0.17 J	0.19 J	0.1 U	21 J	-	1	2	2	48 J	9	0.1 U	1 U	4 J	0.8	0.1 U	0.7	0.1 U	0.5	0.1 U	0.5 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	4 U	4 U	4.2 U	1 U	1.0 U	1 U	53 U	-	0.6 U	0.5 U	270	5.4 UJ	5 U	0.5 U	5 U	0.5 U	370	4 U	4 U	4 U	4 U	4 U	21 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.7	0.7	1	25 J	4 J	0.1 U	2 J	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	1 U	1.0 U	1 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 UJ	3 U	3 U	3.1 U	1 U	1.0 U	1 U	110 U	-	1 U	1 U	540	11 UJ	10 U	1 U	10 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	**0.4J**	**0.2J**	**0.3J**	**12J**	**2J**	0.1 U	**1J**	**0.8**	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.5 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	11 U	-	0.1 U	**0.2J**	0.1J	**7.7J**	**1J**	**0.5**	1 U	**0.6J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.1 U	0.1J	**0.2J**	**5.3J**	1 U	0.1 U	**1J**	**0.8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.1 U	0.2 J	0.2 J	3.3 J	1 U	0.1 U	1 J	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**62**	5 U	5 U	5 U	**29**	**18**	5.2 U	2.1 U	2.1 U	2.8 J	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 J	20 U	**4J**	**6J**	5 U	5 U	5 U	5 U	5 U	26 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 UJ	5 U	5 U	5.2 U	3.1 U	3.1 U	9.7	530 U	-	6 U	5 U	5 U	54 UJ	50 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.9	0.5	0.6	**19J**	4 J	0.1 U	1 U	2 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.5 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 UJ	5 U	5 U	5 U	5 U	5.2 U	5.2 U	5.2 U	5.1 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	1	0.5 U	36 J	5 U	0.5 U	5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	210 U	-	3 U	2 U	2 U	22 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	0.52 U	0.52 U	0.51 U	53 U	-	4	3	3	82 J	12	4	5 U	2 J	3 U	3 U	3 U	3 U	3 U	3 U	15 U
Fluoranthene	ug/L	N	300	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	11 U	-	0.8	0.5 J	0.1 U	23 J	3 J	0.1 U	1 U	2 J	0.6	0.1 J	0.3 J	0.4 J	0.1 U	0.1 U	0.5 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.12 U	0.12 U	53 J	-	5	3	3	99 J	17	0.1 U	10 J	5 J	2	0.9	1	2	1	0.1 U	0.5 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	11 U	-	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.2 U	5.2 U	5.1 U	530 U	-	6 U	5 U	5 U	54 UJ	50 U	5 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U	0.52 U	0.51 U	110 U	-	1 U	1 U	1 U	11 UJ	10 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	11 U	-	0.1 U	0.1J	0.1 U	1.1 UJ	1 U	0.1 U	1 U	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	4 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	4 U
Naphthalene	ug/L	N	300	0.1 U	0.2 J	0.5	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	**790**	**820**	**860**	**690**	**740**	**7500J**	**1500**	**510**	**450J**	300 J	**310**	260	180	220	130	36	77 J
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7 U	1 U	1.0 U	1 U	53 U	-	0.6 U	0.5 U	0.5 U	5.4 UJ	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	8 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	110 U	-	1 U	1 U	1 U	11 UJ	10 U	1 U	10 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	5 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	84	-	9	5	5	200J	35	14	21 J	13 J	4	1	2	2	0.1 U	2	0.5 U
Phenol	ug/L	N	2000	0.5 U	22	25	0.5 U	0.5 U	0.5 U	0.52 U	0.52 U	0.52 U	0.51 U	410	-	85	20	0.5 U	5.4 UJ	20	0.5 U	5 U	3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	3 U
Pyrene	ug/L	N	200	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	19 J	-	2	1	1	53 J	8	4	7 J	4 J	1	0.3 J	0.8	0.9	0.5 J	0.6	0.5 U
Total TIC SVOCS	ug/L	N	NA	400 J	-	410 J	350 J	450 J	310 J	-	-	-	-	-	-	88000 J	-	8000 J	-	-	3400 J	13000 J	7000 J	3500 J	4400 J	3700 J	4200 J	3500 J	-	5300 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331
			Field Sample ID	M330C8X	M330C9X	M330D1X	M330D2X	M330D2	M330D4	M330D5	M330D6	M331A1X	M331A2X	M331A3X	M331B1X	M331B2X	M331B3X	M331B5X	M331B7X	M331B8X	M331B9X	M331C1X	M331C3X	M331C5X	M331C7X	D1113208A	M331C8X	M331D1	M331D2
			Sample Date	05/12/2020	08/19/2020	11/13/2020	02/10/2021	04/30/2021	08/19/2021	10/13/2021	02/15/2022	01/04/2013	05/17/2013	01/16/2014	10/22/2015	04/19/2016	09/19/2016	04/06/2017	10/25/2017	01/16/2018	04/09/2018	02/19/2019	08/12/2019	02/05/2020	08/14/2020	11/13/2020	11/13/2020	04/29/2021	08/19/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	3 U	17 J	6 J	66	34 U	13	3.3 U	3.1 U	36	-	46	4	0.9 J	19	1	5	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	3 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	14 U	81 U	14 U	15 U	160 U	15 U	15 U	14 U	11 U	-	12 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	14 U	14 U	16 U	15 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	5.8 U	1 U	1 U	11 U	1 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	2.3 U	0.41 U	0.41 U	4.5 U	0.42 U	0.43 U	0.41 U	0.4 U	-	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U	0.4 U	0.41 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
2-Methylnaphthalene	ug/L	N	30	21 J	0.58 U	0.1 U	2.8	12	0.1 U	0.11 U	0.1 U	**100**	-	**91**	6 J	2	2	13	15	0.2 J	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	3 J	4.4 J	0.51 U	14	5.6 U	0.52 U	0.54 U	0.51 U	23	-	33	4	0.5 U	4	0.5 U	4	0.5 U	0.5 U	0.9 J	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	12 U	2 U	1 U	11 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	17 U	3.1 U	1 U	11 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	17 U	3.1 U	4.1 U	45 U	4.2 U	4.3 U	4.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	4.1 U	4.1 U
3-Nitroaniline	ug/L	N	NA	3 U	17 U	3.1 U	2.1 U	23 U	2.1 U	2.2 U	2.1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	2 U	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	46 U	8.1 U	8.3 U	90 U	8.3 U	8.7 U	8.2 U	5 U	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	9 U	8.3 UJ	8.2 U	8.1 U	8.1 U	8.3 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
4-Chloroaniline	ug/L	N	30	4 U	23 U	4.1 U	4.1 U	45 U	4.2 U	4.3 U	4.1 U	0.5 U	-	0.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.1 U	4 U	4.1 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	20 J	31	2.7	0.52 U	8.7 J	11	6	0.51 U	42	-	75	6	2	9	1	10	0.5 U	0.5 U	2 J	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
4-Nitroaniline	ug/L	N	NA	0.9 U	5.2 U	0.92 U	0.93 U	10 U	0.93 U	0.98 U	0.92 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.93 U	0.93 U	0.91 U	0.91 U	0.93 U
4-Nitrophenol	ug/L	N	NA	10 U	58 U	10 U	10 U	110 U	10 U	11 U	10 U	11 U	-	12 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.2 J	-	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	23 U	4.1 U	1 U	11 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	7	15	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.1 U	4.1 U	4 U	1 U	1 U
Anthracene	ug/L	N	2000	0.6	3.9	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	12 U	2 U	1 UJ	11 U	1 U	1.1 U	1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	1 U	1 U
Benzaldehyde	ug/L	N	NA	3 U	17 U	3.1 U	1 U	11 U	1 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.15J**	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.58 U	0.1 U	0.11 U	1.2 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.22J**	**0.12J**	0.1 U	0.11 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	**0.33J**	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 UJ	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	29 U	5.1 U	2.1 U	23 U	2.1 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 J	2 U	**5J**	**11**	5 U	6 U	5.2 U	5.1 U	5 U	2 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	12 U	2 U	2.1 U	23 U	2.1 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	29 U	5.1 U	3.1 UJ	34 U	3.1 U	3.3 U	3.1 U	5 U	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.2 U	5.1 U	5 U	3 U	3.1 U
Carbazole	ug/L	N	NA	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
Chrysene	ug/L	N	5	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.19 J	0.11 J	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	12 U	2 U	2.1 U	23 U	2.1 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 U	29 U	5.1 U	5.2 U	56 U	5.2 U	5.4 U	5.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5.2 U	5.1 U	5 U	5.1 U	5.2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
Diethylphthalate	ug/L	N	6000	2 U	12 U	2 U	2.1 U	23 U	2.1 U	2.2 U	2.1 U	8	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	12 U	2 U	2.1 U	23 U	2.1 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	17 U	3.1 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	0.51 U	0.52 U
Fluoranthene	ug/L	N	300	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.28 J	0.16 J	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.58 U	0.1 U	0.12 U	1.4 U	0.12 U	0.13 U	0.12 U	0.3 J	-	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.58 U	0.1 U	0.11 U	1.2 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	29 U	5.1 U	5.2 U	56 U	5.2 U	5.4 U	5.1 U	5 U	-	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.2 U	5.1 U	5 U	5.1 U	5.2 U
Hexachloroethane	ug/L	N	7	1 U	5.8 U	1 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.52 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.58 U	0.1 U	0.11 U	1.2 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15J	0.1 U	0.1 U	0.11 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	4 U	0.71 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.73 U	0.72 U	0.71 U	0.51 U	0.52 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	4 U	0.71 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.73 U	0.72 U	0.71 U	0.51 U	0.52 U
Naphthalene	ug/L	N	300	46 J	0.58 U	110 J	200 J	21	4.4	0.11 U	2.3	**360**	**420**	**320**	23	10	29	19	49	1	2	0.1 U	0.1 U	0.1 U	0.31 J	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	0.52 U	0.54 U	0.51 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	9.2 U	1.6 U	1 U	11 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.6 U	1.6 U	1 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	5.8 U	1 U	1 U	11 U	1 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.5 J	0.58 U	0.1 U	0.11 U	1.5 J	0.11 U	0.12 U	0.11 U	0.2 J	-	0.2 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.13 J	0.1 U	0.1 U	0.11 U	0.11 U
Phenol	ug/L	N	2000	0.5 U	2.9 U	0.51 U	0.52 U	5.6 U	2.3	0.54 U	0.51 U	16	-	27	7	4	21	2	7	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U	0.5 U	0.51 U	0.52 U
Pyrene	ug/L	N	200	0.1 U	0.58 U	0.1 U	0.1 U	1.1 U	0.15 J	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 J	0.32 J	0.19 J	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	2000 J	-	-	-	-	-	-	-	-	-	14000 J	-	860 J	-	-	950 J	-	92 J	790 J	360 J	-	-	0 U	0 U	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-331	MW-331	MW-332	MW-332	MW-332	MW-332	MW-332	MW-332	MW-332	MW-332	MW-332	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341
			Field Sample ID	M331D3	M331D4	M332A1X	M332A2X	D0115148	M332A3X	M332B1X	M332B2X	M332B3X	M332B6X	M332B7X	M341A1X	M341A2X	M341A3X	M341A7X	M341B2X	M341B3X	M341B4X	M341B6X	M341B8X	M341B9X	M341C1X	M341C2X	D0807198	M341C3X	M341C5X	M341C6X
			Sample Date	10/13/2021	02/28/2022	01/07/2013	05/15/2013	01/15/2014	01/15/2014	10/19/2015	04/21/2016	09/14/2016	10/25/2017	02/14/2019	01/21/2013	05/16/2013	01/15/2014	10/24/2014	10/20/2015	04/20/2016	09/15/2016	04/12/2017	10/20/2017	01/15/2018	04/02/2018	03/08/2019	08/07/2019	08/07/2019	02/12/2020	08/12/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.1 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	21 J	95	17 J	29 J	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	17	3 U	30 U	30 U	3 U	14
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	11 U	-	510 U	11 U	10 U	10 U	10 U	10 U	14 U	12 UJ	11 U	11 UJ	10 UJ	10 UJ	10 U	100 U	100 UJ	100 U	500 U	100 U	14 U	140 U	140 UJ	14 U	16 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	-	51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	10 U	10 U	10 U	50 UJ	10 U	1 U	10 U	10 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.4 U	-	20 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 UJ	0.4 U	0.5 UJ	0.4 UJ	0.4 UJ	0.4 U	4 U	4 U	4 U	20 UJ	4 U	0.4 U	4 U	4 U	0.4 U	0.44 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.3 J	-	**2800J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	24 J	**650**	**41 J**	**100 J**	4 J	8	**940**	**460**	**1700**	**57000J**	**740**	30	**240**	**180**	26	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 J	52	13 J	8 J	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	2 U	20 U	20 U	2 U	2.2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.6 UJ	0.5 U	1 J	0.5 UJ	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	3 U	30 U	30 U	3 U	3.3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	4.1 U	2 U	-	100 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	3 U	30 U	30 U	3 U	3.3 U
3-Nitroaniline	ug/L	N	NA	2 U	2 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	3 U	30 U	30 U	3 U	3.3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	8.1 U	5 U	-	250 U	5 U	5 U	5 U	5 U	5 U	8 U	6 UJ	5 U	6 UJ	5 UJ	5 UJ	5 U	52 U	51 UJ	52 U	250 U	50 U	8 U	80 U	81 U	8 U	8.9 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
4-Chloroaniline	ug/L	N	30	4 U	4.1 U	0.5 U	-	25 U	0.5 U	2 U	2 U	2 U	2 U	4 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	4 U	40 U	40 U	4 U	4.4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 UJ	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8 J	23	10 J	26 J	1 J	0.5 U	5 U	5 UJ	5 U	25 U	24	0.5 U	5 U	5 U	4	3.2
4-Nitroaniline	ug/L	N	NA	0.91 U	0.92 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.9 U	9 U	9 U	0.9 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	-	510 U	11 U	10 U	10 U	10 U	10 U	10 U	12 UJ	11 U	11 UJ	10 UJ	10 UJ	10 U	100 U	100 UJ	100 U	500 U	100 U	10 U	100 U	100 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	-	34 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	5	0.1 J	2 J	0.6 J	0.3 J	4 J	3 J	10	5 UJ	7	0.1 U	1 U	1 U	0.3 J	0.17 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	2	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1 U	1 U	1 U	5 UJ	1 U	0.1 U	1 U	1 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	1 U	1 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.6 UJ	**780**	0.6 UJ	17 J	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	4 U	40 U	40 U	4 U	4.4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	-	20 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	2	0.1 J	2 J	0.3 J	0.5 J	6	6	10	370 J	4 J	0.3 J	4 J	1 U	0.1 U	0.11 U
Atrazine	ug/L	N	3	1 U	1 U	2 U	-	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	2 U	20 U	20 U	2 U	2.2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	-	51 U	1 U	1 U	1 U	1 U	1 U	3 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	10 U	10 U	10 U	50 UJ	10 U	3 U	30 U	30 U	3 U	3.3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.5J**	0.1J	0.1 UJ	0.1 UJ	**0.2J**	**2J**	1 U	**4J**	**140J**	**1J**	0.1 U	1 U	**2J**	0.1 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.3J**	0.1 UJ	0.1 UJ	0.1 UJ	0.1J	1 U	**2J**	**2J**	**95J**	1 U	0.1 U	**1J**	1 U	0.1 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.3J**	0.1J	0.1 UJ	0.1 UJ	0.1J	**2J**	**2J**	**2J**	**83J**	1 U	0.1 U	1 U	1 U	0.1 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 UJ	0.2 J	2 J	2 J	2 J	57 J	1 U	0.1 U	1 U	1 J	0.1 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 UJ	0.1 UJ	0.1 U	1 U	1 U	**1 J**	**22J**	1 U	0.1 U	1 U	1 U	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	-	100 U	2 U	2 U	2 U	2 U	2 U	5 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	5 U	50 U	50 U	5 U	5.6 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	-	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	2 U	20 U	20 U	2 U	2.2 U
Caprolactam	ug/L	N	4000	3 U	3.1 U	5 U	-	250 U	5 U	5 U	5 U	5 U	5 U	5 U	6 UJ	5 U	6 UJ	5 UJ	5 UJ	5 U	52 U	51 U	52 U	250 UJ	50 U	5 U	50 U	50 U	5 U	5.6 U
Carbazole	ug/L	N	NA	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	5 J	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	-	5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.8	0.2 J	0.1 J	0.2 J	0.4 J	3 J	4 J	**8**	**250J**	1 J	0.1 U	1 U	1 U	0.1 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	-	100 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	2 U	20 U	20 U	2 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.1 U	2 U	-	100 U	2 U	2 U	2 U	2 U	2 U	5 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	5 U	50 U	50 U	5 U	5.6 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1 U	1 U	1 U	**9J**	1 U	0.1 U	1 U	1 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	2 J	0.5 UJ	0.5 U	5 U	5 U	6 J	200J	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	-	100 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 U	20 U	21 U	100 UJ	20 U	2 U	20 U	20 U	2 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	-	100 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	21 UJ	20 U	21 U	100 UJ	20 U	2 U	20 U	20 U	2 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.51 U	0.5 U	-	41 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.6 UJ	4	0.6 UJ	1 J	0.5 UJ	0.5 U	7 J	5 U	11	400 J	5 J	3 U	30 U	30 U	3 U	3.3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	-	6 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	1	0.1 J	0.7 J	0.2 J	0.5 J	5	4 J	8	300 J	2 J	0.5 J	4 J	3 J	0.2 J	0.11 U
Fluorene	ug/L	N	300	0.12 U	0.12 U	0.1 U	-	75 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	6	0.4 J	8 J	2 J	0.7	11	12	24	**860J**	9	0.1 U	7	6	0.5 J	0.11 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1 U	1 U	1 U	5 UJ	1 U	0.1 U	1 U	1 U	0.1 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.1 U	5 U	-	250 U	5 U	5 U	5 U	5 U	5 U	5 U	6 UJ	5 U	6 UJ	5 UJ	5 UJ	5 U	52 U	51 U	52 U	250 UJ	50 U	5 U	50 U	50 U	5 U	5.6 UJ
Hexachloroethane	ug/L	N	7	0.51 U	0.51 U	1 U	-	51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	10 U	10 U	10 U	50 UJ	10 U	1 U	10 U	10 U	1 U	1.1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.1 U	-	5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1 U	1 U	1 U	**25J**	1 U	0.1 U	1 U	1 U	0.1 U	0.11 U
Isophorone	ug/L	N	40	0.51 U	0.51 U	0.5 U	-	25 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.7 U	7 U	7 U	0.7 U	0.78 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	**17**	0.7 U	7 U	7 U	0.7 U	0.78 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	1 J	1 U	**2100J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	230	**870**	130 J	190 J	1 J	23	**1300**	**510**	**2000**	**50000J**	**970**	61	220	180	51	0.11 U
Nitrobenzene	ug/L	N	6	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 U	5 U	25 UJ	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	2 U	1.8 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	-	51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	10 U	10 UJ	10 U	50 U	10 U	1 U	10 U	10 U	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.1 U	-	130J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	13	0.3 J	21 J	2 J	1	29	26	50	2000J	18	1	14	11	0.6	0.11 U
Phenol	ug/L	N	2000	0.51 U	0.51 U	0.5 U	-	25 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	56 J	43	9 J	32 J	0.5 UJ	0.5 U	5 U	5 UJ	5 U	25 U	5 U	0.5 U	5 U	5 U	0.5 U	0.56 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	-	15 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	3	0.1 UJ	1 J	0.6 J	1	19	14	25	**1000J**	8	1	13	11	0.5 J	0.25 J
Total TIC SVOCS	ug/L	N	NA	0 U	-	-	-	8800 J	39 J	-	-	-	110 J	34 J	-	1800 J	5200 J	-	-	1500 J	-	-	-	-	15000 J	1100 J	6200 J	5000 J	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-341	MW-341	MW-341	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-343	MW-343	MW-343	MW-343	MW-343
			Field Sample ID	M341C7X	M341C8	M341C9	M342A1X	M342A2X	D0116148	M342A3X	M342A7X	M342B2X	M342B3X	M342B4X	M342B6X	M342B8X	M342B9X	M342C1X	M342C2X	M342C3X	M342C4X	M342C5X	M342C6X	M342C7	M342C8	D0116137	M343A1X	M343A2X	M343A3X	M343A7X
			Sample Date	02/09/2021	08/18/2021	03/01/2022	01/22/2013	03/28/2013	01/16/2014	01/16/2014	10/24/2014	10/21/2015	04/18/2016	09/16/2016	04/12/2017	10/26/2017	01/18/2018	04/03/2018	03/08/2019	08/13/2019	02/12/2020	08/12/2020	02/10/2021	08/18/2021	03/01/2022	01/16/2013	01/16/2013	05/15/2013	01/15/2014	10/24/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
2,4-Dichlorophenol	ug/L	N	20	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3.2 U	16 U	6 U	46	79	86	4 J	0.5 U	26 UJ	5 U	5 U	51 J	55 U	0.5 U	3 U	3 U	16 U	3.9 U	3 U	3.2 U	3 U	79 J	**130J**	**210J**	**140**	2 J
2,4-Dinitrophenol	ug/L	N	40	15 U	15 U	74 U	110 U	110 U	59 U	60 U	12 UJ	10 U	520 UJ	100 U	100 U	10 U	1100 U	10 U	14 U	14 U	74 U	18 U	14 U	15 U	14 U	10 UJ	220 UJ	110 UJ	12 U	11 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 U	5.3 U	11 U	11 U	6 U	6 U	1 UJ	1 U	52 UJ	10 U	10 U	1 U	110 UJ	1 U	1 U	1 U	5 U	1.3 U	1 UJ	1.1 U	1 U	1 UJ	22 UJ	11 UJ	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 UJ	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.42 U	2.1 U	4 U	4 U	2 U	2 U	0.5 UJ	0.4 U	21 UJ	4 U	4 U	0.5 J	44 UJ	0.4 U	0.4 U	0.4 U	2 U	0.52 U	0.41 U	0.43 U	0.4 U	0.4 UJ	9 UJ	4 UJ	0.5 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
2-Methylnaphthalene	ug/L	N	30	**31**	0.11 U	0.53 U	**3100J**	**1200**	**190**	**200**	**150J**	**79 J**	**11000J**	**2500J**	**6400J**	**260J**	**190000J**	**360**	**55**	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	**690J**	**1700J**	**1400J**	**170**	**930J**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 U	0.53 U	2.7 U	41 J	55	100	110	0.6 UJ	9	26 UJ	16 J	5 U	20 J	55 U	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	58 J	120J	110J	110	1 J
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1.1 U	5.3 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	2 U	2 U	11 U	2.6 U	1 U	1.1 U	1 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1.1 U	5.3 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	3 U	3 U	16 U	3.9 U	1 U	1.1 U	1 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 U	4.2 U	21 U	22 U	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	3 U	3 U	16 U	3.9 U	4.1 U	4.3 U	4 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	2.1 U	2.1 U	11 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	3 U	3 U	16 U	3.9 U	2 U	2.2 U	2 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.4 U	8.4 U	43 U	56 U	54 U	29 U	30 U	6 UJ	5 U	260 UJ	50 U	50 U	5 U	550 U	5 U	8 U	8 U	42 U	10 U	8.1 U	8.6 U	8.1 U	5 UJ	110 UJ	53 UJ	6 U	6 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
4-Chloroaniline	ug/L	N	30	4.2 U	4.2 U	21 U	6 U	5 U	3 U	3 U	0.6 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	4 U	4 U	21 U	5.2 U	4.1 U	4.3 U	4 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 U	0.53 U	2.7 U	16	31	82	87	0.6 UJ	34	26 UJ	21 J	5 U	**130J**	55 U	24	0.5 U	3	3 U	10	0.51 U	0.54 U	0.51 U	47 J	**110J**	78 J	**140**	0.6 UJ
4-Nitroaniline	ug/L	N	NA	0.94 U	0.95 U	4.8 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.9 U	0.9 U	5 U	1.2 U	0.91 U	0.97 U	0.91 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
4-Nitrophenol	ug/L	N	NA	10 U	11 U	53 U	110 U	110 U	59 U	60 U	12 UJ	10 U	520 UJ	100 U	100 U	10 U	1100 U	10 U	10 U	10 U	53 U	13 U	10 U	11 U	10 U	10 UJ	220 UJ	110 UJ	12 U	11 UJ
Acenaphthene	ug/L	N	400	0.49 J	0.11 U	0.53 U	7 J	7	0.9 J	0.8 J	0.9 J	0.6	80 J	16 J	35 J	2 J	11 UJ	4	0.1 U	0.1 U	0.8 J	0.13 U	0.1 U	0.11 U	0.1 U	3 J	13 J	15 J	1	12 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 U	0.53 U	10 J	4 J	0.6 U	0.6 U	0.1 UJ	0.1 U	56 J	1 U	1 U	0.1 U	11 UJ	0.1 U	0.1 U	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 UJ	9 J	6 J	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	1 U	1.1 U	5.3 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	4 U	4 U	21 U	5.2 U	1 U	1.1 U	1 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
Anthracene	ug/L	N	2000	0.28 J	0.11 U	0.53 U	7 J	2 J	0.6 U	0.6 U	0.6 J	0.3 J	39 J	8 J	36 J	1 J	1100 J	1	0.4 J	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	2 J	7 J	8 J	0.1 U	3 J
Atrazine	ug/L	N	3	1 U	1.1 U	5.3 U	22 U	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	2 U	2 U	11 U	2.6 U	1 UJ	1.1 U	1 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1.1 U	5.3 U	11 U	11 U	6 U	6 U	1 UJ	20	52 UJ	10 U	10 U	1 U	110 UJ	1 U	3 U	3 U	16 U	3.9 U	1 U	1.1 U	1 U	1 UJ	22 UJ	11 UJ	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	**0.15J**	0.11 U	0.53 U	**2J**	**1J**	0.6 U	0.6 U	0.1 UJ	**0.5J**	**22J**	**4J**	**11J**	**0.4J**	**260J**	0.1 U	**0.2J**	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	**0.4J**	2 UJ	1 UJ	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.12 U	0.58 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	**0.2J**	**9J**	**2J**	**7J**	**0.2J**	11 UJ	**0.3J**	0.1 U	0.1 U	0.5 U	0.13 U	0.11 U	0.12 U	0.11 U	**0.2J**	2 UJ	1 UJ	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.11 U	0.53 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	0.2J	**9J**	**2J**	**7J**	**0.2J**	**130J**	0.1 U	0.1 U	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	0.2J	2 UJ	1 UJ	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.11 U	0.53 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	0.2 J	10 J	1 J	3 J	0.2 J	74 J	0.2 J	0.1 U	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	0.2 J	2 UJ	1 UJ	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 U	0.53 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	0.1 J	5 UJ	1 U	**2J**	0.1 U	**53J**	0.1 U	0.1 U	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 UJ	2 UJ	1 UJ	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2.1 U	11 U	22 U	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	5 U	5 U	26 U	6.4 U	2 U	2.2 U	2 U	**15J**	44 UJ	21 UJ	2 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2.1 U	2.1 U	11 U	22 UJ	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 UJ	20 U	2 U	220 UJ	2 U	2 U	2 U	11 U	2.6 U	2 U	2.2 U	2 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
Caprolactam	ug/L	N	4000	3.1 U	3.2 U	16 U	56 U	54 U	29 U	30 U	6 UJ	5 U	260 UJ	50 U	50 U	5 U	550 UJ	5 U	5 U	5 U	26 U	6.4 U	3 U	3.2 U	3 U	5 UJ	110 UJ	53 UJ	6 U	6 UJ
Carbazole	ug/L	N	NA	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 J	1 J
Chrysene	ug/L	N	5	0.26 J	0.11 U	0.53 U	4 J	2 J	0.6 U	0.6 U	0.2 J	0.7	**33J**	**6J**	**22J**	0.8 J	**530J**	0.5 J	0.5 J	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	0.7 J	3 J	2 J	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2.1 U	2.1 U	11 U	22 U	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	2 U	2 U	11 U	2.6 U	2 U	2.2 U	2 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	5.2 U	5.3 U	27 U	22 U	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	5 U	5 U	26 U	6.4 U	5.1 U	5.4 U	5.1 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 U	0.53 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	0.1 U	5 UJ	1 U	1 U	0.1 U	**14J**	0.1 U	0.1 U	0.1 U	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 UJ	2 UJ	1 UJ	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.52 U	0.53 U	2.7 U	6 J	5 U	3 U	3 U	0.7 J	0.5 U	47 J	8 J	5 U	1 J	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	3 J	11 UJ	6 J	0.7 J	8 J
Diethylphthalate	ug/L	N	6000	2.1 U	2.1 U	11 U	22 UJ	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 U	20 U	2 U	220 UJ	2 U	2 U	2 U	11 U	2.6 U	2 UJ	2.2 U	2 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2.1 U	2.1 U	11 U	22 UJ	22 U	12 U	12 U	2 UJ	2 U	100 UJ	20 UJ	20 U	2 U	220 UJ	2 U	2 U	2 U	11 U	2.6 U	2 U	2.2 U	2 U	2 UJ	44 UJ	21 UJ	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.52 U	0.53 U	2.7 U	24 J	9 J	3 U	3 U	1 J	0.5 J	79 J	18 J	34 J	2 J	**1100J**	2	3 U	3 U	16 U	3.9 U	0.51 U	0.54 U	0.51 U	5 J	16 J	10 J	1	12 J
Fluoranthene	ug/L	N	300	0.1 U	0.11 U	0.6 J	5 J	2 J	0.6 U	0.6 U	0.4 J	0.5 J	39 J	8 J	22 J	0.7 J	**580J**	1	0.4 J	0.2 J	0.5 U	0.13 U	0.1 U	0.11 U	0.1 U	1 J	3 J	2 J	0.1 U	0.7 J
Fluorene	ug/L	N	300	0.13 U	0.13 U	0.64 U	27 J	13	2 J	1 J	2 J	1	150 J	26 J	96 J	3 J	**2200J**	5	2	0.1 U	0.5 U	0.13 U	0.12 U	0.13 U	0.12 U	9 J	29 J	22 J	2	21 J
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.12 U	0.58 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	0.1 U	5 UJ	1 U	1 U	0.1 U	11 UJ	0.1 U	0.1 U	0.1 U	0.5 U	0.13 U	0.11 U	0.12 U	0.11 U	0.1 UJ	2 UJ	1 UJ	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5.2 U	5.3 U	27 U	56 U	54 U	29 U	30 U	6 UJ	5 U	260 UJ	50 U	50 U	5 U	550 UJ	5 U	5 U	5 U	26 U	6.4 UJ	5.1 U	5.4 U	5.1 U	5 UJ	110 UJ	53 UJ	6 U	6 UJ
Hexachloroethane	ug/L	N	7	0.52 U	0.53 U	2.7 U	11 U	11 U	6 U	6 U	1 UJ	1 U	52 UJ	10 U	10 U	1 U	110 UJ	1 U	1 U	1 U	5 U	1.3 U	0.51 U	0.54 U	0.51 U	1 UJ	22 UJ	11 UJ	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.12 U	0.58 U	1 U	1 U	0.6 U	0.6 U	0.1 UJ	0.1 U	5 UJ	1 U	**2J**	0.1J	**96J**	0.1 U	0.1 U	0.1 U	0.5 U	0.13 U	0.11 U	0.12 U	0.11 U	0.1 UJ	2 UJ	1 UJ	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 UJ	0.6 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.7 U	0.7 U	4 U	0.9 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.7 U	0.7 U	4 U	0.9 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
Naphthalene	ug/L	N	300	36	0.11 U	0.53 U	**900**	**320**	**430**	**470**	220 J	62	**7800J**	**1900J**	**4700J**	**390J**	**140000J**	**390**	49	0.1 U	5	1.3	0.52	0.11 U	0.1 U	**550**	**940**	**570**	**460**	130 J
Nitrobenzene	ug/L	N	6	0.52 U	0.53 U	2.7 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 UJ	0.5 U	0.5 U	0.5 U	3 U	0.64 U	0.51 U	0.54 U	0.51 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
p-Chloro-m-cresol	ug/L	N	NA	1 U	1.1 U	5.3 U	6 U	5 U	3 U	3 U	0.6 UJ	0.5 U	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	0.5 U	0.5 U	8 U	2.1 U	1 U	1.1 U	1 U	0.5 UJ	11 UJ	5 UJ	0.6 U	0.6 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	5.3 U	11 U	11 U	6 U	6 U	1 UJ	1 U	52 UJ	10 U	10 U	1 U	110 U	1 U	1 U	1 U	5 U	1.3 U	1 U	1.1 U	1 U	1 UJ	22 UJ	11 UJ	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.91	0.12 U	0.58 U	47 J	24	2 J	2 J	5 J	3	290J	61 J	170J	6 J	4500J	9	1	0.1 U	0.5 U	0.13 U	0.11 U	0.12 U	0.11 U	16 J	54 J	48 J	2	34 J
Phenol	ug/L	N	2000	0.52 U	0.53 U	2.7 U	34	33	60	64	17 J	2	26 UJ	5 U	5 U	0.5 U	55 U	0.5 U	0.5 U	0.5 U	3 U	2.1 J	0.51 U	0.54 U	0.51 U	0.5 UJ	40 J	34 J	220	10 J
Pyrene	ug/L	N	200	0.81	0.24 J	2.1 J	12	6	0.6 U	0.6 U	1 J	1	100 J	21 J	66 J	2 J	**1500J**	0.1 J	2	0.6	4	0.23 J	0.1 U	0.11 U	0.1 U	2 J	8 J	6 J	0.2 J	2 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	20000 J	47000 J	21000 J	-	-	270000 J	-	-	6600 J	-	1000 J	570 J	640 J	-	-	-	-	-	-	-	22000 J	12000 J	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	M343B2X	M343B3X	M343B4X	M343B6X	M343B8X	M343B9X	M343C1X	M343C2X	M343C3X	M343C4X	M343C5X	M343C6	M343C7	D0423138	M347A1X	D1029138	M347A3X	D0211168	M347A7X	D1208168BX	M347B1X	D0228178B	M347B2X	D0605178	M347B4X	M347B5X
			Sample Date	10/20/2015	04/15/2016	09/15/2016	04/06/2017	10/20/2017	04/04/2018	02/15/2019	08/13/2019	02/07/2020	08/20/2020	03/01/2021	08/18/2021	02/28/2022	04/23/2013	04/23/2013	10/29/2013	10/29/2013	02/11/2016	02/11/2016	12/08/2016	12/08/2016	02/28/2017	02/28/2017	06/05/2017	06/05/2017	09/13/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.52 U	0.5 UJ	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.52 U	0.5 UJ	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.52 U	0.5 UJ	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3.1 U	3 UJ	3.4 U	3.5 U	5	5	4 J	0.6 U	2	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	1 J	0.8 J	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 UJ	10 UJ	10 U	10 U	10 U	10 U	14 UJ	14 UJ	14 U	15 U	14 UJ	16 U	17 U	12 U	12 U	13 U	12 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	11 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.2 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.45 U	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.52 U	0.5 UJ	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	**210J**	**340J**	**340**	**120**	**120**	**99**	22	**31**	18	0.1 U	23	3.3	14	17	17	11	9	0.4 J	0.4 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.52 U	0.5 UJ	0.56 U	1.4 J	0.6 J	0.6 U	0.6 U	0.6 U	0.9 J	0.9 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.1 U	1 U	1.1 U	1.2 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	3 U	3.1 U	1 UJ	1.1 U	1.2 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.1 U	4 U	4.5 U	4.7 U	2 U	2 U	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	2 U	2.2 U	2.4 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 UJ	5 U	5 U	5 U	5 U	8 UJ	8 UJ	8 U	8.3 U	8 UJ	9.0 U	9.5 U	6 U	6 U	6 U	6 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 UJ	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.2 U	4 U	4.5 U	4.7 U	0.6 U	0.6 U	0.6 U	0.6 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	3 J	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 J	0.5 U	0.52 U	0.5 UJ	0.56 U	1.2 J	4	4	0.6 U	0.6 U	2	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.94 U	0.9 U	1.0 U	1.1 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 UJ	11 U	12 U	12 U	12 U	13 U	12 U	10 UJ	10 UJ	10 UJ	10 UJ	10 U	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	4 J	6 J	5	2	4	2	1	1	2	0.1 U	1.8	1.4	1.7	3	3	3	3	0.8 J	0.8 J	1 J	0.5 J	0.8	0.9	2 J	1 J	4
Acenaphthylene	ug/L	N	NA	0.1 UJ	2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.2 U	1 U	1.1 U	1.2 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	2 J	2 J	1	0.5	1	0.7	0.2 J	0.2 J	0.3 J	0.1 U	0.22 J	0.17 J	0.12 U	2 J	3 J	0.6 J	0.5 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	1.1 U	1.2 U	2 U	2 U	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 UJ	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.1 U	1 U	1.1 U	1.2 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**0.2J**	**0.5J**	**0.2J**	**0.2J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	**5**	**6**	**0.6J**	**0.4J**	**0.4J**	**0.5J**	**0.3J**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1J	**0.3J**	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.13 U	**5**	**6**	**0.6J**	**0.3J**	**0.3J**	**0.3J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.2J	0.2J	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	**5**	**6**	**0.5J**	**0.3J**	**0.4J**	**0.5J**	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.2 J	0.3 J	0.1 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	3	4	0.4 J	0.2 J	0.3 J	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	**2**	**2**	0.3 J	0.1 J	0.2 J	0.3 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 UJ	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.2 U	2 U	2.2 U	2.4 U	**10**	**11**	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2.4 U	2 U	2 U	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	9 J	5.2 U	3 U	3.4 U	3.5 U	6 U	6 U	6 U	6 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.7 J	1 J	1	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.9 J	0.6 J	3
Chrysene	ug/L	N	5	0.4 J	0.6 J	0.3 J	0.3 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	**6**	**6**	0.7	0.5 J	0.6 J	0.9 J	0.4 J	0.1 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2.4 U	2 U	2 U	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 UJ	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.2 U	5 U	5.6 U	5.9 U	2 U	2 U	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	**0.6J**	**0.9J**	0.1 U	0.1 U	0.1 UJ	0.1J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	3 J	0.5 UJ	3	1	2	2	0.7 J	0.8 J	1 J	0.52 U	0.98 J	0.73 J	0.88 J	1	1 J	2 J	1 J	0.5 UJ	0.5 UJ	0.8 J	0.5 U	0.5 J	0.6 J	1	0.8 J	3
Diethylphthalate	ug/L	N	6000	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.2 U	2.4 U	2 U	2 U	3 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2.2 U	2.4 U	2 U	2 U	3 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 J	3 J	4	2	2	1	3 U	3 U	3 U	3.1 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.6 J	0.9 J	0.6	0.4 J	0.5	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	8	11	2 J	1 J	2 J	1 J	0.5 J	0.1 J	0.2 J	0.2 J	0.1 J	0.1 U	0.2 J
Fluorene	ug/L	N	300	8 J	12 J	9	4	6	4	2	2	3	0.1 U	2.5	2.0	2.2	2 J	3 J	3 J	2 J	0.4 J	0.5 J	1 J	0.4 J	0.7	0.7	2 J	1 J	4
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.52 UJ	0.5 UJ	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5.6 U	5.9 U	6 U	6 U	6 U	6 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 UJ
Hexachloroethane	ug/L	N	7	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.56 U	0.59 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 UJ	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.13 U	**3**	**3**	**0.3J**	0.2J	0.2J	0.2J	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.73 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.73 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	18 J	17 J	10	18	33	22	13	6	16	0.1 U	64 J	51	18	7	7	4 J	5	1 J	1 J	1 J	0.1 U	0.6	0.8	3 J	1 J	4
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.56 U	0.59 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	2 U	1.7 U	1 UJ	1.1 U	1.2 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1.1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	11 J	19 J	16	5	9	4	2	2	3	0.1 U	2.6	1.2	2.2	7	9	3 J	2 J	0.5 J	0.7 J	0.2 J	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	1
Phenol	ug/L	N	2000	0.5 UJ	0.5 UJ	0.8 J	0.8 J	0.5 U	0.5 U	1 J	0.5 J	0.5 U	0.52 U	0.5 UJ	0.56 U	15	2	2	3 J	0.6 U	3	3	0.5 UJ	0.5 UJ	1	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	2 J	2 J	2	1	1	0.6	0.1 U	0.2 J	0.1 U	0.1 U	0.14 J	0.16 J	0.12 U	10	10	2 J	1 J	1 J	2 J	0.9 J	0.2 J	0.2 J	0.3 J	0.1 J	0.1 J	0.1 J
Total TIC SVOCS	ug/L	N	NA	-	1000 J	-	520 J	-	340 J	590 J	200 J	340 J	-	-	-	-	1400 J	880 J	460 J	360 J	-	-	770 J	620 J	830 J	2000 J	940 J	550 J	440 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348
			Field Sample ID	M347B8X	M347B9X	D10121815	M347C1X	M347C2X	M347C8X	D0914201	M347D1X	D0505211	M347D3	M347D4	M348A1X	D0109148	M348A2X	M348A4X	M348A7X	M348A8X	M348A9X	D0831178B	M348B1X	D0216188	M348B3X	M348B4X	M348B5X	M348B6X	M348C3
			Sample Date	06/08/2018	10/04/2018	10/12/2018	10/12/2018	12/05/2018	06/15/2020	09/14/2020	12/11/2020	05/05/2021	05/05/2021	10/28/2021	10/30/2013	01/09/2014	01/09/2014	02/19/2016	12/08/2016	02/27/2017	06/06/2017	08/31/2017	08/31/2017	02/16/2018	02/16/2018	06/08/2018	10/01/2018	12/05/2018	05/05/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3 U	3 U	-	3 U	-	3.4 U	3.1 U	3.2 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.2 U
2,4-Dinitrophenol	ug/L	N	40	15 UJ	15 U	14 U	14 U	14 U	-	14 U	-	16 U	14 U	15 U	12 U	58 U	54 U	10 U	10 UJ	11 U	18 J	10 U	10 U	10 U	11 U	14 UJ	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1.1 U	1 U	1.1 U	1 U	6 U	5 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.4 U	-	0.46 U	0.41 U	0.42 U	0.5 U	2 U	2 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**51 J**	0.1 U	**55 J**	0.11 U	0.1 U	0.11 U	4	0.6 U	11 J	0.1 U	0.2 J	0.2 J	0.1 U	0.3 J	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	-	2 U	-	1.1 U	1 U	1.1 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	-	3 U	-	1.1 U	1 U	1.1 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	3 U	-	3 U	-	4.6 U	4.1 U	4.2 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	4.3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	-	3 U	-	2.3 U	2.1 U	2.1 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	2.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	8 U	8 U	-	8.1 U	-	9.2 U	8.3 U	8.4 U	6 U	29 U	27 U	5 U	5 UJ	5 U	9 J	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8.6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4 U	4 U	-	4 U	-	4.6 U	4.1 U	4.2 U	0.6 U	3 U	3 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.3 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	2	3 U	9 J	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.54 U
4-Nitroaniline	ug/L	N	NA	1 U	0.9 U	0.9 U	0.9 U	0.9 U	-	0.91 U	-	1 U	0.93 U	0.95 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.97 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	10 U	10 U	10 U	-	10 U	-	11 U	10 U	11 U	12 U	58 U	54 U	10 U	10 UJ	11 U	12 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	3	0.1 U	4	3	2	-	1.9	-	1.3	1.1	0.59	5	14	19	1	0.7 J	0.7	0.5 J	0.9	1	0.6	0.7	0.6	0.6 J	0.5 J	0.36 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	0.1 U	0.6 U	10 J	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	4 U	-	4 U	-	1.1 U	1 U	1.1 U	0.6 U	31	31	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	8	18	22	0.9	0.3 J	0.4 J	0.2 J	0.6	0.7	0.4 J	0.4 J	0.1 U	0.4 J	0.1 U	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	-	2 U	-	1.1 U	1 U	1.1 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	-	3 U	-	1.1 U	1 U	1.1 U	1 U	6 U	5 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	**11**	**27**	**35**	**1**	**0.3J**	**0.8**	**0.3J**	**1**	**1**	**0.6**	**0.8**	0.1J	**0.9**	0.1 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.13 U	0.11 U	0.12 U	**9**	**22**	**30**	**1**	**0.4J**	**1**	**0.3J**	**1**	**1**	**0.6**	**0.7**	0.1 U	0.1 U	0.1 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	**10**	**26**	**32**	**1**	**0.4J**	**1**	**0.3J**	**1**	**1**	**0.6**	**0.7**	0.1 U	**0.9**	0.1 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	4	8 J	14 J	0.7	0.2 J	0.7	0.2 J	0.9	0.6	0.5 J	0.6	0.1 U	0.6	0.1 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	**4**	**11**	**14**	0.5 J	0.1 J	0.4 J	0.1 J	**0.7**	0.5 J	0.2 J	0.3 J	0.1 U	0.4 J	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	5 U	5 U	-	5 U	-	2.3 U	2.1 U	2.1 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	3 J	**5J**	**4J**	**4J**	5 U	5 U	5 U	2.2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2.3 U	2.1 U	2.1 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	-	5 U	-	3.4 U	3.1 U	3.2 U	6 U	29 U	27 U	5 U	5 UJ	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.2 U
Carbazole	ug/L	N	NA	1 J	0.5 U	1 J	1 J	0.7 J	-	0.66 J	-	0.57 U	0.52 U	0.53 U	0.8 J	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	**12**	**30**	**36**	1	0.5 J	0.9	0.2 J	1	1	0.6	0.9	0.2 J	0.9	0.1 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2.3 U	2.1 U	2.1 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5 U	5 U	-	5 U	-	5.7 U	5.2 U	5.3 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.4 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	**1**	0.6 U	**2J**	0.3J	0.1 UJ	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	2 J	0.5 U	2	2 J	1 J	-	1.5 J	-	0.7 J	0.63 J	0.53 U	4	3 U	10 J	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2.3 U	2.1 U	2.1 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2.3 U	2.1 U	2.1 U	2 U	12 U	11 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	3 U	-	3 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.54 U
Fluoranthene	ug/L	N	300	0.1 J	0.1 U	0.2 J	0.1 J	0.1 U	-	0.1 U	-	0.11 U	0.1 U	0.11 U	29	64	79	3	1 J	2	0.7	3	3	1	2	0.1 U	0.1 U	0.1 U	0.2 J
Fluorene	ug/L	N	300	3	0.1 U	3	3	2	-	2.7	-	1.4	1.1	0.88	8	23	26	1	0.7 J	0.8	0.5 J	1	1	0.5 J	0.6	0.4 J	0.5 J	0.1 U	0.13 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.13 U	0.11 U	0.12 U	0.1 U	0.6 U	0.5 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	-	5 U	-	5.7 U	5.2 U	5.3 U	6 U	29 U	27 U	5 U	5 UJ	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	-	1 U	-	0.57 U	0.52 U	0.53 U	1 U	6 U	5 U	1 U	1 UJ	1 U	**9**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.54 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.13 U	0.11 U	0.12 U	**4**	**8J**	**12J**	**0.6**	0.2J	**0.5J**	0.2J	**0.9**	**0.6**	**0.4J**	**0.4J**	0.1 U	**0.6**	0.1 U	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-	0.71 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.54 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	-	0.71 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.54 U
Naphthalene	ug/L	N	300	1	0.1 U	0.1 U	0.1 U	0.1 U	-	1.3	-	0.11 U	0.1 U	0.78	1 U	1 U	1 U	0.1 U	0.1 UJ	0.4 UJ	0.3 J	0.1 U	0.7	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.53 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	1.6 U	-	1.1 U	1 U	1.1 U	0.6 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1.1 U	1 U	1.1 U	1 U	6 U	5 U	1 U	1 UJ	1 U	4J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.6	0.1 U	0.2 J	0.3 J	0.1 U	-	0.57	-	0.13 U	0.11 U	0.35 J	34	73	87 J	4	0.1 J	0.2 J	0.1 U	0.5	0.5	0.2 J	0.4 J	0.1 U	0.2 J	0.1 U	0.12 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.57 U	0.52 U	0.9 J	0.6 U	3 U	14 J	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U
Pyrene	ug/L	N	200	0.1 U	0.2 J	0.2 J	0.2 J	0.1 J	-	0.34 J	-	0.11 U	0.1 U	0.11 U	27	63	77 J	4	1 J	2	0.8	3	3	2	2	0.5	2	0.4 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	690 J	-	500 J	410 J	2400 J	-	-	-	-	-	-	880 J	1700 J	3000 J	-	320 J	830 J	160 J	410 J	640 J	1800 J	1700 J	820 J	1000 J	1200 J	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-348	MW-348	MW-348	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382
			Field Sample ID	M348C4	M348C6	M348C7	M381A1X	M381A2X	M381A3X	M381A4X	M381A5X	M381A6X	M381A7X	M381A8X	M381A9X	M381B1X	M381B2X	M381B3	D1025211A	M381B4	M382A1X	M382A2X	M382A3X	M382A4X	D0625151	M382A5X	M382A6X	M382A7X	M382A8X
			Sample Date	08/18/2021	11/22/2021	03/18/2022	01/14/2014	04/18/2014	07/15/2014	04/15/2015	06/25/2015	09/03/2015	11/05/2015	05/13/2016	11/08/2016	06/13/2017	12/07/2017	05/12/2021	10/25/2021	10/25/2021	01/14/2014	04/18/2014	07/15/2014	04/15/2015	06/25/2015	06/25/2015	09/01/2015	11/03/2015	05/13/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3.1 U	3.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	3 U	3.2 U	3.1 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	14 U	10 U	11 U	11 U	10 U	12 UJ	10 U	11 U	10 U	10 UJ	10 U	10 U	14 U	15 U	15 U	10 UJ	11 U	11 U	10 U	11 U	11 U	10 U	10 UJ	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.41 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.42 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1.1 U	1 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 U	4.1 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4.3 U	4.2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.1 U	2.1 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2.1 U	2.1 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.3 U	8.2 U	8.1 U	5 U	5 U	5 U	5 U	6 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	8.1 U	8.6 U	8.4 U	5 UJ	6 U	5 U	5 U	5 U	6 U	5 U	5 UJ	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 U	4.1 U	4.1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4.3 U	4.2 U	0.5 UJ	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.94 U	0.93 U	0.92 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.91 U	0.97 U	0.94 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 UJ	10 U	10 U	11 U	11 U	10 U	12 UJ	10 U	11 U	10 U	10 UJ	10 U	10 U	10 U	11 U	10 U	10 UJ	11 U	11 U	10 U	11 U	11 U	10 U	10 UJ	11 U
Acenaphthene	ug/L	N	400	0.35 J	0.45 J	0.54	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1.1 U	1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.51 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	**4J**	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.1 U	3.1 U	3.1 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	3 U	3.2 U	3.1 U	5 UJ	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.2 U	5.1 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5.4 U	5.2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.2 J	0.25 J	0.28 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.17 J	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.13 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.52 U	0.51 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 U	5.1 U	5.1 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5.2 U	5 UJ	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.52 U	0.51 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.54 U	0.52 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1.1 U	1 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.52 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.19 J	0.24 J	0.27 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	94 J	100 J	0 U	140 J	720 J	38 J	200 J	-	48 J	150 J	22 J	-	-	-	340 J	52 J	69 J	17 J	12 J	0 U	46 J	280 J	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-382	MW-382	MW-382	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-385	MW-385	MW-385	MW-386	MW-386	MW-386	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R
			Field Sample ID	M382A9X	M382B1X	M382B2X	M384A1X	M384A2X	M384A3X	M384A4X	M384A5X	D1103151	M384A6X	M384A7X	M384A8X	M384A9X	M384B1X	M385A1X	M385A2X	M385A4X	M386A1X	M386A2X	M386A9X	M386RB1X	M386RB2X	M386RB4X	M386RB5X	M386RB6X	M386RB7X	M386RB8X
			Sample Date	11/09/2016	06/06/2017	12/07/2017	01/14/2014	04/18/2014	07/15/2014	06/25/2015	09/01/2015	11/03/2015	11/03/2015	05/13/2016	11/09/2016	06/06/2017	12/07/2017	10/28/2013	01/08/2014	02/17/2016	11/07/2013	12/20/2013	12/01/2015	06/07/2016	09/06/2016	12/02/2016	03/06/2017	06/08/2017	12/05/2017	06/05/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	**860J**	99	11 J	5 J	1	2 J	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	11 UJ	11 U	12 U	11 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 U	11 U	12 U	10 U	12 U	10 U	10 U	10 UJ	100 U	100 UJ	10 UJ	11 U	10 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	**25J**	10 UJ	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	**10**	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 UJ	8 J	4 UJ	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7	0.4 J	0.1 U	2	1	0.6	**320J**	**860**	13 J	1	2	5	4
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	720J	5 U	8 J	0.9 J	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 UJ	0.5 U	0.5 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	20	5 UJ	0.5 U	0.5 U	0.5 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 UJ	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 UJ	50 U	52 UJ	5 UJ	5 U	5 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 UJ	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.6 U	2 U	0.6 U	0.5 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	**370J**	70	9 J	0.6 J	0.5 U	0.8 J	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	10 J	5 UJ	0.5 U	0.5 U	0.5 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 UJ	11 U	12 U	11 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 U	11 U	12 U	10 U	12 U	10 U	10 U	10 UJ	100 U	100 UJ	10 UJ	11 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.3 J	0.2 J	0.1 U	0.1 J	0.1 U	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	7	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	1 U	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.6 U	0.5 U	1 J	0.5 U	0.5 U	0.5 UJ	**710**	5 UJ	0.5 U	0.5 U	0.5 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 J	1 U	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	10 U	10 UJ	1 U	1 U	1 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1J	0.1 U	**2J**	**6**	1 UJ	0.1 U	0.1J	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**1J**	**4J**	1 UJ	**0.2J**	**0.2J**	0.1 U	**0.3J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1J	0.1 U	**0.8J**	**3J**	1 UJ	0.1J	0.1J	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.8 J	1 U	1 UJ	0.1 J	0.2 J	0.1 U	0.2 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	1 U	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 UJ	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 UJ	50 U	52 UJ	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	4 J	**8**	1 UJ	0.4 J	0.4 J	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3J	1 U	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	6 J	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	20 U	21 UJ	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.2 J	0.2 J	2 J	7	1 UJ	0.1 J	0.1 J	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.4 J	0.3 J	0.1 U	0.2 J	0.1 U	0.4 J	0.1 U	0.3 J	0.1 U	0.2 J	0.1 U	0.1 U	2 J	12	1 UJ	0.1 U	0.1 J	0.1 U	0.1 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	1 U	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 UJ	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 UJ	50 U	52 UJ	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	10 U	10 UJ	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	1 U	1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	**110**	5 UJ	0.5 U	0.5 U	0.5 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	**45**	5 UJ	0.5 U	0.5 U	0.5 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	1 U	1 U	0.1 U	1 U	1 J	9	**380J**	**550**	60 J	16	7	52	14
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	5 U	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	10 U	10 UJ	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.3 J	0.1 U	0.6 J	0.3 J	0.2 J	7 J	31	2 J	0.1 U	0.1 J	0.3 J	0.2 J
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	2	2	90 J	5 U	6 J	0.5 UJ	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.4 J	0.2 J	0.2 J	4 J	14	2 J	0.6	0.5 J	0.2 J	0.4 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	0 U	20 J	0 U	0 U	36 J	100 J	95 J	-	-	-	-	37 J	160 J	-	59 J	110 J	530 J	6400 J	8900 J	1400 J	350 J	240 J	-	180 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-387	MW-387	MW-387	MW-387	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R
			Field Sample ID	D1205188A	M386RB9X	D0610191	M386RC2X	D1204191	M386RC3X	M386RC5X	M386RC9	M386RD1	M387A1X	D1219138	M387A2X	M387A6X	D0607168	M387RA7X	D0907168	M387RA8X	M387RB1X	M387RB2X	D0607178	M387RB3X	M387RB4X	D0606188	M387RB5X	M387RB6X	M387RB7X
			Sample Date	12/05/2018	12/05/2018	06/10/2019	06/10/2019	12/04/2019	12/04/2019	06/09/2020	05/28/2021	10/29/2021	11/07/2013	12/19/2013	12/19/2013	11/30/2015	06/07/2016	06/07/2016	09/07/2016	09/07/2016	12/05/2016	03/02/2017	06/07/2017	06/07/2017	12/06/2017	06/06/2018	06/06/2018	12/04/2018	06/24/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 UJ	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 UJ	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 UJ	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	30 U	3 U	3 U	30 U	30 U	-	3.1 U	3.1 U	**480**	82 J	55 J	6	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	14 U	140 U	14 U	15 U	140 U	140 U	-	15 U	14 U	120 U	230 U	220 UJ	12 U	10 UJ	10 UJ	10 U	10 U	10 UJ	10 U	10 U	11 U	12 U	14 U	15 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	10 U	1 U	1 U	10 U	10 U	-	1 U	1 U	12 U	23 U	22 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	4 U	0.4 U	0.4 U	4 U	4 U	-	0.42 U	0.41 U	5 U	9 U	9 UJ	0.5 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 UJ	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.7	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	**200**	**80**	**76 J**	**33**	0.1 UJ	0.1 UJ	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	5 UJ	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	180	12 U	11 UJ	9	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	20 U	2 U	2 U	20 U	20 U	-	1 U	1 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	30 U	3 U	3 U	30 U	30 U	-	1 U	1 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	30 U	3 U	3 U	30 U	30 U	-	4.2 U	4.1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	30 U	3 U	3 U	30 U	30 U	-	2.1 U	2.1 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	80 U	8 U	8 U	81 U	81 U	-	8.3 U	8.3 U	62 U	120 U	110 UJ	6 U	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 U	6 U	6 U	8 U	9 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	40 U	4 U	4 U	40 U	40 U	-	4.2 U	4.1 U	6 U	12 U	11 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	**720**	99	74 J	22	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	9 U	0.9 U	0.9 U	9 U	9 U	-	0.93 U	0.93 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.9 U	1 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	100 U	10 U	10 U	100 U	100 U	-	10 U	10 U	120 U	230 U	220 UJ	12 U	10 UJ	10 UJ	10 U	10 U	10 UJ	10 U	10 U	11 U	12 U	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	3 J	4 J	0.1 U	0.1 UJ	0.1 UJ	0.3 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	40 U	4 U	4 U	40 U	40 U	-	1 U	1 U	6 U	12 U	11 UJ	62	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	3 J	2 U	3 J	0.8	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	20 U	2 U	2 U	20 U	20 U	-	1 U	1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	30 U	3 U	3 U	30 U	30 U	-	1 UJ	1 U	12 U	23 U	22 UJ	34	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	1 UJ	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**0.6**	1 U	0.1 U	0.1 U	1 U	1 U	-	0.11 U	0.11 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.4 J	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	5 UJ	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	50 U	5 U	5 U	50 U	50 U	-	2.1 U	2.1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	20 UJ	2 U	2 U	20 U	20 U	-	2.1 U	2.1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	50 U	5 U	5 U	50 U	50 U	-	13	3.1 U	62 U	120 U	110 UJ	6 U	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	11J	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.8 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.8	1 UJ	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	3 J	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	20 U	2 U	2 U	20 U	20 U	-	2.1 U	2.1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	50 U	5 U	5 U	50 U	50 U	-	5.2 U	5.2 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	20 U	2 U	2 U	20 U	20 U	-	2.1 U	2.1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	20 U	2 U	2 U	20 U	20 U	-	2.1 U	2.1 U	25 U	46 U	44 UJ	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	30 U	3 U	3 U	30 U	30 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	2	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	1 U	2 U	2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.12 U	0.12 U	9	4 J	5 J	0.1 U	0.1 UJ	0.1 UJ	0.3 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.11 U	0.11 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	50 U	5 U	5 U	50 U	50 U	-	5.2 U	5.2 U	62 U	120 U	110 UJ	6 U	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	10 U	1 U	1 U	10 U	10 U	-	0.52 U	0.52 U	12 U	23 U	22 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.11 U	0.11 U	1 U	2 U	2 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	7 U	0.7 U	0.7 U	7 U	7 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	7 U	0.7 U	0.7 U	7 U	7 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.7	1 U	0.1 U	0.1 U	1 U	1 U	16 J	2	0.1 U	170	100	100	32	0.1 UJ	0.1 UJ	1 J	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 U	0.52 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	1 U	1 U	6 U	12 U	11 UJ	0.6 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	10 U	1 U	1 U	10 U	10 U	-	1 U	1 U	12 U	23 U	22 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	1 U	0.1 U	0.1 U	1 U	1 U	-	0.11 U	0.11 U	20	6 J	10 J	4	0.1 UJ	0.1 UJ	0.3 J	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	5 U	0.5 U	0.5 U	5 U	5 U	-	0.52 UJ	0.52 U	6 U	12 U	11 UJ	53	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.7	1 U	0.1 U	0.1 U	1 U	1 U	-	0.1 U	0.1 U	2 J	2 U	3 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	330 J	0 U	62 J	56 J	0 U	68 J	-	-	-	3500 J	1100 J	4000 J	2700 J	22 J	24 J	65 J	22 J	34 J	8 J	48 J	12 J	33 J	0 U	1700 J	74 J	16 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-387R	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389
			Field Sample ID	M387RB8X	M388A1X	M388A2X	D1130158	M388A9X	M388B1X	M388B3X	M388B4X	M388B5X	M388B6X	M388B7X	D0605191	M388B8X	M388B9X	M388C3	M388C4	M388C5	M388C6	M389A1X	M389A2X	M389A8X	M389A9X	M389B1X	M389B3X	M389B4X	M389B5X	M389B6X
			Sample Date	12/12/2019	11/07/2013	12/19/2013	11/30/2015	06/07/2016	09/07/2016	11/30/2016	03/02/2017	06/08/2017	12/05/2017	06/04/2018	06/05/2019	06/05/2019	12/12/2019	05/20/2021	09/23/2021	12/28/2021	03/18/2022	11/05/2013	12/20/2013	12/01/2015	06/08/2016	09/07/2016	12/02/2016	03/06/2017	06/09/2017	12/07/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.6 UJ	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.6 UJ	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.6 UJ	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.4 U	3.1 U	3.1 U	3.2 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	12 U	11 U	11 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	14 U	14 U	14 U	15 U	16 U	14 U	14 U	15 U	14 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.45 U	0.41 U	0.41 U	0.42 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.6 UJ	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1 U	1.1 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1.1 U	1 U	1 U	1.1 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	3 U	3 U	3 U	3 U	4.5 U	4.1 U	4.1 UJ	4.2 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2.3 U	2.1 U	2 UJ	2.1 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	6 U	6 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	8 U	8 U	8 U	8 U	9 U	8.3 U	8.1 U	8.5 U	7 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	0.6 U	0.6 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.5 U	4.1 U	4.1 U	4.2 U	0.7 U	0.5 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	1	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.93 U	0.92 UJ	0.95 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	12 U	11 U	11 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	11 U	14 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	2	0.8	0.4 J	0.6 J	0.7	0.3 J	0.2 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	1.1 U	1 U	1 U	1.1 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1 U	1.1 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	**0.2J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.12 U	**0.2J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.2J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 UJ	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	5 U	5 U	5 U	5 U	2.3 U	2.1 U	2 U	2.1 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.1 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	6 U	6 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.4 U	3.1 U	3.1 U	3.2 U	7 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.3 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.1 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.6 U	5.2 U	5.1 U	5.3 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.1 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.1 U	3 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.4 J	0.1 J	0.1 J	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.5 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.5 J	0.1 U	0.2 J	0.2 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 U	0.12 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	6 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.6 U	5.2 U	5.1 U	5.3 U	7 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.56 U	0.52 U	0.51 U	0.53 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	1 U	1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 U	1 U	1 U	1.1 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.6	0.3 J	0.1 J	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.11 U	0.12 U	0.5 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.52 U	0.51 U	0.53 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.3 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.11 U	0.4 J	0.1 J	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	11 J	70 J	180 J	530 J	86 J	67 J	33 J	59 J	36 J	-	49 J	53 J	14 J	5 J	0 U	-	-	0 U	46 J	52 J	100 J	16 J	30 J	6 J	18 J	43 J	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-399	MW-399	MW-399	MW-399	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R
			Field Sample ID	M389B7X	M389B8X	D1212198	M389B9X	M389C3	M389C4	M389C5	M389C6	M399A1X	M399A2X	M399A3X	D0910198	M399RA4X	M399RA5X	D1203188	M399RA6X	M399RA7X	M399RA8X	M399RA9X	D1211198	M399RB1X	D0311208	M399RB2X	M399RB3X	M399RB4X	M399RB6	M399RB7
			Sample Date	06/05/2018	06/05/2019	12/12/2019	12/12/2019	05/19/2021	09/24/2021	12/27/2021	03/17/2022	12/16/2015	12/29/2016	02/02/2017	09/10/2019	06/07/2018	09/05/2018	12/03/2018	12/03/2018	03/14/2019	06/05/2019	09/10/2019	12/11/2019	12/11/2019	03/11/2020	03/11/2020	06/16/2020	09/10/2020	05/19/2021	09/24/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3 U	3.1 U	3.2 U	3.1 U	3.1 U	18	33 J	39	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3 U	3.3 U	3.4 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	14 U	14 U	15 U	15 U	14 U	11 U	10 U	10 U	14 U	14 U	14 UJ	14 UJ	14 UJ	14 U	14 U	14 U	14 U	14 U	14 U	14 U	15 U	14 U	16 U	16 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.41 U	0.44 U	0.46 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**150**	**170**	**100**	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	3	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	1.1 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3 U	1.1 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	4.1 U	4.2 U	4.2 U	4.1 U	2 U	2 U	2 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3 U	4.4 U	4.6 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3 U	2 U	2.1 U	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3 U	2.2 U	2.3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	8 U	8.2 U	8.4 U	8.3 U	8.3 U	5 U	5 U	5 U	8 U	8 U	8 UJ	8 UJ	8 UJ	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8.8 U	8.1 U	8.9 U	9.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4 U	4.1 U	4.2 U	4.2 U	4.1 U	2 U	2 U	2 U	4 U	4 U	4 UJ	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.4 U	4.1 U	4.4 U	4.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	11	13	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.9 U	0.9 U	0.92 U	0.95 U	0.93 U	0.93 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 UJ	0.9 UJ	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.99 U	0.91 U	1 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.5	0.8	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 UJ	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.4 U	4.1 U	1.1 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	1.1 U	1.1 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3 U	1.1 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.13 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	5 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5.1 U	2.2 U	2.3 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.3 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	3.1 U	3.2 U	3.1 U	3.1 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5.1 U	3.3 U	3.4 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.3 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5 U	5.1 U	5.3 U	5.2 U	5.2 U	2 U	2 U	2 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5.1 U	5.6 U	5.7 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.3 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.3 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3 U	0.56 U	0.57 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.12 U	0.12 U	0.7	0.6	0.5 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.14 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.13 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5.1 U	5.3 U	5.2 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5.1 U	5.6 U	5.7 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	0.51 U	0.53 U	0.52 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	0.56 U	0.57 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.13 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.77 U	0.71 U	0.56 U	0.57 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.77 U	0.71 U	0.56 U	0.57 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	85	170	90	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.8 U	1.6 U	1.1 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.6	0.3 J	0.2 J	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.13 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.52 U	0.52 U	16	12	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.51 U	0.56 U	0.57 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U
Total TIC SVOCS	ug/L	N	NA	18 J	33 J	26 J	69 J	-	-	0 U	-	-	1800 J	1400 J	8 J	220 J	10 J	90 J	35 J	48 J	52 J	14 J	59 J	0 U	6 U	6 J	-	0 U	0 U	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-399R	MW-399R	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-401	MW-401	MW-401	MW-401
			Field Sample ID	M399RB8	M399RB9	M400A3X	D0201178B	M400A2X	D0417188	M400A5X	M400A6X	M400A7X	M400A8X	M400A9X	M400B1X	D0909198	M400B2X	M400B3X	M400B4X	M400B5X	M400B6X	M400B8	M400B9	M400C2	M400C3	M401A2X	D1228168X	M401A3X	M401A4X
			Sample Date	01/10/2022	03/24/2022	12/28/2016	02/01/2017	02/01/2017	04/17/2018	04/17/2018	06/12/2018	09/04/2018	12/03/2018	03/15/2019	06/04/2019	09/09/2019	09/09/2019	12/12/2019	03/16/2020	06/17/2020	09/10/2020	05/26/2021	09/24/2021	12/15/2021	03/24/2022	07/14/2016	12/28/2016	12/28/2016	02/01/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 UJ	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	0.7 J	2	2	2	2	3 J	3 U	3 U	3 U	15 U	15 U	15 U	3 U	4 U	3.2 U	3.2 U	3.1 U	3.9 U	3.2 U	3 U	7	3 J	3	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	10 U	11 U	10 U	10 U	11 U	14 U	14 U	14 U	14 U	71 U	71 U	72 U	14 U	16 U	15 U	15 U	15 U	18 U	15 U	14 U	10 U	10 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1.1 U	1.1 U	1 U	1.3 U	1.1 U	1 U	1 U	1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	2 U	2 U	0.4 U	0.5 U	0.43 U	0.43 U	0.42 U	0.52 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.3 J	26	**44**	24	21	23	**35**	14	25	8	**38**	**39**	25	1	5.1	2.9	2.3	7.9 J	**43 J**	0.1 U	9	19 J	2	0.1 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.8 J	1	0.5 U	0.5 U	1 J	0.5 U	0.5 U	0.6 J	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	1	1	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2.2 U	2.1 U	1 U	1.3 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	15 U	15 U	15 U	3 U	4 U	3.2 U	3.2 U	1 U	1.3 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	4.1 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	15 U	15 U	15 U	3 U	4 U	3.2 U	3.2 U	4.2 U	5.2 U	4.2 UJ	4.1 U	2 U	2 U	2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	15 U	15 U	15 U	3 U	4 U	3.2 U	3.2 U	2.1 U	2.6 U	2.1 UJ	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	8.1 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	40 U	41 U	41 U	8 U	9 U	8.6 U	8.5 U	8.4 U	10 U	8.5 U	8.1 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	4 U	4.1 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	20 U	20 U	20 U	4 U	5 U	4.3 U	4.3 U	4.2 U	5.2 U	4.2 U	4.1 U	2 U	2 U	2 U	2 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.7 J	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.91 U	0.91 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	5 U	5 U	5 U	0.9 U	1 U	0.97 U	0.96 U	0.94 U	1.2 U	0.96 U	0.91 U	0.5 U	0.5 U	0.5 U	0.5 UJ
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	50 U	51 U	51 U	10 U	12 U	11 U	11 U	10 U	13 U	11 UJ	10 U	10 U	10 U	11 U	10 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.8	0.8	0.5 J	0.6	0.9	0.7	0.4 J	0.1 U	0.6 J	0.5 U	0.5 U	0.5 J	0.1 U	0.57	0.72	0.51 J	0.13 U	0.46 J	0.45 J	0.1 U	0.5 J	0.1 J	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	20 U	20 U	20 U	4 U	5 U	4.3 U	4.3 U	1 U	1.3 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	5 J
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2.2 U	2.1 U	1 U	1.3 U	1.1 U	1 U	2 U	2 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	15 U	15 U	15 U	3 U	4 U	3.2 U	3.2 U	1 U	1.3 U	1.1 U	1 U	1 U	1 U	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	**0.3J**	**0.2J**	0.1J	0.1J	0.1 U	0.1 U	**0.3J**	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	**0.23J**	**0.71**	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.1 U	**0.4J**	**0.2J**	**0.2J**	0.1J	0.1 U	0.1 U	**0.4J**	0.1 U	0.5 U	**0.6J**	**0.6J**	0.1 U	0.1 U	**0.32J**	**0.67**	0.11 U	0.14 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	**0.6**	0.2J	0.2J	0.2J	0.1 U	0.1 U	**0.6**	0.1J	**0.7J**	0.5 U	**0.8J**	0.1 U	0.1 U	**0.41J**	**0.78**	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.4 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.4 J	0.1 U	0.5 U	0.5 U	0.7 J	0.1 U	0.1 U	0.23 J	0.62	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.5 U	0.5 U	0.5 U	0.1 J	0.1 U	0.22 J	0.17 J	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	25 U	26 U	26 U	5 U	6 UJ	5.4 U	5.3 U	2.1 U	2.6 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	10 U	10 U	10 U	2 U	2 U	2.2 U	2.1 U	2.1 U	2.6 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	16 J	3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	26 U	26 U	5 U	6 U	5.4 U	5.3 U	3.1 U	3.9 U	3.2 U	3 U	5 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.5 J	0.2 J	0.2 J	0.2 J	0.1 U	0.1 U	0.4 J	0.1 U	0.5 U	0.5 U	0.6 J	0.1 U	0.1 U	0.25 J	0.33 J	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2.2 U	2.1 U	2.1 U	2.6 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.1 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	25 U	26 U	26 U	5 U	6 U	5.4 U	5.3 U	5.2 U	6.5 U	5.3 U	5.1 U	2 U	2 U	2 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2.2 U	2.1 U	2.1 U	2.6 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	10 U	2 U	2 U	2.2 U	2.1 U	2.1 U	2.6 U	2.1 UJ	2 U	2 U	2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	15 U	15 U	15 U	3 U	4 U	3.2 U	3.2 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.8	0.4 J	0.3 J	0.2 J	0.1 J	0.1 U	0.6	0.1 U	0.8 J	0.9 J	1 J	0.3 J	0.1 U	0.4 J	0.42 J	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.12 U	0.12 U	0.1 U	0.6	0.6	0.5	0.5 J	0.6	0.8	0.4 J	0.5 J	0.7 J	2 J	2 J	0.1 U	0.1 U	0.11 U	0.11 U	0.13 U	0.16 U	0.5 J	0.38 J	0.1 U	0.6 J	0.1 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	0.5 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.14 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	25 U	26 U	26 U	5 U	6 U	5.4 U	5.3 U	5.2 U	6.5 U	5.3 UJ	5.1 U	5 U	5 U	5 U	5 UJ
Hexachloroethane	ug/L	N	7	0.51 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1.1 U	1.1 U	0.52 U	0.65 U	0.53 U	0.51 U	1 U	1 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.1 U	**0.3J**	0.1J	0.1J	0.2J	0.1 U	0.1 U	**0.4J**	0.1 U	**0.5J**	0.5 U	0.5 U	0.1 U	0.1 U	**0.21J**	**0.75**	0.11 U	0.14 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	4 U	4 U	4 U	0.7 U	0.8 U	0.75 U	0.74 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	4 U	4 U	4 U	0.7 U	0.8 U	0.75 U	0.74 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Naphthalene	ug/L	N	300	0.1 U	0.1 U	6 J	26	36	17	15	28	17	10	25	11	16	18	12	0.1 U	7.6	4.9	5.6	0.13 U	1.1	0.74	39	28 J	13	2 J
Nitrobenzene	ug/L	N	6	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	0.6 U	0.54 U	0.53 U	0.52 U	0.65 U	0.53 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	2 U	1.7 U	1.7 U	1 U	1.3 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1.1 U	1.1 U	1 U	1.3 U	1.1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.1 J	0.5	0.4 J	0.4 J	0.3 J	0.3 J	0.4 J	0.3 J	0.3 J	0.5 U	1 J	1 J	0.1 U	0.1 U	0.36 J	0.11 U	0.21 J	0.14 U	0.12 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 UJ
Phenol	ug/L	N	2000	0.51 UJ	0.51 U	11 J	9	1	5 J	0.5 U	4	4	11	6	5 J	3 U	3 U	0.5 U	0.6 U	3.4	4.9	4.4	0.65 U	0.53 U	3	12	0.5 U	18	3
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.7	0.3 J	0.3 J	0.2 J	0.1 J	0.1 U	0.6	0.1 U	0.8 J	1 J	0.9 J	0.2 J	0.1 U	0.43 J	0.42 J	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	0 U	-	540 J	940 J	920 J	1000 J	1200 J	760 J	1000 J	550 J	1400 J	960 J	1800 J	2000 J	740 J	360 J	-	-	-	-	-	-	-	800 J	690 J	460 J

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-401R	MW-408	MW-408	MW-408	MW-408	MW-408	MW-408R	MW-408R	MW-409	MW-409	MW-409R
			Field Sample ID	D1115178	M401RA5X	D0305188	M401RA6X	M401RA8X	M401RA9X	M401RB1X	M401RB2X	M401B3X	M401RB4X	M401RB5X	M401RB6X	M401RB7X	M401RB9	M401RC1	M401RC2	M408A1X	D0413188	M408A3X	D0611188B	M408A4X	M408RA6X	M408RB2	M409A1X	M409A3X	M409RB1X
			Sample Date	11/15/2017	11/15/2017	03/05/2018	03/05/2018	09/04/2018	12/03/2018	02/26/2019	06/03/2019	09/09/2019	12/10/2019	03/11/2020	06/05/2020	09/11/2020	05/27/2021	09/01/2021	12/15/2021	11/19/2015	04/13/2018	04/13/2018	06/11/2018	06/11/2018	05/20/2020	08/20/2021	12/03/2014	02/10/2016	02/20/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3.5 U	3 UJ	3.1 UJ	3.4 UJ	3 U	9	1	2	3 U	3 U	22 J	-	0.5 U	5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 U	10 U	11 U	10 U	14 U	14 UJ	14 U	14 U	14 U	14 UJ	14 UJ	17 U	14 UJ	15 UJ	16 UJ	14 U	10 U	10 U	10 U	14 U	14 U	14 UJ	-	10 U	100 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 UJ	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 U	10 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.4 U	0.42 UJ	0.45 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	-	0.4 U	4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.2 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	**44**	4	3	1	0.8	3 J	-	0.1 U	1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	2 J	-	0.5 U	5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	1 UJ	1.1 UJ	1 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 UJ	-	0.5 U	5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3.5 U	3 UJ	1 UJ	1.1 UJ	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	-	0.5 U	5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3.5 U	3 U	4.2 UJ	4.5 UJ	4 UJ	2 U	2 U	2 U	3 U	3 U	3 UJ	-	2 U	21 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3.5 U	3 U	2.1 UJ	2.2 UJ	2 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	-	0.5 U	5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	8 U	8 UJ	8 U	8 U	8 U	8 U	8 UJ	9.4 U	8.1 UJ	8.3 UJ	9 UJ	8 U	5 U	5 U	5 U	8 U	8 U	8 UJ	-	5 U	52 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	4 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4.7 U	4 U	4.2 UJ	4.5 UJ	4 U	2 U	2 U	2 U	4 U	4 U	4 UJ	-	0.5 U	21 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	3 J	-	0.5 U	5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.9 U	0.9 UJ	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1.1 U	0.91 U	0.94 UJ	1 UJ	0.9 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 UJ	-	0.5 U	5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 UJ	10 UJ	12 U	10 UJ	10 UJ	11 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 UJ	-	10 U	100 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	6	16	12	11	11	0.9 J	-	0.5	1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 UJ	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.1 U	0.4 J	0.3 J	0.2 J	0.2 J	0.1 UJ	-	0.2 J	1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4.7 U	4 U	1 UJ	1.1 UJ	1 U	0.5 U	0.5 U	0.5 U	4 U	4 U	67 J	-	0.5 U	5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.7	2	1	0.3 J	0.3 J	0.1 UJ	-	0.1 J	1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	1 UJ	1.1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 U	21 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3.5 U	3 U	1 UJ	1.1 UJ	1 U	53	1 U	1 U	3 U	3 U	3 UJ	-	1 U	10 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	**0.2J**	**1**	**1**	**0.4J**	**0.4J**	0.1 UJ	-	**0.2J**	1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 UJ	0.12 UJ	0.11 U	0.1 U	**0.6**	**0.5J**	**0.2J**	**0.2J**	0.1 UJ	-	**0.2J**	1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.1J	**0.8**	**0.9**	0.2J	0.2J	0.1 UJ	-	0.1J	1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.1 U	0.3 J	0.3 J	0.1 U	0.1 U	0.1 UJ	-	0.1 J	1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.1 U	0.4 J	0.4 J	0.1 U	0.1 U	0.1 UJ	-	0.1 U	1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 U	2.1 UJ	2.2 UJ	2 U	2 U	2 J	2 U	5 U	5 U	5 UJ	-	2 U	21 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 UJ	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 U	21 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 U	3.1 UJ	30 J	3 U	5 U	5 U	5 U	5 U	5 U	5 UJ	-	5 U	52 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	2	0.8 J	0.7 J	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.3 J	2	2	0.4 J	0.4 J	0.1 UJ	-	0.2 J	1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 UJ	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 U	21 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 U	5.2 UJ	5.6 UJ	5 U	2 U	2 U	2 U	5 U	5 U	5 UJ	-	2 U	21 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 UJ	-	0.1 U	1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	3	4	3	2	2 J	0.5 UJ	-	0.5 U	5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 UJ	2.2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 U	21 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 UJ	2.2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	-	2 U	21 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3.5 U	3 U	0.52 UJ	0.56 UJ	0.5 U	1	0.5 U	0.5 U	3 U	3 U	3 UJ	-	0.5 U	5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	1	7	6	2	1	0.1 UJ	-	0.4 J	1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.12 UJ	0.13 UJ	0.12 U	4	6	5	3	3	0.1 UJ	-	0.3 J	1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 UJ	0.12 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	-	0.1 U	1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 UJ	5.2 UJ	5.6 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	-	5 U	52 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	0.52 UJ	0.56 UJ	0.5 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 U	10 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 UJ	0.12 UJ	0.11 U	0.1 U	**0.3J**	**0.3J**	0.1J	0.1 U	0.1 UJ	-	0.1 U	1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.83 U	0.71 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 UJ	-	0.5 U	5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.83 U	0.71 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 UJ	-	0.5 U	5 U	0.5 U
Naphthalene	ug/L	N	300	0.2 J	0.1 U	0.1 U	0.8 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	180	5	5	2	2	10 J	15 J	0.5	1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.52 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	1.9 U	1.6 UJ	1 UJ	1.1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	-	0.5 U	5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1.2 U	1 UJ	1 UJ	1.1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	-	1 U	10 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 UJ	0.12 UJ	0.11 U	4	6	4	1	0.8	0.1 UJ	-	0.2 J	1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	3 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.59 U	0.51 UJ	0.52 UJ	0.56 UJ	0.5 U	0.5 U	4	5	2	3	3 J	-	0.5 U	5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.11 UJ	0.1 U	0.8	6	6	2	2	0.1 UJ	-	0.7	1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	260 J	28 J	46 J	55 J	51 J	82 J	44 J	29 J	24 J	38 J	21 J	-	-	0 U	-	-	4000 J	-	-	310 J	320 J	980 J	-	-	-	52 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-409R	MW-442	MW-442	MW-442	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-445	MW-445	MW-446	MW-446	MW-446R	MW-446R	MW-446R	MW-446R
			Field Sample ID	M409RB2X	D1124158	M442A1X	M442A2X	M443A1X	M443A2X	M443A9X	M443B1X	M443C4	M443C5	M443C6	M443C7	M444A1X	M444A2X	M444A3X	D0521208	M444A5X	M444A8X	M445A1X	M445A2X	M446A1X	M446A2X	M446RC1X	M446RC2X	M446RC4	M446RC5
			Sample Date	04/17/2018	11/24/2015	11/24/2015	02/10/2016	11/23/2015	02/10/2016	02/19/2018	04/12/2018	04/14/2021	10/05/2021	12/27/2021	03/25/2022	11/19/2015	02/20/2018	04/18/2018	05/21/2020	05/21/2020	03/02/2021	11/23/2015	02/10/2016	11/24/2015	02/09/2016	07/30/2020	10/28/2020	04/15/2021	12/30/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *- *1	0.54 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *- *1	0.54 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 UJ	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3.1 U	3.3 U	3.1 U	3.4 U	3 U	0.5 U	5 U	31 U	32 U	-	0.5 UJ	0.5 U	0.5 UJ	0.5 U	3 U	3.2 U	3.5 UJ	3.2 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U	15 U	15 U	14 U	16 U	50 U	11 U	100 U	140 U	150 U	-	10 U	10 U	10 U	10 U	14 U	15 U	16 U *1	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	5 U	1 U	10 U	10 U	11 U	-	1 U	1 U	1 U	1 U	1 U	1.1 U	1.2 U *1	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 UJ	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.51 U	0.54 U	0.58 U *- *1	0.54 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.42 U	0.44 U	0.41 U	0.46 U	2 U	0.4 U	4 U	4 U	4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.47 U *1	0.43 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	1 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	**82**	**84**	**610J**	1 U	1 U	-	0.1 U	0.2 J	2	0.4 J	0.1 U	0.11 U	0.12 U *1	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1.1 U	3 U	0.5 U	5 U	20 U	21 U	-	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2.2 U	1.2 U *- *1	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1.1 U	3 U	0.5 U	5 U	31 U	32 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.2 U	1.2 U *1	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	4.2 U	4.4 U	4.1 U	4.6 U	10 U	2 U	20 U	31 U	32 U	-	2 U	2 U	2 U	2 U	3 U	3.2 U	4.7 U	4.3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1 U	2.2 U	2 U	2.3 U	3 U	0.5 U	5 U	31 U	32 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.2 U	2.3 U *- *1	2.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	51 U	5 U	5 U	5 U	5 U	8.3 U	8.8 U	8.2 U	9.1 U	25 U	5 U	51 U	82 U	84 U	-	5 U	5 U	5 U	5 U	8.1 U	8.6 U	9.4 U *1	8.6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *- *1	0.54 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	4.2 U	4.4 U	4.1 U	4.6 U	10 U	2 U	20 U	41 U	42 U	-	2 U	2 U	2 U	2 U	4 U	4.3 U	4.7 U	4.3 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.94 U	0.99 U	0.92 U	1 U	3 U	0.5 U	5 U	9 U	9 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.91 U	0.97 U	1.1 U *1	0.97 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	100 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	50 U	11 U	100 U	100 U	110 U	-	10 U	10 U	10 U	10 U	10 U	11 U	12 U *1	11 U
Acenaphthene	ug/L	N	400	0.1 U	11	10	17	0.2 J	0.3 J	0.3 J	0.1 J	0.31 J	0.11 U	0.32 J	0.3 J	33	34	190 J	19 J	13 J	-	0.1 U	0.2 J	0.6	0.6	0.61	0.36 UJ	1.3*- *1	2.4
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.5 U	0.1 U	1 U	1 U	1 U	-	0.1 UJ	0.4 J	0.1 UJ	0.1 U	0.1 U	0.11 U	0.12 U *- *1	0.11 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1.1 U	3 U	0.5 U	5 U	41 U	42 U	-	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4.3 U	1.2 U *- *1	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.2 J	0.2 J	1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.8 J	1	8 J	1 U	1 U	-	0.1 J	0.5 J	0.1 UJ	0.1 J	0.1 U	0.11 U	0.12 U *- *1	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	1 U	1.1 U	1 U	1.1 U	10 U	2 U	20 U	20 U	21 U	-	2 U	2 U	2 U	2 U	2 U	2.2 U	1.2 UJ	1.1 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	5 J	1 U	10 U	31 U	32 U	-	1 U	1 U	1 U	1 U	3 U	3.2 U	1.2 U *1	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.2J**	0.1J	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	**0.6J**	**0.3J**	**5J**	1 U	1 U	-	**0.3J**	**2**	0.1J	**0.3J**	**0.4J**	0.11 U	0.12 U *- *1	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**0.2J**	0.1J	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	0.5 U	**0.2J**	**4J**	1 U	1 U	-	**0.4J**	**2**	**0.2J**	**0.4J**	0.1 U	0.11 U	0.13 U *1	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.2J	0.1 U	1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.5 U	**0.3J**	**3J**	1 U	1 U	-	**0.5J**	**3**	0.2J	**0.5**	0.1 U	0.11 U	0.12 U *- *1	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.5 U	0.2 J	1 U	1 U	1 U	-	0.3 J	1	0.1 U	0.3 J	0.1 U	0.11 U	0.12 U *1	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.5 U	0.1 U	1 U	1 U	1 U	-	0.2 J	**1**	0.1 J	0.2 J	0.1 U	0.11 U	0.12 UJ	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 UJ	0.54 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 UJ	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.3 U	10 U	2 U	20 U	51 U	53 U	-	2 U	2 U	2 U	2 U	5.1 U	5.4 U	2.3 U *1	2.2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.3 U	10 U	2 U	20 U	20 U	21 U	-	2 U	2 U	2 U	2 U	2 U	2.2 UJ	2.3 U	2.2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	51 U	5 U	5 U	5 U	5 U	3.1 U	3.3 U	3.1 U	3.4 U	25 U	5 U	51 U	51 U	53 U	-	5 U	5 U	5 U	5 U	5.1 U	5.4 U	3.5 U *1	3.2 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
Chrysene	ug/L	N	5	0.1 U	0.3 J	0.2 J	2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.6 J	0.7	1 U	1 U	1 U	-	0.3 J	2	0.1 J	0.5 J	0.54	0.11 U	0.12 U *- *1	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.3 U	10 U	2 U	20 U	20 U	21 U	-	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	5.2 U	5.5 U	5.1 U	5.7 U	10 U	2 U	20 U	51 U	53 U	-	2 U	2 U	2 U	2 U	5.1 U	5.4 U	5.8 U *1	5.4 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.5 U	0.1 U	1 U	1 U	1 U	-	0.1 U	0.3J	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U *- *1	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	7	6	34 J	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 UJ	0.54 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.3 U	10 U	2 U	20 U	20 U	21 U	-	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2.3 U	10 U	2 U	20 U	20 U	21 U	-	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	1 J	24 J	31 U	32 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.2 U	0.58 U *- *1	0.54 U
Fluoranthene	ug/L	N	300	0.1 U	2 J	1 J	12	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	2 J	2	23 J	6 J	4 J	-	0.5	3	0.3 J	0.6	0.57	0.11 U	0.12 U *1	0.11 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	1 U	0.1 UJ	0.3 J	0.1 J	0.1 U	0.12 U	0.13 U	0.12 U	0.14 U	13	13	57 J	9 J	6 J	-	0.1 UJ	0.3 J	0.5 J	0.4 J	0.1 U	0.11 U	0.14 U *- *1	0.13 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	0.5 U	0.1 U	1 U	1 U	1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.13 U *- *1	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.54 U	0.58 U *1	0.54 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	51 U	5 U	5 U	5 U	5 U	5.2 U	5.5 U	5.1 U	5.7 U	25 U	5 U	51 U	51 U	53 U	-	5 U	5 U	5 U	5 U	5.1 U	5.4 U	5.8 U *1	5.4 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	0.52 U	0.55 U	0.51 U	0.57 U	5 U	1 U	10 U	10 U	11 U	-	1 U	1 U	1 U	1 U	1 U	1.1 U	0.58 U *1	0.54 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	0.5 U	0.1 U	1 U	1 U	1 U	-	0.2J	**1**	0.1 U	**0.3J**	0.1 U	0.11 U	0.13 U *1	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	7 U	7 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.71 U	0.76 U	0.58 U *1	0.54 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	**33J**	7 U	7 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.71 U	0.76 U	0.58 U *- *1	0.54 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	1 U	2	1	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	120	60	**320J**	1 U	1 U	14 J	0.1 U	0.3 J	2	0.1 U	0.1 U	0.11 U	2.4 J	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 UJ	0.54 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1.1 U	3 U	0.5 U	5 U	16 U	17 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.7 UJ	1.2 U *1	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	5 U	1 U	10 U	10 U	11 U	-	1 U	1 U	1 U	1 U	1 U	1.1 U	1.2 UJ	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.2 J	0.2 J	1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.13 U	9	10	64 J	6 J	1 U	-	0.3 J	1	0.5	0.4 J	0.1 U	0.11 U	0.13 UJ	0.12 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.55 U	0.51 U	0.57 U	3 U	0.5 U	5 U	5 U	5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.54 U	0.58 U *1	0.54 U
Pyrene	ug/L	N	200	0.1 U	1 J	0.7 J	8	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	2 J	2	23 J	6 J	4 J	-	0.6	3	0.3 J	0.8	0.8	0.23 UJ	0.12 UJ	0.11 U
Total TIC SVOCS	ug/L	N	NA	18 J	110 J	62 J	-	310 J	-	190 J	-	-	-	-	-	3200 J	1800 J	4200 J	3000 J	2500 J	-	23 J	-	800 J	-	-	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-447	MW-447	MW-447	MW-447	MW-447R	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449
			Field Sample ID	M447A1X	D0221188	M447A2X	M447A3X	M447RA5X	M448A1X	M448A2X	M448A3X	M448A4X	M448A6X	M448A7X	M448A8X	M448A9X	M448B1X	M448B2X	D0728208	M448B4X	M448B6X	M448B8	M448C1	M449A1X	M449A2X	M449A3X	M449A5X	M449A7X	M449A8X	D0403198
			Sample Date	11/24/2015	02/21/2018	02/21/2018	04/18/2018	05/19/2020	01/11/2016	07/05/2016	07/26/2017	01/19/2018	07/13/2018	10/10/2018	01/24/2019	04/03/2019	08/01/2019	01/24/2020	07/28/2020	07/28/2020	01/19/2021	07/16/2021	01/25/2022	04/14/2016	07/14/2016	07/27/2017	01/30/2018	07/12/2018	10/10/2018	04/03/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	3.0 U	3.2 U	3 U	0.5 U	0.6 J	4	0.5 UJ	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	11 U	10 U	14 UJ	10 U	10 UJ	10 U	10 U	14 U	14 U	14 U	14 U	14 UJ	16 U	15 U	15 U	14 U	15 U	14 U	10 U	10 U	10 U	10 UJ	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.0 U	1.1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.5 U	0.42 U	0.42 U	0.40 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	**36**	22	**220**	4	2 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	**35**	0.1 U	3	0.1 UJ	0.3 J	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2.0 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	3.0 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	3 UJ	2 U	2 UJ	2 U	2 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	3.0 U	4.3 U	4 U	2 U	2 U	2 U	2 UJ	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	3.0 U	2.1 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	8 UJ	5 U	5 UJ	5 U	5 U	8 U	8 U	8 U	8 U	8 UJ	9 U	8.3 U	8.3 U	8.1 U	8.5 U	8 U	5 U	5 U	5 U	5 UJ	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	4 UJ	2 U	2 UJ	2 U	2 U	4 U	4 U	4 U	4 U	4 UJ	5 U	4.2 U	4.2 U	4.0 U	4.3 U	4 U	2 U	2 U	2 U	2 UJ	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	1	0.5 U	**350**	0.5 UJ	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.9 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 UJ	1 U	0.94 U	0.94 U	0.91 U	0.96 U	0.9 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	10 U	10 UJ	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	11 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	1	3	25	4	2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.6	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	4 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 UJ	5 U	4.2 U	4.2 U	4.0 U	1.1 U	1 U	0.5 U	2	0.5 U	**1200J**	97	4 U	4 U
Anthracene	ug/L	N	2000	0.2 J	0.4 J	10	0.6	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2.0 U	1.1 U	1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	3 UJ	1 U	1 UJ	1 U	1 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	3.0 U	1.1 U	1 U	1 U	1 U	1 U	7 J	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.3J**	**5**	**0.4J**	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1J	**3**	**0.3J**	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	**0.3J**	**5**	**0.3J**	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 J	1	0.2 J	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	**1**	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	2	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	5 UJ	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U	5 UJ	6 U	5.2 U	5.2 U	5.1 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2.0 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	6 U	5.2 U	5.2 U	5.1 U	3.2 U	3 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 J	0.5	**7**	0.6	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2.0 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	5 UJ	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U	5 UJ	6 U	5.2 U	5.2 U	5.1 U	5.3 U	5 U	2 U	2 U	2 U	2 UJ	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1J	**0.5J**	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.8 J	1	13	0.5 U	0.8 J	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2.0 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2.1 U	2.0 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	3.0 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.3 J	1	21	2	0.9 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 UJ	0.1 J	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	1 J	2	28	2	2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.13 U	0.12 U	0.5 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	6 U	5.2 U	5.2 U	5.1 U	5.3 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.0 U	0.53 U	0.5 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.2J	**0.9**	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.8 U	0.73 U	0.73 U	0.71 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.8 U	0.73 U	0.73 U	0.71 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	15	0.1 U	0.1 U	0.1 U	6 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	66	0.1 U	6	0.1 J	2	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	2 U	1.7 U	1.7 U	1.6 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.0 U	1.1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	1	2	37	1	2 J	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.10 U	0.12 U	0.11 U	0.4 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.52 U	0.52 U	0.51 U	0.53 U	0.5 U	0.5 U	8	23	0.5 UJ	1 J	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.3 J	1	18	2	0.8 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 UJ	0.2 J	0.1 U	0.1 U	0.10 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	1400 J	960 J	760 J	890 J	760 J	-	-	-	-	28 J	47 J	43 J	33 J	7 J	-	-	-	-	-	-	3200 J	-	-	1600 J	220 J	64 J	86 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-451	MW-451
			Field Sample ID	M449B1X	M449B2X	M449B3X	M449B5X	M449B7X	M449B9	M449C2	M450A1X	D0707168	M450A2X	D0727178	M450A3X	M450A4X	D0713188	M450A6X	M450A7X	D0122198	M450A8X	M450A9X	M450B1X	M450B2X	M450B4X	M450B6X	M450B8	M450C1	M451A1X	M451A2X
			Sample Date	04/03/2019	08/01/2019	02/20/2020	08/26/2020	01/20/2021	07/16/2021	01/25/2022	12/09/2015	07/07/2016	07/07/2016	07/27/2017	07/27/2017	01/19/2018	07/13/2018	07/13/2018	10/12/2018	01/22/2019	01/22/2019	04/05/2019	07/24/2019	01/23/2020	07/22/2020	01/21/2021	07/19/2021	01/24/2022	01/11/2016	07/06/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 UJ	3 U	3.2 U	3 U	3.5 U	3.1 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	4 UJ	3 U	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3.2 U	3 UJ	3.3 U	3 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 UJ	15 U	15 U	14 U	16 U	14 U	10 U	11 U	11 UJ	10 UJ	11 UJ	10 U	16 U	16 UJ	15 U	15 UJ	14 UJ	14 U	14 UJ	15 UJ	15 U	14 UJ	15 U	14 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1.1 U	1 U	1.1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.4 U	0.42 U	0.41 U	0.47 U	0.41 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.43 U	0.4 U	0.44 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 UJ	0.2 J	0.11 U	0.1 U	0.12 U	0.1 U	**41**	0.3 J	0.4 J	0.4 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	3	0.5 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 UJ	2 U	2.1 U	2 U	1.2 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2.1 U	2 U	1.1 U	1 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 UJ	3 U	3.2 U	3 U	1.2 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	3 U	4 UJ	3 U	3 UJ	3 UJ	3 U	3 UJ	3 UJ	3.2 U	3 UJ	1.1 U	1 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 UJ	3 U	3.2 U	3 U	4.7 U	4.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	3 U	4 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3.2 U	3 U	4.4 U	4 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	3 UJ	3 U	3.2 U	3 U	2.3 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	4 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3.2 U	3 U	2.2 U	2 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 UJ	9 U	8.4 U	8.1 U	9.3 U	8.2 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 U	9 U	9 UJ	8 U	8 UJ	8 UJ	8 U	8 UJ	9 UJ	8.6 U	8 UJ	8.8 U	8.1 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 UJ	4 U	4.2 U	4.1 U	4.7 U	4.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	5 U	5 U	4 U	4 UJ	4 UJ	4 U	4 UJ	4 U	4.3 U	4 UJ	4.4 U	4 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 J	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 UJ	1 U	0.95 U	0.91 U	1.1 U	0.92 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	0.9 U	0.9 UJ	0.9 UJ	0.9 U	0.9 UJ	1 U	0.97 U	0.9 U	0.99 U	0.91 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 UJ	11 U	11 U	10 U	12 U	10 U	10 U	11 U	11 UJ	10 UJ	11 UJ	10 U	12 U	12 UJ	10 U	10 UJ	10 UJ	10 U	10 UJ	11 UJ	11 U	10 UJ	11 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.3 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.8	0.6
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	25 J	4 UJ	4 U	4.2 U	4.1 U	1.2 U	1 U	24	0.5 U	0.5 UJ	0.5 U	0.5 U	2	5 U	5 U	4 U	4 UJ	4 UJ	4 U	4 UJ	4 U	4.3 U	4 U	1.1 U	1 U	4	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 J
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	2.1 U	2 U	1.2 U	1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2.1 U	2 U	1.1 U	1 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 UJ	3 U	3.2 U	3 U	1.2 U	1 U	26	1 U	1 UJ	1 U	1 U	1 U	3 U	4 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3.2 U	3 U	1.1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	**0.2J**	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	**0.3J**	0.11 U	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	**0.4J**	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.2J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.2 J	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 UJ	5 U	**6.3J**	5.1 U	2.3 U	**5.6**	2 U	2 U	**10J**	2 U	2 U	**5J**	6 U	6 U	5 U	**6J**	5 UJ	5 U	5 UJ	**48**	**120**	5 U	2.2 U	**5.4**	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	5 U	5.3 U	5.1 U	3.5 U	3.1 U	5 U	5 U	5 UJ	5 U	5 U	5 U	6 U	6 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U	5.4 U	5 U	3.3 U	3 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.3 J	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 UJ	5 U	5.3 U	5.1 U	5.8 U	5.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	6 U	6 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U	5.4 U	5 U	5.5 U	5.1 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2.1 U	2 U	2.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 UJ	3 U	3.2 U	3 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	4 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3.2 U	3 U	0.55 U	0.51 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 J	0.1 UJ	0.3 J	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.5	0.3 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.14 U	0.12 U	0.3 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.13 U	0.12 U	0.7	0.6
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 U	5.3 U	5.1 U	5.8 U	5.1 U	5 U	5 U	5 UJ	5 U	5 U	5 U	6 U	6 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U	5.4 U	5 U	5.5 U	5.1 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 U	1.1 U	1 U	0.58 U	0.51 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1.1 U	1 U	0.55 U	0.51 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.2J	0.11 U	0.1 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 UJ	0.7 U	0.74 U	0.71 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.8 U	0.75 U	0.7 U	0.55 U	0.51 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 UJ	0.7 U	0.74 U	0.71 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.8 U	0.75 U	0.7 U	0.55 U	0.51 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	33	0.8	1 J	0.8	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	2	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.54 U	0.5 U	0.55 U	0.51 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 UJ	2 U	1.7 U	1.6 U	1.2 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	2 UJ	1.7 U	1.6 UJ	1.1 U	1 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 UJ	1 U	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 UJ	1 UJ	4J	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1.1 U	1 UJ	1.1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	0.2 J	0.11 U	0.1 U	0.13 U	0.11 U	0.6	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.5	0.4 J
Phenol	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.53 U	0.51 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	220	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.54 U	0.5 UJ	0.55 U	0.51 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.2 J	0.1 UJ	0.4 J	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 J	0.1 J	0.1 U	0.5 J	0.4 J	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	170 J	6 J	-	-	-	-	-	-	75 J	150 J	-	-	-	44 J	53 UJ	74 J	52 J	39 J	0 U	39 J	40 J	-	-	-	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452
			Field Sample ID	M451A3X	D0118188	M451A4X	M451A6X	M451A7X	M451A8X	M451A9X	M451B1X	M451B2X	M451B4X	M451B8X	M451C1	M451C3	M452A1X	M452A2X	M452A3X	M452A5X	M452A7X	D1010188	M452A9X	M452B1X	M452B2X	M452B3X	M452B4X	M452B6X	M452B7X	M452B8X
			Sample Date	07/25/2017	01/18/2018	01/18/2018	07/13/2018	10/10/2018	01/23/2019	04/04/2019	08/01/2019	01/24/2020	07/27/2020	01/20/2021	07/21/2021	01/24/2022	01/07/2016	07/11/2016	07/25/2017	01/19/2018	07/12/2018	10/10/2018	10/10/2018	01/23/2019	04/03/2019	07/30/2019	03/02/2020	07/27/2020	10/22/2020	01/21/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 UJ	3.1 U	2	1	2	10	3 U	3 U	3 U	6 J	3 U	3 U	4 U	3.2 U	-	4.2 J
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	14 UJ	14 UJ	14 U	14 U	15 UJ	15 U	14 UJ	14 UJ	14 UJ	15 U	11 U	10 U	11 U	10 U	14 U	15 U	15 U	14 U	14 U	13 U	17 U	15 U	-	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1.1 U	-	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.41 U	0.41 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.42 U	-	0.43 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
2-Methylnaphthalene	ug/L	N	30	0.5	0.1 UJ	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	**57**	0.1 U	4	5	**32**	22 J	0.1 U	28	0.1 U	14	0.1 U	0.11 U	-	1.8
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2.2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3.2 U	-	3.2 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	4.1 U	4.2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3.2 U	-	3.2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	2 U	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3.2 U	-	3.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	8 UJ	8 UJ	8 U	8 U	8 UJ	9 U	8.1 UJ	8.1 UJ	8.1 UJ	8.3 U	5 U	5 U	5 U	5 U	8 U	8 U	9 U	8 U	8 U	7 U	9 U	8.4 U	-	8.6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4.1 U	4.1 U	4.2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	5 U	4.2 U	-	4.3 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	2	1	3	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	0.6 U	0.53 U	-	1.7 J
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 UJ	1 U	0.91 U	0.91 U	0.91 U	0.94 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	0.8 U	1 U	0.95 U	-	0.97 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 UJ	11 U	10 UJ	10 UJ	10 UJ	10 U	11 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	9 U	12 U	11 U	-	11 U
Acenaphthene	ug/L	N	400	0.5	0.3 J	0.4 J	0.4 J	0.2 J	0.2 J	0.4 J	0.1 UJ	0.3 J	0.26 J	0.25 J	0.15 J	0.3 J	0.4 J	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Acenaphthylene	ug/L	N	NA	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4.1 U	1 U	1 U	0.5 U	0.5 U	1	**4400**	**3600**	240	220	190	89	37	500	8.8 J	-	38
Anthracene	ug/L	N	2000	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2.2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	1 U	1 U	1 U	1 U	4 J	1 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3.2 U	-	3.2 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	**7.8J**	-	5.4 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2.2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	3 U	3.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.3 U	-	5.4 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2.2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	5.1 U	5.2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.3 U	-	5.4 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	5 J	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2.2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3.2 U	-	3.2 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Fluorene	ug/L	N	300	0.3 J	0.2 J	0.2 J	0.3 J	0.1 J	0.2 J	0.1 U	0.1 UJ	0.2 J	0.1 U	0.14 J	0.12 U	0.13 J	0.5 J	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 UJ	-	0.54 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	5.1 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.3 U	-	5.4 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.51 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1.1 U	-	1.1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.71 U	0.71 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.74 U	-	0.76 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.71 U	0.71 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.74 U	-	0.76 U
Naphthalene	ug/L	N	300	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.16 J	0.1 U	0.1 U	74	87	11	11	130	58 J	0.1 U	160	0.1 U	110	9	0.11 U	19 J	9
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	-	0.54 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	2 U	1.6 UJ	1.6 UJ	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	-	1.7 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	2.2J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1.1 U	-	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.6	0.2 J	0.2 J	0.2 J	0.1 U	0.7 J	0.1 U	0.4 J	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.51 UJ	0.51 UJ	0.52 U	12	0.5 U	5	12	2 J	0.5 U	0.5 U	0.5 U	0.5 U	11	0.6 U	0.53 U	-	4
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.11 U	-	0.11 U
Total TIC SVOCS	ug/L	N	NA	180 J	-	-	200 UJ	76 J	170 J	76 J	22 J	-	-	-	-	-	-	2100 J	440 J	-	2200 J	750 J	800 J	1300 J	970 J	1300 J	-	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-452	MW-452	MW-452	MW-452	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455
			Field Sample ID	M452B9	M452C1	M452C2	M452C3	M453A1X	M453A2X	M453A3X	M453A4X	M453A6X	M453A7X	M453A8X	M453A9X	M453B1X	M453B2X	M453B4X	D0120218	M453B6X	M453B8	D0124228A	M453C1	M455A2	M455A3X	M455A4X	M455A5X	M455A7X	M455A8X
			Sample Date	04/06/2021	07/19/2021	10/14/2021	01/25/2022	01/07/2016	07/08/2016	07/26/2017	01/19/2018	07/13/2018	10/12/2018	01/23/2019	04/04/2019	07/31/2019	02/03/2020	08/31/2020	01/20/2021	01/20/2021	07/16/2021	01/24/2022	01/24/2022	12/16/2015	07/18/2016	07/26/2017	01/19/2018	07/13/2018	10/09/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	-	3 U	-	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	2.9 U	3 U	3.1 U	0.5 U	0.5 UJ	0.6 U	0.6 U	3 UJ	3 U
2,4-Dinitrophenol	ug/L	N	40	-	14 U	-	15 U	10 U	10 U	10 U	10 U	15 U	14 U	14 U	14 U	15 U	16 UJ	14 U	14 U	15 U	14 U	14 U	14 U	10 U	10 UJ	11 U	11 U	14 UJ	15 U
2,4-Dinitrotoluene	ug/L	N	10	-	1 U	-	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.98 U	0.99 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	-	0.4 U	-	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.41 U	0.41 U	0.39 U	0.39 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	-	11	-	6.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	23	7	9	4	3	3
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	-	1 U	-	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	0.98 U	0.99 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	1 U	-	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 U	3.1 U	0.98 U	0.99 U	1 U	0.5 U	0.5 UJ	0.6 U	0.6 U	3 UJ	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	-	4 U	-	4.2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	3.9 U	3.9 U	4.1 U	2 U	2 U	2 U	2 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	-	2 U	-	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	2 U	2 U	2.1 U	0.5 U	0.5 U	0.6 U	0.6 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	8.1 U	-	8.4 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	9 UJ	8.1 U	8.2 U	8.3 U	7.9 U	7.9 U	8.3 U	5 U	5 UJ	6 U	6 U	8 UJ	9 U
4-Bromophenylphenylether	ug/L	N	NA	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	-	4 U	-	4.2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	4.1 U	4.1 U	3.9 U	3.9 U	4.1 U	2 U	2 U	2 U	2 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	0.91 J	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	11	0.6 U	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	-	0.91 U	-	0.95 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.91 U	0.93 U	0.93 U	0.88 U	0.89 U	0.93 U	0.5 U	0.5 U	0.6 U	0.7 J	0.9 U	1 U
4-Nitrophenol	ug/L	N	NA	-	10 U	-	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 UJ	10 U	10 U	10 U	9.8 U	9.9 U	10 U	10 U	10 UJ	11 U	11 U	10 UJ	11 U
Acenaphthene	ug/L	N	400	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.6	0.6	0.6	0.6	0.8	0.9
Acenaphthylene	ug/L	N	NA	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	-	38	-	20	0.5 U	0.5 U	0.5 U	0.7 UJ	4 U	10	4 U	4 U	4 U	5 U	5 J	4.1 U	4.1 U	30	26	32	0.5 U	0.5 U	0.6 U	0.6 U	4 U	4 U
Anthracene	ug/L	N	2000	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	-	1 U	-	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	0.98 U	0.99 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	-	1 U	-	1.1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	0.98 U	0.99 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	-	0.11 U	-	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	-	2 U	-	2.1 U	2 U	2 U	2 U	**5J**	5 U	**10J**	5 U	5 U	5 U	6 U	5 U	5.2 U	5.2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	-	2 U	-	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	-	3 U	-	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5.2 U	2.9 U	3 U	3.1 U	5 U	5 U	6 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	-	2 U	-	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	-	5.1 U	-	5.3 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5.2 U	4.9 U	4.9 U	5.2 U	2 U	2 U	2 U	2 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	-	2 U	-	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	4 J
Dimethyl phthalate	ug/L	N	NA	-	2 U	-	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	3 U	3 U
Fluoranthene	ug/L	N	300	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	-	0.12 U	-	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.7	0.6	0.6 J	0.5 J	0.7	0.6
Hexachlorobenzene	ug/L	N	0.02	-	0.11 U	-	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	-	5.1 U	-	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5.2 U	4.9 U	4.9 U	5.2 U	5 U	5 U	6 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	-	0.51 U	-	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.49 U	0.49 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	-	0.11 U	-	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.71 U	0.72 U	0.73 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.71 U	0.72 U	0.73 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	130 J	54 J	62 J	41 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	20	10	4	2	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	-	0.51 U	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.52 U	1.6 J	1.3 J	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	-	1 U	-	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	1.6 U	1.6 U	1.7 U	0.98 U	0.99 U	1 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	-	1 U	-	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.98 UJ	0.99 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U
Phenanthrene	ug/L	N	NA	-	0.11 U	-	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.21 J	0.13 J	0.11 U	0.11 U	0.11 U	0.8	0.5 J	0.5 J	0.3 J	0.4 J	0.1 U
Phenol	ug/L	N	2000	-	9.3	-	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.52 U	0.52 U	0.49 U	0.49 U	0.52 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	-	0.1 U	-	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 U	0.099 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	14 J	-	-	270 J	270 J	21 J	0 U	37 J	18 J	-	0 U	0 U	-	-	-	-	370 J	-	-	560 UJ	380 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-464
			Field Sample ID	M455A9X	M455B1X	D0724198	M455B2X	M455B3X	M455B5X	M455B6X	M455B7X	M455B9	M455C2	M458A3X	M458A5X	M458A6X	M458A7X	M458A8X	D1020178X	M458A9X	M458B1X	M458B2X	M458B3X	M458B4X	M458B8X	M458B9X	D0824218	M458C4	M458C2	M464A1X
			Sample Date	01/23/2019	04/05/2019	07/24/2019	07/24/2019	03/03/2020	07/22/2020	10/26/2020	01/22/2021	07/21/2021	01/26/2022	09/01/2016	12/07/2016	01/25/2017	04/20/2017	07/12/2017	10/20/2017	10/20/2017	01/10/2018	05/24/2018	08/28/2018	11/19/2018	09/09/2020	02/03/2021	08/24/2021	08/24/2021	02/09/2022	11/23/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 UJ	-	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 UJ	-	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 UJ	-	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 UJ	3 UJ	3 U	3.4 UJ	-	3 U	3.1 UJ	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3.2 U	3.4 U	3.3 U	3 U	3 UJ
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	14 UJ	14 UJ	15 U	16 UJ	-	14 U	14 UJ	14 U	10 U	10 UJ	10 U	10 U	10 UJ	10 U	11 U	10 U	14 U	14 U	15 U	14 U	15 U	16 U	15 U	14 U	52 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 UJ	1 UJ	1 U	1.1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	5 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.45 U	-	0.4 U	0.41 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.45 U	0.43 U	0.4 U	2 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 UJ	-	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	10 J	10 J	2	1.2	29 J	1.7	0.8	0.6	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	**39**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 UJ	-	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 UJ	2 UJ	2 U	2.3 U	-	2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1.1 U	1.1 U	1.1 U	1 U	3 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 UJ	3 UJ	3 U	3.4 UJ	-	3 U	1 UJ	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	1.1 U	1.1 U	1.1 U	1 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 UJ	3 UJ	3 U	3.4 U	-	3 U	4.1 U	4 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.1 U	4.2 U	4.5 U	4.3 U	4 U	10 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 UJ	3 UJ	3 U	3.4 U	-	3 U	2.1 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	2.1 U	2.3 U	2.2 U	2 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	9 U	8 UJ	8 UJ	8 U	9 UJ	-	8.1 U	8.2 UJ	8.1 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	8 U	8 U	8 U	8.2 U	8.5 U	9.1 U	8.7 U	8.1 U	26 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 UJ	4 UJ	4 U	4.5 U	-	4 U	4.1 U	4 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.2 U	4.5 U	4.3 U	4 U	10 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	5 J	0.5 U	1.9 J	-	0.51 U	3.7 J	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 J	0.53 U	0.57 U	0.54 U	0.5 U	3 U
4-Nitroaniline	ug/L	N	NA	0.9 U	1 U	0.9 UJ	0.9 UJ	0.9 U	1 U	-	0.91 U	0.93 U	0.91 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.92 U	0.96 U	1 U	0.98 U	0.91 U	3 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	10 UJ	10 UJ	10 U	11 UJ	-	10 U	10 UJ	10 U	10 U	10 UJ	10 U	10 U	10 UJ	10 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	10 U	52 U
Acenaphthene	ug/L	N	400	0.7	0.1 U	1 J	2 J	0.9	0.57	-	0.51	0.58	0.48 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	7
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.5 UJ
Acetophenone	ug/L	N	700	4 U	4 U	4 UJ	4 UJ	4 U	4.5 U	-	4 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.1 U	1.1 U	1.1 U	1.1 U	1 U	3 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 J
Atrazine	ug/L	N	3	2 U	2 U	2 UJ	2 UJ	2 U	2.3 U	-	2 U	1 U	1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1.1 U	1.1 U	1 U	10 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 UJ	3 UJ	3 U	3.4 U	-	3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.1 U	1.1 U	1.1 U	1.1 U	1 U	5 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	**1J**
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	**0.8J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	**0.9J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.5 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.5 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 UJ	5 UJ	5 U	5.6 U	-	5.1 U	2.1 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	2.1 U	2.3 U	2.2 UJ	2 U	10 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 UJ	2 U	2.3 U	-	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U	10 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 UJ	5 UJ	5 U	5.6 U	-	5.1 U	3.1 U	3 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	3.2 U	3.4 U	3.3 U	3 U	26 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	2 J
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 UJ	2 UJ	2 U	2.3 U	-	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U	10 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 UJ	5 UJ	5 U	5.6 U	-	5.1 U	5.2 U	5.1 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.3 U	5.7 U	5.4 U	5 U	10 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.5 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.6 J	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	4 J
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 UJ	2 U	2.3 U	-	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U	10 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 UJ	2 U	2.3 U	-	2 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U	10 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 UJ	3 UJ	3 U	3.4 U	-	3 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	4
Fluorene	ug/L	N	300	0.7	0.2 J	0.1 UJ	1 J	0.7	0.54 J	-	0.55	0.46 J	0.47 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.14 U	0.13 U	0.12 U	7 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	0.5 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 UJ	5 UJ	5 U	5.6 UJ	-	5.1 U	5.2 U	5.1 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.3 U	5.7 U	5.4 U	5 U	26 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 UJ	1 UJ	1 U	1.1 U	-	1 U	0.52 U	0.51 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	0.57 U	0.54 U	0.5 U	5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	0.5 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.8 U	0.7 UJ	0.7 UJ	0.7 U	0.79 U	-	0.71 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.71 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.8 U	0.7 UJ	0.7 UJ	0.7 U	0.79 U	-	0.71 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.71 U	0.53 U	0.57 U	0.54 U	0.5 U	5 J
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.6 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	18
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.56 U	-	0.51 U	0.52 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	2 U	1.8 UJ	-	1.6 U	1 UJ	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.1 U	1.1 U	1.1 U	1 U	3 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 UJ	1 UJ	1 U	1.1 UJ	-	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 UJ	1.1 U	1 U	5 U
Phenanthrene	ug/L	N	NA	0.5 J	0.1 U	0.7 J	0.1 UJ	0.4 J	0.11 U	-	0.33 J	0.28 J	0.21 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	10
Phenol	ug/L	N	2000	0.5 U	0.5 U	1 J	3 J	0.5 U	0.56 UJ	-	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.57 U	0.54 U	0.5 U	3 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	4 J
Total TIC SVOCS	ug/L	N	NA	350 J	250 J	1400 J	680 J	-	-	-	-	-	-	13 J	71 J	17 J	-	1000 J	-	-	-	30 J	110 J	-	-	-	-	-	-	2500 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-465	MW-465	MW-465	MW-465	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473
			Field Sample ID	D0208168	M464A2X	M464A9X	M464B1X	M464C3	M464C4	M464C6	M465A1X	M465A2X	M465A3X	M465A5X	M473A1X	D0715168	M473A2X	M473A3X	M473A4X	M473A6X	D0611188A	M473A7X	M473A8X	M473A9X	M473B1X	D0603198	M473B3X	M473B4X	D1211198A
			Sample Date	02/08/2016	02/08/2016	02/19/2018	04/13/2018	04/14/2021	10/01/2021	03/25/2022	11/19/2015	02/21/2018	04/19/2018	05/20/2020	12/16/2015	07/15/2016	07/15/2016	12/28/2016	01/27/2017	03/06/2018	06/11/2018	06/11/2018	09/04/2018	12/04/2018	02/26/2019	06/03/2019	06/03/2019	09/09/2019	12/11/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	5 U	5 U	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
2,4,6-Trichlorophenol	ug/L	N	20	5 U	5 U	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
2,4-Dichlorophenol	ug/L	N	20	5 U	5 U	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
2,4-Dimethylphenol	ug/L	N	100	5 U	5 U	0.5 U	0.5 U	3.4 U	3.1 U	17 U	0.5 U	0.6 J	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	3 UJ	3 UJ	3 U	3 U	3 U	3 UJ	3 U	3 UJ	31 U
2,4-Dinitrophenol	ug/L	N	40	100 U	110 U	10 U	10 U	16 U	14 U	77 U	10 U	11 U	10 U	15 U	11 U	10 U	10 U	10 UJ	10 U	10 UJ	14 UJ	14 UJ	14 U	15 U	14 U	14 UJ	15 U	14 UJ	150 U
2,4-Dinitrotoluene	ug/L	N	10	10 UJ	11 UJ	1 U	1 U	1.1 U	1 U	5.5 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	10 U
2,6-Dinitrotoluene	ug/L	N	5	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
2-Chloronaphthalene	ug/L	N	600	4 UJ	4 UJ	0.4 U	0.4 U	0.46 U	0.41 U	2.2 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	5 U	5 U	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
2-Methylnaphthalene	ug/L	N	30	21 J	**47 J**	2	0.1 U	0.11 U	0.1 U	0.55 U	2 J	0.7	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	5 U	5 U	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	1.1 U	1 U	5.5 U	0.5 UJ	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	21 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	5 U	5 U	0.5 U	0.5 U	1.1 U	1 U	5.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	3 UJ	3 UJ	3 U	3 U	3 U	3 UJ	3 U	3 UJ	31 U
3,3'-Dichlorobenzidine	ug/L	N	30	20 UJ	21 UJ	2 U	2 U	4.6 U	4.1 U	22 U	2 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	31 U
3-Nitroaniline	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	2.3 U	2 U	11 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	31 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	51 U	54 U	5 U	5 U	9.2 U	8.1 U	44 U	5 U	5 U	5 U	8 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	8 UJ	8 UJ	8 U	8 U	8 U	8 UJ	8 U	8 UJ	83 U
4-Bromophenylphenylether	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
4-Chloroaniline	ug/L	N	30	20 UJ	21 UJ	2 U	2 U	4.6 U	4.1 U	22 U	2 UJ	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	4 UJ	4 UJ	4 U	4 UJ	4 U	4 U	4 U	4 U	41 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	5 U	5 U	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
4-Nitroaniline	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	1 U	0.92 U	5 U	0.5 UJ	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.9 UJ	0.9 UJ	0.9 U	0.9 UJ	0.9 U	0.9 U	0.9 U	0.9 U	9 U
4-Nitrophenol	ug/L	N	NA	100 U	110 U	10 U	10 U	11 U	10 U	55 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 UJ	10 UJ	10 UJ	10 U	10 U	10 U	10 UJ	10 U	10 UJ	100 U
Acenaphthene	ug/L	N	400	4 J	11 J	2	0.4 J	0.62	0.68	0.55 U	0.7 J	0.4 J	0.3 J	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	1 U
Acenaphthylene	ug/L	N	NA	1 UJ	1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	1 U
Acetophenone	ug/L	N	700	5 UJ	5 UJ	0.5 U	0.5 U	1.1 U	1 U	5.5 U	0.5 UJ	0.5 U	0.5 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	4 UJ	4 UJ	4 U	4 UJ	4 U	4 U	4 U	4 U	41 U
Anthracene	ug/L	N	2000	1 J	3 J	0.6	0.1 J	0.11 U	0.1 U	0.55 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	1 U
Atrazine	ug/L	N	3	20 UJ	21 UJ	2 U	2 U	1.1 U	1 U	5.5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	21 U
Benzaldehyde	ug/L	N	NA	10 UJ	11 UJ	1 U	1 U	1.1 U	1 U	5.5 U	4 J	1 U	1 U	3 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	31 U
Benzo(a)anthracene	ug/L	N	0.1	1 UJ	**2J**	**0.5**	0.1 U	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	0.1J	0.1 UJ	0.1 U	**2J**	0.1 U	0.1 U	0.1 U	0.1 U	**2J**
Benzo(a)pyrene	ug/L	N	0.1	1 UJ	**1J**	**0.3J**	0.1 U	0.13 U	0.11 U	0.61 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	**2J**	0.1 U	0.1 U	0.1 U	0.1 U	**3J**
Benzo(b)fluoranthene	ug/L	N	0.2	1 UJ	**2J**	**0.4J**	0.1J	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.2J	0.1J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	**3J**	0.1 U	0.1 U	0.1 U	0.1 U	**4J**
Benzo(g,h,i)perylene	ug/L	N	NA	1 UJ	1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1 J	0.1 U	0.1 U	0.1 U	0.1 U	3 J
Benzo(k)fluoranthene	ug/L	N	0.5	1 UJ	1 UJ	0.1 J	0.1 U	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	**1 J**	0.1 U	0.1 U	0.1 U	0.1 U	**3J**
bis(2-Chloroethoxy)methane	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
bis(2-Chloroethyl) ether	ug/L	N	7	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	20 UJ	21 UJ	**5J**	2 U	2.3 U	2 U	11 U	2 UJ	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	52 U
Butylbenzylphthalate	ug/L	N	100	20 UJ	21 UJ	2 U	2 U	2.3 U	2 U	11 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	21 U
Caprolactam	ug/L	N	4000	51 UJ	54 UJ	5 U	5 U	3.4 U	3.1 U	17 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	52 U
Carbazole	ug/L	N	NA	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Chrysene	ug/L	N	5	1 J	3 J	1	0.2 J	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 UJ	0.1 UJ	0.1 J	0.1 UJ	0.1 U	2 J	0.1 U	0.1 U	0.1 U	0.1 U	3 J
Di-n-butylphthalate	ug/L	N	700	20 UJ	21 UJ	2 U	2 U	2.3 U	2 U	11 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	21 U
Di-n-octylphthalate	ug/L	N	100	20 UJ	21 UJ	2 U	2 U	5.7 U	5.1 U	28 U	2 UJ	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	52 U
Dibenz(a,h)anthracene	ug/L	N	0.3	1 UJ	1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.55 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.3J	0.1 U	0.1 U	0.1 U	0.1 U	1 U
Dibenzofuran	ug/L	N	NA	5 UJ	6 J	0.8 J	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Diethylphthalate	ug/L	N	6000	20 UJ	21 UJ	2 U	2 U	2.3 U	2 U	11 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	21 U
Dimethyl phthalate	ug/L	N	NA	20 UJ	21 UJ	2 U	2 U	2.3 U	2 U	11 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	21 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	31 U
Fluoranthene	ug/L	N	300	3 J	9 J	2	0.3 J	0.11 J	0.13 J	0.56 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.2 J	0.3 J	0.2 J	0.1 UJ	0.1 UJ	0.1 J	0.1 UJ	0.1 U	3 J	0.1 U	0.1 U	0.1 U	0.1 U	2 J
Fluorene	ug/L	N	300	4 J	11 J	2	0.2 J	0.45 J	0.52	0.66 U	1 J	0.5 J	0.2 J	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	1 U
Hexachlorobenzene	ug/L	N	0.02	1 UJ	1 UJ	0.1 U	0.1 U	0.13 U	0.11 U	0.61 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	1 U
Hexachlorobutadiene	ug/L	N	1	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
Hexachlorocyclopentadiene	ug/L	N	40	51 UJ	54 UJ	5 U	5 U	5.7 U	5.1 U	28 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	52 U
Hexachloroethane	ug/L	N	7	10 UJ	11 UJ	1 U	1 U	0.57 U	0.51 U	2.8 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	10 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	1 UJ	**2J**	0.1 U	0.1 U	0.13 U	0.11 U	0.61 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1J	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	**1J**	0.1 U	0.1 U	0.1 U	0.1 U	**4J**
Isophorone	ug/L	N	40	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.7 UJ	0.7 UJ	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	7 U
Naphthalene	ug/L	N	300	16 J	24 J	3	0.1 U	0.11 U	0.1 U	0.55 U	3 J	1	0.4 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 UJ	2 J	0.1 UJ	0.1 UJ	0.2 J	0.3 J	0.1 U	0.1 U	0.2 J	0.1 U	1 UJ
Nitrobenzene	ug/L	N	6	5 UJ	5 UJ	0.5 U	0.5 U	0.57 U	0.51 U	2.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 U
p-Chloro-m-cresol	ug/L	N	NA	5 U	5 U	0.5 U	0.5 U	1.1 U	1 U	5.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
Pentachlorophenol	ug/L	N	0.3	10 U	11 U	1 U	1 U	1.1 U	1 U	5.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 UJ	10 U
Phenanthrene	ug/L	N	NA	7 J	17 J	3	0.2 J	0.13 U	0.16 J	0.61 U	1 J	1	0.1 U	0.8	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1 J	0.1 U	0.1 U	0.1 U	0.1 U	1 J
Phenol	ug/L	N	2000	5 U	5 U	0.5 U	0.7 J	0.57 U	0.51 U	2.8 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U
Pyrene	ug/L	N	200	3 J	8 J	2	0.4 J	0.11 U	0.1 U	0.84 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J	0.1 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	3 J	0.1 U	0.1 U	0.1 U	0.1 U	3 J
Total TIC SVOCS	ug/L	N	NA	-	-	860 J	-	-	-	-	860 J	250 J	440 J	580 J	-	-	-	23 J	36 J	-	48 J	32 J	67 J	86 J	46 J	230 J	260 J	32 J	0 U

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-476	MW-476	MW-476	MW-494	MW-494	MW-495	MW-495	MW-496	MW-496	MW-496	MW-499	MW-499	MW-499	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500
			Field Sample ID	M473B5X	D0312208	M473B6X	D0605208	M473B7X	D0911208	M473B8X	M473B9	D0724188	M476A1X	M476A2X	M494A1X	M494A2X	M495A1X	M495A2X	M496A1X	D1221168X	M496A2X	M499A1X	M499A2X	M499A3X	M500A1X	M500A2X	M500A3X	M500A6	M500A7	M500A8
			Sample Date	12/11/2019	03/12/2020	03/12/2020	06/05/2020	06/05/2020	09/11/2020	09/11/2020	03/24/2022	07/24/2018	07/24/2018	02/19/2019	09/14/2016	12/27/2016	09/15/2016	12/21/2016	09/15/2016	12/21/2016	12/21/2016	11/27/2017	01/31/2018	03/14/2019	11/16/2017	01/30/2018	03/11/2019	06/02/2021	09/24/2021	12/20/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 UJ	3 UJ	3 UJ	3.6 UJ	3.4 UJ	3.1 U	3.2 U	3.3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 UJ	16 UJ	15 UJ	17 UJ	16 UJ	14 U	15 U	16 UJ	14 U	14 U	15 U	10 U	10 U	100 U	10 U	10 UJ	10 U	10 U	10 U	10 U	14 U	11 U	10 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.4 U	0.48 U	0.45 U	0.41 U	0.43 U	0.44 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.6	0.4 J	0.1 U	**84 J**	**59**	14	6	2 J	9	8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.23 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2.4 U	2.3 U	2.1 U	2.1 U	1.1 U	2 U	2 U	2 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 UJ	3 UJ	3 UJ	3.6 UJ	3.4 UJ	3.1 U	3.2 U	1.1 UJ	3 U	3 U	3 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	3 U	1 U	1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3.6 U	3.4 U	3.1 U	3.2 U	4.4 U	3 U	3 U	3 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	4 U	4 U	4 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3.6 U	3.4 U	3.1 U	3.2 U	2.2 U	3 U	3 U	3 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	3 U	2 U	2 U	2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 UJ	9 UJ	8 UJ	9.6 UJ	9 UJ	8.2 U	8.5 U	8.9 UJ	8 U	8 U	8 U	5 U	5 U	50 U	5 U	5 UJ	5 U	5 U	5 U	5 U	8 U	5 U	5 U	8 U	8.1 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	5 U	4 U	4.8 U	4.5 U	4.1 U	4.3 U	4.4 U	4 U	4 U	4 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	4 U	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	35	11	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	1 U	0.9 U	1.1 U	1 U	0.93 U	0.96 U	1 U	0.9 U	0.9 U	0.9 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	0.9 U	0.91 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 UJ	11 UJ	10 UJ	12 UJ	11 UJ	10 U	11 U	11 UJ	10 U	10 U	10 U	10 U	10 U	100 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	2 J	2	1 J	0.8	0.4 J	3 J	2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	5 U	4 U	4.8 U	4.5 U	4.1 U	4.3 U	1.1 U	4 U	4 U	4 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 U	4 U	1 U	1 U	1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.3 J	0.4 J	1 U	0.3 J	0.1 J	1	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2.4 U	2.3 U	2.1 U	2.1 U	1.1 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3.6 U	3.4 U	3.1 U	3.2 U	1.1 U	3 U	3 U	3 U	1 UJ	1 U	10 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	3 U	1 U	1 U	3 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.3J**	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	1 U	0.1 U	0.1 UJ	**0.5J**	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**0.4J**	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	1 U	0.1 U	0.1 UJ	**0.3J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	1 U	0.1 U	0.1 UJ	**0.4J**	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.12 U	0.18 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	1 U	0.1 U	0.1 UJ	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	6 U	5 U	6 U	5.6 U	5.1 U	5.3 U	2.2 U	5 U	5 U	5 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	2 U	2 U	5 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2.4 U	2.3 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	6 U	5 U	6 U	5.6 U	5.1 U	5.3 U	3.3 U	5 U	5 U	5 U	5 UJ	5 U	50 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3 U	3 U	3 U
Carbazole	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	1 J	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.3 J	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	1 U	0.1 J	0.1 UJ	0.7	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2.4 U	2.3 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	6 U	5 U	6 U	5.6 U	5.1 U	5.3 U	5.6 U	5 U	5 U	5 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	2 U	2 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	2 J	1	5 U	0.5 U	0.5 UJ	1	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2.4 U	2.3 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2.4 U	2.3 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2 UJ	2 UJ	2 U	20 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3.6 U	3.4 U	3.1 U	3.2 U	0.56 U	3 U	3 U	3 U	3 J	3	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.2 J	0.3 J	0.1 U	0.12 U	0.11 U	0.14 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.5 J	0.2 J	1 U	0.4 J	0.1 UJ	1	0.9	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.13 U	0.1 U	0.1 U	0.1 U	2 J	2	1 J	0.7	0.5 J	3 J	2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	5 U	6 U	5.6 U	5.1 UJ	5.3 UJ	5.6 U	5 U	5 U	5 U	5 UJ	5 U	50 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1.1 U	0.56 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	1 U	0.1 U	0.1 UJ	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.8 U	0.7 U	0.84 U	0.79 U	0.72 U	0.74 U	0.56 U	0.7 U	0.7 U	0.7 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.8 U	0.7 U	0.84 U	0.79 U	0.72 U	0.74 U	0.56 U	0.7 U	0.7 U	0.7 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 UJ	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.11 U	4	3	0.1 U	59 J	31	17	10	0.5 J	0.1 U	2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 J	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	0.5 U	0.6 U	0.56 U	0.51 U	0.53 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	2 UJ	2 UJ	1.9 UJ	1.8 UJ	1.6 U	1.7 U	1.1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 UJ	1.2 UJ	1.1 UJ	1 U	1.1 U	1.1 UJ	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	2 J	2	2 J	1	0.5 J	5	4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.15 J	0.11 U
Phenol	ug/L	N	2000	0.5 UJ	0.6 UJ	0.5 UJ	0.6 UJ	0.56 UJ	0.51 U	0.53 U	0.56 UJ	0.5 U	0.5 U	0.5 U	270	31	5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.2 J	0.1 U	0.1 U	0.12 U	0.11 U	0.18 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.5 J	0.2 J	1 J	0.4 J	0.1 UJ	1	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	59 J	6 J	47 J	-	-	-	-	-	95 J	120 J	64 J	520 J	660 J	2900 J	860 J	350 J	840 J	840 J	-	27 J	0 U	-	16 J	150 J	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-500	MW-500	MW-501	MW-501	MW-501	MW-501	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-506	MW-506	MW-506	MW-506	MW-510	MW-510
			Field Sample ID	D0331221B	M500A9	D1117178	M501A1X	M501A2	M501A3X	M504A2X	M504A4X	M504A5X	M504A6X	M504A7X	M504A8X	M504A9X	M504B1X	M504B2X	M504B3X	M504B7X	M504B8X	M504B9	M504C1	M506A7	M506A8	M506A9	M506B1	M510A1X	M510A2X
			Sample Date	03/31/2022	03/31/2022	11/17/2017	11/17/2017	01/30/2018	03/12/2019	08/31/2016	12/07/2016	01/20/2017	04/18/2017	07/12/2017	10/18/2017	01/09/2018	05/25/2018	08/17/2018	11/15/2018	09/04/2020	02/03/2021	08/24/2021	02/04/2022	06/03/2021	09/24/2021	11/23/2021	03/23/2022	12/29/2016	02/02/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	3.1 U	0.5 U	0.5 U	0.5 U	3 U	13	37 J	37	49	10	15	11	29	19	30 J	30	13	15	4.2 J	3.5 U	3.1 U	3.4 U	3.3 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	15 U	10 U	10 U	10 U	14 U	10 U	10 UJ	10 U	10 U	10 U	11 U	10 U	15 U	14 U	14 U	14 U	15 U	14 U	15 U	16 U	14 U	16 U	15 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 UJ	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.41 U	0.42 U	0.47 U	0.41 U	0.46 U	0.44 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7 J	0.5 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	4	2	0.5 U	0.5 U	0.5 U	2 J	0.5 U	0.5 U	0.77 J	0.53 U	1.6 J	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 U	4.2 U	2 U	2 U	2 U	3 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.1 U	4.2 U	4.1 U	4.2 U	4.7 U	4.1 U	4.6 U	4.4 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2.3 U	2.2 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.5 U	8.4 U	5 U	5 U	5 U	8 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8.2 U	8.4 U	8.2 U	8.4 U	9.4 U	8.2 U	9.1 U	8.8 UJ	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 U	4.2 U	2 U	2 U	2 U	4 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.2 U	4.1 U	4.2 U	4.7 U	4.1 U	4.6 U	4.4 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	2	4 J	8	35	0.5 U	2	0.8 J	13	1 J	2	2.2	0.53 U	2.2	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.96 U	0.94 U	0.5 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.92 U	0.95 U	0.92 U	0.95 U	1.1 U	0.92 U	1 U	0.99 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	12 U	10 U	11 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2	2 J	3	2	2	0.3 J	2	2	2	2	3	2	2.5	1.4*1	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	1 U	0.5 U	0.5 U	0.5 U	4 U	0.5 U	0.5 UJ	1	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4.1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3.1 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.13 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2.1 U	2 U	2 U	**4J**	5 U	**320**	**620J**	**370J**	**360**	**130**	**310**	**660**	**100**	5 U	**120**	**230**	**120**	**44**	**120**	2.3 U	2.1 U	2.3 U	2.2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2.1 U	2 U	2 U	2 U	2 U	7	4 J	5	4 J	3 J	2 U	2 J	2 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2.3 U	2.2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.2 U	3.1 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	3.2 U	3.1 U	6.6 J	3.5 U	3.1 U	3.4 U	3.3 U	5 U	5 U
Carbazole	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2.3 U	2.2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.3 U	5.2 U	2 U	2 U	2 U	5 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.3 U	5.1 U	5.3 U	5.8 U	5.1 U	5.7 U	5.5 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.9 J	1 J	0.7 J	0.6 J	0.5 U	0.6 J	0.6 J	0.7 J	0.5 U	1.1 J	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2.3 U	2.2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.1 U	2.3 U	2.2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	1	2 J	2	1	1	0.1 U	1	1	1	1	2.3	0.81	1.5	0.58*1	0.14 U	0.12 U	0.14 U	0.13 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.13 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.3 U	5.1 U	5.3 U	5.8 U	5.1 U	5.7 U	5.5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.53 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.13 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.72 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.72 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.1 U	1 U	1.1 U	1.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 UJ	1.1 U	1.2 U	1 U	1.1 U	1.1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	1 J	1	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.3 J	0.1 U	0.12 U	0.11 U	0.12 U	0.13 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.53 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 UJ	2	4	0.5 J	2	1 J	7	0.5 U	3	0.51 U	0.53 U	0.51 U	0.53 U	0.58 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.4 J	0.3 J	0.2 J	0.2 J	0.2 J	0.3 J	0.2 J	0.3 J	0.2 J	0.26 J	0.24 J	0.1 U	0.11 J	0.12 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	5 J	240 J	-	590 J	430 J	-	180 J	610 J	-	170 J	350 J	150 J	-	-	-	-	-	-	0 U	-	25 J	24 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511
			Field Sample ID	M510A3X	M510A4X	M510A5X	D0315198	M510A6X	M510A7X	M510A8X	M510A9X	M510B1X	M510B2X	M510B3X	D0602211	M510B5	M510B6	M510B7	M510B8	M511A1X	M511A2X	M511A3X	M511A4X	D1204188	M511A5X	M511A6X	M511A7X	M511A8X	M511A9X	M511B1X
			Sample Date	06/12/2018	09/04/2018	12/03/2018	03/15/2019	03/15/2019	06/06/2019	09/10/2019	12/11/2019	03/12/2020	06/15/2020	09/10/2020	06/02/2021	06/02/2021	09/24/2021	12/17/2021	03/22/2022	12/29/2016	01/27/2017	06/08/2018	09/07/2018	12/04/2018	12/04/2018	03/18/2019	06/04/2019	09/10/2019	12/13/2019	03/12/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3 U	3.1 U	3 U	3.1 U	3.4 U	3.3 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	14 UJ	14 U	14 U	14 U	14 U	14 U	14 U	15 U	15 U	15 U	14 U	15 U	14 U	14 U	16 U	15 U	10 UJ	10 U	14 U	14 U	15 U	15 U	14 U	71 U	14 U	15 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.43 U	0.4 U	0.42 U	0.41 U	0.41 U	0.45 U	0.44 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	6	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.5 U	0.2 J	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 UJ	0.5 UJ	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3.2 U	3 U	4.2 U	4.1 U	4.1 U	4.5 U	4.4 U	2 U	2 UJ	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3.2 U	3 U	2.1 U	2 U	2.1 U	2.3 U	2.2 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 UJ	8 U	8 U	8 U	8 U	8 U	8 U	9 U	9 U	8.5 U	8.1 U	8.4 U	8.1 U	8.2 U	9.1 U	8.8 U	5 UJ	5 U	8 U	8 U	8 U	8 U	8 U	40 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 UJ	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4.3 U	4 U	4.2 U	4.1 U	4.1 U	4.5 U	4.4 U	2 U	2 UJ	4 U	4 U	4 U	4 U	4 U	20 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 UJ	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 UJ	1 U	1 U	0.96 U	0.91 U	0.94 U	0.91 U	0.93 U	1 U	0.99 U	0.5 U	0.5 UJ	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	5 U	0.9 U	0.9 U	1 U
4-Nitrophenol	ug/L	N	NA	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	50 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 UJ	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.4 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 UJ	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4.3 U	4 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 UJ	4 U	4 U	4 U	4 U	4 U	20 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 UJ	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.5 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	1 U	1 U	1 U	1.1 U	1.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 UJ	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3.2 U	3 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 UJ	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	**0.2J**	0.1 U	0.1 UJ	0.1J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1J	**0.3J**	**0.2J**	0.5 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**0.2J**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 UJ	0.1J	0.1J	**0.2J**	**0.3J**	**0.2J**	0.5 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	**0.3J**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.2J	**0.3J**	**0.4J**	**0.4J**	0.5 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.2 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 J	0.2 J	0.2 J	0.5 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 J	0.2 J	0.2 J	0.5 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**8J**	5 U	5 U	5 U	5 U	**5J**	5 UJ	5 U	5 U	5.3 U	5.1 U	2.1 U	2 U	2.1 U	2.3 U	2.2 U	2 U	2 UJ	**19**	**11J**	**23**	**27**	**23**	**38J**	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.3 U	5.1 U	3.1 U	3 U	3.1 U	3.4 U	3.3 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.3 J	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 J	0.1 J	0.2 J	0.3 J	0.3 J	0.5 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.3 U	5.1 U	5.2 U	5.1 U	5.1 U	5.7 U	5.5 U	2 U	2 UJ	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2.3 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3.2 U	3 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.3 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.2 J	0.1 J	0.2 J	0.5 J	0.7	0.7 J	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 UJ	0.1 U	0.1 U	0.1 U	1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.13 U	0.12 U	0.12 U	0.14 U	0.13 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.7	0.5 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.3 U	5.1 U	5.2 U	5.1 U	5.1 U	5.7 U	5.5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.1 U	1 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2J	0.2J	0.2J	0.5 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.8 U	0.7 U	0.75 U	0.71 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	4 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.8 U	0.7 U	0.75 U	0.71 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	4 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	7	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.5 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.6 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	2 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 J	0.1 U	0.1 U	0.1 U	2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.13 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 J	0.3 J	1	0.5 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.51 U	0.52 U	0.51 U	0.51 U	0.57 U	0.55 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.3 J	0.1 U	0.1 U	0.1 J	0.3 J	0.1 U	0.1 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.2 J	0.2 J	0.3 J	0.5 J	0.6	0.7 J	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	110 J	31 J	12 J	45 J	150 J	70 J	0 U	0 U	0 U	-	-	-	-	-	-	-	140 J	34 J	17 J	67 J	56 J	90 J	340 J	2700 J	22 J	7 J	0 U

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-511	MW-511	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-525	MW-525	MW-525	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526
			Field Sample ID	M511B2X	M511B3X	M512A1X	M512A2X	M512A3X	M512A4X	M512A5X	M512A6X	M512A7X	M512A8X	M512A9X	M512B1X	D0616208	M512B2X	M512B3X	M512B5	M512B6	M525A1X	M525A2X	M525A3X	M526A1X	M526A2X	M526A3X	M526A9	D0526218	D092220211C
			Sample Date	06/17/2020	09/09/2020	03/13/2017	05/05/2017	06/08/2018	09/20/2018	12/05/2018	03/07/2019	06/05/2019	09/10/2019	12/11/2019	03/12/2020	06/16/2020	06/16/2020	09/08/2020	06/01/2021	10/25/2021	11/27/2017	01/29/2018	03/01/2019	11/27/2017	01/29/2018	03/05/2019	04/30/2021	05/26/2021	09/22/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	3.5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.2 U	32 U	3 U	3.2 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	3 U	3 U	3.1 U	3 U
2,4-Dinitrophenol	ug/L	N	40	17 U	14 U	10 U	10 U	14 U	15 U	14 U	14 U	14 U	15 U	14 U	14 U	15 U	15 UJ	150 U	14 U	15 U	10 U	10 U	14 UJ	10 U	10 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.1 U	1.1 U	11 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.47 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.43 U	0.42 U	4.2 U	0.41 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
2-Methylnaphthalene	ug/L	N	30	0.12 U	0.1 U	0.2 J	1	0.2 J	1	0.1 U	0.2 J	1 J	0.1 J	0.1 U	0.1 J	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.3 J	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**70 J**	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.4 U	2 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.2 U	2.1 U	21 U	1 U	1.1 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	2 U	1 U	1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3.5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.2 U	32 U	1 U	1.1 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	3 U	1 U	1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3.5 U	3 U	2 U	2 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3.2 U	3.2 UJ	32 U	4.1 U	4.2 U	2 U	2 U	3 U	2 U	2 U	3 U	4 U	4.1 U	4.1 U
3-Nitroaniline	ug/L	N	NA	3.5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3.2 U	3.2 U	32 U	2 U	2.1 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	3 U	2 U	2.1 U	2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9.4 U	8.1 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	8.6 U	8.5 UJ	85 U	8.1 U	8.5 U	5 U	5 U	8 UJ	5 U	5 U	8 U	8 U	8.3 U	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
4-Chloroaniline	ug/L	N	30	4.7 U	4.1 U	2 U	2 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4 U	4.3 U	4.2 U	42 U	4.1 U	4.2 U	2 U	2 U	4 U	2 U	2 U	4 U	4 U	4.1 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
4-Nitroaniline	ug/L	N	NA	1.1 U	0.91 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 UJ	0.9 U	0.9 U	0.9 U	0.97 U	0.95 U	9.5 U	0.91 U	0.95 U	0.5 U	0.5 U	0.9 U	0.5 U	0.5 U	0.9 U	0.91 U	0.93 U	0.91 U
4-Nitrophenol	ug/L	N	NA	12 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	110 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.12 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3	0.1 U
Acenaphthylene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4.7 U	4.1 U	0.5 U	3	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4 U	4.3 U	4.2 U	42 U	1 U	1.1 U	0.5 U	0.5 U	4 UJ	0.5 U	0.5 U	4 U	1 U	1 U	1 U
Anthracene	ug/L	N	2000	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.2	0.1 U
Atrazine	ug/L	N	3	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.2 U	2.1 U	21 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U
Benzaldehyde	ug/L	N	NA	3.5 U	3 U	1 U	1 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3.2 U	3.2 U	32 U	1 U	1.1 U	1 UJ	1 U	3 U	1 UJ	1 U	3 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	**5.3**	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**2.3**	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	**5.1J**	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**1.8**	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	**0.16J**	**5.2J**	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.92**	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.13 J	4.8 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.1	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.9 U	5.1 U	2 U	2 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5.4 U	5.3 U	53 U	2 U	2.1 U	2 U	2 U	5 U	2 U	2 U	5 U	2 U	**5.5**	2 U
Butylbenzylphthalate	ug/L	N	100	2.4 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2.2 U	2.1 U	21 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U
Caprolactam	ug/L	N	4000	5.9 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5.4 U	5.3 U	53 U	3 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	3 UJ	3.1 U	3 U
Carbazole	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.9	0.51 U
Chrysene	ug/L	N	5	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.4 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.7	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.2 U	2.1 U	21 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.9 U	5.1 U	2 U	2 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5.4 U	5.3 U	53 U	5.1 U	5.3 U	2 U	2 U	5 U	2 U	2 U	5 U	5 U	5.2 U	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
Diethylphthalate	ug/L	N	6000	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.2 U	2.1 U	21 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.2 U	2.1 U	21 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.5 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3.2 U	3.2 U	32 U	0.51 U	0.53 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	3 U	0.5 U	0.52 U	0.51 U
Fluoranthene	ug/L	N	300	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.11 U	0.19 J	1.5 J	0.12 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1.2	0.1 U
Fluorene	ug/L	N	300	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	4.6	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	5.9 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5.4 U	5.3 U	53 U	5.1 U	5.3 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5.2 U	5.1 U
Hexachloroethane	ug/L	N	7	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.1 U	1.1 U	11 U	0.51 U	0.53 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	0.5 U	0.52 U	0.51 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.14J	**5.8**	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.37J**	0.11 U
Isophorone	ug/L	N	40	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.83 U	0.71 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.75 U	0.74 U	7.4 U	0.51 U	0.53 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.7 U	0.5 U	0.52 U	0.51 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.83 U	0.71 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.75 U	0.74 U	7.4 U	0.51 U	0.53 U	0.5 U	0.5 U	0.7 U	0.5 U	0.5 U	0.7 U	0.5 U	0.52 U	0.51 U
Naphthalene	ug/L	N	300	0.12 U	0.1 U	0.1 U	1	0.1 U	2	0.1 U	0.1 U	0.1 UJ	0.5	0.1 U	0.1 U	0.11 U	0.11 U	1.1 U	0.1 U	0.11 U	0.1 U	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	4.3	0.1 U
Nitrobenzene	ug/L	N	6	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	1.9 U	1.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.7 U	17 U	1 U	1.1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U
Pentachlorophenol	ug/L	N	0.3	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	11 U	1 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.11 U	0.12 J	1.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	2.9	0.11 U
Phenol	ug/L	N	2000	0.59 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5.3 U	0.51 U	0.53 U	0.5 U	16	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1.8 J	0.51 U
Pyrene	ug/L	N	200	0.12 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U	0.11 U	0.23 J	2.1 J	0.18 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	4.2	0.1 U
Total TIC SVOCS	ug/L	N	NA	0 U	-	300 J	-	39 J	110 J	23 J	38 J	230 J	19 J	14 J	0 U	-	-	0 U	-	0 U	-	400 J	150 UJ	-	4 J	59 J	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-526	MW-526	MW-526	MW-534	MW-534	MW-534	MW-534	MW-534	MW-534	MW-534	MW-534	MW-537	MW-537	MW-537	MW-537	MW-537	MW-537	MW-537	MW-537	MW-545	MW-545	MW-548	MW-548	MW-548	MW-549	MW-549	MW-549
			Field Sample ID	M526B1	M526B2	M526B3	M534A1X	M534A2X	M534A3X	M534A4X	M534A5X	M534A6X	M534A7	M534A8	M537A1X	M537A2X	M537A3X	M537A4X	M537A5X	M537A6X	M537A7	M537A8	M545A1X	M545A2X	D1016188	M548A1X	M548A2X	M549A1X	D1206188	M549A2X
			Sample Date	09/22/2021	12/14/2021	03/21/2022	11/20/2018	02/15/2019	08/19/2019	02/12/2020	08/18/2020	02/08/2021	08/18/2021	02/23/2022	11/20/2018	02/15/2019	08/19/2019	02/12/2020	08/18/2020	02/12/2021	08/18/2021	02/23/2022	04/13/2018	06/12/2018	10/16/2018	10/16/2018	12/06/2018	10/17/2018	12/06/2018	12/06/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.1 U	3.3 U	3.2 U	3 U	3 U	3 U	3 U	3.5 U	3.1 UJ	3.0 U	3 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	16 U	14 U	14 U	16 U	14 U	15 U	14 U	15 U	14 U	15 U	15 U	15 U	14 U	15 U	14 U	16 U	14 UJ	14 U	14 U	10 U	14 U	15 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1 UJ	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.41 U	0.43 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.46 U	0.41 UJ	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	2	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1.1 U	1.1 U	2 U	2 U	2 U	2 U	2.3 U	1 U	1.0 U	1 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.2 U	1 U	1.1 U	1.1 U	3 U	3 U	3 U	3 U	3.5 U	1 UJ	1.0 U	1 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.5 U	4 U	4 U	3 U	3 U	3 U	3 U	3.2 U	4.1 U	4.3 U	4.2 U	3 U	3 U	3 U	3 U	3.5 U	4.1 UJ	4.1 U	4 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	2.2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.2 U	2 U	2.2 U	2.1 U	3 U	3 U	3 U	3 U	3.5 U	2.1 UJ	2.0 U	2 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.9 U	8 U	8.1 U	9 U	8 U	8 U	8 U	8.6 U	8.2 U	8.7 U	8.5 U	9 U	8 U	8 U	8 U	9.3 U	8.2 UJ	8.1 U	8.1 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	4.1 U	4.3 U	4.2 U	4 U	4 U	4 U	4 U	4.6 U	4.1 UJ	4.1 U	4 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	4	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	0.9 U	0.91 U	1 U	0.9 U	0.9 U	0.9 U	0.97 U	0.92 U	0.98 U	0.96 U	1 U	0.9 U	0.9 U	0.9 U	1 U	0.92 UJ	0.91 U	0.91 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	12 U	10 UJ	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	1 U	1 U	4 U	4 U	4 U	4 U	4.3 U	1 U	1.1 U	1.1 U	4 U	4 U	4 U	4 U	4.6 U	1 UJ	1.0 U	1 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1.1 U	1.1 U	2 U	2 U	2 U	2 U	2.3 U	1 UJ	1.0 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.2 U	1 U	1.1 U	1.1 U	3 U	3 U	3 U	3 U	3.5 U	1 UJ	1.0 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	2 U	2 U	6 U	5 U	5 U	5 U	5.4 U	2 U	2.2 U	2.1 U	5 U	**8J**	5 U	5 U	5.8 U	2.1 UJ	2.0 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.3 U	2.1 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.4 U	3 U	3 U	6 U	5 U	5 U	5 U	5.4 U	3.1 U	3.3 U	8.3	5 U	5 U	5 U	5 U	5.8 U	3.1 UJ	3.0 U	13	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.3 U	2.1 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.6 U	5 U	5.1 U	6 UJ	5 U	5 U	5 U	5.4 U	5.1 U	5.4 U	5.3 U	5 UJ	5 U	5 U	5 U	5.8 U	5.1 UJ	5.1 U	5.1 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.3 U	2.1 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2.3 U	2.1 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.56 U	0.5 U	0.51 U	3 U	3 U	3 U	3 U	3.2 U	0.51 U	0.54 U	0.53 U	3 U	3 U	3 U	3 U	3.5 U	0.51 UJ	0.51 U	0.51 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.13 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 UJ	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.6 U	5 U	5.1 U	6 U	5 U	5 U	5 U	5.4 U	5.1 U	5.4 U	5.3 U	5 U	5 U	5 U	5 U	5.8 U	5.1 UJ	5.1 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.56 U	0.5 U	0.51 U	1 U	1 U	1 U	1 U	1.1 U	0.51 U	0.54 U	0.53 U	1 U	1 U	1 U	1 U	1.2 U	0.51 UJ	0.51 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.56 U	0.5 U	0.51 U	0.8 U	0.7 U	0.7 U	0.7 U	0.75 U	0.51 U	0.54 U	0.53 U	0.8 U	0.7 U	0.7 U	0.7 U	0.81 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.56 U	0.5 U	0.51 U	0.8 U	0.7 U	0.7 U	0.7 U	0.75 U	0.51 U	0.54 U	0.53 U	0.8 U	0.7 U	0.7 U	0.7 U	0.81 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	26	0.1 U	0.12 U	0.16 J	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 U	1 U	0.6 U	0.5 U	0.5 U	2 U	1.7 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	2 U	1.9 U	1 UJ	1.0 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1 UJ	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.56 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.54 U	0.51 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.51 UJ	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.4 J	0.1 U	0.2 J	0.12 U	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	51 J	7 J	-	-	-	-	-	-	230 J	920 J	-	0 U	-	-	-	-	27 J	51 J	57 J	180 J	7 J	59 J	51 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	RW-61R	RW-61R	RW-61R	RW-81	RW-81	RW-81	RW-81	RW-81	RW-82	RW-82	RW-82	RW-82	RW-83	RW-83	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R
			Field Sample ID	R061RD9	R061RE1	R061RE2	R081B6X	R081B7X	R081B9X	R081C1X	R081C2	R082B6X	R082B7X	R082C2X	R082C3	R083B7X	R083B8X	R083RC1X	R83RC2	R83RC3X	R083RC4	D0530191	R083RC5X	R083RC6X	R083RC7X	R083RC8	R83RD2X	R83RD3X	R083RD5X	R083RD7X
			Sample Date	06/24/2021	09/16/2021	11/23/2021	09/19/2016	12/19/2016	02/04/2020	09/10/2020	02/07/2022	09/21/2016	12/20/2016	05/12/2020	05/25/2021	09/20/2016	12/20/2016	05/25/2018	08/23/2018	11/20/2018	03/25/2019	05/30/2019	05/30/2019	08/30/2019	11/13/2019	02/11/2020	05/26/2020	08/06/2020	11/18/2020	02/26/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.2 U	3.3 UJ	5 U	5 U	17 U	3.1 U	3 U	0.52 UJ	0.5 U	3 U	3.1 U	0.5 U	0.5 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3.2 U
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	15 UJ	100 U	100 U	80 U	14 U	14 U	10 UJ	10 U	14 U	14 U	10 U	10 U	14 U	15 U	71 UJ	14 U	14 U	14 U	14 U	16 U	15 U	14 U	14 U	15 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 U	1.1 U	10 U	10 U	6 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.43 U	0.44 U	4 U	4 U	2 U	0.41 U	0.4 U	0.42 UJ	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.43 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.11 U	0.11 U	1 J	1 U	0.6 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.9	0.1 U	0.1 U	0.3 J	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1.1 U	1.1 U	5 U	5 U	11 U	2.1 U	1 U	0.52 UJ	0.5 U	2 U	1 U	0.5 U	0.5 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1.1 U	1.1 UJ	5 U	5 U	17 U	3.1 U	1 U	0.52 UJ	0.5 U	3 U	1 U	0.5 U	0.5 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	4.3 U	4.4 U	20 U	20 U	17 U	3.1 U	4 U	2.1 UJ	2 U	3 U	4.1 U	2 U	2 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	4.3 U
3-Nitroaniline	ug/L	N	NA	2 U	2.1 U	2.2 U	5 U	5 U	17 U	3.1 U	2 U	0.52 UJ	0.5 U	3 U	2 U	0.5 U	0.5 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	8.5 U	8.7 UJ	51 U	50 U	46 U	8.2 U	8.1 U	5.2 UJ	5 U	8 U	8.1 U	5 U	5 U	8 U	8 U	41 U	8 U	8 U	8 U	8 U	9 U	8 U	8 U	8.1 U	8.8 U	8.6 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
4-Chloroaniline	ug/L	N	30	4 U	4.3 U	4.4 U	20 U	20 U	23 U	4.1 U	4 U	2.1 UJ	2 U	4 U	4.1 U	2 U	2 U	4 U	4 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.4 U	4.3 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2.7	0.55 U	0.54 U
4-Nitroaniline	ug/L	N	NA	0.91 U	0.96 U	0.98 U	5 U	5 U	5 U	0.93 U	0.91 U	0.52 UJ	0.5 U	0.9 U	0.92 U	0.5 U	0.5 U	0.9 U	0.9 U	5 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	0.91 U	0.99 U	0.96 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	11 UJ	100 U	100 U	57 U	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	51 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.11 U	0.11 U	20	33	5	4.2	3	6 J	6	6	3.9	0.1 J	0.1 U	4	6	12	4	4	4	5	4	4	4	4.1	4.1	4.5
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 U	0.11 U	1 U	1 U	0.6 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Acetophenone	ug/L	N	700	1 U	1.1 U	1.1 U	5 U	5 U	23 U	4.1 U	1 U	0.52 UJ	0.5 U	4 U	1 U	0.5 U	0.5 U	4 U	4 U	20 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.4 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.11 U	0.11 U	13	28	1 J	1	0.1 U	3.2 J	2	2	0.97	0.6	0.1 U	0.6	1	8	1	1	0.9	1	1	1	1	1.3	1.2	1.1
Atrazine	ug/L	N	3	1 U	1.1 U	1.1 U	20 U	20 U	11 U	2.1 U	1 U	2.1 UJ	2 UJ	2 U	1 U	2 U	2 UJ	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1.1 U
Benzaldehyde	ug/L	N	NA	1 U	1.1 U	1.1 U	10 U	10 U	17 U	3.1 U	1 U	1 UJ	1 U	3 U	1 U	1 U	1 U	3 U	3 U	15 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.11 U	0.11 U	**15**	**28**	**1J**	**1**	**0.36J**	**2.5J**	**1**	**0.9**	**1.2**	**1**	**0.1J**	0.1 U	0.1 U	**7**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.12 U	0.12 U	**11**	**20**	**1J**	**0.92**	**0.46J**	**1.4J**	**0.8**	**0.6**	**1.1**	**2**	**0.2J**	0.1 U	0.1 U	**5**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.11 U	0.11 U	**11**	**18**	**1J**	**0.85**	**0.35J**	**1.4J**	**0.7**	**0.6**	**0.98**	**2**	**0.2J**	0.1 U	0.1 U	**5**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.11 U	0.11 U	4 J	9	0.7 J	0.58	0.24 J	0.47 J	0.3 J	0.1 U	0.47 J	1	0.2 J	0.1 U	0.1 U	2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 U	0.11 U	**4J**	**8**	0.6 U	0.24 J	0.15 J	**0.62 J**	0.4 J	0.1 U	0.48 J	**0.8**	0.1 J	0.1 U	0.1 U	**2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 UJ	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.1 U	2.2 U	20 U	20 U	29 U	5.1 U	2 U	2.1 UJ	2 U	5 U	2 U	2 U	2 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5.1 U	5.5 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 U	2.2 U	20 U	20 U	11 U	2.1 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U
Caprolactam	ug/L	N	4000	3 U	3.2 U	3.3 U	51 U	50 U	29 U	5.1 U	3 U	5.2 UJ	5 U	5 U	3.1 U	5 U	5 U	5 UJ	5 U	25 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5.1 U	5.5 U	3.2 U
Carbazole	ug/L	N	NA	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
Chrysene	ug/L	N	5	0.1 U	0.11 U	0.11 U	**13**	**28**	0.6 U	0.37 J	0.1 U	3.2 J	2	0.8	1.3	2	0.2 J	0.1 U	0.1 U	**8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 U	2.2 U	20 U	20 U	11 U	2.1 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.3 U	5.5 U	20 U	20 U	29 U	5.1 U	5.1 U	2.1 UJ	2 U	5 U	5.1 U	2 U	2 U	5 U	5 U	25 UJ	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5.1 U	5.5 U	5.4 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 U	0.11 U	**1J**	**2J**	0.6 U	0.1 U	0.1 U	0.25J	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.51 U	0.53 U	0.55 U	5 U	13	3 U	0.51 U	0.51 U	1.9 J	2	2 J	1.2 J	0.5 U	0.5 U	0.7 J	1 J	3 U	0.5 U	0.6 J	0.6 J	0.8 J	0.7 J	0.7 J	0.7 J	0.72 J	0.66 J	0.54 U
Diethylphthalate	ug/L	N	6000	2 U	2.1 U	2.2 U	20 U	20 U	11 U	2.1 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 U	2.2 U	20 U	20 U	11 U	2.1 U	2 U	2.1 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.53 U	0.55 U	5 U	5 U	17 U	3.1 U	0.51 U	0.52 UJ	0.5 U	3 U	0.51 U	0.5 U	0.5 U	3 U	3 U	15 U	3 U	3 U	3 U	4 J	3 U	3 U	3 U	3 U	3.3 U	0.54 U
Fluoranthene	ug/L	N	300	0.1 U	0.11 U	0.11 U	43	91	4	2.9	1.3	6.2 J	3	2	3	1	0.1 J	0.7	1	13	0.7	0.7	0.8	0.9	0.8	0.8	0.8	0.92	0.97	0.83
Fluorene	ug/L	N	300	0.12 U	0.13 U	0.13 U	15	30	2 J	2.1	0.12 U	3.6 J	6	5	2.9	0.2 J	0.1 U	2	4	7	2	2	2	3	3	2	3	2.6	2.6	2.4
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.12 U	0.12 U	1 U	1 U	0.6 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.3 U	5.5 U	51 U	50 U	29 U	5.1 U	5.1 U	5.2 UJ	5 UJ	5 U	5.1 U	5 U	5 UJ	5 U	5 U	25 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5.1 UJ	5.5 U	5.4 U
Hexachloroethane	ug/L	N	7	0.51 U	0.53 U	0.55 U	10 U	10 U	6 U	1 U	0.51 U	1 UJ	1 U	1 U	0.51 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.54 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.12 U	0.12 U	**4J**	**8**	**0.6J**	0.1 U	**0.28J**	**0.35J**	**0.3J**	0.1 U	**0.47J**	**0.9**	0.2J	0.1 U	0.1 U	**2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U
Isophorone	ug/L	N	40	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.53 U	0.55 U	5 U	5 U	4 U	0.72 U	0.51 U	0.52 UJ	0.5 U	0.7 U	0.51 U	0.5 U	0.5 U	0.7 U	0.7 U	4 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.71 U	0.77 U	0.54 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.53 U	0.55 U	5 U	5 U	4 U	0.72 U	0.51 U	0.52 UJ	0.5 U	0.7 U	0.51 U	0.5 U	0.5 U	0.7 U	0.7 U	4 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.71 U	0.77 U	0.54 U
Naphthalene	ug/L	N	300	0.1 U	0.11 U	0.11 U	3 J	1 U	0.6 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	2	0.1 J	0.1 U	2	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1	0.1 U	0.11 U	0.11 U
Nitrobenzene	ug/L	N	6	0.51 U	0.53 U	0.55 U	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1.1 U	1.1 UJ	5 U	5 U	9 U	1.6 U	1 U	0.52 UJ	0.5 U	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	1.6 U	1.8 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	1.1 UJ	10 U	10 U	6 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.12 U	0.12 U	13	39	0.6 U	0.1 U	0.11 U	1.6 J	0.9	0.1 U	0.11 U	1	0.1 U	0.3 J	4	15	3	3	3	1	1	2	3	1.9	2.5	2.8
Phenol	ug/L	N	2000	0.51 U	0.53 U	0.55 UJ	5 U	5 U	3 U	0.51 U	0.51 U	0.52 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.51 U	0.55 U	0.54 U
Pyrene	ug/L	N	200	0.1 U	0.11 U	0.11 U	49	86	5	3.4	2.2	8 J	4	3	4.8	2	0.2 J	0.5 J	0.8	12	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.71	0.66	0.71
Total TIC SVOCS	ug/L	N	NA	0 U	-	-	2300 J	2400 J	-	-	-	380 J	270 J	-	-	99 J	7 J	320 J	310 J	960 J	270 J	280 J	300 J	310 J	300 J	180 J	420 J	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-91	RW-92	RW-92	RW-94	SB-10	SB-10	SB-10	SB-10	SB-10	SB-10	SB-10	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B	SB-13B
			Field Sample ID	R091B4X	R092B2X	R092B3X	R094B6	SB10212X	SB10412X	SB10413X	SB10214X	SB10414X	SB10215X	SB10415X	SB13B112X	SB13B212X	SB13B312X	SB13B412X	SB13B113X	SB13B213X	SB13B313X	SB13B413X	SB13114X	SB13214X	SB13314X	SB13B414X	SB13115X	SB13B215X	SB13B315X
			Sample Date	11/05/2013	10/30/2013	01/13/2014	08/16/2013	04/13/2012	10/02/2012	10/18/2013	05/16/2014	10/03/2014	05/01/2015	10/06/2015	01/20/2012	04/13/2012	07/17/2012	10/04/2012	01/15/2013	05/02/2013	07/16/2013	10/18/2013	02/18/2014	04/29/2014	07/24/2014	10/03/2014	01/16/2015	05/01/2015	07/21/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
2,4-Dinitrophenol	ug/L	N	40	10 U	13 U	12 U	-	12 U	-	-	11 U	-	11 U	-	-	12 U	-	-	-	11 U	-	-	-	12 U	-	-	-	11 U	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.5 U	-	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.5 U	-	0.4 U	-	0.4 U	-	0.5 U	-	0.5 U	-	0.4 U	-	0.4 U	-
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	3	5	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
3-Nitroaniline	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	7 U	6 U	-	6 U	-	-	5 U	-	6 U	-	-	6 U	-	-	-	5 U	-	-	-	6 U	-	-	-	5 U	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
4-Chloroaniline	ug/L	N	30	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	2 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	4	-	-	-	3	-	-	-	9	-	-	-	0.5 U	-
4-Nitroaniline	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
4-Nitrophenol	ug/L	N	NA	10 U	13 U	12 U	-	12 U	-	-	11 U	-	11 U	-	-	12 U	-	-	-	11 U	-	-	-	12 U	-	-	-	11 U	-
Acenaphthene	ug/L	N	400	0.8	11	8	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Acetophenone	ug/L	N	700	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
Anthracene	ug/L	N	2000	0.1 U	11	4	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Atrazine	ug/L	N	3	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	-	1 U	-
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**4**	**2**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**4**	**2**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Benzo(b)fluoranthene	ug/L	N	0.2	0.1J	**3**	**1**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	2	0.8	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	**1**	0.4 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	**42**	**5J**	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Butylbenzylphthalate	ug/L	N	100	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Caprolactam	ug/L	N	4000	5 U	7 U	6 U	-	6 U	5 U	6 U	5 U	5 U	6 U	5 U	-	6 U	-	5 U	-	5 U	-	6 U	-	6 U	-	5 U	-	5 U	-
Carbazole	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
Chrysene	ug/L	N	5	0.1 J	5	3	-	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Di-n-butylphthalate	ug/L	N	700	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Di-n-octylphthalate	ug/L	N	100	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	**0.8**	**0.4J**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Dibenzofuran	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
Diethylphthalate	ug/L	N	6000	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Dimethyl phthalate	ug/L	N	NA	2 U	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
Fluoranthene	ug/L	N	300	0.2 J	8	3	-	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Fluorene	ug/L	N	300	0.5 J	16	11	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
Hexachlorocyclopentadiene	ug/L	N	40	5 U	7 U	6 U	-	6 U	5 U	6 U	5 U	5 U	6 U	5 U	-	6 U	-	5 U	-	5 U	-	6 U	-	6 U	-	5 U	-	5 U	-
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	**1**	**0.5J**	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Isophorone	ug/L	N	40	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
Naphthalene	ug/L	N	300	1 U	5 U	1 U	1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	1 U	0.1 U	1 U	0.1 U	1 U	1 U	1 U	0.1 U	1 U	1 U	1 U	0.1 U	1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.7 U	0.6 U	-	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.5 U	-
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	-	1 U	-	-	1 U	-	1 U	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-
Phenanthrene	ug/L	N	NA	0.1 J	28	18	-	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Phenol	ug/L	N	2000	0.5 U	0.7 U	0.6 U	-	0.6 U	-	-	0.5 U	-	0.6 U	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.6 U	-	-	-	0.5 U	-
Pyrene	ug/L	N	200	0.3 J	16	8	-	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-
Total TIC SVOCS	ug/L	N	NA	37 J	850 J	570 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-13B	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-16
			Field Sample ID	SB13B415X	SB15112X	SB15212X	SB15312X	SB15412X	SB15A1X	SB15113X	SB15A3X	SB15A4X	SB15A5X	SB15114X	SB15R214X	SB15RA6X	SB15R414X	D0331151	SB15R115X	SB15R215X	SB15R315X	D1006151	SB15R415X	SB15R116X	SB15RB6X	SB15RB7X	SB15RB8	SB15RB9	SB16112X
			Sample Date	10/06/2015	01/20/2012	04/13/2012	07/17/2012	10/02/2012	11/12/2012	01/18/2013	05/10/2013	07/03/2013	12/09/2013	03/04/2014	05/16/2014	07/10/2014	10/03/2014	03/31/2015	03/31/2015	05/01/2015	07/21/2015	10/06/2015	10/06/2015	03/01/2016	08/19/2020	02/03/2021	08/25/2021	02/09/2022	01/24/2012
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
2,4,6-Trichlorophenol	ug/L	N	20	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
2,4-Dichlorophenol	ug/L	N	20	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
2,4-Dimethylphenol	ug/L	N	100	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	3.2 U	3 U	3.0 U	3 U	-
2,4-Dinitrophenol	ug/L	N	40	-	-	12 U	-	-	11 U	-	-	11 U	10 U	-	11 U	-	-	-	-	11 U	-	-	-	10 U	15 UJ	14 U	14 U	14 U	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	-	1 U	-	1 U	1 U	-	-	1 U	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	1 U	1 U	1.1 U	1 U	1.0 U	1 U	-
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
2-Chloronaphthalene	ug/L	N	600	0.4 U	-	0.5 U	-	0.4 U	0.4 U	-	-	0.4 U	0.4 U	-	0.4 U	-	0.4 U	-	-	0.4 U	-	0.4 U	0.4 U	0.4 U	0.43 U	0.4 U	0.40 U	0.4 U	-
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.2 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	2.2 U	1 U	1.0 U	1 U	-
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	3.2 U	1 U	1.0 U	1 U	-
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	-	2 U	-	2 U	2 U	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	3.2 U	4 U	4.0 U	4 U	-
3-Nitroaniline	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	3.2 U	2 U	2.0 U	2 U	-
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	6 U	-	-	5 U	-	-	5 U	5 U	-	6 U	-	-	-	-	5 U	-	-	-	5 U	8.6 U	8 U	8.1 U	8 U	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
4-Chloroaniline	ug/L	N	30	2 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	2 U	2 U	2 U	4.3 U	4 U	4.0 U	4 U	-
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
4-Nitroaniline	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.97 U	0.9 U	0.91 U	0.9 U	-
4-Nitrophenol	ug/L	N	NA	-	-	12 U	-	-	11 U	-	-	11 U	10 U	-	11 U	-	-	-	-	11 U	-	-	-	10 U	11 U	10 U	10 U	10 U	-
Acenaphthene	ug/L	N	400	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Acenaphthylene	ug/L	N	NA	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Acetophenone	ug/L	N	700	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	4.3 U	1 U	1.0 U	1 U	-
Anthracene	ug/L	N	2000	0.1 U	-	0.1 U	-	0.4 J	0.1 U	-	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Atrazine	ug/L	N	3	2 U	-	2 U	-	2 U	2 U	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	2.2 U	1 U	1.0 U	1 U	-
Benzaldehyde	ug/L	N	NA	1 U	-	1 U	-	1 U	1 U	-	-	1 U	1 U	-	1 U	-	1 UJ	-	-	1 U	-	1 U	1 U	1 U	3.2 U	1 U	1.0 U	1 U	-
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	**0.2J**	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	**0.2J**	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	-
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.2J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	-	2 U	-	2 U	2 U	-	-	2 U	**160**	-	2 U	-	2 U	-	-	**46**	-	**49J**	**9J**	2 U	5.4 U	2 U	2.0 U	2 U	-
Butylbenzylphthalate	ug/L	N	100	2 U	-	2 U	-	2 U	2 U	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	2.2 U	2 U	2.0 U	2 U	-
Caprolactam	ug/L	N	4000	5 U	-	6 U	-	5 U	5 U	-	-	5 U	5 U	-	6 U	-	5 U	-	-	5 U	-	5 U	5 U	5 U	5.4 U	3 U	3.0 U	3 U	-
Carbazole	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
Chrysene	ug/L	N	5	0.1 U	-	0.1 U	-	0.1 J	0.1 U	-	-	0.1 U	0.3 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Di-n-butylphthalate	ug/L	N	700	2 U	-	2 U	-	2 U	2 U	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	2.2 U	2 U	2.0 U	2 U	-
Di-n-octylphthalate	ug/L	N	100	2 U	-	2 U	-	2 U	2 U	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	5.4 U	5 U	5.0 U	5 U	-
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Dibenzofuran	ug/L	N	NA	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
Diethylphthalate	ug/L	N	6000	2 U	-	2 U	-	2 U	13	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	2.2 U	2 U	2.0 U	2 U	-
Dimethyl phthalate	ug/L	N	NA	2 U	-	2 U	-	2 U	2 U	-	-	2 U	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	2 U	2 U	2.2 U	2 U	2.0 U	2 U	-
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	3.2 U	0.5 U	0.50 U	0.5 U	-
Fluoranthene	ug/L	N	300	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.3 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Fluorene	ug/L	N	300	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	-
Hexachlorobenzene	ug/L	N	0.02	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	-
Hexachlorobutadiene	ug/L	N	1	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
Hexachlorocyclopentadiene	ug/L	N	40	5 U	-	6 U	-	5 U	5 U	-	-	5 U	5 U	-	6 U	-	5 U	-	-	5 U	-	5 U	5 U	5 U	5.4 U	5 U	5.0 U	5 U	-
Hexachloroethane	ug/L	N	7	1 U	-	1 U	-	1 U	1 U	-	-	1 U	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	1 U	1 U	1.1 U	0.5 U	0.50 U	0.5 U	-
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	-
Isophorone	ug/L	N	40	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.50 U	0.5 U	-
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.75 U	0.5 U	0.50 U	0.5 U	-
Naphthalene	ug/L	N	300	1 U	1 U	0.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	1 U	1 U	1 U	1 U	0.11 U	0.1 U	0.10 U	0.1 U	1 U
Nitrobenzene	ug/L	N	6	0.5 U	-	0.6 U	-	0.5 U	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	0.5 U	-	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
p-Chloro-m-cresol	ug/L	N	NA	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	1.7 U	1 U	1.0 U	1 U	-
Pentachlorophenol	ug/L	N	0.3	-	-	1 U	-	-	1 U	-	-	1 U	1 U	-	1 U	-	-	-	-	1 U	-	-	-	1 U	1.1 U	1 U	1.0 U	1 U	-
Phenanthrene	ug/L	N	NA	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.2 J	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	-
Phenol	ug/L	N	2000	-	-	0.6 U	-	-	0.5 U	-	-	0.5 U	0.5 U	-	0.6 U	-	-	-	-	0.5 U	-	-	-	0.5 U	0.54 U	0.5 U	0.50 U	0.5 U	-
Pyrene	ug/L	N	200	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	-	0.1 U	0.4 J	-	0.1 U	-	0.1 U	-	-	0.1 J	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.10 U	0.1 U	-
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	14 J	-	-	78 J	120 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16
			Field Sample ID	SB16212X	SB16312X	SB16412X	SB16113X	SB16213X	SB16313X	SB16413X	SB16114X	SB16214X	SB16314X	D1009141	SB16414X	SB16115X	SB16215X	SB16315X	SB16415X	D1209158A	SB16A1X	SB16116X	SB16A2X	SB16A3X	SB16A6X	SB16318X	SB1641X	D1213181	SB16A7X
			Sample Date	04/19/2012	07/12/2012	10/04/2012	01/15/2013	05/02/2013	07/17/2013	10/11/2013	02/18/2014	04/29/2014	07/24/2014	10/09/2014	10/09/2014	01/16/2015	05/01/2015	07/21/2015	10/06/2015	12/09/2015	12/09/2015	03/17/2016	07/06/2016	07/27/2017	01/12/2018	07/25/2018	10/15/2018	12/13/2018	12/13/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	-	-	-	0.5 U	-	-	-	0.7 J	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 U	-	-	-	10 U	-	-	-	11 U	-	-	-	-	11 U	-	-	11 U	10 UJ	10 UJ	10 U	11 U	10 U	14 UJ	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	-	0.4 U	-	0.4 U	-	0.4 U	-	0.4 U	-	0.5 U	0.5 U	-	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	3	-	2	-	1	-	-	-	0.9	-	2 J	1 J	-	0.7	-	6	2 J	1	0.2 J	4 J	3	1	1	1	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	-	-	-	5 U	-	-	-	5 U	-	-	-	-	5 U	-	-	5 U	5 UJ	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	-	-	-	0.5 U	-	-	-	2	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	-	-	-	10 U	-	-	-	11 U	-	-	-	-	11 U	-	-	11 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.4 J	-	0.7	-	0.7	-	0.7	-	0.7	-	0.9	0.9	-	0.6	-	2	0.8	1	0.3 J	1 J	1	0.5	0.8	1	0.2 J	0.2 J
Acenaphthylene	ug/L	N	NA	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.3 J	0.2 J	-	0.1 U	-	0.9	0.2 J	0.2 J	0.1 U	0.2 J	0.6	0.3 J	0.3 J	0.3 J	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	-	0.1 J	-	0.1 J	-	0.1 J	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 J	0.1 U	0.1 J	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	-	2 U	-	2 U	-	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	-	1 U	-	1 U	-	-	-	1 U	-	1 UJ	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	-	5 U	-	5 U	-	-	-	5 U	-	6 U	6 U	-	5 U	-	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	2	0.5 U	0.5 U	0.5 U	0.5 UJ	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.8 J	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	-	0.5 U	-	0.5 U	-	-	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.7 J	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	-	0.1 J	-	0.1 J	-	0.1 J	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.2 J	-	0.5 J	-	0.6	-	0.4 J	-	0.4 J	-	0.7	0.7	-	0.2 J	-	2	0.7	0.7	0.2 J	0.6 J	1	0.6	0.7	1	0.2 J	0.1 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	-	5 U	-	5 U	-	5 U	-	5 U	-	6 U	6 U	-	5 U	-	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	1	1 U	0.1 J	1 U	0.2 J	1 U	1 U	1 U	1	8 J	3 J	2 J	1 U	1	10	23	3	3	2 J	4 J	8	4	3	4	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.6 U	0.6 U	-	0.5 U	-	0.7 J	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	-	-	-	1 U	-	-	-	1 U	-	-	-	-	1 U	-	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	-	0.1 J	-	0.2 J	-	0.3 J	-	0.1 J	-	0.3 J	0.3 J	-	0.1 J	-	1	0.3 J	0.3 J	0.1 U	0.4 J	1	0.3 J	0.1 U	0.3 J	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.6 U	-	-	-	0.5 U	-	-	-	2	-	-	-	-	0.5 U	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71 J	47 J	220 J	26 J	41 J

Notes:
GWQS = Groundwater Quality Standard
Bold, Shaded, Bracket = Exceedance to Criteria
NA = No Criterion Available for the Analyte
NJDEP = Approved Site Cleanup Critera
U = Not-detectable above minimum detection limit
J = Estimated value

MNA Appendix A4 East Yard - SVOCs and TICs
Historical Groundwater SVOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	SB-16	SB-16	SB-16	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17	SB-17
			Field Sample ID	D0201191A	D0822191	SB16B1X	SB17212X	SB17312X	SB17412X	SB17113X	D0425131	SB17213X	SB17313X	SB17413X	SB17114X	SB17214X	SB17314X	SB17414X	SB17115X	SB17215X	SB17315X	SB17415X	SB17116X
			Sample Date	02/01/2019	08/22/2019	08/22/2019	04/03/2012	07/12/2012	10/04/2012	01/18/2013	04/25/2013	04/25/2013	07/17/2013	10/11/2013	03/27/2014	05/15/2014	07/24/2014	10/09/2014	03/31/2015	05/05/2015	07/21/2015	10/08/2015	03/17/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	15 U	11 U	-	-	-	-	-	-	-	-	10 UJ	-	-	-	11 U	-	-	10 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 UJ	-	1 U	-	1 UJ	-	1 U	-	1 U	-	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.5 U	-	0.4 U	-	0.4 UJ	0.4 UJ	-	0.5 U	-	0.4 UJ	-	0.5 U	-	0.4 U	-	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.5 J	0.9 J	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	-	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	9 U	6 U	-	-	-	-	-	-	-	-	5 UJ	-	-	-	5 U	-	-	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	1 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	11 U	-	-	-	-	-	-	-	-	10 UJ	-	-	-	11 U	-	-	10 U
Acenaphthene	ug/L	N	400	0.8	1 J	0.4 J	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.5	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.2 J	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 UJ	-	-	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	1 U	-	1 U	-	1 UJ	1 UJ	-	-	-	1 UJ	-	1 UJ	-	1 U	-	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	6 U	-	5 U	-	5 UJ	5 UJ	-	-	-	5 UJ	-	6 U	-	5 U	-	6 U	5 U
Carbazole	ug/L	N	NA	0.5 U	1 J	0.7 J	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 J	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	-	2 U	-	2 UJ	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	-	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
Fluoranthene	ug/L	N	300	0.2 J	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.8	1 J	0.3 J	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	6 U	-	5 U	-	5 UJ	5 UJ	-	6 U	-	5 UJ	-	6 U	-	5 U	-	6 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	-	1 U	-	1 UJ	1 UJ	-	1 U	-	1 UJ	-	1 U	-	1 U	-	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	0.8	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
Naphthalene	ug/L	N	300	0.8	0.1 U	0.1 U	0.1 J	1 U	0.1 U	1 U	0.1 UJ	0.1 UJ	1 U	1 U	1 U	0.1 UJ	1 U	1 U	1 U	0.1 U	1 U	1 U	1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.6 U	-	0.5 U	-	0.5 UJ	0.5 UJ	-	0.6 U	-	0.5 UJ	-	0.6 U	-	0.5 U	-	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	1 UJ	-	-	-	1 U	-	-	1 U
Phenanthrene	ug/L	N	NA	0.3 J	0.7 J	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.6 U	-	-	-	-	-	-	-	-	0.5 UJ	-	-	-	0.5 U	-	-	0.5 U
Pyrene	ug/L	N	200	0.1 J	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	96 J	29 J	32 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

GWQS = Groundwater Quality Standard

Bold, Shaded, Bracket = Exceedance to Criteria

NA = No Criterion Available for the Analyte

NJDEP = Approved Site Cleanup Critera

U = Not-detectable above minimum detection limit

J = Estimated value

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	A21TP1	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05
			Field Sample ID	A21TP1NX	A21TP1OX	A21TP1PX	A21TP1QX	A21TP1RX	A21TP1SX	A21TP1TX	A21TP1UX	A21TP1VX	A21TP1WX	A21TP1XX	A21TP1YX	A21TP1ZX	A21TP1A1X	MP05A1X	MP05A2X	MP05A4X	MP05A5X	MP05A6X	MP05A7X	MP05A8X	MP05B1X	MP05B2X
			Sample Date	06/07/2012	05/23/2013	09/23/2014	09/13/2016	02/24/2017	02/23/2018	05/10/2018	08/02/2018	11/28/2018	02/13/2019	05/23/2019	08/29/2019	11/04/2019	05/20/2020	04/24/2013	06/19/2013	03/13/2014	06/26/2014	07/31/2014	01/06/2015	12/10/2015	12/13/2016	05/09/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 U	6 U	6 U	6 J	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.4 U	-	-	-	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	5	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	2 J	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	1 U	-	-	-	1 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 J
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0 U	16 J	0 U	0 U	-	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06R
			Field Sample ID	MP05B3X	MP05B4X	MP05B5X	MP05B6X	MP05B7X	MP05B8X	MP06A1X	MP06A2X	MP06A3X	MP06A4X	MP06A5X	MP06A6X	MP06A7X	MP06A8X	MP06A9X	MP06B1X	MP06B2X	MP06B3X	MP06B4X	MP06B5X	MP06B6X	MP06RC1X	MP06RB8X
			Sample Date	11/27/2017	01/07/2019	10/14/2019	09/25/2020	12/22/2020	03/24/2021	05/07/2013	06/18/2013	03/12/2014	06/27/2014	07/29/2014	01/06/2015	07/07/2015	12/14/2015	06/10/2016	12/14/2016	05/11/2017	11/27/2017	07/09/2018	01/09/2019	10/11/2019	03/23/2021	09/25/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	-	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	-	-	-	-	4 U	5 U	10 U	20 U	4 U	10 U	4 U	20 UJ	10 U	10 U	4 U	4 U	20 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	-	0.3 U	0.3 U	0.3 U	2 U	3 U	5 U	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	-	0.3 U	0.3 U	0.3 U	4 U	5 U	10 U	20 U	4 U	10 U	4 U	20 UJ	10 U	10 U	4 U	4 U	20 U	-	-	0.3 U	**27**
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	-	0.3 U	0.3 U	0.3 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	-	0.3 U	0.3 U	0.3 U	12 J	67	110	120	40	93	49	30 UJ	42 J	31 J	29	36	30 U	-	-	0.3 U	20
2-Hexanone	ug/L	N	40	3 UJ	-	-	0.3 U	0.3 U	0.3 U	6 U	8 U	15 U	30 U	6 U	15 U	15 J	30 UJ	15 U	15 U	6 U	6 UJ	30 U	-	-	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	-	0.5 U	0.5 U	0.5 U	6 U	8 U	15 U	30 U	6 U	15 U	6 U	30 UJ	15 U	15 U	6 U	6 U	30 U	-	-	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	-	-	1.3 UJ	0.7 U	0.7 U	25 J	200	360	390	100	220	63	60 UJ	130	74 J	63	70	83 J	-	-	0.7 U	25
Benzene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**730**	**990**	**1900**	**1300**	**1500**	**3100**	**2100**	**3800J**	**2500**	**2600**	**1200**	**3500**	**4400**	**1800**	**2400**	0.2 U	**510**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	**3.3**
Bromoform	ug/L	N	4	0.5 U	-	-	1 U	1 U	1 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	-	0.3 U	0.3 U	0.3 U	2 U	3 UJ	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	23 J	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	9 J	5 U	5 U	1 U	3 U	2	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.51 J
Chloroform	ug/L	N	70	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	24 J	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	-	-	1 U	1 U	1 U	190	250	730	140	230	300	280	420J	240	180	200	310	190J	-	-	1 U	200
Dibromochloromethane	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	-	0.2 U	0.2 U	0.2 U	4 U	5 U	10 U	5 U	1 U	3 U	1 U	5 UJ	3 UJ	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1.8 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	580	**950**	**1500**	**1100**	**830**	**2000**	**1100**	**2400J**	**1400**	**1500**	**710**	**1900**	**840**	**1100**	390	0.4 U	460
Isopropylbenzene	ug/L	N	700	1 U	-	-	0.2 U	0.2 U	0.2 U	64	78	140	86	56	120	73	170 J	86	98	48	140	81	-	-	0.2 U	41
Methane	ug/L	N	NA	-	100	1000	3400	130	18 J	-	-	-	-	-	-	-	-	-	-	-	-	-	16000	5600	3 U	1500
Methyl acetate	ug/L	N	7000	1 U	-	-	0.3 U	0.3 U	0.3 U	2 U	3 U	5 U	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	-	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	-	-	0.5 U	0.5 U	0.5 U	190	230	1000	280	200	330	300	490J	250	220	200	500	170	-	-	0.5 U	180
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	-	-	0.3 U	0.3 U	0.3 U	4 U	5 U	10 U	20 U	4 U	10 U	4 U	20 UJ	10 U	10 U	4 U	1 U	5 U	-	-	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	10 U	2 U	5 U	2 U	10 UJ	5 U	5 U	2 U	2 U	10 U	-	-	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	200	230	540	280	400	400	200	380 J	300	290	110	380	**710**	220	310	0.2 U	45
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	-	0.2 U	0.2 U	0.2 U	4 U	5 U	10 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	-	0.2 U	0.2 U	0.2 U	2 U	3 U	5 U	5 U	1 U	3 U	1 U	5 UJ	3 U	3 U	1 U	1 U	5 U	-	-	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	1 U	1 U	1.4 U	1.4 U	1.4 U	470	550	970	600	670	490	310	740 J	440	510	180	610	**1300**	400	430	1.4 U	270
Total TIC VOCS	ug/L	N	NA	0 U	-	-	0 U	0 U	0 U	2900 J	4700 J	7400 J	3900 J	2900 J	-	4000 J	6600 J	4100 J	4100 J	2300 J	4100 J	4400 J	-	-	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-06R	MP-06R	MP-06R	MP-06R	MP-06R	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029
			Field Sample ID	MP06RB9X	MP06RC2	MP06RC3	MP06RC4	MP06RC5	M024B8X	M024B9X	M024C1X	M024C2X	M024C3X	D0503171	M024C4X	M024C5X	M024C6X	D0601201	M024C7X	M024C8	M029A2X	M029A3	M029A4	M029A5X	M029A6X	M029A7X
			Sample Date	01/06/2021	06/09/2021	09/08/2021	12/06/2021	03/16/2022	02/28/2012	04/05/2013	05/30/2014	02/19/2015	06/16/2016	05/03/2017	05/03/2017	05/16/2018	05/08/2019	06/01/2020	06/01/2020	06/25/2021	12/12/2014	06/14/2016	05/12/2017	11/20/2017	02/16/2018	05/22/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	**6**	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 J
2-Hexanone	ug/L	N	40	0.3 UJ	0.4 U	0.4 U	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	1 J	2.3 J	0.7 U	1.1 J	0.7 U	-	-	-	-	-	-	-	-	-	-	-	6 U	6 J	6 U	6 U	7 J	8 J
Benzene	ug/L	N	1	0.2 UJ	0.3 U	**1.2**	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	**400**	**330**	**360**	**320**	**340**	**340**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 UJ	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 UJ	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	67	61	79	48	45	51
Dibromochloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 UJ	0.4 U	0.92 J	0.61 J	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	200	210	240	180	180	140
Isopropylbenzene	ug/L	N	700	0.2 UJ	0.2 U	0.3 J	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	12	16	19	13	13	12
Methane	ug/L	N	NA	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	4	3	2	3	2	3
Methylcyclohexane	ug/L	N	NA	0.5 UJ	0.5 U	0.56 J	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	56	44	76	46	46	54
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U
Styrene	ug/L	N	100	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 UJ	0.3 J	9.4	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	75	45	79	50	39	33
trans-1,2-Dichloroethene	ug/L	N	100	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.4 U	1.4 U	0.4 U	460	580	740	430	440	250
Total TIC VOCS	ug/L	N	NA	0 UJ	0 U	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1900 J	1200 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030
			Field Sample ID	M029A8X	M029A9X	M029B1X	M029B2X	M029RB3X	M029RB4X	D0216218	M029RB5X	M029RB6	M029RB7	M029RB8	M030D5X	M030D6X	M030D7X	M030D8X	M030D9X	M030E1X	M030E2X	M030E3X	M030E4X	D0826161	M030E5X	M030E7X
			Sample Date	08/29/2018	11/13/2018	02/22/2019	09/05/2019	04/16/2020	10/07/2020	02/16/2021	02/16/2021	05/21/2021	09/03/2021	11/23/2021	02/14/2012	08/07/2012	03/05/2013	09/24/2013	06/03/2014	11/07/2014	06/30/2015	09/30/2015	03/10/2016	08/26/2016	08/26/2016	09/08/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 J	0.3 J	0.2 U	0.4 J	0.4 J	2 U	0.36 J	0.2 U	0.2 UJ	0.37 J	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.4 J	0.5 J	0.5 J	0.2 U	0.2 U	2 U	0.63 J	0.62 J	0.44 J	0.69 J	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.71 J	0.75 J	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2 J	1 J	4 J	3 J	7 J	3 U	0.3 U	0.3 U	0.3 UJ	0.5 U	2.5 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.4 U	2 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	1 J	0.5 U	5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2.5 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	8 J	3 J	18 J	7 J	23	16 UJ	4.6 J	4.8 J	2.4 J	7.9 J	3.5 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**360J**	**380**	**390**	**370**	**150**	**330**	**300**	**290**	**290J**	**380**	**310**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 UJ	0.2 U	0.2 U	1 U	1 U	10 U	1 U	1 U	1 UJ	1 U	5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 UJ	0.3 J	0.2 J	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	7	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 J	0.4 J	0.4 J	0.3 J	0.5 J	2 U	0.52 J	0.45 J	0.43 J	0.38 J	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	57 J	50	75	52	51	39 J	62	56	37 J	56	36	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	180 J	230	290	210	130	260	230	220	130 J	200	110	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	15 J	17	22	14	12	17 J	23	22	13 J	20	14 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	3 J	3	3	3	0.9 J	2 U	2	1.8	2.1 J	2.3	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	51 J	55	80	51	53	35 J	49	45	28 J	47	29	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 UJ	0.3 U	0.3 U	0.3 U	**6**	3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 J	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	44 J	42	60	54	14	20	22	20	17 J	53	28	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	1	2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	1.5 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 J	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	330 J	400	480	440	79	230	250	240	170 J	240	160	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	1600 J	2500 J	1800 J	-	810 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0031	MW-0031	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R
			Field Sample ID	M030E8X	M030E9X	M030F1X	D112119X	M030F2X	M030F5X	M030F7X	M030F8	M030F9	M031D5X	M031D6X	M031RA1X	M031RA2X	M031RA3X	M031RA4X	M031RA5X	M031RA6X	M031RA7X	M031RA8X	M031RB1X	M031RB2X	M031RB3X	M031RB4X
			Sample Date	05/01/2018	11/26/2018	04/30/2019	11/21/2019	11/21/2019	05/07/2020	12/30/2020	06/25/2021	12/27/2021	02/14/2012	08/07/2012	04/25/2013	09/24/2013	06/05/2014	11/07/2014	02/13/2015	09/30/2015	03/10/2016	08/26/2016	09/08/2017	05/01/2018	11/26/2018	04/30/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	11 J	6 U	6 U	6 U	6 U	6 U	6 U	1 J	6 J
Benzene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	3 J	2 U	2 U	3 J	2 UJ	2 U	2 J	2 U	2 U	2 U	2 U	2 U	0.9 J	0.6 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	0.2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	1 U	1 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032
			Field Sample ID	M031RB5X	D0506201X	M031RB6X	M031RB8X	M031RC1	M031RC2	M032D4X	M032D5X	M032D6X	M032D7X	M032D8X	M032D9X	M032E1X	M032E2X	M032E3X	M032E4X	M032E5X	M032F6X	M032E7X	M032E8X	M032E9X	M032F1X	M032F5X
			Sample Date	11/20/2019	05/06/2020	05/06/2020	12/29/2020	06/25/2021	11/23/2021	03/09/2012	08/07/2012	03/15/2013	09/25/2013	06/05/2014	11/07/2014	02/13/2015	10/01/2015	03/10/2016	08/26/2016	03/22/2017	09/08/2017	05/01/2018	11/27/2018	03/26/2019	11/01/2019	03/24/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	11 J	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Acetone	ug/L	N	6000	1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	27	6 J	6 U	6 U	7 J	7 J	0.7 U	6 UJ	0.8 J	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**5**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 J	4 J	2 U	2 U	2 UJ	3 J	2 J	66	2 U	2 U	2 U	2 J	2 U	2 J	1 J	2 J	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	13	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	3 J	1 U	1 U	1 U	2 J	1 U	53	1 U	1 J	1 U	2 J	2 J	2 J	1 J	1 J	0.5 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 J	0.5 J	8	0.5 U	0.5 U	0.5 U	0.5 J	0.6 J	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 J	0 U	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033
			Field Sample ID	M0032F7X	M032F8X	M032F9X	M0032G1	M032G2	M032G3	D0216121	M033C7X	M033C8X	D0605141	M033D2X	M033D3X	M033D4X	M033D5X	M033D7X	M033D9X	M033E2X	M033E3X	M033E4	D0805218	M033E5	M033E6	M033E7
			Sample Date	09/15/2020	12/22/2020	03/09/2021	06/01/2021	08/26/2021	12/09/2021	02/16/2012	02/16/2012	03/19/2013	06/05/2014	06/05/2014	02/13/2015	03/10/2016	03/24/2017	03/30/2018	03/28/2019	11/19/2020	02/25/2021	05/10/2021	08/05/2021	08/05/2021	11/12/2021	02/11/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.3 U	3 U	0.3 U	0.3 U	0.33 J	0.3 U	1.5 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.5 U	0.50 U	0.5 U	3 U	3 U	3 U	3 U	3 J	3 U	15 U	15 U	3 J	0.7 J	6.2 J	2.6 J	0.71 J	2.1 J	1.8 J	2.5 U	16
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.4 U	0.40 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	15 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.4 U	0.4 U	2 U	0.48 J
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	15 U	3 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Acetone	ug/L	N	6000	2.3 UJ	0.7 J	0.7 U	4.2 J	4.3 J	0.7 J	6 U	6 U	9 J	32	38	19 J	30 U	30 U	69	72	78 J	16 J	14 J	21	24	8.5 J	31
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.44 J	0.71 J	0.6 J	0.61 J	1.5 U	0.37 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	0.5 U	0.2 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.35 J	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Cyclohexane	ug/L	N	NA	4.7 J	1 U	1 U	1 U	1.0 U	1 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	10 U	10 U	2 U	0.2 U	10 U	1 U	1 U	1 U	1 U	5 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.9 J	0.9 J	0.9 J	0.6 J	0.5 J	0.8 J	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.29 J	0.2 U	0.2 U	1 U	0.2 U
Methylcyclohexane	ug/L	N	NA	3 J	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.7 J	0.8 J	13	2.2	5.4	2.6	2.4	2.8 J	2.2
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	0.4 U	0.40 U	0.4 U	0.9 J	1 J	0.9 J	0.9 J	0.8 J	1	3 U	3 U	0.7 J	1 U	14 U	1.4 U	1.4 U	0.4 U	0.4 U	2 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0.0 U	0 U	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	-	-	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0035
			Field Sample ID	M034D6X	M034D7X	M034D8X	M034D9X	M034E1X	M034E2X	M034E3X	M034E4X	M034E5X	M034E6X	M034E7X	M034E8X	M034E9X	M034F1X	M034F4X	M034F5X	M034F7X	M034F8X	M034F9	M034G1	M034G2	M034G3	M035C8X
			Sample Date	02/16/2012	08/07/2012	03/11/2013	09/25/2013	06/24/2014	11/07/2014	02/19/2015	10/01/2015	02/16/2016	08/17/2016	03/24/2017	09/06/2017	03/30/2018	10/17/2018	03/27/2019	08/26/2019	08/05/2020	03/02/2021	05/28/2021	07/30/2021	12/27/2021	02/01/2022	06/07/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	4 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	0.3 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.4 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	12 U	0.7 U	2 UJ	1 UJ	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**3**	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	1 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 J	2 U	2 U	2 U	2 U	4 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	-
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	1 U	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	670	-	140	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 J	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 UJ	0.4 U	0.4 U	0.4 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	16 J	0 U	-	-	-	-	0 U	-	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0035	MW-0039
			Field Sample ID	M035C9X	M035D1X	M035D2X	M035D3	M035D4X	M035D5	M035D6	D0723198	M035D7X	M035D8X	M035D9X	M035E1X	M035E2X	M035E3X	D0805208	M035E4X	M035E5X	M035E6X	M035E7	M035E8	M035E9	M035F1	M039B7X
			Sample Date	05/21/2013	06/25/2014	12/09/2015	09/13/2016	02/24/2017	02/23/2018	02/04/2019	07/23/2019	07/23/2019	08/22/2019	11/08/2019	02/13/2020	03/20/2020	06/03/2020	08/05/2020	08/05/2020	11/03/2020	02/12/2021	06/16/2021	08/16/2021	12/02/2021	03/02/2022	03/27/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 J	0.5 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	1 J	1 J	0.7 U	0.7 U	0.7 U	-	4.2 J	0.7 U	0.7 U	0.7 U	0.91 J	0.7 U	0.7 U	0.7 U	0.7 U	-
Benzene	ug/L	N	1	0.6 J	**2**	0.5 U	**14**	0.5 U	1	0.4 J	0.2 UJ	0.2 UJ	0.8 J	0.2 U	0.2 U	0.2 U	0.39 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**2.5**	0.3 U	**7**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	22	1 U	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.45 J	0.2 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 J	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	7.9	0.5 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	0.7 UJ	0.7 UJ	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	0.3 U	-
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 J	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 J	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	6
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	-	0 U	-	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057
			Field Sample ID	M039B8X	M039B9X	M0039C1X	D020316HS4	D0209161	M039C2X	M039C3X	M039C4X	M039C5X	M039C6X	M039C7X	M057B3X	M057B4	M057B4X	M057B5	M057B5X	D1120121	M057B6	M057B7	M057B8	D0909131	M057B9	M057C1
			Sample Date	04/11/2013	09/05/2014	04/16/2015	02/03/2016	02/09/2016	02/09/2016	02/15/2017	03/01/2018	03/08/2019	02/07/2020	01/27/2021	03/13/2012	05/23/2012	05/24/2012	07/25/2012	07/26/2012	11/20/2012	11/20/2012	02/20/2013	06/12/2013	09/09/2013	09/09/2013	11/06/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	6 U	6 U	6 U	6 U	6 U	47	13 J	6 U	8 J	7 J	6 U	6 U
Benzene	ug/L	N	1	0.5 U	**7**	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.7 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.8 U	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057
			Field Sample ID	M057C2	D0805141	M057C4	M057C5	M057C6	M057C7	M057C8	M057C9	M057D1	M057D2	M057D3	M057D4	M057D5	M057D6	M057D7	M057D8	M057D9	M057E1	M057E2	M057E3	M057E4	M057E5	M057E6
			Sample Date	03/05/2014	08/05/2014	08/05/2014	10/23/2014	03/03/2015	05/29/2015	09/16/2015	11/13/2015	01/08/2016	04/12/2016	07/19/2016	10/17/2016	01/11/2017	04/26/2017	07/18/2017	10/09/2017	01/22/2018	04/09/2018	07/12/2018	10/23/2018	01/08/2019	04/08/2019	07/08/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	54	6 U	6 U	6 U	21	14 J	6 U	6 U	6 U	6 UJ	6 U	15 J	6 U	6 U	6 U	6 U	22	4 J	9 UJ	6 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 J	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	16 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	10 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058
			Field Sample ID	M057E7	M057E8	M057E9	M057F1	M057F2	M057F3	M057F4	M057F5	M057F6	M0057F7	M058A2X	M058A3X	M058A4X	M058A5	M058A6	D1120179	M058A7X	M058A8X	M058A9X	M058B1X	M058B2X	M058B3X	M058B4X
			Sample Date	10/04/2019	01/08/2020	04/08/2020	07/13/2020	10/12/2020	01/12/2021	04/07/2021	07/02/2021	10/06/2021	01/18/2022	03/29/2012	03/27/2013	02/07/2014	06/14/2016	05/12/2017	11/20/2017	11/20/2017	02/16/2018	05/22/2018	08/29/2018	11/13/2018	02/22/2019	09/05/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	1 J	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 UJ	0.7 U	0.7 U	4.4 UJ	0.7 U	0.7 U	0.74 UJ	0.7 U	2 J	3.3 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	5 J	2 J	3 J	3 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**4J**	0.6 J	0.5 U	**8**	0.5 U	0.6 J	0.6 J	0.5 U	0.9 J	**41**	1	0.3 J	**40**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 UJ	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 UJ	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	4 J	2 U	2 U	8	2 U	3 J	3 J	2 U	2 U	6	3 J	0.6 J	10
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	6	2 J	0.8 U	20	0.5 U	10	10	0.5 U	2	21	10	0.6 J	17
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	3 J	1 U	2 J	1 J	1 U	1 U	3 J	2 J	0.4 J	2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.2 U	0.2 U	0.5 J
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 J	3 J	2 J	3 J	1 U	2 J	2 J	1 U	1 J	3 J	2 J	0.7 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	8	2 J	0.7 U	15	1	3	3	0.5 U	2	20	10	0.9 J	16
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	28	9	4 J	79	4	62	61	2	9	110	77	9	89
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	-	-	-	-	-	-	-	98 J	70 J	240 J	250 J	99 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0059	MW-0059	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060
			Field Sample ID	M058B5X	M058B6X	M058B7X	M058B8	D0902218A	M058B9	M058C1	M059A1X	M0059A3	M060A8X	M060A9X	M060B1X	M060B2X	M060B3X	M060B4X	M060B5X	M060B6X	M060B7X	M060B8X	M060B9X	M060C1X	M060C2X	M060C3X
			Sample Date	04/14/2020	10/07/2020	02/16/2021	05/26/2021	09/02/2021	09/02/2021	11/19/2021	04/23/2020	02/03/2022	03/29/2012	03/27/2013	02/11/2014	06/14/2016	05/12/2017	11/21/2017	02/14/2018	05/22/2018	08/30/2018	11/12/2018	02/27/2019	05/14/2019	09/05/2019	04/22/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	2 J	0.58 J	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 UJ	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	2 J	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 UJ	0.3 U	0.5 U	-	-	-	-	-	3 U	3 U	5 J	2 J	0.3 U	1 J	0.3 U	6 J	0.3 U
2-Hexanone	ug/L	N	40	0.3 UJ	0.3 U	0.3 U	0.3 U	0.4 UJ	0.4 U	0.4 UJ	0.3 U	0.4 U	-	-	-	-	-	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 J	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	-	-	-	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	0.5 U
Acetone	ug/L	N	6000	6 J	6.7 UJ	2.9 J	2.6 J	0.7 UJ	0.7 U	0.7 U	0.7 U	0.79 J	-	-	-	-	-	6 U	6 U	13 J	9 UJ	3 UJ	3 J	2 J	12 J	0.7 U
Benzene	ug/L	N	1	0.2 U	**51**	**22**	0.43 J	**36J**	**37**	**36**	**3**	**22**	**10**	**3J**	**2J**	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	0.7 J	0.4 J	0.8 J	0.2 J	1	0.2 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	1 U	1 U	1 U	0.4 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 J	0.41 J	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	6.2	5	3.7 J	4.9 J	4.7 J	6.6	24	24	-	-	-	-	-	7	4 J	8	17	9	9	7	17	7
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	18	14	3.5	15 J	15	16	0.4 U	31	0.8 U	0.8 J	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.4 J	2.1 J	1.5 J	0.83 J	1.6 J	1.5 J	1.8 J	10	16	-	-	-	-	-	2 J	1 U	2 J	5	0.6 J	0.9 J	0.7 J	1 J	2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	1.2	0.75 J	0.2 U	1 J	1.1	1.6	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.9 J	3 J	3.2 J	2.2 J	2.8 J	2.7 J	4.2 J	19	13	-	-	-	-	-	4 J	2 J	4 J	10	5 J	4 J	3 J	9	6
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	2	14	16	12	17 J	17	30	1	8.3	1 J	0.7 J	0.7 U	0.5 U	0.5 U	0.5 J	0.5 U	0.9 J	1	0.4 J	0.4 J	0.5 J	0.7 J	0.4 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.2 U	0.3 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	8	100	84	42	84 J	82	86	9	29	6	5	2 J	0.7 J	0.6 J	1	0.5 U	1	2 J	1 U	1 U	1 U	2 J	1 U
Total TIC VOCS	ug/L	N	NA	74 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	160 J	340 J	280 J	120 J	130 J	100 J	-	350 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0060	MW-0060	MW-0060	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062
			Field Sample ID	M060C4X	M060C5X	M060C6	M061A4X	M061A5X	M061A6X	M061A7X	D1112189	M061A8X	M061A9X	M061B1X	D0422201X	M0061B2X	M061B3X	M061B4X	M061B5	M061B6	M061B7	M062A4X	M062A5X	M062A6X	M062A7X	M062A8X
			Sample Date	10/08/2020	03/02/2021	03/23/2022	11/21/2017	02/14/2018	05/17/2018	08/30/2018	11/12/2018	11/12/2018	02/21/2019	09/09/2019	04/22/2020	04/22/2020	10/09/2020	02/17/2021	05/19/2021	09/02/2021	11/19/2021	11/22/2017	02/16/2018	05/17/2018	08/31/2018	11/14/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	5 U	0.5 U	0.5 U	0.2 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	2 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	**8**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	20 U	2 U	2 U	0.2 U	1 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	0.3 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.3 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	0.3 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	0.2 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	1 U	0.3 J	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 J	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	2 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	-	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	-	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3.6 J	-	0.5 U	3 U	3 U	3 U	4 J	2 J	2 J	2 J	3 J	0.3 U	0.3 U	0.3 U	1.1 J	0.3 U	0.5 U	1.3 J	30 U	5 J	3 U	4 J	9 J
2-Hexanone	ug/L	N	40	0.3 U	-	0.4 U	3 U	3 U	3 U	7 J	0.3 U	0.3 U	2 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 UJ	30 U	3 U	3 U	0.3 U	2 U
4-Methyl-2-pentanone	ug/L	N	NA	0.55 J	-	0.5 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	30 U	3 U	3 U	0.5 U	3 U
Acetone	ug/L	N	6000	14 J	-	0.7 U	7 J	6 U	6 U	14 UJ	5 UJ	6 UJ	3 J	9 J	0.7 U	0.7 U	5.5 UJ	3.4 J	1.8 J	4.2 J	2.3 J	60 U	16 J	6 U	17 J	31 J
Benzene	ug/L	N	1	0.81 J	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.4 J	0.2 U	0.2 U	0.2 U	**3**	0.5 J	0.9 J	**12**	**4.4**	**2.4**	**3.2**	**3.6**	**71**	**130**	**200**	**48**	**29**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.9 J	0.2 U	0.2 U	0.8 J	0.2 U	0.2 U	0.2 U	0.62 J	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Bromoform	ug/L	N	4	1 U	-	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	2 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	-	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Chlorobenzene	ug/L	N	50	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Chloroethane	ug/L	N	NA	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Chloroform	ug/L	N	70	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	13	-	1 U	7	5 J	4 J	8	9	9	5 J	19	6 J	11 J	15	20	19	16	18	20 U	100	98	45	16 J
Dibromochloromethane	ug/L	N	1	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Ethane	ug/L	N	NA	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.9 J	1	1.1	2.7	1.8	2.2	1.5	91	29	150	98	85
Isopropylbenzene	ug/L	N	700	0.66 J	-	0.32 J	6	5 J	1 U	8	5	5	4 J	15	8 J	13 J	16	21	9.5	16	18	17 J	22	20	29	21 J
Methane	ug/L	N	NA	-	-	5000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	-	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Methylcyclohexane	ug/L	N	NA	5.9	-	0.5 U	7	6	5 J	8	9	8	7	10	4 J	6 J	7.9	11	9.9	11	13 J	15 J	90	81	49	17 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.4 J	0.7 J	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	2 U
Styrene	ug/L	N	100	0.2 U	-	0.3 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Toluene	ug/L	N	600	0.51 J	0.2 U	0.2 U	0.7 J	0.5 U	0.5 U	1	1 J	1 J	0.2 U	2	1	1	2.2	1.8	1.2	1.8	2.3	5 U	9	9	8	5
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	-	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	1 U
Xylene (total)	ug/L	N	1000	1.8 J	1.4 U	0.4 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	4 J	1 U	2 J	3.2 J	3.2 J	2.2 J	1.7	2.3	130	56	150	120	110
Total TIC VOCS	ug/L	N	NA	-	-	-	-	380 J	400 J	580 J	310 J	300 J	320 J	510 J	370 J	470 J	-	-	-	-	-	-	1600 J	1600 J	1700 J	2500 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063
			Field Sample ID	M062A9X	M062B1X	M062B2X	M062B3X	M062B4X	M062B5	M062B6	M062B7	M062B8	M063A2X	M063A3X	M063A4X	M063A5X	M063A6X	M063A7X	M063A8X	M063A9X	M063B1X	M063B2X	M063B3	M063B2	M063B5	M063B6
			Sample Date	02/25/2019	09/09/2019	04/15/2020	10/13/2020	02/17/2021	05/25/2021	09/02/2021	11/19/2021	02/25/2022	11/20/2017	02/09/2018	05/17/2018	08/31/2018	11/15/2018	02/25/2019	09/05/2019	04/10/2020	10/13/2020	02/17/2021	05/26/2021	09/02/2021	11/19/2021	03/01/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.28 J	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.4 U	0.2 U	**8**	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.4 U	0.2 U	0.2 U	-	-	-	-	-	-	20 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.6 U	0.3 U	0.3 U	**3J**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	**0.4J**	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.4 U	0.3 J	0.3 J	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	1 U	0.3 J	2 U	0.3 J	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.6 U	0.3 U	0.3 U	3 U	0.3 U	1.1	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.4 J	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.7 J	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	2 U	0.2 J	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	7 J	5 J	0.3 U	3 U	0.3 U	3 J	0.5 U	0.5 UJ	0.5 U	30 U	35	6 J	5 J	4 J	15	4 J	5 J	3 U	0.3 U	2.6 J	1.9 J	1.3 J	0.5 U
2-Hexanone	ug/L	N	40	1 J	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.4 U	0.4 UJ	0.4 U	30 U	6 J	3 U	0.3 U	3 U	0.3 U	0.3 U	3 J	3 U	0.3 U	0.3 U	0.4 U	0.4 UJ	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	1 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	30 U	3 U	3 U	0.5 U	5 U	2 J	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Acetone	ug/L	N	6000	20 J	21	36	7 U	1.4 J	6.8 J	2.2 J	0.7 U	0.7 U	60 U	110	22	18 J	12 J	26	11 J	18 J	7 U	3.1 J	6.9 J	5.4 J	2.2 J	0.7 U
Benzene	ug/L	N	1	**62**	**63**	**17**	**70**	**5.3**	**36**	**57**	**48**	**100**	**38**	**150**	**100**	**24**	**14**	**150**	**78**	**42**	**59**	**46**	**48**	**49**	**20**	**25**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.4 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.8 J	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.4 U	0.2 J	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 J	2 U	0.3 J	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.47 J	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.7 J	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.87 J	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	2	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.3 J	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	16	110	130	39 J	96	72	29	45	38	41 J	58	70	74	64	95	63	70 J	43 J	64	33	26	30	34
Dibromochloromethane	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	24	70	26	77	76	49	23	11	3.9	7 J	6	16	4	4 U	18	14	20	12	13	7.7	6.4	2.6	2.2
Isopropylbenzene	ug/L	N	700	9 J	28	21	16 J	19	16	13	17	19	21 J	20	27	31	22 J	25	22	15	16 J	22	13	13	12	14
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.4 U	0.2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	12	87	91	24 J	86	50	17	21 J	14	48 J	37	100	150	98	83	62	47	41 J	49	25	22	25 J	28
Methylene chloride (Dichloromethane)	ug/L	N	3	0.6 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	**9**	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Toluene	ug/L	N	600	3	14	3	5.2 J	1.4	1.8	2.1	2.4	2.2	8 J	8	8	9	7 J	10	10	2	4 J	2.6	2.8	4	3.3	2.8
trans-1,2-Dichloroethene	ug/L	N	100	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.4 U	0.2 U	0.2 U	2 U	0.2 U	0.27 J	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.4 J	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	42	99	38	36 J	30	24	13	13	8.5	42	46	54	35	23 J	56	58	26	24 J	29	18	17	14	15
Total TIC VOCS	ug/L	N	NA	2100 J	1800 J	1400 J	-	-	-	-	-	-	-	1000 J	1600 J	3200 J	2500 J	1100 J	-	910 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0066	MW-0066	MW-0067	MW-0067	MW-0070	MW-0070
			Field Sample ID	M065B3X	M065B4X	M065B5X	M065B6X	M065B7X	M065B8X	M065B9X	M065C1X	M065C2X	M065C3X	M065C4X	M065C5X	M0065C6X	M065C7X	M065C8X	D032220221A	M065C9	M066A1X	M066A2X	M067A1X	M067A2X	M070A8X	M070A9X
			Sample Date	03/29/2012	03/28/2013	02/11/2014	06/16/2016	05/10/2017	11/21/2017	02/12/2018	05/17/2018	08/30/2018	11/19/2018	02/26/2019	09/03/2019	04/10/2020	10/06/2020	03/02/2021	03/22/2022	03/22/2022	06/22/2020	03/04/2021	04/23/2020	03/04/2021	03/29/2012	04/19/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	3 U	3 U	3 U	0.3 J	0.3 U	0.3 U	0.3 UJ	0.3 U	0.73 J	-	0.5 U	0.5 U	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	-	0.4 U	0.4 U	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	0.5 U	0.5 U	-	-	-	-	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	6 U	6 U	6 U	3 UJ	0.8 J	0.7 U	0.8 J	2 J	3.8 UJ	-	0.7 U	0.7 U	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.6 J	**3**	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.2 U	0.25 J	0.6 J	**5.7**	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	-	1 U	1 U	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.7 J	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	2 U	2 U	2 U	5	0.2 U	0.2 U	4 J	1 U	1 U	-	1 U	1 U	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	20	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	1 U	1 U	1 U	0.7 J	0.2 U	0.2 U	0.7 J	0.2 U	0.33 J	-	0.2 U	0.2 U	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4500	4500	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	1 U	1 U	1 U	3 J	0.2 U	0.2 U	2 J	0.5 U	0.5 U	-	0.5 U	0.5 U	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Styrene	ug/L	N	100	-	-	-	-	-	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	0.2 U	0.4 J	0.2 U	0.23 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1	0.5 J	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.3 U	0.3 U	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	1	0.5 U	0.5 U	1 U	1 U	1 U	1 UJ	1 U	1.4 U	1.4 U	0.4 U	0.4 U	1.4 U	1.4 U	3 J	8.2	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	0 U	0 U	28 J	0 U	0 U	-	0 U	0 U	-	0 U	0 U	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0070	MW-0070	MW-0070	MW-0070	MW-0071	MW-0071R	MW-0071R	MW-0071R	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-2	MW-2	MW-2
			Field Sample ID	M070B1X	M070B2X	M070B3	M070B4X	M071A8X	M071RA9X	M071RB1X	M071RB2X	M071RRB7X	M071RRB8X	M071RRB9	M071RRC1	M071RRC2	M072A9X	M072B1X	M072B2X	M072B3X	M072B4X	M072B5X	M002B1X	M002B2X	M002B3X
			Sample Date	08/29/2014	04/15/2015	06/01/2016	05/10/2017	04/24/2012	09/03/2014	11/06/2015	02/23/2016	11/23/2020	02/22/2021	05/06/2021	08/04/2021	11/10/2021	03/28/2012	04/19/2013	08/29/2014	04/17/2015	06/08/2016	05/16/2017	03/16/2012	02/26/2013	04/01/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	**1.1**	1 J	0.57 J	0.42 UJ	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	3 UJ	2.1	1.2 J	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	**2.4J**	**1.7**	**3.1J**	0.85 J	**1.2**	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	**60J**	**51**	**49J**	**22**	**19**	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	16 J	10	9.5 J	5.4	4.5	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.41 J	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	**120J**	**59**	**50J**	**35**	**25**	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	**14J**	**11**	**11J**	0.3 U	**4.9**	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	3 UJ	0.3 U	4.7 J	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	3 UJ	4 J	0.3 UJ	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	6.5 J	1.7 J	0.5 UJ	1.2 J	0.5 U	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	78 J	15 J	15 J	11 J	2.3 J	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	**32**	**53**	**4**	**2**	**150J**	**170**	**120J**	**78**	**49**	0.9 J	0.9 J	0.7 J	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	10 UJ	1 U	1 UJ	1 U	1 U	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	2 UJ	1.7 J	0.61 J	0.3 U	0.3 UJ	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	2.8 J	6.6	4.7 J	3.8	5.8	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	12 J	15	12 J	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	**480J**	**290**	**250J**	18	12	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	2.9 J	13	0.2 UJ	0.2 U	0.49 J	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	2 UJ	0.79 J	0.74 J	0.53 J	0.46 J	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	120J	220	150J	120	90	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0 J	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0 U	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	14	13	4	2	27 J	50	33 J	25	25	0.8 U	1 J	0.5 U	0.7J	0.5 U	0.7 J	0.8 U	0.8 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	14 J	19	16 J	13	14	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19000	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	2 UJ	0.27 J	0.36 J	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	74 J	150	91 J	80	78	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	**200J**	**160**	**140J**	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	26	10	2	0.9 J	16 J	8.4	9.9 J	7.6	2.8	2 J	5	3	2	2	1	0.7 U	0.7 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	2 UJ	0.21 J	0.2 UJ	0.3 J	0.3 U	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	**1.1**	0.2 UJ	0.3 U	**2.2**	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	2 UJ	0.59 J	0.73 J	**1.4**	1	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	120	40	9	5	140 J	130	110 J	39	17	29	49	75	44	25	11	0.8 U	0.8 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-5	MW-5	MW-5	MW-5
			Field Sample ID	M002B4X	M002B5	M002B6X	M002B7X	M002B8X	M002B9	M002B9X	M002C1X	M002C2X	M003B6X	M003B7X	M003B8X	M003B9X	M003C1X	M003C2X	M003C3X	M003C4X	M003C5X	M003C6X	M005B7X	M005B8X	M005B9X	M005C1X
			Sample Date	12/10/2015	09/08/2016	02/08/2017	03/06/2018	01/08/2019	03/07/2019	03/07/2019	10/15/2019	03/05/2020	03/22/2012	02/27/2013	04/01/2014	12/29/2015	09/21/2016	02/16/2017	03/06/2018	03/20/2019	02/14/2020	01/22/2021	02/28/2012	04/05/2013	05/30/2014	06/15/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	1 U	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	3 U	-	-	7.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
			Field Sample ID	M005C2X	M005C3X	M005C4X	M005C5X	M005C6	M005C7	M013A4X	D0914178A	M013A5X	M013A6X	M013A7X	M013A8X	M013A9X	M013B1X	M013B2X	D0607198	M013B3X	M013B4X	D1209198	M013B5X	M013B6X	D0619208	M013B7X
			Sample Date	05/03/2017	05/23/2018	05/14/2019	06/23/2020	05/27/2021	12/22/2021	03/16/2017	09/14/2017	09/14/2017	12/05/2017	03/13/2018	06/14/2018	09/20/2018	12/10/2018	02/26/2019	06/07/2019	06/07/2019	09/11/2019	12/09/2019	12/09/2019	03/11/2020	06/19/2020	06/19/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.26 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	0.3 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.3 U	2 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.24 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.37 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.43 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	2 U	4 U	4 U	2 U	2 U	2 U	0.2 U	1 UJ	0.4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.26 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	0.3 U	0.3 U	1 U	2 U	2 U	1 U	1 U	1 U	0.3 U	2 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.37 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	0.3 U	0.3 U	2 U	4 U	4 U	2 U	2 U	2 U	0.3 U	2 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.38 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	0.2 U	0.2 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.43 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	0.3 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.3 U	2 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.43 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.35 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	0.2 U	0.3 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.34 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	0.2 U	0.3 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.33 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	0.3 U	0.5 U	3 U	6 U	6 U	3 U	3 U	3 U	0.4 J	2 U	0.6 UJ	1 J	1 J	0.3 U	0.7 J	0.4 J	0.3 U	1.9 U	1.9 U
2-Hexanone	ug/L	N	40	-	-	-	-	0.3 U	0.4 U	3 UJ	6 U	6 U	3 U	3 U	3 U	0.3 U	2 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	1.1 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	0.5 U	0.5 U	3 UJ	6 U	6 U	3 U	3 U	3 U	0.5 U	3 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	1.3 U
Acetone	ug/L	N	6000	-	-	-	-	1.4 J	0.7 U	6 U	22 J	23 J	6 U	6 U	6 U	4 J	4 J	3 J	4 J	4 J	0.7 U	4 J	3 J	1 UJ	4.4 U	4.4 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.34 U
Bromoform	ug/L	N	4	-	-	-	-	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	0.54 U	0.54 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	0.3 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.3 UJ	2 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.55 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	0.2 U	0.3 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.82 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	1 UJ	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 UJ	0.21 UJ
Chlorobenzene	ug/L	N	50	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.38 U
Chloroethane	ug/L	N	NA	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.32 U
Chloroform	ug/L	N	70	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.33 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.22 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.22 U
Cyclohexane	ug/L	N	NA	-	-	-	-	1 U	1 U	2 U	4 U	4 U	2 U	2 U	2 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.32 U	0.32 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.28 U	0.28 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.31 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.4 U	2 U	0.8 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.3 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	0.2 U	0.2 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.34 U
Methane	ug/L	N	NA	-	-	-	-	7600	14000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	0.3 U	0.3 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.79 U	0.79 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.47 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	0.5 U	0.5 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.26 U	0.26 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	0.3 U	0.3 U	2 U	4 U	4 U	0.5 U	0.5 U	0.5 U	0.3 U	2 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.32 U
Styrene	ug/L	N	100	-	-	-	-	0.2 U	0.3 U	1 U	2 U	2 U	1 U	1 U	1 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.42 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.25 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.38 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.24 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.49 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	0.2 U	0.3 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.31 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 UJ	1 UJ	0.4 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.32 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.17 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	1 U	1.4 UJ	1.4 U	0.4 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	1 U	5 U	2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.65 U	0.65 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	0 U	0 U	42 J	56 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
			Field Sample ID	D1002208	M013B8X	M013B9X	M013C1X	M013C2	M013C3	M013C5	M020B6X	M020B7X	M020B8X	D0309178B	M020B9X	M020C1X	M020C2X	M020C3X	M020C4X	M020C5X	M020C6X	M020C7X	M020C8X	M020C9X	M020D1X	M020D2X
			Sample Date	10/02/2020	10/02/2020	12/21/2020	03/11/2021	05/28/2021	08/27/2021	02/11/2022	03/16/2012	03/01/2013	08/26/2014	03/09/2017	03/09/2017	09/07/2017	12/04/2017	03/12/2018	06/12/2018	09/20/2018	12/13/2018	03/20/2019	06/19/2019	09/04/2019	12/10/2019	03/18/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3.2 J	4.1 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.8 J	0.5 J	0.3 U	0.3 J	2 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	18 UJ	24	1.3 UJ	0.7 U	0.7 U	0.7 U	0.7 U	-	-	-	9 J	8 J	6 U	6 U	6 U	6 U	4 J	0.9 J	8 UJ	0.7 U	4 J	2 J	8 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	110	46	110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 UJ	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	-	0 U	0 U	-	-	-	29 J	38 J	38 J	42 J	33 J	83 J	21 J	30 J	68 J	37 J	20 J	89 J	43 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
			Field Sample ID	M020D3X	M020D4X	M020D5X	M020D6X	M020D7	M020D8	D0204221	M020E1	M021B5X	M021B6X	M021B7X	M021B9X	M021C1X	M021C2X	M021C3X	M021C4X	M021C5X	M021C6X	D0911198	M021C7X	M021C8X	D0310208	M021C9X
			Sample Date	06/18/2020	09/03/2020	12/18/2020	03/10/2021	05/19/2021	09/30/2021	02/04/2022	02/04/2022	03/16/2012	03/01/2013	03/08/2017	01/22/2018	03/12/2018	06/13/2018	09/05/2018	12/11/2018	02/22/2019	06/07/2019	09/11/2019	09/11/2019	12/09/2019	03/10/2020	03/10/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.37 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 J	0.3 U	-	-	1 U	1 U	1 U	1 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	2 U	2 U	2 U	2 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.50 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.35 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.9 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	-	-	3 U	3 U	3 U	3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	1.1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	-	-	3 U	3 U	3 U	3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	3 U	3 U	3 U	3 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	4.4 U	1.3 UJ	0.81 J	7 UJ	1.4 J	0.74 J	0.7 U	0.76 J	-	-	7 J	6 U	6 J	6 U	6 J	10 J	8 J	3 J	19 J	13 J	15 J	9 J	5 J
Benzene	ug/L	N	1	0.20 U	0.31 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Bromoform	ug/L	N	4	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.55 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.82 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Chlorobenzene	ug/L	N	50	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Chloroform	ug/L	N	70	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.40 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	1.9 J	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.30 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.34 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	5600	14000	9100	8900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.42 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.25 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.24 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
Xylene (total)	ug/L	N	1000	0.65 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	15 J	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-114	MW-114	MW-114	MW-114	MW-114
			Field Sample ID	M021D1X	M021D2X	M021D3X	M021D4X	M021D5	M021D6	M021D7	M021D8	M112B5X	M112B6X	M112B7X	M112B8X	M112B9X	M112C4X	M112C8X	M112D3X	M112D4X	M112D5X	M114B6X	M114B7	M114B7X	M114B8	M114B8X
			Sample Date	06/18/2020	10/02/2020	12/18/2020	03/12/2021	06/30/2021	09/29/2021	12/27/2021	02/17/2022	03/22/2012	04/04/2013	09/04/2014	09/03/2015	02/23/2016	01/26/2017	01/30/2018	01/28/2019	01/28/2020	01/29/2021	03/16/2012	05/14/2012	05/15/2012	07/24/2012	07/25/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.9 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	4.4 U	250	38	4.6 UJ	1.2 J	1.4 J	0.7 U	1.3 J	-	-	-	-	-	-	-	-	-	-	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.55 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	0.38 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	14000	14000	14000	7600 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.36 J	0.5 U	0.67 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.24 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114
			Field Sample ID	M114B9	M114C1	M114C2	M114C3	M114C4	M114C5	M114C6	M114C7	M114C8	M114C9	M114D1	M114D2	M114D3	M114D4	M114D5	M114D6	M114D7	M114D8	M114D9	M114E1	M114E2	M114E4	M114E5
			Sample Date	11/19/2012	02/19/2013	06/10/2013	09/03/2013	11/04/2013	03/05/2014	05/19/2014	08/04/2014	10/22/2014	03/24/2015	05/27/2015	09/14/2015	11/13/2015	01/05/2016	04/06/2016	07/18/2016	10/11/2016	01/11/2017	04/18/2017	07/17/2017	10/09/2017	04/09/2018	07/12/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0	0	0 U	0 U	0 U	0 U	0 U	16 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	19 J	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115
			Field Sample ID	M114E6	M114E7	M114E8	M114E9	M114F1	M114F2	M114F3	M114F3	M114F4	M114F5	M114F6	D0407211	M114F7	M114F8	M114F9	M114G1	M115B1X	M115B2	M115B2X	M115B3	M115B3X	M115B4	M115B5
			Sample Date	10/18/2018	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/08/2020	04/08/2020	04/08/2020	07/14/2020	10/13/2020	01/05/2021	04/07/2021	04/07/2021	07/12/2021	10/06/2021	01/20/2022	03/16/2012	05/14/2012	05/15/2012	07/24/2012	07/25/2012	11/19/2012	02/19/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.26 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	1 UJ	0.7 U	0.7 U	0.7 U	6 UJ	0.7 U	4.4 U	0.7 U	0.7 U	0.7 U	0.7 U	-	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	1 U	0.54 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 UJ	0.82 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	2 U	1 UJ	0.32 U	1 UJ	1 U	1 U	1 U	-	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 UJ	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	1 U	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3 U	3.3 J	3 U	-	3 U	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.26 U	0.5 UJ	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.5 U	0.3 U	0.32 U	0.3 U	1.4	0.3 U	0.3 U	-	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.2 U	0.25 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.5 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.17 U	0.2 U	0.2 UJ	0.2 U	0.2 U	-	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U	1.4 U	-	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0	0	0	0	0	0	0

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115
			Field Sample ID	M115B6	M115B7	M115B8	M115B9	M115C1	M115C2	M115C3	M115C4	M115C5	M115C6	M115C7	M115C8	M115C9	M115D1	M115D2	M115D3	M115D4	M115D5	M115D6	M115D7	M115D8	M115D9	M115E1
			Sample Date	06/12/2013	09/03/2013	11/04/2013	03/05/2014	05/19/2014	08/04/2014	10/22/2014	03/02/2015	05/27/2015	09/14/2015	11/13/2015	01/05/2016	04/06/2016	07/18/2016	10/11/2016	01/11/2017	04/18/2017	07/17/2017	10/09/2017	01/23/2018	04/09/2018	07/12/2018	10/18/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**2**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	6 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	40 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-116R	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-118	MW-118
			Field Sample ID	M115E2	M115E3	M115E4	M115E5	M115E6	M115E7	M115E8	M115E9	M115F1	M115F2	M115F3	M115F4	M115F5	M116RB3X	M117B5X	D0327131	M117B6X	M117B7X	M117B8X	M117B9X	M117C1X	M118B6X	M118B7X
			Sample Date	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/09/2020	04/08/2020	07/14/2020	10/13/2020	01/05/2021	04/07/2021	07/02/2021	10/06/2021	01/20/2022	04/24/2012	03/07/2012	03/26/2013	03/27/2013	05/28/2014	08/07/2015	02/18/2016	02/07/2017	02/21/2012	08/13/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	**4J**	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	50 U	2 UJ	2 UJ	4 U	20 UJ	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	2 U	10 UJ	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	50 U	2 U	2 U	4 U	20 UJ	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	2 U	10 UJ	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	2 U	10 UJ	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	2 U	10 UJ	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.9 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.95 J	3 U	75 U	4 J	4 J	6 U	30 UJ	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 UJ	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	75 U	3 U	3 U	6 U	30 UJ	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	75 U	3 U	3 U	6 U	30 UJ	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	2 UJ	0.7 U	0.7 U	0.7 U	8 J	4.4 U	2.7 UJ	0.7 U	0.8 UJ	0.7 U	0.7 U	4.4 J	6 U	150 U	15 J	17 J	12 U	60 UJ	8 J	6 U	6 U	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**32**	**1600**	**1800**	**1900**	**2200**	**1900J**	**470**	**95**	**10**	**7**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.54 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 UJ	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.82 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 UJ	1 UJ	2 U	10 UJ	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	0.32 U	1 UJ	1 U	1 U	1 U	1 U	1 U	9	50 U	44	52	36	33 J	27	14	280	24
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.28 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	50 U	2 U	2 U	1 U	5 UJ	0.5 U	0.5 U	2 U	2 U
Ethane	ug/L	N	NA	1 U	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	6	160	230	230	200	84 J	94	77	0.8 U	1 J
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	25 U	18	18	16	12 J	9	4 J	21	22
Methane	ug/L	N	NA	3 U	-	-	230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	2 U	10 UJ	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	**71J**	**110**	**120**	**120**	**84J**	32	0.9 J	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8	25 U	23	25	16	14 J	17	4 J	140	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.32 U	0.3 UJ	0.9 J	0.3 U	0.3 U	0.3 U	0.3 U	2 U	50 U	2 U	2 U	4 U	20 UJ	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	2 U	10 UJ	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.25 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	6	**700**	540	550	340	65 J	150	41	7	1 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	20 U	0.8 U	0.8 U	1 U	5 UJ	0.5 U	0.5 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.32 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	50 U	2 U	2 U	1 U	5 UJ	0.5 U	0.5 UJ	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	25 U	1 U	1 U	1 U	5 UJ	0.5 U	0.5 U	1 U	1 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 UJ	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	36	690	840	860	770	500 J	420	410	20	20
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 UJ	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	M118B8X	M118B9X	M118C1X	M118C2X	M118C6X	M118D9X	M118D5X	M118D6X	M118D7X	M118E2X	M118E3	M118E4	M118E5	M120B6X	M120B7	M120B7X	M120B8	M120B8X	M120C2	M120C3	M120C4	M120C5	M120C6
			Sample Date	10/01/2013	08/27/2014	10/23/2015	02/24/2016	02/03/2017	02/02/2018	02/15/2019	01/29/2020	11/23/2020	02/23/2021	05/04/2021	08/04/2021	11/10/2021	03/14/2012	05/29/2012	05/30/2012	07/31/2012	08/01/2012	09/06/2013	11/11/2013	03/06/2014	05/21/2014	08/06/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.75 J	0.78 J	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	4 J	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	0.3 U	1.7 J	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	5 J	1 J	2.3 J	2.5 J	2.2 UJ	3 UJ	0.78 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**3J**	1	1	**9**	0.5 U	**2**	1	**2**	0.88 J	1	**1.9**	0.66 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.47 J	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	16	6 J	12	11	3 J	7	22	39	38 J	44	41	12	12	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.7 J	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	16	17	15	3 J	7	8	17	25	16	19	14	5.3	4.4 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	2 J	2 J	1 U	1 J	4 J	8	9.2 J	9.9	5.8	2.8 J	3.9 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.7 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.8 J	0.7 J	1 J	1	0.5 U	2	4	2	1.5	1.6	2.7	1.1	0.86 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	6	2	3	3	0.6 J	2	7	13	4.8 J	3.8 J	5 J	0.53 J	0.57 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	150 J	-	-	-	-	-	-	0	0	0	0	0	0 U	0 U	9 J	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	M120C7	M120C8	M120C9	M120D1	M120D2	M120D3	M120D4	M120D5	M120D6	M120D7	M120D8	M120D9	M120E2	M120E3	M120E4	M120E5	M120E6	M120E7	M120E8	M120E9	M120F1	M120F3	M120F4
			Sample Date	10/23/2014	03/23/2015	06/01/2015	09/15/2015	11/16/2015	01/13/2016	04/08/2016	07/25/2016	10/21/2016	01/20/2017	04/18/2017	07/21/2017	10/12/2017	01/22/2018	04/10/2018	07/16/2018	10/30/2018	01/03/2019	04/03/2019	07/01/2019	09/25/2019	01/03/2020	04/07/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 UJ	2 UJ	2 J	0.7 U	0.7 UJ	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-121	MW-121	MW-121	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R
			Field Sample ID	M120F5	M120F6	M120F7	M120F8	M120F9	M120G1	M120G2	M121B6X	M121B7X	M121B8X	D0427178	M121RC1X	M121RC2X	M121RC3X	M121RC4X	D0614188	M121RC5X	M121RC6X	D1210188	M121RC7X	D0222198B	M121RC8X	M121RC9X
			Sample Date	07/14/2020	10/12/2020	01/08/2021	04/06/2021	07/02/2021	10/07/2021	01/20/2022	03/16/2012	03/01/2013	08/26/2014	04/27/2017	04/27/2017	08/31/2017	11/30/2017	03/06/2018	06/14/2018	06/14/2018	09/05/2018	12/10/2018	12/10/2018	02/22/2019	02/22/2019	06/10/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,1,1-Trichloroethane	ug/L	N	30	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,1,2-Trichloroethane	ug/L	N	3	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2 U	2 U	4 U	4 UJ	40 U	10 UJ	10 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	2 U	2 U	4 U	4 UJ	40 U	10 UJ	10 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
1,2-Dichloropropane	ug/L	N	1	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.9 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	-	-	-	3 U	3 U	6 U	6 UJ	60 U	15 UJ	15 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
2-Hexanone	ug/L	N	40	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	-	-	-	3 U	3 U	6 U	6 UJ	60 U	15 UJ	15 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	3 U	3 U	6 U	6 UJ	60 U	15 UJ	15 U	1 U	5 UJ	5 UJ	10 U	10 U	5 U
Acetone	ug/L	N	6000	4.4 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	2.3 J	-	-	-	6 J	6 U	12 U	12 UJ	120 U	30 UJ	30 U	11 J	7 UJ	7 UJ	14 U	14 U	7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 J	0.5 U	0.5 U	**2**	**3**	**3**	**3J**	10 U	3 UJ	**3J**	**3**	**3J**	**3J**	4 U	4 U	**5J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Bromoform	ug/L	N	4	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Chlorobenzene	ug/L	N	50	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Chloroethane	ug/L	N	NA	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Chloroform	ug/L	N	70	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.7 J	2 UJ	2 UJ	4 U	4 U	2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 UJ	2 UJ	2 UJ	4 U	4 U	2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Cyclohexane	ug/L	N	NA	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	2 U	2 U	4 U	4 UJ	40 U	10 UJ	10 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Dibromochloromethane	ug/L	N	1	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	1 J	2 J	1 J	1 J	10 U	3 UJ	3 U	0.8 U	4 UJ	4 UJ	8 U	8 U	4 U
Isopropylbenzene	ug/L	N	700	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Methyl-t-butyl ether	ug/L	N	70	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Methylcyclohexane	ug/L	N	NA	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	1 J	1 J	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	2 U	2 U	4 U	1 UJ	10 U	3 UJ	3 U	0.6 U	3 UJ	3 UJ	6 U	6 U	3 U
Styrene	ug/L	N	100	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	1 U	1 U	2 U	2 UJ	20 U	5 UJ	5 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Tetrachloroethene	ug/L	N	1	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Toluene	ug/L	N	600	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	1 J	2 J	2 J	1 J	10 U	3 UJ	3 U	2 J	2 UJ	2 UJ	4 U	4 U	2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.24 U	0.99 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	0.5 U	0.5 U	1 U	1 UJ	10 U	3 UJ	3 U	0.4 U	2 UJ	2 UJ	4 U	4 U	2 U
Xylene (total)	ug/L	N	1000	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	2	2	2	1 J	10 U	3 UJ	3 U	2 U	10 UJ	10 UJ	20 U	20 U	10 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	80 J	100 J	13 J	30 J	0 U	0 U	0 U	20 J	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-123	MW-123	MW-123	MW-123
			Field Sample ID	M121RD1X	M121RD2X	M121RD3X	M121RD4X	M121RD5X	D1216208	M121RD6X	M121RD7X	M121RD8	M121RD9	M121RE1	M121RE2	D0309121	M122B6X	D0409131	M122B7X	M122B8X	M122C4X	M122C5X	M123B4X	M123B5X	M123B6	M123B7X
			Sample Date	09/12/2019	12/09/2019	03/11/2020	06/18/2020	10/01/2020	12/16/2020	12/16/2020	03/10/2021	05/28/2021	09/24/2021	12/13/2021	03/30/2022	03/09/2012	03/09/2012	04/09/2013	04/09/2013	05/29/2014	04/17/2015	12/18/2019	08/21/2012	04/19/2013	08/19/2013	08/27/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	20 U	1 U	10 U	0.26 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	30 U	2 U	15 U	0.24 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	3 UJ	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	20 U	1 U	10 U	0.37 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	20 U	1 U	10 U	0.43 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	20 U	1 U	10 U	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2U	2 UJ	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	20 U	1 U	10 U	0.26 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	30 U	2 U	15 U	0.37 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1U	3 UJ	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	30 U	2 U	15 U	0.38 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2U	3 UJ	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	20 U	1 U	10 U	0.5 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	20 U	1 U	10 U	0.43 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1U	2 UJ	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	30 U	2 U	15 U	0.43 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	3 UJ	1 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	20 U	1 U	10 U	0.35 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	20 U	1 U	10 U	0.34 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1U	2 UJ	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	20 U	1 U	10 U	0.33 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1U	2 UJ	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	30 U	2 U	15 U	1.9 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	1.2 J	0.5 U	2.8 J	3 U	3 U	5 J	6 J	3 U	3U	3 UJ	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	30 U	2 U	15 U	1.1 U	3 UJ	0.3 U	0.3 U	1.5 U	6 UJ	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3U	3 UJ	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	50 U	3 U	25 U	1.3 U	5 U	0.5 U	0.5 U	2.5 U	10 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3U	5 UJ	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	70 U	4 U	35 U	5.2	8.2 UJ	9 UJ	11 UJ	3.5 U	14 UJ	6.4 J	3.5 J	2.5 J	6 U	6 U	12 J	12 J	17 J	25	7 UJ	9 J	6 U	6 U	6 U
Benzene	ug/L	N	1	20 U	**4J**	10 U	**3.8**	**4.4J**	**3.8**	**3.9**	**3J**	4 UJ	**4.3**	**2.5**	**2.6**	**120**	**120**	**86**	**91**	**20**	**36**	**420J**	**47**	**180**	**16**	**10**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	20 U	1 U	10 U	0.34 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	100 U	5 U	50 UJ	0.54 U	10 U	1 U	1 U	5 U	20 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	10 UJ	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	30 UJ	2 U	15 U	0.55 UJ	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	3 UJ	1 U	1 U	1 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	20 U	1 U	10 U	0.82 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1U	2 UJ	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	20 U	1 U	10 U	0.21 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	20 U	1 U	10 U	0.38 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
Chloroethane	ug/L	N	NA	20 U	1 U	10 U	0.32 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Chloroform	ug/L	N	70	20 U	1 U	10 U	0.33 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	20 U	1 U	10 U	0.4 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	20 U	1 U	10 U	0.22 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	20 U	1 U	10 U	0.22 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	100 UJ	5 U	50 U	0.69 J	10 U	1.6 J	1.6 J	5 U	20 UJ	1 U	1 U	1 U	85	87	92	97	62	94	71 J	35	60	18	15 J
Dibromochloromethane	ug/L	N	1	20 U	1 U	10 UJ	0.28 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	20 U	1 U	10 U	0.31 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5U	2 UJ	2 U	2 U	2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	1 J	1 U	1.3 J	1.7 J	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	40 U	2 U	20 U	0.8 J	4 U	1.1	1.1	2 U	8 UJ	0.61 J	0.44 J	0.4 U	29	30	6	6	0.7 J	3	4 UJ	110	130	54	19
Isopropylbenzene	ug/L	N	700	20 U	1 U	10 U	0.69 J	2 U	0.68 J	0.65 J	1 U	4 UJ	0.43 J	0.45 J	0.57 J	5 J	5 J	9	10	7	7	7 J	24	25	22	23
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	13000	10000	17000	18000	-	-	-	-	-	-	-	-	-	16000	-
Methyl acetate	ug/L	N	7000	20 U	1 U	15 U	0.79 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1U	2 UJ	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	20 U	1 U	10 U	0.47 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	2 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	50 U	3 U	25 U	1	5 U	1.8 J	1.8 J	2.5 U	10 UJ	0.6 J	1.1 J	1.1 J	43	43	42	44	23	50	40 J	25	38	9	4 J
Methylene chloride (Dichloromethane)	ug/L	N	3	30 U	2 U	15 U	0.32 U	3 U	0.3 U	0.3 U	1.5 U	6 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2U	3 UJ	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	20 U	1 U	10 U	0.42 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1U	2 UJ	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	20 U	1 U	10 U	0.25 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	20 UJ	4 J	10 U	2.3	2.9 J	4	4.4	2.7 J	4 UJ	3	3.1	1.7	24	24	12	12	5	8	5 J	180	140	8	34
trans-1,2-Dichloroethene	ug/L	N	100	20 U	1 U	10 U	0.24 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	2 UJ	0.8 U	0.8 U	0.8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	20 U	1 U	10 U	0.49 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	20 U	1 U	10 U	0.31 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	20 U	1 U	10 U	0.32 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5U	2 UJ	2 U	2 U	2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	20 U	1 U	10 U	0.17 U	2 U	0.2 U	0.2 U	1 U	4 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	2 UJ	1 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	140 U	7 U	70 U	1.9 J	14 U	2.9 J	3 J	7 U	28 UJ	0.95 J	0.81 J	0.97 J	61	60	18	19	6	15	15 J	960	890	500	430
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1600 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-123	MW-123	MW-123	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124
			Field Sample ID	M123B8X	M123C1X	M123C2X	M123RC3X	M123RC4X	M123RC5X	D1014208	M123RC6X	M123RC7X	D0412218	M123RC8	M123RC9	M123RD1	M123RD2	M124C1X	M124C2X	M124C3X	M124C4X	M124C5X	M124C6X	M124C8X	M124C9X	M124D1X
			Sample Date	09/23/2014	10/13/2015	02/18/2016	11/14/2017	06/13/2019	07/10/2019	10/14/2020	10/14/2020	01/08/2021	04/12/2021	04/12/2021	07/14/2021	10/15/2021	02/02/2022	02/16/2012	03/15/2013	06/05/2014	02/13/2015	02/17/2016	02/16/2017	03/14/2019	02/03/2020	01/26/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 UJ	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.33 J	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	0.3 U	**2J**	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	9 J	2 J	0.7 U	0.95 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	4 UJ	0.7 U	0.7 U
Benzene	ug/L	N	1	**7**	**19**	**49**	**66**	**120**	**83**	**6**	**6**	**29**	**12**	**13**	0.3 U	0.3 U	**13**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	10	18	43	5	2 J	0.8 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 UJ	2 U	2 U	2 J	0.6 J	1 U	1.8 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	22	20	46	8	15	13	0.88 J	0.99 J	9.2	5.5	6.3	0.4 U	0.4 U	1.3	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	23	34	22	12	5	8	1 J	0.96 J	0.32 J	0.89 J	0.78 J	0.3 J	0.2 J	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	3 J	6	18	2 J	2 J	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 J	1 U	1 U	0.2 U	0.5 U	0.95 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	55	26	49	3	7	3	0.21 J	0.22 J	7.2	2.9	3.4	0.2 U	0.2 U	1.5	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	470	520	500	110	110	98	14	13	38	25	27	4.2	2.7	4.3	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 J	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	840 J	1300 J	-	-	310 J	240 J	-	-	0 U	-	-	-	-	0 U	-	-	-	-	-	-	0 U	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126
			Field Sample ID	M125B6X	M125B7X	M125B8X	M125B9X	M125C1X	M125C5X	M125C9X	M125D4X	M125D5X	M125D6X	M125D8X	M125D9	M125E1	M125E2	M126C2X	M126C3X	M126C4X	M126C5X	M126C6X	M126C7X	M126C9X	M126D2	M126D3X
			Sample Date	02/21/2012	03/28/2013	02/12/2014	10/23/2015	02/23/2016	01/25/2017	02/02/2018	01/30/2019	01/28/2020	11/23/2020	02/23/2021	05/04/2021	08/04/2021	11/10/2021	02/16/2012	03/15/2013	06/24/2014	02/19/2015	03/15/2016	03/24/2017	05/01/2018	04/24/2019	03/04/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.99 J	0.2 U	20 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	0.2 U	0.2 J	20 U	3 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	1.3 J	0.3 U	30 U	5 U	5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 J	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	4 U	4 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	50 U	5 U	5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.5 U	5 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	8.4 J	3.5 J	70 U	7 U	17 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	4 J	7 U
Benzene	ug/L	N	1	**840**	**500**	**840**	**260**	**120**	**320**	**390**	**570**	0.2 U	**2.3**	**570**	**500**	**100**	**350**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	1 U	1 U	100 U	10 U	10 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.2 U	10 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	0.3 J	2 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	0.2 U	1.5	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	14 J	160	100 U	15 J	45 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	10 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	310	290	470	160	50 U	190	230	290	0.4 U	1	340	150	17	73	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	4 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	2 J	30	20 U	6.3 J	14 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	6.2 J	98	50 U	8.1 J	26 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U	30 U	3 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	3 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Toluene	ug/L	N	600	570	280	**770**	280	91 J	330	420	530	0.2 U	2.4	490	270	50	210	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	3 U	3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U	20 U	2 U	2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U
Xylene (total)	ug/L	N	1000	**2600**	**1300**	**3300**	820	300	**1400**	**1700**	**2300**	1 U	17	**3000**	1000	140	650	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	14 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-133	MW-133
			Field Sample ID	M126D4X	M126D5X	M126D6	M126D7	M126D8	M126D9	M128B5X	D0321131	M128B6X	M128B7X	M128B8X	M128B9X	M128C1X	M128C2X	M128C3	M128C4	M128C5X	M128C6X	M128C7X	M128C8X	M128C9	M133B4X	M133B5X
			Sample Date	11/18/2020	01/29/2021	05/07/2021	08/05/2021	11/11/2021	02/11/2022	03/28/2012	03/21/2013	03/21/2013	09/09/2014	04/17/2015	12/03/2015	06/09/2016	07/20/2016	05/16/2017	06/06/2018	07/11/2018	10/24/2018	01/16/2019	06/08/2020	06/25/2021	04/24/2012	04/04/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.3 U	0.3 U	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	-	1 UJ	-	-	1 U	0.3 U	0.3 U	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	2 U	-	2 U	-	-	2 U	0.3 U	0.3 U	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.3 U	0.3 U	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.5 UJ	0.3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	3 U	-	3 U	-	-	3 U	0.3 U	0.3 U	-	-	-	-
2-Hexanone	ug/L	N	40	1.5 UJ	0.3 UJ	0.3 U	0.4 U	0.4 U	0.4 U	-	-	-	-	-	3 U	-	3 U	-	-	3 U	0.3 U	0.3 U	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	2.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	3 U	-	3 U	-	-	3 U	0.5 U	0.5 U	-	-	-	-
Acetone	ug/L	N	6000	8.2 J	0.7 UJ	0.7 U	0.7 U	0.99 J	0.7 U	-	-	-	-	-	7 J	-	6 U	-	-	7 J	4 J	7 J	-	-	-	-
Benzene	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Bromoform	ug/L	N	4	5 UJ	1 UJ	1 U	1 U	1 U	1 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.3 U	0.3 U	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1.2 J	0.82 J	0.2 U	0.3 U	0.3 U	0.85 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Chlorobenzene	ug/L	N	50	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Chloroethane	ug/L	N	NA	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Chloroform	ug/L	N	70	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Cyclohexane	ug/L	N	NA	5 UJ	1 UJ	1 U	1 U	1 U	1 U	-	-	-	-	-	2 J	-	2 U	-	-	2 U	1 J	0.5 J	-	-	-	-
Dibromochloromethane	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.3 J	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15000	12000	-	-	-	-
Methyl acetate	ug/L	N	7000	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.4 J	-	-	-	-
Methylcyclohexane	ug/L	N	NA	2.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-	-	7	-	1 J	-	-	3 J	5 J	2 J	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	1.5 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	2 U	-	2 U	-	-	0.5 U	0.3 U	0.3 U	-	-	-	-
Styrene	ug/L	N	100	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	-	-	-	-
Tetrachloroethene	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Toluene	ug/L	N	600	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	-	-	-	-
Xylene (total)	ug/L	N	1000	7 UJ	1.4 UJ	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.4 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	-	0 U	-	0 U	-	-	-	-	-	-	130 J	-	57 J	-	-	110 J	75 J	92 J	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134
			Field Sample ID	M133B6X	M133B7X	M133B8X	M133B9X	M133C1	M133C2	M133C4	M134B5X	M134B6X	M134B7X	M134B8X	M134B9X	M134C1X	M134C2X	M134C3X	M134C4X	M134C5X	M134C6X	M134C7X	M134C8X	M134C9X	M134D1X	M134D2
			Sample Date	09/10/2014	04/17/2015	06/09/2016	05/10/2017	06/28/2021	10/04/2021	02/07/2022	06/07/2012	05/21/2013	06/25/2014	12/09/2015	06/03/2016	06/06/2017	02/23/2018	05/15/2018	08/02/2018	11/20/2018	02/28/2019	05/16/2019	08/14/2019	11/08/2019	05/14/2020	05/20/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	-	-	-	-	0.4 U	0.4 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	0.5 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	-	-	2.6 UJ	1.1 J	0.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 J	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 J	1 J	0.8 J	0.5 U	0.8 J	0.5 U	0.5 U	0.4 J	**2**	0.6 J	0.6 J	1	**2**	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	-	-	1 U	1 U	1 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 J	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	-	-	7	8.7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	1 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	3.2 J	3.7 J	3.5 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.4 U	-	-	-	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	4.3 J	5.1	4 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	0.2 U
Methane	ug/L	N	NA	-	-	-	-	18000	19000	23000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
Methyl acetate	ug/L	N	7000	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4 J	0.2 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	5.5	6.6	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.6 J	-	-	-	0.6 J	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	0.3 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5U	0.5 U	0.5 U	0.66 J	0.78 J	0.74 J	0.8 U	0.8 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	1 U	-	-	-	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	310 J	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-134	MW-134	MW-134	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-136	MW-136
			Field Sample ID	M134D3	M134D4	M134D5	M135B5X	M135B6X	M135B7X	M135B8X	M135B9X	M135C1X	M135C2X	M135C3X	M135C4X	M135C5X	M135C6X	M135C7X	M135C8X	M135C9X	M135D1X	M135D3	M135D4	M135D6	M136C1X	M136C2X
			Sample Date	09/17/2021	12/16/2021	03/31/2022	06/07/2012	05/21/2013	06/25/2014	12/09/2015	02/12/2016	02/24/2017	02/23/2018	05/15/2018	08/02/2018	11/21/2018	02/28/2019	05/16/2019	08/15/2019	11/13/2019	05/15/2020	06/16/2021	09/17/2021	03/25/2022	02/14/2012	03/05/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.3 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	0.2 U	-	-	-	0.2 U	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.3 U	-	-	-	0.3 U	0.3 U	0.82 J	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 UJ	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	0.3 U	-	-	-	0.3 U	0.3 U	**1J**	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.3 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	4 J	3 J	3 U	4 J	3 U	3 UJ	4 J	-	-	-	2 J	-	-	-	2 J	0.5 U	0.5 U	0.5 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	-	-	-	0.3 U	-	-	-	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	-	-	-	0.5 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	2.2 J	0.74 J	17 J	16 J	6 U	16 J	18 J	14 J	18 J	-	-	-	9 J	-	-	-	12 J	2.2 J	0.7 U	0.7 U	6 U	6 U
Benzene	ug/L	N	1	0.3 U	0.59 J	0.3 U	0.5 U	**2J**	**2**	**2**	**7**	**6**	**22**	**7**	0.5 U	0.3 J	1	**2**	1 U	2 U	0.2 U	0.3 U	0.3 U	**5.4**	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.3 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.4 J	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	2 J	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 UJ
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Cyclohexane	ug/L	N	NA	1.6 J	7.9	8.1 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	0.2 U	-	-	-	1 U	1 U	1 U	1.5 J	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Ethane	ug/L	N	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.4 U	-	-	-	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.26 J	7.2	4.5 J	1 U	1 U	1 U	1 U	1 J	1 J	2 J	-	-	-	0.3 J	-	-	-	0.2 U	0.25 J	0.2 U	1 J	1 U	1 U
Methane	ug/L	N	NA	4600	9100	1900	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19000	2200	19000	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	-	-	-	0.2 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	26	25	18	10	11	9	10	-	-	-	7	-	-	-	6	5.6	4.5	3.9	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.57 J	3.1 J	3.9 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	-	-	0.3 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.2 U	0.21 J	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	1 U	-	-	-	1 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	-	-	-	-	-	-	-	-	-	-	-	-	10 J	-	-	-	0 U	-	0 U	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-138	MW-138	MW-138	MW-138	MW-138
			Field Sample ID	M136C3X	M136C4X	M136C5X	M136C7X	M136C8X	M136C9X	M136D1X	M136D2	D0327121	M137B5X	M137B6X	M137B7X	M137B8X	M137B9X	M137C1X	M137C2X	M137C3X	M137C4X	M138B4X	M138B5X	M138B6X	M138B7X	M138B8X
			Sample Date	06/03/2014	09/30/2015	02/16/2016	03/30/2018	03/21/2019	02/05/2020	01/27/2021	03/25/2022	03/27/2012	03/27/2012	04/03/2013	09/05/2014	10/01/2015	09/14/2016	02/14/2017	02/27/2018	02/19/2019	02/04/2020	03/22/2012	04/03/2013	09/09/2014	10/01/2015	09/14/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	3 U	0.6 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	10 U	0.4 U	4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	5 U	0.6 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	10 U	0.6 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	5 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	3 U	0.6 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	5 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	5 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	4 J	3 U	3 U	15 U	0.6 U	6 U	0.3 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	15 U	0.6 U	6 U	0.3 U	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	15 U	1 U	10 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	22	15 J	6 U	30 U	4 J	14 U	1.5 J	0.7 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	3 U	0.4 U	20 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	3 U	0.6 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	4 J	3 J	1 U	5 U	0.4 J	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	10 U	0.4 U	20 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	3 U	0.8 U	8 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	5 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	5 U	0.4 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	5 U	0.4 U	10 U	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	3 U	0.6 U	6 U	0.3 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	1 U	1 U	1 U	5 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	3 U	0.4 U	4 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	3 U	2 U	28 U	1.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	1 U	1 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-140	MW-140	MW-140	MW-140	MW-140	MW-140	MW-140
			Field Sample ID	D0214171	M138B9X	M138C1X	M138C2X	M138C3X	M138C4X	M139B5X	M139B6X	M139B7X	M139B8X	M139B9X	M139C1X	M139C2X	M139C3X	M139C4X	M139C5X	M140B5X	M140B6X	M140B7X	M140B8X	M140B9	M140C1	M140C2
			Sample Date	02/14/2017	02/14/2017	02/27/2018	02/19/2019	02/04/2020	03/31/2021	03/22/2012	04/03/2013	09/09/2014	04/16/2015	02/09/2016	02/14/2017	02/27/2018	02/15/2019	01/27/2020	01/28/2021	03/29/2012	04/03/2013	09/09/2014	12/29/2015	09/14/2016	02/14/2017	02/27/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 J	0.6 J	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-140	MW-140	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-158	MW-158	MW-158	MW-158
			Field Sample ID	M140C3	M140C4X	M154B3X	M154B4X	M154B5X	M154B7X	M154B8X	M154B9X	M154C1X	M154C2X	M154C3X	M154C4X	M154C5X	M154C7X	M154C8X	M154C9X	M154D1X	M154D2X	M154D3X	M158C1X	M158C2X	M158C3X	M158C4X
			Sample Date	03/06/2019	03/04/2020	03/27/2012	08/16/2012	04/04/2013	10/29/2013	03/28/2014	11/13/2014	04/16/2015	02/09/2016	08/16/2016	02/15/2017	08/22/2017	08/23/2018	03/14/2019	08/23/2019	02/04/2020	08/13/2020	01/27/2021	06/07/2012	09/05/2012	05/21/2013	10/02/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	6 J	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	57	6 U	12 J	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	0.8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	1 U	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-159
			Field Sample ID	M158C5X	M158C6X	M158C7X	M158C8X	M158C9X	M158D1X	M158D2X	M158D3X	M158D4X	M158D5X	M158D6X	M158D7X	M158D9X	M158E1X	M158E2X	M158E3X	M158E4X	M158E5X	M158E6	M158E7	M158E8	M158E9	M159B4X
			Sample Date	06/25/2014	11/06/2014	07/15/2015	03/18/2016	09/13/2016	03/29/2017	08/30/2017	05/15/2018	11/21/2018	05/08/2019	07/23/2019	08/22/2019	11/13/2019	02/25/2020	06/04/2020	08/18/2020	11/06/2020	02/26/2021	06/16/2021	08/16/2021	12/03/2021	03/02/2022	09/11/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.3 U	2 U	0.3 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	10 UJ	2 U	2 U	2 U	20 U	2 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.3 U	2 U	0.3 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	10 UJ	2 U	2 U	2 U	20 U	2 U	0.3 U	2 U	0.3 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.3 U	2 U	0.3 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	15 UJ	6 J	3 U	5 J	30 U	5 J	0.3 J	2 U	0.3 UJ	2 UJ	3 U	1 J	0.3 U	0.3 U	3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	15 UJ	3 U	3 U	3 U	30 U	3 U	0.3 U	2 U	0.3 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	15 UJ	3 U	3 U	3 U	30 U	3 U	0.5 U	3 U	0.5 UJ	3 UJ	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	6 U	6 U	30 UJ	45 J	7 J	20 J	60 U	19 J	22	4 U	1 J	9 J	7 U	10 J	3.4 J	2 J	14 UJ	5.6 J	0.7 U	1.1 J	1.6 J	4.2 J	-
Benzene	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	5 UJ	10 U	1 UJ	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.3 U	2 U	0.3 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	1 J	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.24 J	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	2 U	2 U	10 UJ	2 U	2 U	2 U	20 U	2 U	0.2 U	1 U	0.2 UJ	5 UJ	10 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 UJ	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.4 U	2 U	0.4 UJ	2 UJ	4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	3 UJ	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	10 UJ	2 U	2 U	2 U	20 U	0.5 U	0.3 U	2 U	0.6 UJ	2 UJ	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	1 U	1 U	5 UJ	1 U	1 U	1 U	10 U	1 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Toluene	ug/L	N	600	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 UJ	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.2 U	1 U	0.2 UJ	1 UJ	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	1 U	5 U	1 UJ	7 UJ	14 U	1 U	1.4 U	1.4 U	14 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	-	0 U	0 U	0 U	-	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164
			Field Sample ID	M164B8X	M164B9X	M164C1X	M164C2X	M164C3X	M164C4X	M164C5X	M164C6	M164C7X	M164C9X	M164D1X	M164D2X	M164D3X	M164D5X	M164D6X	M164D7X	M164D8X	M164D9X	M164E1X	M164E2X	D0319201	M164E3X	D0622201
			Sample Date	03/20/2012	08/14/2012	02/22/2013	10/29/2013	04/03/2014	12/12/2014	06/26/2015	03/15/2016	09/01/2016	03/28/2017	09/14/2017	12/15/2017	03/14/2018	06/12/2018	10/04/2018	12/11/2018	03/21/2019	06/20/2019	09/04/2019	12/10/2019	03/19/2020	03/19/2020	06/22/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	30 U	6 U	6 U	6 U	6 U	6 U	6 U	4 J	0.7 U	5 UJ	0.7 U	3 J	0.7 U	0.7 U	0.7 U	0.74 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	26	35	22	28	19	25	23	**96**	23	4	21	21	10	13	9	4	13	4	15	7	1	1	22
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.44 J
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 J	**2J**	1 U	1 J	**2**	0.7 J	0.7 J	**3J**	0.6 J	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.28 J
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**2J**	**2J**	1 U	**2J**	1 J	**2**	1	**4J**	1	0.5 U	1	1	0.5 J	0.7 J	0.4 J	0.2 U	0.6 J	0.3 J	0.6 J	0.3 J	0.2 U	0.2 U	**2.4**
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R
			Field Sample ID	M164E4X	D0902201X	M164E5X	M164E6X	M164E7X	M164E8	M164E9	M164F2	M165RA5X	M165RA6X	D1130178	M165RA7X	M165RA8X	D0612181	M165RA9X	M165RB1X	M165RB2X	M165RB3X	M165RB4X	M165RB5X	M165RB6X	M165RB7X	M165RB8X
			Sample Date	06/22/2020	09/02/2020	09/02/2020	12/18/2020	03/09/2021	05/26/2021	08/27/2021	02/15/2022	04/26/2017	09/06/2017	11/30/2017	11/30/2017	03/09/2018	06/12/2018	06/12/2018	09/05/2018	12/11/2018	03/21/2019	06/04/2019	09/04/2019	12/09/2019	03/20/2020	06/02/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.8 J	0.3 UJ	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	3.9 UJ	0.86 UJ	0.78 UJ	0.7 U	0.7 U	0.7 U	0.7 U	6.7 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	2 J	2 J	3 UJ	25	6 J	0.8 J	44	9.7 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	**3**	**2**	**2**	1	0.5 J	0.5 J	**2**	1	0.4 J	0.9 J	0.8 J	0.5 J	0.7 J	0.47 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	21	18	18	0.38 J	8.6	17	0.84 J	0.63 J	0.5 U	0.7 J	0.6 J	0.6 J	0.8 J	0.6 J	0.6 J	0.3 J	0.6 J	0.5 J	0.2 J	0.2 UJ	0.4 J	0.2 J	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 UJ	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	2	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	1500	120	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.44 J	0.25 J	0.27 J	0.2 U	0.21 J	0.47 J	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 J	0.2 J	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 UJ	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 J	0.2 J	0.2 U	0.2 UJ	0.3 J	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.23 J	0.28 J	0.23 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**2.3**	**1.5**	**1.5**	0.2 U	**1.7**	**2.1**	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0.0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
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Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R
			Field Sample ID	M165RB9X	M165RC1X	M165RC1X	D0311218	M165RC2X	M165RC3	M165RC4	M165RC5	M165RC6	M166B9X	M166C1X	M166C2X	M166C4X	M166C5X	M166C6X	M166C7X	M166C8X	M166C9X	M166RD1X	M166RD2X	M166RD3X	M166RD4X	M166RD6X
			Sample Date	09/01/2020	12/23/2020	12/23/2020	03/11/2021	03/11/2021	05/26/2021	08/03/2021	10/21/2021	02/15/2022	03/20/2012	08/14/2012	02/22/2013	10/29/2013	04/03/2014	12/12/2014	07/14/2015	03/16/2016	09/01/2016	04/26/2017	09/14/2017	12/15/2017	03/09/2018	06/12/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	4 U	20 U	10 UJ	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	20 U	10 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	1.1 J	0.3 U	0.3 U	3 J	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	30 UJ	15 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	30 UJ	15 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	30 UJ	15 U	3 U	3 U
Acetone	ug/L	N	6000	17 J	8.7 J	12 UJ	5.5 UJ	9.3 UJ	89	58	11 J	7.9 J	6 U	6 J	6 U	6 U	6 U	6 J	6 U	6 U	6 U	12 U	60 U	30 U	6 U	6 U
Benzene	ug/L	N	1	0.77 J	0.2 U	0.2 U	0.2 U	0.2 U	0.51 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**2J**	5 U	3 U	0.6 J	0.8 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	5 U	3 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.47 J	0.27 J	0.3 J	0.26 J	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 UJ	4 U	20 U	10 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3	5 U	3 J	2	0.7 J
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	15000	8100	13000	16000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.24 J	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.26 J	0.41 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	5 U	3 U	0.5 U	0.5 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	10 U	5 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	5 U	3 U	0.6 J	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.24 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	5 U	3 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9	5 U	3 U	3	2
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	-	-	-	-	-	-	-	-	-	13 J	0 U	0 U	0 U	6 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-179	MW-179	MW-179	MW-179
			Field Sample ID	D1003181	M166RD7X	M166RD8X	D0320191	M166RD9X	M166RC1X	D0904191X	M166RE2X	M166RE3X	M166RE4X	M166RE5X	M166RE6X	M166RE7X	D0312211	M166RE8X	M166RE9	M166RF1	M166RF2	M166RF3	M179B3X	M179B4X	M179B5X	M179B6X
			Sample Date	10/03/2018	10/03/2018	12/11/2018	03/20/2019	03/20/2019	06/04/2019	09/04/2019	09/04/2019	12/09/2019	03/18/2020	06/02/2020	09/02/2020	12/23/2020	03/12/2021	03/12/2021	05/26/2021	08/03/2021	10/21/2021	02/15/2022	03/20/2012	04/09/2013	09/04/2014	02/24/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3U	0.3U	0.3 U	0.9 J	0.9 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	16	12
2-Hexanone	ug/L	N	40	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5U	0.5U	1 J	1 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	2J	6J	2 J	14 UJ	16 UJ	6 J	6 J	5 J	0.7 U	4 J	1.1 J	1.8 UJ	2.4 UJ	1 UJ	0.97 UJ	3 J	2.2 J	1.7 J	45	6 U	25	6 U	20
Benzene	ug/L	N	1	0.7J	0.6J	0.7 J	0.7 J	0.7 J	0.6 J	0.2 J	0.3 J	0.3 J	0.7 J	0.57 J	0.2 U	0.68 J	0.53 J	0.62 J	0.69 J	0.69 J	0.81 J	0.8 J	**14**	**5J**	**4**	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 UJ
Chloroform	ug/L	N	70	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 J	1 U	1 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	0.6J	0.4J	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	310	160	190	3 J
Dibromochloromethane	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6 J	2 J	5.4	1.8 J	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4U	0.4U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	9	4 J	3	0.5 U
Isopropylbenzene	ug/L	N	700	0.4J	0.3J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	12	8	13	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	2200	14000	1900	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.3J	0.2J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	190	120	77	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.7 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	**4J**
Styrene	ug/L	N	100	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.4J	0.4J	0.2 J	0.2 J	0.2 J	0.3 J	0.6 J	0.7 J	0.7 J	0.3 J	0.34 J	0.38 J	0.36 J	0.21 J	0.21 J	0.2 U	0.2 U	0.25 J	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1U	1U	1 U	1 U	1 U	1 U	1 U	2 J	2 J	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0U	0U	0 U	0 U	0 U	0 U	0 U	0 U	6 J	0 U	0 U	0 U	0 U	-	-	-	-	-	0 U	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-179	MW-179	MW-179	MW-179	MW-179	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187
			Field Sample ID	M179C1X	M179C5X	M179C9X	M179D2X	D1209201	M187B1X	M187B2X	M187B3X	M187B4X	M187B5X	M187B6X	M187B7X	M187B8X	M187B9	M187C1	M187C2	M187C3X	M187C4	M187C5X	M187C6X	M187C7	M187C8	M187C9
			Sample Date	01/31/2017	02/06/2018	03/01/2019	08/12/2020	12/09/2020	04/26/2012	08/14/2012	04/11/2013	03/27/2014	09/23/2014	12/05/2014	12/10/2015	03/03/2016	02/08/2017	03/06/2018	03/19/2019	07/10/2019	02/12/2020	10/15/2020	01/13/2021	04/08/2021	07/15/2021	10/08/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 J	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.83 J	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.2 J	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	18 J	16 J	8 J	4.6 J	0.7 U	6 U	7 J	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	1 UJ	3 J	0.7 U	0.7 U	0.7 U	1.5 J	0.92 J	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.6 J	0.5 J	**2J**	1 J	0.6 J	0.5 U	0.5 U	**2**	0.5 U	1 J	0.2 J	1	0.2 U	0.64 J	**1.4**	1	**5.3**	**13**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	21000 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	0.2 J	1 U	1 U	2 J	5 J	2 U	2 U	2 U	7 J	3 J	4 J	2 U	4 J	3 J	2 J	2 J	1.6 J	1.3 J	1 J	1.9 J	1.4 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	1.6 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.65 J	1.9
Isopropylbenzene	ug/L	N	700	1 J	1 U	0.5 J	0.2 U	0.2 U	1 J	3 J	1 U	1 U	1 U	2 J	1 U	1 J	1 U	1 J	0.3 J	1 J	0.2 U	0.34 J	1.2 J	1.3 J	1.7 J	1.1 J
Methane	ug/L	N	NA	-	-	-	-	8100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	3 J	1 U	0.2 U	0.5 U	0.5 U	2 J	8	1 J	1 U	1 J	8	5	7	2 J	7	0.7 J	4 J	3 J	0.5 U	0.5 U	0.5 U	1.5 J	1.3 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 J	0.25 J	0.2 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.5 UJ	0.2 U	0.2 U	0.31 J	0.27 J	0.57 J	1.8
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	1 U	1.4 U	1.4 U	1 J	0.8 U	0.8 U	1	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.2	4.5
Total TIC VOCS	ug/L	N	NA	-	-	180 J	-	-	-	-	-	-	11 J	31 J	-	-	-	-	8 J	20 J	-	0 U	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-187	MW-192	MW-192	MW-192	MW-192	MW-192	MW-192	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195
			Field Sample ID	M187D1	M192B1X	M192B2X	M192B3X	M192B4X	M192B5X	M192B7X	D0126121	M195D3X	M195D4X	M195D5X	M195D6X	D0123131	M195D7X	M195D8X	M195D9X	M195E1X	M195E2X	M195E3X	M195E4X	M195E5X	M195E6X	M195E7X
			Sample Date	01/26/2022	03/20/2012	02/26/2013	09/05/2014	09/23/2016	09/11/2020	03/19/2021	01/26/2012	01/26/2012	04/12/2012	07/11/2012	10/09/2012	01/23/2013	01/23/2013	04/16/2013	07/18/2013	10/09/2013	03/04/2014	04/24/2014	07/22/2014	10/14/2014	03/31/2015	05/07/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	-	-	-	-	-	-	-	-	3 U	-	3 U	-	-	3 U	-	4 J	-	3 U	-	3 U	-	3 U
2-Hexanone	ug/L	N	40	0.4 U	-	-	-	-	-	-	-	-	3 U	-	3 U	-	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	-	-	-	-	-	-	-	3 U	-	3 U	-	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U
Acetone	ug/L	N	6000	0.7 U	-	-	-	-	-	-	-	-	6 U	-	7 J	-	-	6 U	-	7 J	-	10 J	-	6 U	-	6 U
Benzene	ug/L	N	1	0.44 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21 U	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	1 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloroform	ug/L	N	70	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	1 U	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.38 J	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	-	-	-	-	-	-	-	0.5 U	-	0.5 U	-	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	0.55 J	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U
Styrene	ug/L	N	100	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.59 J	0.7 U	0.7 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	-	-	-	-	-	-	-	-	0.8 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	-	-	-	-	-	-	-	2 U	-	2 U	-	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	1 U	-	1 U	-	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U
Xylene (total)	ug/L	N	1000	0.58 J	0.8 U	0.8 U	0.5 U	0.5 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196
			Field Sample ID	M195E8X	M195E9X	M195F1X	M195F2X	M195F3X	M195F4X	M195F5X	M195F7	M196D3X	M196D4X	M196D5X	M196D6X	M196D7X	M196D8X	M196D9X	M196E1X	D0304141	M196E2X	M196E3X	M196E4X	M196E5X	M196E6X	M196E7X
			Sample Date	07/17/2015	10/13/2015	03/09/2016	03/23/2017	04/26/2018	06/10/2019	06/17/2020	05/28/2021	01/26/2012	04/12/2012	07/03/2012	10/09/2012	01/23/2013	04/16/2013	07/18/2013	10/09/2013	03/04/2014	03/04/2014	04/24/2014	07/22/2014	10/14/2014	03/31/2015	05/07/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	0.2 U	-	-	-	2 U	-	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	3 U	3 U	5 J	0.3 U	0.3 U	0.3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	-	3 U	-	3 U	-	3 U
2-Hexanone	ug/L	N	40	-	3 UJ	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	-	3 U	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	-	-	3 U	-	3 U	-	3 U
Acetone	ug/L	N	6000	-	6 U	6 U	13 J	29	2 J	2 J	0.79 J	-	6 U	-	6 U	-	6 U	-	6 U	-	-	6 U	-	6 U	-	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22 U	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Bromoform	ug/L	N	4	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Chlorobenzene	ug/L	N	50	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Chloroethane	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Chloroform	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Cyclohexane	ug/L	N	NA	-	2 U	2 U	2 U	2 U	0.4 J	1 U	1 U	-	2 U	-	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Isopropylbenzene	ug/L	N	700	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	-	1 U	1 U	1 U	1 U	0.2 U	0.5 U	0.5 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	-	-	2 U	-	2 U	-	2 U
Styrene	ug/L	N	100	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	-	0.5 U	-	0.5 U	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	-	0.5 U	-	0.5 U	-	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
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			Location ID	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197
			Field Sample ID	D0717151	M196E8X	M196E9X	M196F1X	M196F2X	M196F3X	M196F5X	M196F6X	M196F7	M197D3X	M197D4X	D0703121	M197D5X	M197D6X	M197D7X	M197D8X	M197D9X	M197E1X	M197E2X	M197E3X	M197E4X	M197E5X	M197E6X
			Sample Date	07/17/2015	07/17/2015	10/13/2015	03/09/2016	03/23/2017	04/26/2018	05/31/2019	06/17/2020	05/28/2021	01/26/2012	04/12/2012	07/03/2012	07/03/2012	10/09/2012	01/23/2013	04/16/2013	07/19/2013	10/08/2013	02/27/2014	04/24/2014	07/22/2014	10/14/2014	04/02/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 UJ	2 U	2 U	0.2 U	-	-	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
1,1-Dichloroethane	ug/L	N	50	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	1 U	1 UJ	1 U	1 U	0.3 U	0.3 UJ	0.3 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	2 U	2 UJ	2 U	2 U	0.3 U	0.3 UJ	0.3 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichloroethane	ug/L	N	2	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2-Dichloropropane	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	3 U	3 UJ	3 U	3 U	0.3 U	0.3 UJ	0.3 U	-	3 U	-	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-
2-Hexanone	ug/L	N	40	-	-	3 UJ	3 UJ	3 UJ	3 U	0.3 U	0.3 UJ	0.3 U	-	3 U	-	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	3 U	3 UJ	3 U	3 U	0.5 U	0.5 UJ	0.5 U	-	3 U	-	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-
Acetone	ug/L	N	6000	-	-	6 U	6 UJ	6 U	6 U	2 UJ	0.7 UJ	0.7 U	-	6 U	-	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	-
Benzene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21 U	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Bromoform	ug/L	N	4	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	1 UJ	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	1 U	1 UJ	1 U	1 U	0.4 J	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Carbon Tetrachloride	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Chlorobenzene	ug/L	N	50	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
Chloroethane	ug/L	N	NA	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Chloroform	ug/L	N	70	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Cyclohexane	ug/L	N	NA	-	-	2 U	2 UJ	2 U	2 U	0.2 U	1 UJ	1 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Dibromochloromethane	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.3 UJ	0.3 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methyl-t-butyl ether	ug/L	N	70	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.5 U	-	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-
Methylcyclohexane	ug/L	N	NA	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.5 UJ	0.5 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	2 U	2 UJ	2 U	0.5 U	0.3 U	0.3 UJ	0.3 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Styrene	ug/L	N	100	-	-	1 U	1 UJ	1 U	1 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Tetrachloroethene	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
Toluene	ug/L	N	600	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	0.8 U	-	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	2 U	-	-	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	-	1 U	-	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Xylene (total)	ug/L	N	1000	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1.4 UJ	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198
			Field Sample ID	M197E7X	M197E8X	M197E9X	M197F1X	M197F2X	M197F3X	M197F4X	M197F7	M198D3X	M198D4X	M198D5X	M198D6X	M198D7X	M198D8X	M198D9X	M198E1X	M198E2X	D0424141	M198E3X	M198E4X	M198E5X	M198E6X	M198E7X
			Sample Date	05/07/2015	07/17/2015	10/13/2015	03/09/2016	03/23/2017	04/26/2018	03/29/2019	05/27/2021	01/26/2012	04/12/2012	07/03/2012	10/09/2012	01/23/2013	04/16/2013	07/19/2013	10/08/2013	02/26/2014	04/24/2014	04/24/2014	07/22/2014	10/14/2014	04/02/2015	05/07/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 U	2 U	2 U	2 U	0.2 U	-	-	2 U	-	4 U	-	2 U	-	2 U	-	4 U	2 U	-	2 U	-	10 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 U	1 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 U	2 U	2 U	2 U	0.3 U	0.3 U	-	2 U	-	4 U	-	2 U	-	2 U	-	4 U	2 U	-	2 U	-	10 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	3 U	3 U	3 U	3 U	0.3 U	0.3 U	-	3 U	-	6 U	-	3 U	-	3 U	-	6 U	3 U	-	3 U	-	15 UJ
2-Hexanone	ug/L	N	40	3 U	-	3 UJ	3 U	3 UJ	3 U	0.3 U	0.3 U	-	3 U	-	6 U	-	3 U	-	3 U	-	6 U	3 U	-	3 U	-	15 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 U	3 U	3 U	3 U	0.5 U	0.5 U	-	3 U	-	6 U	-	3 U	-	3 U	-	6 U	3 U	-	3 U	-	15 UJ
Acetone	ug/L	N	6000	6 U	-	6 U	6 U	6 U	6 U	3 UJ	0.7 U	-	6 U	-	12 U	-	6 U	-	6 U	-	12 U	6 U	-	6 U	-	30 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21 U	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Bromoform	ug/L	N	4	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	1 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	-	1 U	1 U	1 U	1 U	0.4 J	0.2 U	-	1 U	-	2 U	-	1 U	-	1 J	-	2 U	1 J	-	1 U	-	5 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Chlorobenzene	ug/L	N	50	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Chloroethane	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Chloroform	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Cyclohexane	ug/L	N	NA	2 U	-	2 U	2 U	2 U	2 U	0.2 U	1 U	-	2 U	-	4 U	-	2 U	-	2 U	-	4 U	2 U	-	2 U	-	10 UJ
Dibromochloromethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	2 U	-	4 U	-	2 U	-	2 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ
Isopropylbenzene	ug/L	N	700	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.3 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.5 U	-	1 U	-	0.5 U	-	0.5 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Methylcyclohexane	ug/L	N	NA	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.5 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	-	2 U	-	4 U	-	2 U	-	2 U	-	4 U	2 U	-	2 U	-	10 UJ
Styrene	ug/L	N	100	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	2 U	1 U	-	1 U	-	5 UJ
Tetrachloroethene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	1 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.8 U	-	2 U	-	0.8 U	-	0.8 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	2 U	-	4 U	-	2 U	-	2 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	1 U	-	2 U	-	1 U	-	1 U	-	1 U	0.5 U	-	0.5 U	-	3 UJ
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.5 J	0.8 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199
			Field Sample ID	M198E8X	M198E9X	M198F1X	M198F2X	M198F3X	M198F4X	M198F5X	M198F6	M198F7	M199D3X	M199D4X	M199D5X	D1018121	M199D6X	M199D7X	M199D8X	M199D9X	M199E1X	M199E2X	M199E3X	M199E4X	M199E5X	M199E6X
			Sample Date	07/17/2015	10/13/2015	03/09/2016	03/23/2017	04/26/2018	03/29/2019	03/27/2020	05/28/2021	02/04/2022	02/02/2012	04/05/2012	07/11/2012	10/18/2012	10/18/2012	01/29/2013	04/18/2013	07/19/2013	10/09/2013	02/20/2014	04/25/2014	07/17/2014	10/15/2014	01/23/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	3 U	-	0.3 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 UJ	2 U	2 UJ	2 U	-	-	-	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
1,1-Dichloroethane	ug/L	N	50	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 UJ	1 U	1 UJ	3 U	-	0.3 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 UJ	2 U	2 UJ	3 U	-	0.3 UJ	0.3 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	3 U	-	0.3 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	3 UJ	3 U	3 UJ	3 U	-	0.3 UJ	0.5 U	-	3 U	-	3 U	3 U	-	7 J	-	3 U	-	3 U	-	3 U	-
2-Hexanone	ug/L	N	40	-	3 UJ	3 UJ	3 UJ	3 UJ	3 U	-	0.3 UJ	0.4 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 UJ	3 U	3 UJ	5 U	-	0.5 UJ	0.5 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-
Acetone	ug/L	N	6000	-	6 U	6 UJ	6 U	6 UJ	7 U	-	0.7 UJ	0.7 U	-	12 J	-	6 U	6 U	-	6 U	-	6 U	-	6 U	-	11 J	-
Benzene	ug/L	N	1	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	0.2 U	0.2 UJ	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22 U	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Bromoform	ug/L	N	4	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	1 UJ	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	3 U	-	0.3 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 J	1 UJ	1 U	1 UJ	2 U	-	0.83 J	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Chlorobenzene	ug/L	N	50	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
Chloroethane	ug/L	N	NA	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Chloroform	ug/L	N	70	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Cyclohexane	ug/L	N	NA	-	2 U	2 UJ	2 U	2 UJ	2 U	-	1 UJ	1 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Dibromochloromethane	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	4 U	0.4 U	0.4 UJ	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.3 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-
Methylcyclohexane	ug/L	N	NA	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.5 UJ	0.5 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 UJ	2 U	0.5 UJ	3 U	-	0.3 UJ	0.3 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Styrene	ug/L	N	100	-	1 U	1 UJ	1 U	1 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Tetrachloroethene	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
Toluene	ug/L	N	600	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	0.2 U	0.2 UJ	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	0.8 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.3 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 U	0.5 UJ	0.5 U	0.5 UJ	2 U	-	0.2 UJ	0.2 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-
Xylene (total)	ug/L	N	1000	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	10 U	1 U	1.4 UJ	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200
			Field Sample ID	M199E7X	M199E8X	M199E9X	M199F1X	M199F2X	M199F3X	M199F5X	M199F6X	M199F7X	M199F8X	M199F9X	M199G1X	M199G2X	M199G3X	M199G4	M199G5	M200D3X	M200D4X	D0711121	M200D5X	M200D6X	M200D7X	M200D8X
			Sample Date	04/24/2015	07/30/2015	10/15/2015	04/05/2016	09/29/2016	02/01/2017	08/01/2017	02/09/2018	08/01/2018	02/08/2019	07/23/2019	02/07/2020	08/03/2020	03/18/2021	09/09/2021	01/31/2022	02/02/2012	04/05/2012	07/11/2012	07/11/2012	10/18/2012	01/29/2013	04/18/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 U	2 U	4 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	-	-	-	-	-	2 U	-	-	2 U	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 U	2 U	4 U	2 U	2 U	2 U	2 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	2 U	-	-	2 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 UJ	-	1 U	-	-	1 U	-	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	5 J	-	3 U	3 U	6 U	3 U	3 U	3 U	3 U	0.3 U	0.3 UJ	1 J	0.3 UJ	0.3 U	0.5 U	0.5 U	-	3 U	-	-	3 U	-	3 U
2-Hexanone	ug/L	N	40	3 U	-	3 U	3 UJ	6 U	3 U	3 UJ	3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.4 U	0.4 U	-	3 U	-	-	3 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 U	3 UJ	6 U	3 U	3 U	3 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	-	3 U	-	-	3 U	-	3 U
Acetone	ug/L	N	6000	10 J	-	6 U	6 U	12 U	6 U	6 U	6 U	6 U	0.7 U	1 J	8 J	0.7 UJ	3.2 J	0.7 U	0.7 U	-	6 U	-	-	6 U	-	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Bromoform	ug/L	N	4	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	1 UJ	1 U	1 U	1 U	-	1 U	-	-	1 U	-	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	0.5 U	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
Chlorobenzene	ug/L	N	50	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
Chloroethane	ug/L	N	NA	0.5 UJ	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Chloroform	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Cyclohexane	ug/L	N	NA	2 U	-	2 U	2 U	4 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	1 U	1 UJ	1 U	1 U	1 U	-	2 U	-	-	2 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	-	0.5 U	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	2 U	-	-	2 U	-	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	0.5 U	-	-	0.5 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	-	1 U	-	-	1 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 U	2 U	4 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.6 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	-	2 U	-	-	2 U	-	2 U
Styrene	ug/L	N	100	1 U	-	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 J	0.2 U	0.2 UJ	0.2 U	0.25 J	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	-	0.8 U	-	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	-	1 U	-	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	2 U	-	-	2 U	-	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	-	1 U	-	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 UJ	1 U	1.4 UJ	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	5 J	-	-	-	-	0 U	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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Chevron Perth Amboy Facility

			Location ID	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200
			Field Sample ID	M200D9X	M200E1X	M200E2X	M200E3X	M200E4X	M200E5X	M200E6X	M200E7X	M200E8X	M200E9X	M200F1X	M200F2X	M200F3X	M200F5X	D0209181	M200F6X	M200F7X	M200F8X	M200F9X	M200G1X	M200G2X	M200G3X	M200G4X
			Sample Date	07/19/2013	10/09/2013	02/20/2014	04/25/2014	07/17/2014	10/15/2014	01/23/2015	04/24/2015	07/30/2015	10/15/2015	04/05/2016	09/29/2016	02/01/2017	08/01/2017	02/09/2018	02/09/2018	08/01/2018	02/13/2019	07/23/2019	02/06/2020	04/16/2020	08/03/2020	10/12/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	-	2 U	-	2 U	-	4 UJ	-	2 UJ	2 U	10 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	1 U	0.4 UJ	4 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	-	2 U	-	2 U	-	4 UJ	-	2 UJ	2 U	10 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	-	3 U	-	3 U	-	6 UJ	-	3 UJ	3 U	15 UJ	3 UJ	3 U	3 UJ	3 UJ	3 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	-	3 U	-	3 U	-	3 U	-	6 UJ	-	3 UJ	3 UJ	15 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	-	3 U	-	3 U	-	6 UJ	-	3 UJ	3 UJ	15 UJ	3 UJ	3 U	3 UJ	3 UJ	3 UJ	3 U	1 UJ	10 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	6 U	-	6 U	-	6 U	-	12 UJ	-	6 UJ	6 U	30 UJ	6 UJ	6 U	6 UJ	6 UJ	6 UJ	4 U	1 UJ	14 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	21 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	20 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 UJ	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	2 U	0.6 UJ	6 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	4 U	0.2 U	0.24 J	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 UJ	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	2 U	-	2 U	-	2 U	-	4 UJ	-	2 UJ	2 U	10 UJ	2 UJ	2 U	2 UJ	2 UJ	2 UJ	1 U	0.4 UJ	20 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	2 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 UJ	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	2 U	0.8 UJ	8 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	6 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	10 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	-	2 U	-	2 U	-	4 UJ	-	2 UJ	2 U	10 UJ	2 UJ	2 U	0.5 UJ	0.5 UJ	0.5 UJ	2 U	1 UJ	6 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	1 U	-	1 U	-	1 U	-	2 UJ	-	1 UJ	1 U	5 UJ	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 UJ
Tetrachloroethene	ug/L	N	1	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.8 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	2 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	1 U	-	0.5 U	-	0.5 U	-	1 UJ	-	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	1 U	0.4 UJ	4 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 UJ	0.5 U	3 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	5 U	2 UJ	28 U	1 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	0 U	-	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-200	MW-200	MW-200	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201
			Field Sample ID	M200G5X	M200G6	M200G7	M201D3X	D0411121	M201D4X	M201D5X	M201D6X	M201D7X	M201D8X	M201D9X	D1015132	M201E1X	M201E2X	M201E3X	M201E4X	M201E5X	M201E6X	M201E7X	M201E8X	M201E9X	M201F1X	M201F2X
			Sample Date	03/18/2021	09/09/2021	01/31/2022	01/31/2012	04/11/2012	04/11/2012	07/10/2012	10/16/2012	01/31/2013	04/23/2013	07/23/2013	10/15/2013	10/15/2013	03/18/2014	05/15/2014	07/18/2014	10/10/2014	01/21/2015	04/24/2015	07/30/2015	10/14/2015	04/01/2016	09/29/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 UJ	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.5 U	0.5 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 U	0.4 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	-	6 U	6 U	-	6 U	-	6 U	-	6 U	6 U	-	6 U	-	6 U	-	6 U	-	6 U	6 UJ	6 U
Benzene	ug/L	N	1	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	21 U	22 U	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.81 J	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 UJ	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	0.5 U	-	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 U	0.3 U	-	0.8 U	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 U	0.3 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202
			Field Sample ID	M201F3X	M201F5X	M201F6X	D0731181	M201F7X	M201F8X	M201F9X	M201G1X	M201G2X	M201G3X	M201G4	M201G5	D0201221A	M201G7	M202D3X	M202D4X	M202D5X	M202D6X	M202D7X	M202D8X	M202D9X	M202E1X	M202E2X
			Sample Date	02/02/2017	08/02/2017	02/14/2018	07/31/2018	07/31/2018	02/06/2019	07/25/2019	02/04/2020	07/27/2020	03/18/2021	05/21/2021	09/14/2021	02/01/2022	02/01/2022	01/31/2012	04/11/2012	07/10/2012	10/16/2012	01/31/2013	04/23/2013	07/23/2013	10/15/2013	03/18/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	-	2 U	-	2 U	-	2 U	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.35 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	1.9 U	3.5 J	0.3 U	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	-
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	-	3 U	-	3 U	-	3 U	-	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	-
Acetone	ug/L	N	6000	6 U	6 U	6 UJ	6 U	6 U	0.7 U	4 J	1 J	4.4 U	9.7 J	0.7 U	0.7 U	0.7 U	0.7 U	-	6 U	-	6 U	-	6 U	-	6 U	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	**2J**	**2J**	1 J	**2J**	**2J**	**2J**	1 J	1 J	0.8 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21 U	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Bromoform	ug/L	N	4	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.5 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	0.32 U	1 U	1 U	1 U	1 U	1 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3 J	3 J	2 J	3 J	3 J	2 J	2 J	2 J	1 J
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	210	1900	8900	8900	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.6 UJ	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	3 J	2 J	3 J	2 J	3 J	2 J	2 J	1 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	0.65 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	7	7	5 J	7	6	6	5 J	5	3 J
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	15 J	-	-	-	-	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-203	MW-203
			Field Sample ID	M202E3X	M202E4X	M202E5X	M202E6X	M202E7X	M202E8X	M202E9X	M202F1X	M202F2X	M202F3X	M202F5X	M202F6X	M202F7X	M202F8X	M202F9X	M202G1X	M202G2X	D0319211X	M202G3X	M202G4	M202G5	M203D3X	M203D4X
			Sample Date	05/15/2014	07/18/2014	10/10/2014	01/21/2015	04/24/2015	07/30/2015	10/14/2015	04/01/2016	09/29/2016	02/02/2017	08/02/2017	02/14/2018	07/31/2018	02/06/2019	07/25/2019	02/12/2020	07/27/2020	03/19/2021	03/19/2021	09/14/2021	01/28/2022	01/31/2012	04/11/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.26 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.3 UJ	0.3 U	3 U	0.24 U	0.3 U	0.3 U	0.3 U	3 U	-	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.37 U	0.2 U	0.2 U	0.3 U	3 UJ	-	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.43 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 U	-	4 UJ	-	10 U	2 UJ	10 UJ	2 U	20 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	2 U	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.26 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.3 UJ	0.3 U	3 U	0.37 U	0.3 U	0.3 U	0.3 U	3 U	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 U	-	4 UJ	-	10 U	2 UJ	10 UJ	2 U	20 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	3 U	0.38 U	0.3 U	0.3 U	0.3 U	3 U	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	2 U	0.43 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.3 UJ	0.3 U	3 U	0.43 U	0.3 U	0.3 U	0.3 U	3 U	-	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.35 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	2 U	0.34 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	2 U	0.33 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	3 U	-	6 UJ	-	15 U	3 UJ	15 UJ	3 U	30 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	3 U	1.9 U	0.3 U	0.3 U	0.5 U	5 U	-	3 U
2-Hexanone	ug/L	N	40	3 U	-	3 U	-	6 UJ	-	15 UJ	3 UJ	15 UJ	3 U	30 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	3 U	1.1 U	0.3 U	0.3 U	0.4 U	4 U	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 U	-	6 UJ	-	15 UJ	3 UJ	15 UJ	3 U	30 UJ	3 UJ	3 UJ	0.5 UJ	0.5 U	5 U	1.3 U	0.5 U	0.5 U	0.5 U	5 U	-	3 U
Acetone	ug/L	N	6000	6 U	-	6 U	-	12 UJ	-	30 U	6 UJ	30 UJ	6 U	60 UJ	6 UJ	6 UJ	0.7 UJ	5 J	7 U	4.4 U	0.7 U	0.7 U	0.7 U	7 U	-	6 U
Benzene	ug/L	N	1	0.9 J	1	1	0.6 J	1 UJ	0.6 J	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.6 J	0.7 J	0.4 J	2 U	0.53 J	0.3 J	0.29 J	0.44 J	3 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.34 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
Bromoform	ug/L	N	4	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.5 U	10 U	0.54 U	1 U	1 U	1 U	10 U	-	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	-	0.5 U	-	1 UJ	-	3 UJ	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.3 UJ	0.3 U	3 U	0.55 U	0.3 U	0.3 U	0.3 U	3 U	-	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	2 U	0.82 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.21 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
Chlorobenzene	ug/L	N	50	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.38 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	-	0.5 U	-	1 UJ	-	3 UJ	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.32 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
Chloroform	ug/L	N	70	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.33 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.4 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.22 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.22 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
Cyclohexane	ug/L	N	NA	2 U	-	2 U	-	4 UJ	-	10 U	2 UJ	10 UJ	2 U	20 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	10 U	0.32 U	1 U	1 U	1 U	10 U	-	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.28 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.31 U	0.2 U	0.2 U	0.2 U	2 U	-	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	1	2	0.8 J	1 UJ	0.9 J	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.6 J	0.9 J	0.4 J	4 U	0.66 J	0.4 U	0.4 U	0.45 J	4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	2 U	0.34 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	3 U	0.79 U	0.3 U	0.3 U	0.3 U	3 U	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.47 U	0.2 U	0.2 U	0.2 U	2 U	-	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	5 U	0.26 U	0.5 U	0.5 U	0.5 U	5 U	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 U	-	4 UJ	-	10 U	2 UJ	10 UJ	2 U	20 UJ	0.5 UJ	0.5 UJ	0.3 UJ	0.5 UJ	3 U	0.32 U	0.3 U	0.3 U	0.3 U	3 U	-	2 U
Styrene	ug/L	N	100	1 U	-	1 U	-	2 UJ	-	5 U	1 UJ	5 UJ	1 U	10 UJ	1 UJ	1 UJ	0.2 UJ	0.2 U	2 U	0.42 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.25 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
Toluene	ug/L	N	600	1	1	1	0.8 J	1 UJ	0.7 J	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.5 J	0.3 J	2 U	0.4 J	0.2 J	0.2 U	0.27 J	2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.24 U	0.2 U	0.2 U	0.3 U	3 U	-	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.49 U	0.2 U	0.2 U	0.2 U	2 U	-	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.31 U	0.2 U	0.2 U	0.3 U	3 U	-	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.32 U	0.2 U	0.2 U	0.2 U	2 U	-	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	-	0.5 U	-	1 UJ	-	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	0.5 UJ	0.2 UJ	0.2 U	2 U	0.17 U	0.2 UJ	0.2 UJ	0.2 U	2 U	-	1 U
Xylene (total)	ug/L	N	1000	3	3	4	2	1 UJ	2	3 U	0.5 UJ	3 UJ	0.5 U	5 UJ	0.5 UJ	1 J	2 J	1 U	14 U	1.6 J	1.4 U	1.4 U	0.45 J	4 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	200 J	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203
			Field Sample ID	M203D5X	M203D6X	M203D7X	M203D8X	M203D9X	M203E1X	M203E2X	M203E3X	M203E4X	M203E5X	M203E6X	M203E7X	M203E8X	M203E9X	M203F1X	M203F2X	M203F3X	M203F5X	M203F6X	M203F7X	M203F8X	M203F9X	M203G1X
			Sample Date	07/10/2012	10/16/2012	01/31/2013	04/23/2013	07/23/2013	10/15/2013	03/18/2014	04/22/2014	07/18/2014	10/10/2014	01/21/2015	04/29/2015	07/28/2015	10/14/2015	04/01/2016	09/30/2016	02/02/2017	08/02/2017	02/14/2018	07/27/2018	02/11/2019	07/24/2019	02/05/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	10 U	2 U	2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	10 U	2 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	3 U	3 U	3 U	15 U	3 U	3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 U	3 U	3 U	15 U	3 U	3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 U	3 U	3 U	15 U	3 U	3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	6 UJ	6 U	6 U	30 U	6 UJ	6 U	0.7 U	5 J	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	21 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.2 U	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	10 U	2 U	2 U	0.2 U	2 U	1 U
Dibromochloromethane	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	1 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	10 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-

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			Location ID	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204
			Field Sample ID	M203G2X	M203G3X	M203G4	D0915211	M203G5	M203G6	M204D3X	M204D4X	M204D5X	M204D6X	M204D7X	M204D8X	M204D9X	M204E1X	M204E2X	M204E3X	M204E4X	M204E5X	M204E6X	D0429151	M204E7X	M204E8X	M204E9X
			Sample Date	07/28/2020	03/17/2021	05/24/2021	09/15/2021	09/15/2021	01/28/2022	01/31/2012	04/11/2012	07/10/2012	10/16/2012	01/31/2013	04/23/2013	07/23/2013	10/15/2013	03/18/2014	04/22/2014	07/23/2014	10/10/2014	01/21/2015	04/29/2015	04/29/2015	07/28/2015	10/14/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.26 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,1,1-Trichloroethane	ug/L	N	30	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.37 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,1,2-Trichloroethane	ug/L	N	3	0.43 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 UJ	-	10 U
1,1-Dichloroethane	ug/L	N	50	0.26 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 UJ	-	10 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
1,2-Dichloroethane	ug/L	N	2	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,2-Dichloropropane	ug/L	N	1	0.35 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.34 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
1,4-Dichlorobenzene	ug/L	N	75	0.33 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1.9 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	3 UJ	-	15 U
2-Hexanone	ug/L	N	40	1.1 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	3 UJ	-	15 UJ
4-Methyl-2-pentanone	ug/L	N	NA	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	-	3 U	3 UJ	-	15 UJ
Acetone	ug/L	N	6000	4.4 U	0.7 U	0.7 U	0.83 UJ	0.7 U	0.7 U	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	-	6 U	6 UJ	-	30 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 UJ	3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	21 U	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Bromoform	ug/L	N	4	0.54 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.82 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
Carbon Tetrachloride	ug/L	N	1	0.21 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Chlorobenzene	ug/L	N	50	0.38 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Chloroethane	ug/L	N	NA	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 UJ
Chloroform	ug/L	N	70	0.33 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
cis-1,2-Dichloroethene	ug/L	N	70	0.22 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Cyclohexane	ug/L	N	NA	0.32 U	1 U	1 U	1 U	1 U	1 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 UJ	-	10 U
Dibromochloromethane	ug/L	N	1	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Ethane	ug/L	N	NA	-	-	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 UJ	3 U
Isopropylbenzene	ug/L	N	700	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
Methane	ug/L	N	NA	-	-	480	1200	1100	4200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
Methyl-t-butyl ether	ug/L	N	70	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Methylcyclohexane	ug/L	N	NA	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 UJ	-	10 U
Styrene	ug/L	N	100	0.42 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 UJ	-	5 U
Tetrachloroethene	ug/L	N	1	0.25 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Toluene	ug/L	N	600	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	1 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 UJ	3 U
trans-1,2-Dichloroethene	ug/L	N	100	0.24 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.31 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	-	3 U
Xylene (total)	ug/L	N	1000	0.65 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 UJ	3 U
Total TIC VOCS	ug/L	N	NA	-	-	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205
			Field Sample ID	M204F1X	M204F2X	D0202171	M204F3X	M204F5X	M204F6X	M204F7X	D0211191	M204F8X	D0724191	M204F9X	M204G1X	M204G2X	M204G3X	M204G4	M204G5	M205D3X	M205D4X	M205D5X	M205D6X	M205D7X	M205D8X	M205D9X
			Sample Date	04/01/2016	09/30/2016	02/02/2017	02/02/2017	08/02/2017	02/14/2018	07/27/2018	02/11/2019	02/11/2019	07/24/2019	07/24/2019	02/05/2020	07/28/2020	03/16/2021	09/09/2021	01/31/2022	02/01/2012	04/05/2012	07/12/2012	10/11/2012	02/05/2013	05/08/2013	07/25/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.26 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	2 UJ	3 UJ	2 U	2 U	6 U	0.24 UJ	0.3 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.37 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.43 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 UJ	2 U	2 U	20 UJ	2 UJ	2 UJ	1 UJ	2 UJ	1 U	1 U	4 U	-	-	-	-	-	2 U	-	2 U	-	2 U	-
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.26 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	2 UJ	3 UJ	2 U	2 U	6 U	0.37 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 UJ	2 U	2 U	20 UJ	2 UJ	2 UJ	2 UJ	3 UJ	2 U	2 U	6 U	0.38 UJ	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.5 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.43 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	2 UJ	3 UJ	2 U	2 U	6 U	0.43 UJ	0.3 U	0.3 U	0.3 UJ	-	1 U	-	1 U	-	1 U	-
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.35 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.34 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.33 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	3 UJ	3 U	3 U	30 UJ	3 UJ	3 UJ	2 UJ	3 UJ	2 U	2 U	6 U	1.9 UJ	0.3 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-
2-Hexanone	ug/L	N	40	3 UJ	3 UJ	3 U	3 U	30 UJ	3 UJ	3 UJ	2 UJ	3 UJ	2 U	2 U	6 U	1.1 UJ	0.3 U	0.4 U	0.4 U	-	3 U	-	3 U	-	3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	3 UJ	3 U	3 U	30 UJ	3 UJ	3 UJ	3 UJ	5 UJ	3 U	3 U	10 U	1.3 UJ	0.5 U	0.5 U	0.5 U	-	3 U	-	3 U	-	3 U	-
Acetone	ug/L	N	6000	6 UJ	6 UJ	6 U	6 U	60 UJ	6 UJ	6 UJ	4 UJ	7 UJ	4 U	4 U	14 U	4.4 UJ	0.7 U	0.7 U	0.7 U	-	9 J	-	9 J	-	6 U	-
Benzene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.2 UJ	0.2 U	0.3 U	0.3 U	**2J**	**6**	1 J	**2J**	**4J**	**23**	**4J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.34 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
Bromoform	ug/L	N	4	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	3 U	3 U	20 U	0.54 UJ	1 U	1 U	1 U	-	1 U	-	1 U	-	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	2 UJ	3 UJ	2 U	2 U	6 U	0.55 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.82 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.21 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
Chlorobenzene	ug/L	N	50	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.38 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.32 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
Chloroform	ug/L	N	70	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.33 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.4 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.22 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.22 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
Cyclohexane	ug/L	N	NA	2 UJ	2 UJ	2 U	2 U	20 UJ	2 UJ	2 UJ	1 UJ	2 UJ	10 U	10 U	20 U	0.32 UJ	1 U	1 U	1 U	-	7	-	11	-	4 J	-
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.28 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.31 UJ	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	2 UJ	4 UJ	2 U	2 U	8 U	0.3 UJ	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.34 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 J	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	6 U	0.79 UJ	0.3 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
Methyl-t-butyl ether	ug/L	N	70	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.47 UJ	0.2 U	0.2 U	0.2 U	-	0.5 U	-	0.5 U	-	0.5 U	-
Methylcyclohexane	ug/L	N	NA	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	5 U	5 U	10 U	0.26 UJ	0.5 U	0.5 U	0.5 U	-	4 J	-	7	-	1 J	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	2 UJ	2 U	2 U	20 UJ	0.5 UJ	0.5 UJ	2 UJ	3 UJ	2 U	2 U	6 U	0.32 UJ	0.3 U	0.3 U	0.3 U	-	2 U	-	2 U	-	2 U	-
Styrene	ug/L	N	100	1 UJ	1 UJ	1 U	1 U	10 UJ	1 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.42 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.25 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
Toluene	ug/L	N	600	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.38 UJ	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.24 UJ	0.2 U	0.3 U	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.49 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.31 UJ	0.2 U	0.3 U	0.3 U	-	1 U	-	1 U	-	1 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.32 UJ	0.2 U	0.2 U	0.2 U	-	2 U	-	2 U	-	2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	1 UJ	2 UJ	1 U	1 U	4 U	0.17 UJ	0.2 U	0.2 U	0.2 U	-	1 U	-	1 U	-	1 U	-
Xylene (total)	ug/L	N	1000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 UJ	0.5 UJ	0.5 UJ	5 UJ	10 UJ	5 U	5 U	28 U	0.65 UJ	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205
			Field Sample ID	M205E1X	M205E2X	D0502141	M205E3X	M205E4X	D1001141	M205E5X	M205E6X	M205E7X	M205E8X	M205E9X	M205F1X	M205F2X	M205F3X	M205F5X	M205F6X	M205F7X	M205F8X	M205F9X	M205G1X	M205G2X	M205G3X	M205G4
			Sample Date	10/16/2013	02/20/2014	05/02/2014	05/02/2014	07/23/2014	10/01/2014	10/01/2014	01/15/2015	04/29/2015	07/28/2015	10/15/2015	03/31/2016	09/30/2016	02/01/2017	08/03/2017	02/08/2018	07/27/2018	02/07/2019	07/22/2019	02/06/2020	07/29/2020	03/16/2021	09/09/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.26 U	1 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.24 U	1.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.37 U	1 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.43 U	1 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	-	2 U	2 U	-	2 U	2 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.26 U	1 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	2 U	0.37 U	1.5 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	-	2 U	2 U	-	2 U	2 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	2 U	0.38 U	1.5 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.5 U	1 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.43 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.43 U	1.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.35 U	1 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.34 U	1 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.33 U	1 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	-	3 U	3 U	-	3 U	3 U	-	3 U	-	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	2 J	0.4 J	2 U	1.9 U	1.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	-	3 U	3 U	-	3 U	3 U	-	3 U	-	3 U	3 UJ	3 U	3 U	3 UJ	3 U	3 U	0.3 U	0.3 U	2 U	1.1 U	1.5 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	-	3 U	3 U	-	3 U	3 U	-	3 U	-	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	3 U	1.3 U	2.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	-	6 U	6 U	-	7 J	6 U	-	6 U	-	13 J	8 J	6 U	6 U	6 U	6 U	7 J	41	4 J	4 U	9	13 UJ	1.3 J
Benzene	ug/L	N	1	0.5 U	**3J**	**17**	**16**	**4**	1 J	0.9 J	**5**	**12**	**2J**	0.6 J	**3J**	0.5 U	**8**	1	0.9 J	**2**	1	**3**	**14**	0.74 J	**5.1**	0.3 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.34 U	1 U	0.2 U
Bromoform	ug/L	N	4	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	5 U	0.54 U	5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.55 U	1.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.82 U	1 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.21 U	1 U	0.3 U
Chlorobenzene	ug/L	N	50	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.38 U	1 U	0.3 U
Chloroethane	ug/L	N	NA	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.32 U	1 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.33 U	1 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.4 U	1 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.22 U	1 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.22 U	1 U	0.2 U
Cyclohexane	ug/L	N	NA	8	-	4 J	4 J	-	6	5	-	2 U	-	4 J	4 J	5 J	9	7	4 J	5 J	2 J	6	6 J	7.2	5 U	9.2
Dibromochloromethane	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.28 U	1 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	1 U	0.31 U	1 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	2 U	0.3 U	2 U	0.4 U
Isopropylbenzene	ug/L	N	700	2 J	-	1 J	1 U	-	1 J	2 J	-	1 U	-	1 U	1 UJ	2 J	1 U	1 J	1 U	1 J	0.4 J	2 J	1 J	1.8	1.5 J	1.9 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	2 U	0.79 U	1.5 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.47 U	1 U	0.2 U
Methylcyclohexane	ug/L	N	NA	4 J	-	1 J	1 J	-	3 J	3 J	-	1 U	-	3 J	2 J	3 J	5 J	5 J	2 J	3 J	2 J	3 J	3 J	3.7	2.5 U	5.8
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	-	2 U	2 U	-	2 U	2 U	-	2 U	-	2 U	2 UJ	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.7 UJ	2 U	0.32 U	1.5 U	0.3 U
Styrene	ug/L	N	100	1 U	-	1 U	1 U	-	1 U	1 U	-	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.42 U	1 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.25 U	1 U	0.3 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.6 J	0.5 U	0.5 J	0.5 U	0.6 J	0.2 U	0.8 J	1 U	0.58 J	1 U	0.46 J
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.24 U	1 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.49 U	1 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.31 U	1 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.32 U	1 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.17 U	1 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.7 J	0.7 J	0.6 U	0.5 U	1 U	0.5 U	0.5 UJ	0.6 J	0.5 U	0.7 J	0.5 U	0.8 J	1 U	1 U	7 U	0.79 J	7 U	0.86 J
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 J	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-205	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206
			Field Sample ID	M205G5	M206D3X	M206D4X	M206D5X	M206D6X	M206D7X	M206D8X	M206D9X	D1016131	M206E1X	M206E2X	M206E3X	M206E4X	M206E5X	M206E6X	M206E7X	M206E8X	M206E9X	M206F1X	M206F2X	M206F3X	D0801171	M206F5X
			Sample Date	01/31/2022	02/01/2012	04/05/2012	07/12/2012	10/11/2012	02/05/2013	05/08/2013	07/25/2013	10/16/2013	10/16/2013	02/20/2014	05/02/2014	07/23/2014	10/01/2014	01/15/2015	04/29/2015	07/28/2015	10/15/2015	03/31/2016	09/30/2016	02/01/2017	08/01/2017	08/01/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 UJ	2 UJ	2 UJ	2 UJ	2 U	20 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 UJ	2 UJ	2 UJ	2 UJ	2 U	20 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
1,2-Dichloroethane	ug/L	N	2	0.3 UJ	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 UJ	3 UJ	3 UJ	3 U	30 U
2-Hexanone	ug/L	N	40	0.4 U	-	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	30 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	3 U	-	3 U	-	3 U	-	3 U	3 U	-	3 U	-	3 U	-	3 U	-	3 UJ	3 UJ	3 UJ	3 UJ	3 U	30 U
Acetone	ug/L	N	6000	0.72 J	-	6 U	-	6 U	-	6 U	-	6 U	6 U	-	6 U	-	6 U	-	6 U	-	6 UJ	6 UJ	6 UJ	6 UJ	6 U	60 U
Benzene	ug/L	N	1	**3.5**	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 UJ	0.6 J	0.5 UJ	0.5 UJ	0.5 U	5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Bromoform	ug/L	N	4	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Chlorobenzene	ug/L	N	50	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Chloroethane	ug/L	N	NA	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Chloroform	ug/L	N	70	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Cyclohexane	ug/L	N	NA	6.3	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 UJ	2 UJ	2 UJ	2 UJ	2 U	20 U
Dibromochloromethane	ug/L	N	1	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Isopropylbenzene	ug/L	N	700	0.47 J	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	0.5 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Methylcyclohexane	ug/L	N	NA	2.5 J	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	2 U	-	2 U	-	2 U	-	2 UJ	2 UJ	2 UJ	2 UJ	2 U	20 U
Styrene	ug/L	N	100	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	1 U	-	1 U	-	1 U	-	1 UJ	1 UJ	1 UJ	1 UJ	1 U	10 U
Tetrachloroethene	ug/L	N	1	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Toluene	ug/L	N	600	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	-	0.8 U	-	0.8 U	-	0.8 U	-	0.8 U	0.8 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Xylene (total)	ug/L	N	1000	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-210	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211
			Field Sample ID	M206F6X	M206F7X	M206F8X	M206F9X	M206G1X	M206G2X	M206G3X	M206G4	M206G5	M207A2X	M207A3X	M207A4X	M207A5	M207A6	M207A7	M210B6X	M211B6X	M211B7X	M211B8	M211B9X	M211C1X	M211C2	M211C3
			Sample Date	02/08/2018	07/31/2018	02/07/2019	07/26/2019	02/06/2020	07/29/2020	03/16/2021	09/09/2021	01/31/2022	11/20/2017	02/12/2018	05/23/2018	05/24/2021	08/18/2021	10/27/2021	03/14/2012	03/14/2012	06/26/2013	05/22/2014	07/02/2014	08/05/2014	09/26/2014	10/30/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.26 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 UJ	0.3 UJ	3 UJ	2 U	0.24 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.37 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.43 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 UJ	0.2 UJ	2 UJ	1 U	-	-	-	-	20 U	2 U	2 U	-	-	-	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.26 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 UJ	0.3 UJ	3 UJ	2 U	0.37 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 UJ	0.3 UJ	3 UJ	2 U	0.38 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U	0.3 U	0.3 U	0.3 U	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.5 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 UJ	0.2 UJ	2 UJ	1 U	0.43 U	0.2 U	0.2 U	0.2 U	10 U	1 U	1 U	0.2 U	0.2 U	0.2 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 UJ	0.3 UJ	3 UJ	2 U	0.43 U	0.3 U	0.3 U	0.3 UJ	5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.35 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	1 UJ	0.2 UJ	2 UJ	1 U	0.34 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	1 UJ	0.2 UJ	2 UJ	1 U	0.33 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	3 UJ	0.3 UJ	3 UJ	2 U	1.9 U	0.3 U	0.5 U	0.5 U	30 U	6 J	7 J	3.5 J	1.1 J	1.2 J	-	-	3 U	3 U	3 U	3 UJ	3 U	3 U
2-Hexanone	ug/L	N	40	3 UJ	3 UJ	0.3 UJ	3 UJ	2 U	1.1 U	0.3 U	0.4 U	0.4 U	30 U	3 U	3 U	0.3 U	0.4 U	0.4 U	-	-	3 U	3 U	3 U	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	3 UJ	0.5 UJ	5 UJ	3 U	1.3 U	0.5 U	0.5 U	0.5 U	30 U	3 U	3 U	0.5 U	0.5 U	0.5 U	-	-	3 U	3 U	3 U	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	6 UJ	6 UJ	1 J	7 UJ	4 U	4.4 U	0.7 U	0.7 U	0.7 U	60 U	29	21 J	13 J	5 UJ	5.4 J	-	-	6 U	6 U	14 J	13 J	6 U	6 U
Benzene	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.2 U	0.2 U	0.3 U	0.3 U	**120**	**290**	**320**	**100**	**46**	**31**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.34 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 UJ	0.5 UJ	0.2 UJ	5 UJ	5 U	0.54 U	1 U	1 U	1 U	5 U	0.5 U	0.5 U	1 U	1 U	1 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 UJ	0.3 UJ	3 UJ	2 U	0.55 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 UJ	1 UJ	0.2 UJ	2 UJ	1 U	0.82 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 UJ	0.21 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.38 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.32 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Chloroform	ug/L	N	70	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.33 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.4 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.22 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.22 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 UJ	2 UJ	0.2 UJ	20 UJ	5 U	0.32 U	1 U	1 U	1 U	29 J	93	130J	26	31	26	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.28 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.31 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	2 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 UJ	0.5 UJ	0.4 UJ	4 UJ	2 U	0.3 U	0.4 U	0.4 U	0.4 U	56	52	160	0.67 J	0.44 J	0.4 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 UJ	1 UJ	0.2 UJ	2 UJ	1 U	0.34 U	0.2 U	0.2 U	0.2 U	19 J	15	29	4.9 J	2 J	1.7 J	-	-	27	38	5 J	11 J	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	14000	11000	15000	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 UJ	0.2 UJ	2 UJ	2 U	0.79 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U	0.3 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.47 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 UJ	1 UJ	0.2 UJ	10 UJ	3 U	0.26 U	0.5 U	0.5 U	0.5 U	33 J	74	130J	42	26	20	-	-	1 J	1 U	1 U	1 UJ	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 UJ	0.5 UJ	0.3 UJ	4 UJ	2 U	0.32 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	-	-	2 U	2 U	2 U	2 UJ	2 U	2 U
Styrene	ug/L	N	100	1 UJ	1 UJ	0.2 UJ	2 UJ	1 U	0.42 U	0.2 U	0.3 U	0.3 U	10 U	1 U	1 U	0.2 U	0.3 U	0.3 U	-	-	1 U	1 U	1 U	1 UJ	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.25 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.38 U	0.2 U	0.2 U	0.2 U	5 U	5	6	2.4	2.6	2.5	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.24 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.49 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.31 U	0.2 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.32 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	0.5 UJ	0.2 UJ	2 UJ	1 U	0.17 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	-	-	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 UJ	0.5 UJ	1 UJ	10 UJ	7 U	0.65 U	1.4 U	0.4 U	0.4 U	7 J	15	24	7.8	3.2	2.9	0.8 U	0.9 J	1 J	0.6 J	0.8 J	0.5 UJ	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	0 U	-	-	-	-	0 U	-	-	740 J	990 J	-	-	-	-	-	380 J	230 J	240 J	140 J	17 J	12 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
			Field Sample ID	M211C4X	M211C5	M211C6	M211C7	M211C8	M211C9X	M211D1	M211D2	M211D3	M211D4	M211D5	M211D6	M212B1X	M212B2X	M212B3X	M212B4X	M212B5X	M212B6X	M212B7X	M212B8X	M212B9X	M212C1X	M212C2X
			Sample Date	03/12/2015	03/24/2015	06/08/2015	09/16/2015	11/16/2015	12/17/2015	01/14/2016	04/08/2016	07/22/2016	12/08/2016	01/19/2017	04/18/2017	03/20/2012	08/14/2012	02/27/2013	05/07/2013	06/18/2013	04/01/2014	06/26/2014	07/29/2014	01/20/2015	08/07/2015	12/15/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	15 U	3 U	3 U	3 U	5 J	3 UJ	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	15 U	3 U	3 UJ	3 U	3 U	3 UJ	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	15 U	3 U	3 UJ	3 U	3 U	3 UJ	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ
Acetone	ug/L	N	6000	6 J	9 J	6 U	26 J	30 U	12 J	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ
Benzene	ug/L	N	1	0.6 J	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Cyclohexane	ug/L	N	NA	2 U	2 U	4 J	2 U	10 U	2 U	2 U	2 U	2 U	2 UJ	4 U	2 U	2 U	2 U	2 U	2 U	4 J	2 U	5	2 U	2 U	2 U	2 UJ
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Isopropylbenzene	ug/L	N	700	24	24	39	7	5 U	32	1 U	2 J	1 U	1 U	2 U	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 J	1 U	5 U	1 J	1 U	1 U	1 UJ	1 J	2 U	1 U	1 U	1 U	1 U	3 J	9	1 U	5	1 U	1 J	2 J	3 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	2 UJ	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Toluene	ug/L	N	600	0.6 J	0.5 U	0.6 J	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.7 J	0.5 U	3 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Total TIC VOCS	ug/L	N	NA	200 J	180 J	230 J	130 J	0 U	-	42 J	100 J	40 J	140 J	140 J	290 J	-	-	-	0	38 J	-	0 U	0 U	-	-	0 UJ

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	M212C3X	D1213168BX	M212C4X	M212C5X	M212C6X	M212C7X	D1212181	M212C8X	M212C9X	M212D1	M212D1X	M212D2X	M212D3X	M212D4X	M212D5X	M212D7X	M212D8X	M233B3X	M233B4	M233B4X	M233B5	M233B5X	M233B6X
			Sample Date	02/17/2016	12/13/2016	12/13/2016	02/16/2017	11/27/2017	03/06/2018	12/12/2018	12/12/2018	01/07/2019	03/07/2019	03/07/2019	10/10/2019	12/17/2019	03/05/2020	09/29/2020	12/04/2020	03/24/2021	03/21/2012	05/24/2012	05/25/2012	07/25/2012	07/26/2012	04/25/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	0.2 U	0.2 UJ	-	0.2 U	0.2 UJ	-	-	-	4 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 J	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	2 U	2 U	2 U	2 U	2 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	6 U	5 J	9 J	15	23	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 UJ	3 U	2 J	2 J	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	6 U	3 J	3 U	3 U	7 J	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6 U	3 U	3 U	10 J	4 J	3 U
Acetone	ug/L	N	6000	7 J	32 J	21 J	6 U	7 J	6 U	0.7 U	0.7 U	-	0.7 U	0.7 U	-	0.7 U	2 J	0.7 U	0.7 U	0.7 U	12 U	15 J	24	42	53	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**430**	**1300**	**860**	**270**	**220**	**370**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	-	0.3 U	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 UJ	0.2 UJ	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	1 U	1 UJ	1 U	1 U	1 U	130	160	150	65	140	130
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	1 U	-	-	1 U	-	-	1 U	1 U	1 U	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	45	250	100	5	12	22
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	24	20	19	7	18	28
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	2200	-	-	1000	-	-	200	8600	2400 J	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	2 J	2 J	1 U	1 U	1 U	2 J	2 J	-	0.5 J	0.2 U	-	0.5 U	0.5 UJ	1.1 J	0.5 U	0.5 U	130	150	170	63	130	160
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	-	0.3 UJ	0.3 U	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	51	170	120	22	32	30
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 UJ	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	-	0.2 U	0.2 U	-	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	170	540	410	28	47	49
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	-	0 U	-	23 J	22 J	-	0 U	0 U	-	-	-	0 U	-	-	2300 J	2300 J	2300 J	1400 J	1800 J	2300 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	M233B7	M233B8X	M233B9	M233C1	M233C2	M233C4X	M233C5X	M233C6	M233C7	M233C8X	M233C9	M233D1	M233D2X	M233D3	M233D4	M233D5X	M233D6	M233D7	M233D8	M233D9	M233E1	M233E2	M233E4X
			Sample Date	06/17/2013	06/25/2013	09/10/2013	11/12/2013	03/14/2014	07/02/2014	08/04/2014	08/08/2014	10/31/2014	01/16/2015	03/11/2015	06/09/2015	07/07/2015	09/21/2015	11/19/2015	12/11/2015	01/14/2016	04/14/2016	07/26/2016	12/08/2016	01/23/2017	04/28/2017	05/09/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ	20 U	20 U	20 U	20 U	2 UJ	2 U	10 U	4 UJ	4 UJ	2 UJ	20 U	2 U	2 UJ	20 UJ	2 UJ	10 U
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	1 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 UJ	1 U	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 UJ	10 UJ	1 UJ	5 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ	20 U	20 U	20 U	20 U	2 UJ	2 U	10 U	4 UJ	4 UJ	2 UJ	20 U	2 U	2 UJ	20 UJ	2 UJ	10 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 UJ	1 U	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 UJ	10 UJ	1 UJ	5 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 UJ	1 U	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 UJ	10 UJ	1 UJ	5 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 UJ	1 U	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 UJ	10 UJ	1 UJ	5 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	19	19	9 J	3 U	18	5 J	30 UJ	30 U	88 J	35 J	30 U	4 J	8 J	15 U	6 UJ	6 UJ	3 UJ	30 U	5 J	3 J	30 UJ	3 UJ	15 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	7 J	19	3 U	30 UJ	30 U	30 U	30 U	30 U	3 UJ	3 U	15 U	6 UJ	6 UJ	3 UJ	30 U	3 U	3 UJ	30 UJ	3 UJ	15 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	13	6 J	3 U	30 UJ	30 U	30 U	30 U	30 U	3 UJ	3 U	15 U	6 UJ	6 UJ	3 UJ	30 U	3 U	3 UJ	30 UJ	3 UJ	15 U
Acetone	ug/L	N	6000	30	49	22	6 U	28	26	60 UJ	60 U	390	60 U	60 U	10 J	24	30 U	12 UJ	16 J	6 UJ	60 U	6 U	8 J	60 UJ	6 UJ	30 U
Benzene	ug/L	N	1	**530**	**160**	**460**	**84**	**390**	**57**	**140J**	**260**	**73**	**270**	**360**	**420J**	**280**	**270**	**290J**	**340J**	**340J**	**310**	**190**	**240J**	**370J**	**150J**	**260**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	16 J	10 U	10 U	1 J	1 J	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 J	10 UJ	1 UJ	5 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Cyclohexane	ug/L	N	NA	130	66	160	75	62	21	28 J	59	22 J	36 J	41 J	52 J	61	39	52 J	63 J	73 J	28 J	57	57 J	63 J	26 J	53
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 UJ	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	21	8	77	3 J	3 J	0.7 J	5 UJ	6 J	5 U	7 J	5 U	7 J	28	13	27 J	35 J	24 J	10	46	49 J	18 J	9 J	12
Isopropylbenzene	ug/L	N	700	9	2 J	21	13	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 J	7	5 U	5 J	8 J	5 J	10 U	11	11 J	10 UJ	2 J	7 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 UJ	1 U	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 UJ	10 UJ	1 UJ	5 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Methylcyclohexane	ug/L	N	NA	120	98	160	94	56	17	27 J	39 J	26 J	38 J	42 J	48 J	81	51	63 J	81 J	100 J	26 J	73	80 J	78 J	30 J	51
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ	20 U	20 U	20 U	20 U	2 UJ	2 U	10 U	4 UJ	4 UJ	2 UJ	20 U	2 U	2 UJ	20 UJ	2 UJ	10 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	10 U	10 U	10 U	10 U	1 UJ	1 U	5 U	2 UJ	2 UJ	1 UJ	10 U	1 U	1 UJ	10 UJ	1 UJ	5 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Toluene	ug/L	N	600	49	16	65	15	16	3	5 UJ	9 J	5 J	9 J	7 J	11 J	18	11	19 J	21 J	14 J	10 J	11	21 J	16 J	6 J	16
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	0.5 U	0.5 U	5 UJ	5 U	5 U	5 U	5 U	0.5 UJ	0.5 U	3 U	1 UJ	1 UJ	0.5 UJ	5 U	0.5 U	0.5 UJ	5 UJ	0.5 UJ	3 U
Xylene (total)	ug/L	N	1000	72	35	120	29	23	4	5 UJ	15	8 J	22	19	22 J	49	25	46 J	67 J	44 J	19	54	65 J	30 J	16 J	27
Total TIC VOCS	ug/L	N	NA	2100 J	1100 J	2000 J	1700 J	1300 J	440 J	730 J	1300 J	290 J	-	1300 J	1200 J	2000 J	1300 J	1300 J	1700 J	1500 J	980 J	1500 J	1100 J	1300 J	690 J	1300 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	M233E5	M233E6	M233E7	M233E8	M233E9	M233F1	M233F2	M233F3	M233F4	M233F5	M233F6	M233F7	M233F8	M233F9X	M233G1	M233G2X	M233G3	D0322218	M233G4X	M233G5	M233G6	M233G7	M233G8
			Sample Date	07/24/2017	10/16/2017	01/26/2018	04/16/2018	07/19/2018	10/24/2018	01/07/2019	04/04/2019	07/03/2019	10/08/2019	01/07/2020	04/02/2020	07/07/2020	09/28/2020	10/12/2020	12/03/2020	01/05/2021	03/22/2021	03/22/2021	04/02/2021	07/09/2021	10/07/2021	12/07/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.26 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	5 U	1 UJ	5 U	0.5 U	3 U	3 U	0.3 U	3 UJ	2 UJ	3 U	3 U	0.24 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.37 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.43 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	20 U	4 UJ	20 U	2 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.26 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	10 U	2 UJ	10 U	1 U	3 U	3 U	0.3 U	3 UJ	2 UJ	3 U	3 U	0.37 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	20 U	4 UJ	20 U	2 U	3 U	3 U	0.3 U	3 UJ	2 UJ	3 U	3 U	0.38 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.5 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	10 U	2 UJ	10 U	1 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.43 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	5 U	1 UJ	5 U	0.5 U	3 U	3 U	0.3 J	3 UJ	2 UJ	3 U	3 U	0.43 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.35 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	10 U	2 UJ	10 U	1 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.34 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	10 U	2 UJ	10 U	1 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.33 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 J	30 U	6 UJ	30 U	3 U	5 J	5 J	4 J	3 UJ	2 UJ	3 U	3 U	1.9 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.5 UJ	1.2 J	13 J
2-Hexanone	ug/L	N	40	3 UJ	30 U	6 UJ	30 U	3 U	3 U	11 J	0.3 U	3 UJ	2 UJ	3 U	3 U	1.1 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.4 UJ	0.4 U	4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	30 U	6 UJ	30 U	3 U	5 U	5 U	1 J	5 UJ	3 UJ	5 U	5 U	1.3 U	5 U	5 U	5 U	2.5 U	0.5 U	0.88 J	2.5 U	0.5 UJ	0.5 U	5 U
Acetone	ug/L	N	6000	10 J	60 UJ	12 UJ	60 U	6 U	8 J	14 J	12 UJ	10 J	4 UJ	7 U	7 U	6	11 J	7 U	7 U	7.9 J	6.4 J	7.2 J	4.7 J	2.3 J	2.2 UJ	34 J
Benzene	ug/L	N	1	**48**	**360**	**330J**	**360**	**380**	**230**	**200**	**270**	**240J**	**300J**	**190**	**190**	**220**	**220**	**220**	**230**	**140**	**310J**	**310**	**260**	**310J**	**150**	**200**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.34 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Bromoform	ug/L	N	4	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 UJ	2 UJ	5 UJ	10 U	10 U	0.54 U	10 U	10 U	10 U	5 U	1 U	1 U	5 U	1 UJ	1 U	10 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	5 U	1 UJ	5 U	0.5 U	3 U	3 U	0.3 U	3 UJ	2 UJ	3 U	3 U	0.55 U	3 U	3 U	3 U	1.5 UJ	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	10 U	2 UJ	10 U	1 U	2 U	2 U	2 J	2 J	1 UJ	2 U	2 U	1.6	3.2 J	2 U	2.1 J	1 U	0.69 J	0.73 J	1 U	0.85 J	0.44 J	3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.21 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
Chlorobenzene	ug/L	N	50	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.38 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
Chloroethane	ug/L	N	NA	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	3 J	0.2 U	2 UJ	1 UJ	2 U	2 U	0.32 U	2 U	2 U	2 U	1 UJ	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Chloroform	ug/L	N	70	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.33 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	5 UJ	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.4 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.22 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.22 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Cyclohexane	ug/L	N	NA	5	43 J	71 J	70	59	48 J	50	70	42 UJ	35 J	37 J	29 J	21	27 J	10 U	11 J	12 J	49	49	12 J	35 J	18	20 J
Dibromochloromethane	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 UJ	2 UJ	1 UJ	2 U	2 U	0.28 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	5 U	1 UJ	5 UJ	0.5 U	2 UJ	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.31 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	2.8 J	-	-	4.1 J	-	-	-	3 J	-	3.2 J	-	2.4 J	2 J	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	1 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	5	22	21 J	19	22	8 J	8 J	8	9 J	15 J	17	11	12	24	9.2 J	7.5 J	4.2 J	34	33	15	43 J	23	15
Isopropylbenzene	ug/L	N	700	1 U	10 U	5 J	10 U	5	10 J	10 J	15	9 J	6 J	6 J	5 J	7.7	12 J	12 J	19 J	4.7 J	7.1	6.6	8 J	8.7 J	9.2	12 J
Methane	ug/L	N	NA	-	-	-	-	-	-	8200 J	-	-	8000	-	-	-	5900	-	8300	-	8800	8100	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	10 UJ	2 UJ	10 U	1 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	3 U	0.79 U	3 U	3 U	3 U	1.5 U	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.47 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Methylcyclohexane	ug/L	N	NA	6	56	71 J	77	68	47 J	48 J	70	36 J	32 J	29 J	25 J	22	35 J	5 U	8.6 J	8.6 J	60	59	11 J	28 J	16	11 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	5 U	1 UJ	5 U	0.5 U	3 U	3 U	0.3 U	3 UJ	2 UJ	5 UJ	3 U	0.32 U	3 U	3 U	3 U	1.5 J	0.3 U	0.3 U	1.5 U	0.3 UJ	0.3 U	3 U
Styrene	ug/L	N	100	1 U	10 U	2 UJ	10 U	1 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.42 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
Tetrachloroethene	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.25 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
Toluene	ug/L	N	600	3	13	14 J	15	17	18	15	22	20 J	19 J	14	13	14	13	6.6 J	6 J	3.4 J	25	24	10	32 J	4.4	4.6 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.24 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.49 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.31 U	2 U	2 U	2 U	1 U	0.2 U	0.2 U	1 U	0.3 UJ	0.3 U	3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.32 U	2 U	2 U	2 U	1 UJ	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	5 U	1 UJ	5 U	0.5 U	2 U	2 U	0.2 U	2 UJ	1 UJ	2 U	2 U	0.17 U	2 U	2 U	2 U	1 UJ	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	2 U
Xylene (total)	ug/L	N	1000	6	31	30 J	29	33	21 J	23 J	29	22 J	23 J	20 J	17 J	19	25 J	14 U	14 U	8 J	36	35	18 J	35 J	17	4 U
Total TIC VOCS	ug/L	N	NA	250 J	1100 J	1200 J	1300 J	1400 J	2200 J	840 J	1200 J	720 J	1200 J	690 J	530 J	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
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Chevron Perth Amboy Facility

			Location ID	MW-233	MW-234	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234RR	MW-234RR	MW-234RR	MW-234RR
			Field Sample ID	M233G9	M234B3X	M234RA1X	M234RA2X	M234RA3X	M234RA4X	M234RA5X	M234RA6	M234RA7	M234RA8X	M234RA9	M234RB1	M234RB2	M234RB3	M234RB4	M234RB6X	M234RB7	M234RB8X	M234RRC1	D1016171	M234RRC2	M234RRC3
			Sample Date	01/21/2022	03/21/2012	07/26/2013	07/03/2014	08/01/2014	08/29/2014	01/16/2015	09/18/2015	11/19/2015	12/15/2015	01/13/2016	04/14/2016	07/25/2016	12/06/2016	01/23/2017	03/22/2017	04/28/2017	05/17/2017	08/31/2017	10/16/2017	10/16/2017	01/26/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	4 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 J	0.5 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	4 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	3 J	3 J	3 J	3 UJ	3 U	3 U	3 U	3 U	4 J	3 U	3 J	3 UJ	3 U	3 U	-	3 U	-	3 U	3 U	3 U	6 U
2-Hexanone	ug/L	N	40	0.4 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	-	3 U	-	3 UJ	3 U	3 U	6 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	-	3 U	-	3 U	3 U	3 U	6 U
Acetone	ug/L	N	6000	0.81 J	6 U	7 J	6 J	6 UJ	6 U	6 U	7 J	6 U	7 J	6 U	6 U	6 U	6 J	6 U	-	6 U	-	6 J	6 UJ	6 UJ	12 U
Benzene	ug/L	N	1	**190**	**75**	**36**	**43**	**45J**	**57**	**47**	**28**	**53**	**54**	**50**	**64**	**89**	**140**	**140**	**110**	**110**	**120**	**98**	**66**	**58**	**43**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.41 J	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	2 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Chlorobenzene	ug/L	N	50	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Chloroethane	ug/L	N	NA	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Chloroform	ug/L	N	70	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Cyclohexane	ug/L	N	NA	20	70	28	53	52 J	53	44	10	32	35	35	28	24	40	33	-	30	-	28	40 J	32 J	33
Dibromochloromethane	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	0.5 UJ	-	0.5 U	0.5 U	0.5 U	1 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	11	170	50	30	26 J	22	24	5	11	13	12	12	12	14	13	-	16	-	6	5	4	4
Isopropylbenzene	ug/L	N	700	17	30	12	28	28 J	26	26	9	15	19	16	16	16	14	19	-	23	-	9	8 J	6 J	14
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	-	1 U	-	1 U	1 UJ	1 UJ	2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Methylcyclohexane	ug/L	N	NA	21	100	30	73	76 J	66	58	13	34	45	37	31	32	52	41	-	36	-	38	70	56	62
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	-	2 U	-	2 U	0.5 U	0.5 U	1 U
Styrene	ug/L	N	100	0.3 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	2 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Toluene	ug/L	N	600	4.5	31	20	49	46 J	56	55	20	42	61	38	80	110	72	74	-	75	-	25	10	8	6
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	1 U
Xylene (total)	ug/L	N	1000	10	500	200	370	390 J	330	320	84	160	170	130	150	120	120	110	-	110	-	50	34	29	17
Total TIC VOCS	ug/L	N	NA	-	-	1800 J	2900 J	2400 J	-	-	500 J	910 J	810 J	910 J	1000 J	800 J	770 J	820 J	-	1000 J	-	850 J	980 J	860 J	1200 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR
			Field Sample ID	M234RRC4	M234RRC5	M234RRC6	D0107191	M234RRC7	M234RRC8	M234RRC9	M234RRD1X	M234RRD2	M234RRD3	M234RRD4	M234RRD5X	M234RRD6	M234RRD7X	M234RRD8	M234RRD9X	M234RRE1	M234RRE2	M234RRE3	M234RRE4
			Sample Date	04/16/2018	07/19/2018	10/23/2018	01/07/2019	01/07/2019	04/04/2019	07/03/2019	10/01/2019	01/07/2020	04/02/2020	07/07/2020	09/25/2020	10/13/2020	12/03/2020	01/06/2021	03/25/2021	04/02/2021	07/09/2021	10/07/2021	12/03/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	**3J**	0.3 U	0.3 U	0.3 U	0.38 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	**0.27J**	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	7 J	2 J	2 J	7 J	5 J	0.3 U	0.3 U	1 J	1.9 U	9.9 J	0.3 U	0.3 U	0.3 U	0.3 U	0.86 J	2.1 J	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	1 J	1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	15 J	3 J	3 J	16 UJ	9 J	0.7 U	1 UJ	2 J	4.4 U	15 J	0.7 U	0.7 U	0.7 U	1.5 J	3.1 J	2.8 J	0.7 U	0.7 U
Benzene	ug/L	N	1	**33**	**36**	**16**	**16**	**16**	**35**	**19**	**9**	**6**	**12**	**2.8**	**14J**	**2.7**	**2**	**1.3**	**9.2**	**3.7**	0.85 J	0.77 J	0.47 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	0.54 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3	0.33 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1.5 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	27	27	33	29	30	28	19	25	16	34	15	41 J	22 J	25	13	40	7.5	16	14	14
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	1 U	1 U	-	-	1.8 J	-	-	-	1.6 J	-	1.4 J	-	2.2 J	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3	2	1	0.7 J	0.7 J	2	0.8 J	1 J	0.5 J	1 J	0.34 J	1.2 J	0.44 J	0.5 J	0.4 U	0.93 J	0.46 J	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	12	19	14	8	8	14	14	13	8	12	13	20 J	9.2	14	5.3	18	5.3	9.9	8.5	3.7 J
Methane	ug/L	N	NA	-	-	-	8700	9100	-	-	7900 J	-	-	-	11000	-	8800	-	13000	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	36	33	31	28	29	42	26	23	15	26	22	54 J	24 J	37	6.7	44	5.2	14	15	9.4
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.7 UJ	0.9 UJ	0.3 U	0.32 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Toluene	ug/L	N	600	6	5	4	2	2	6	3	3	1	3	2.3	3.2 J	1.7	1.7	0.86 J	2.6	1.2	1.2	1.1	0.41 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	14	16	14	9	10	11	9	8	4 J	7	5.6	9.7 J	4 J	5.6 J	1.7 J	6.7	1.9 J	2.5	3.4	0.4 U
Total TIC VOCS	ug/L	N	NA	850 J	960 J	710 J	620 J	630 J	870 J	690 J	690 J	420 J	600 J	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-234RR	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-238	MW-238	MW-238	MW-238	MW-238	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239
			Field Sample ID	M234RRE5	M237B3X	M237B4X	M237B5X	M237B6X	M237B7X	M237B8X	M237B9X	M237C1X	D0624201	M237C2X	M237C3	M238B1X	M238B2X	M238B3X	M238B4X	M238B5X	M239B3X	M239B4X	M239B5X	M239B6X	M239B7X	M239B8X
			Sample Date	01/18/2022	02/14/2012	03/05/2013	06/03/2014	09/30/2015	02/16/2016	03/24/2017	03/30/2018	03/22/2019	06/24/2020	06/24/2020	06/25/2021	03/07/2012	04/25/2013	05/29/2014	02/18/2016	02/07/2017	02/28/2012	03/21/2013	09/10/2014	12/10/2015	06/09/2016	07/28/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.3 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 UJ	2 U	10 U	20 UJ	0.2 U	-	-	-	-	-	2 U	-	-	-	-	-	2 UJ	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.3 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	2 U	2 U	2 U	2 UJ	2 U	10 U	20 UJ	0.3 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	2 U	-	-	-	-	-	2 UJ	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.3 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	3 U	3 U	3 U	3 UJ	3 U	15 U	30 UJ	0.3 U	1.5 UJ	1.5 UJ	0.5 UJ	-	-	3 U	-	-	-	-	-	3 UJ	-	3 U
2-Hexanone	ug/L	N	40	0.4 U	3 U	3 U	3 U	3 UJ	3 U	15 U	30 UJ	0.3 U	1.5 UJ	1.5 UJ	0.4 UJ	-	-	3 U	-	-	-	-	-	3 UJ	-	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 UJ	3 U	15 U	30 UJ	0.5 U	2.5 UJ	2.5 UJ	0.5 UJ	-	-	3 U	-	-	-	-	-	3 UJ	-	3 U
Acetone	ug/L	N	6000	0.7 U	6 U	6 U	6 U	6 UJ	6 U	30 U	60 UJ	0.7 U	3.5 UJ	3.5 UJ	0.7 UJ	-	-	6 U	-	-	-	-	-	6 UJ	-	6 U
Benzene	ug/L	N	1	1	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 UJ	5 UJ	0.2 U	5 UJ	5 UJ	1 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.3 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	1 U	1 UJ	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Chloroform	ug/L	N	70	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Cyclohexane	ug/L	N	NA	18	2 U	2 U	2 U	2 UJ	2 U	10 U	20 UJ	0.2 U	5 UJ	5 UJ	1 UJ	-	-	2 U	-	-	-	-	-	2 UJ	-	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.4 U	2 UJ	2 UJ	0.4 UJ	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	7.2	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Methylcyclohexane	ug/L	N	NA	12	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	2.5 UJ	2.5 UJ	0.5 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	2 U	2 U	2 U	2 UJ	2 U	10 U	5 UJ	0.3 U	1.5 UJ	1.5 UJ	0.3 UJ	-	-	2 U	-	-	-	-	-	2 UJ	-	2 U
Styrene	ug/L	N	100	0.3 U	1 U	1 U	1 U	1 UJ	1 U	5 U	10 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	1 U	-	-	-	-	-	1 UJ	-	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Toluene	ug/L	N	600	0.68 J	0.7 U	0.7 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.3 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	0.2 U	1 UJ	1 UJ	0.2 UJ	-	-	0.5 U	-	-	-	-	-	0.5 UJ	-	0.5 U
Xylene (total)	ug/L	N	1000	3.1	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	3 U	5 UJ	1 U	7 UJ	7 UJ	0.4 UJ	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	0 U	-	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240
			Field Sample ID	M239B9X	M239C1X	D0607181	M239C2X	M239C3X	M239C4X	M239C5X	M239C6X	M239C7	M239C8	M240A9X	M240B1X	M240B2X	M240B3X	M240B4X	M240B5X	M240B6X	M240B7X	M240B8X	M240B9X	M240C1X	M240C2X	M240C3X
			Sample Date	05/11/2017	06/06/2018	06/07/2018	07/06/2018	10/22/2018	01/14/2019	06/12/2019	08/25/2020	06/07/2021	09/29/2021	03/15/2012	02/26/2013	04/30/2013	06/19/2013	03/13/2014	06/30/2014	07/30/2014	09/11/2014	01/19/2015	12/14/2015	12/29/2015	12/06/2016	11/29/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	0.5 U	0.3 U	0.3 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 UJ	2 U	2 U	2 U	2 UJ	-	2 U	2 U	-	2 U	2 UJ
1,1-Dichloroethane	ug/L	N	50	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	1 U	0.3 U	0.3 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 UJ	1 U	-	1 U	1 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	2 U	0.3 U	0.3 U	-	-	0.3 U	-	-	-	2 U	2 U	2 U	2 U	2 UJ	-	2 U	2 U	-	2 U	2 UJ
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	1 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
1,2-Dichloroethane	ug/L	N	2	-	-	-	0.5 U	0.3 U	0.3 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,2-Dichloropropane	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	1 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	1 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	3 U	0.3 U	0.3 U	-	-	0.5 U	-	-	-	3 U	3 U	3 U	3 U	3 UJ	-	3 U	3 U	-	3 U	3 UJ
2-Hexanone	ug/L	N	40	-	-	-	3 U	0.3 U	0.3 U	-	-	0.4 U	-	-	-	3 U	3 U	3 U	3 U	3 UJ	-	3 U	3 U	-	3 U	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	3 U	0.5 U	0.5 U	-	-	0.5 U	-	-	-	3 U	3 U	3 U	3 U	3 UJ	-	3 U	3 U	-	3 U	3 UJ
Acetone	ug/L	N	6000	-	-	-	6 U	2 J	0.7 U	-	-	0.7 U	-	-	-	6 U	6 U	6 U	6 U	6 UJ	-	6 U	6 U	-	6 U	6 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Bromoform	ug/L	N	4	-	-	-	0.5 U	0.2 U	0.2 U	-	-	1 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	0.5 U	0.3 U	0.3 U	-	-	0.3 U	-	-	-	1 U	1 UJ	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	1 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
Carbon Tetrachloride	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Chlorobenzene	ug/L	N	50	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Chloroethane	ug/L	N	NA	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 UJ	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Chloroform	ug/L	N	70	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Cyclohexane	ug/L	N	NA	-	-	-	2 U	0.2 U	0.2 U	-	-	1 U	-	-	-	2 U	2 U	2 U	2 U	2 UJ	-	2 U	2 U	-	2 U	2 UJ
Dibromochloromethane	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	2 U	2 U	2 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 UJ	0.5 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Isopropylbenzene	ug/L	N	700	-	-	-	1 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
Methane	ug/L	N	NA	-	-	-	22	12	3.3 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	1 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
Methyl-t-butyl ether	ug/L	N	70	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Methylcyclohexane	ug/L	N	NA	-	-	-	1 U	0.2 U	0.2 U	-	-	0.5 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	0.5 U	0.3 U	0.3 U	-	-	0.3 U	-	-	-	2 U	2 U	2 U	2 U	2 UJ	-	2 U	2 U	-	2 U	0.5 UJ
Styrene	ug/L	N	100	-	-	-	1 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	1 U	1 UJ	-	1 U	1 U	-	1 U	1 UJ
Tetrachloroethene	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.3 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	2 U	2 U	2 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 UJ	0.5 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	0.5 U	0.2 U	0.2 U	-	-	0.2 U	-	-	-	1 U	1 U	1 U	0.5 U	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Total TIC VOCS	ug/L	N	NA	-	-	-	0 U	0 U	0 U	-	-	0 U	-	-	-	0	0 U	0 U	0 U	0 UJ	-	-	0 U	-	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
6. U - Not detected

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Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241
			Field Sample ID	M240C4X	M240C5X	M240C6X	D1204208	M240C7X	M240C8X	M241B3X	M241B4X	M241B5X	M241B6X	M241B7X	M241B8X	M241B9X	M241C1X	M241C2X	M241C3X	M241C4X	M241C5X	M241C6X	M241C7X	M241C8X	M241C9X	M241D2X
			Sample Date	01/08/2019	10/10/2019	09/23/2020	12/04/2020	12/04/2020	03/24/2021	03/27/2012	08/09/2012	04/04/2013	09/26/2013	06/19/2014	11/12/2014	06/30/2015	02/18/2016	08/16/2016	02/15/2017	08/22/2017	03/01/2018	08/09/2018	03/08/2019	08/22/2019	02/07/2020	08/28/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.2U	0.4 U	0.2 U	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	-	-	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5U	1 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	0.7U	1 U	2 J	0.7 U	4.6 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	1 U	1 U	1 U	1 U	6	5	5	3 J	6	6	3 J	2 J	3 J	4 J	3 J	4 J	5	4 J	5 J	1 J	3 J
Dibromochloromethane	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.4 UJ	0.2 U	0.2 U	0.2 UJ
Ethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4U	0.8 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	3 U	3 U	3.3 J	4.8 J	4.9 J	21 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	0.2 U	0.2 U	0.2 U	0.2 U	9	8	5 J	5	4	7	5	4	5	4	4	4	3	3	3 J	0.7 J	2.1
Methylcyclohexane	ug/L	N	NA	-	-	0.5 U	0.5 U	0.5 U	0.5 U	1 J	1 J	1 J	1 J	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U	2J	1 J	1 J	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	0.39 J	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1U	2 U	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-241	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-244
			Field Sample ID	M241D3X	M242B1X	M242B2X	M242B3X	M242B4X	M242B5X	M242B7X	M242B8X	M242C1X	M242C2X	M243RB6X	M243RB5X	M243RC2X	M243RC6X	D0206201X	M243RC7X	M243RC8X	M243RD1X	M243RD2	M243RD3	M243RD4	M243RD5	M244B2X
			Sample Date	01/29/2021	03/14/2012	09/26/2013	08/29/2014	09/23/2016	02/16/2017	01/10/2019	03/19/2019	10/08/2019	06/25/2020	08/23/2016	01/26/2017	02/02/2018	01/30/2019	02/06/2020	02/06/2020	11/18/2020	02/24/2021	05/10/2021	08/05/2021	11/09/2021	02/14/2022	02/29/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 UJ	0.3 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	20 U	2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	-	-	-	-	-	-	-	-	20 U	2 U	2 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	-	-	-	-	-	-	-	-	-	30 U	7 J	14 J	3 U	2 J	3 J	1.5 UJ	3 UJ	0.3 U	0.5 U	0.5 U	0.5 U	-
2-Hexanone	ug/L	N	40	0.3 U	-	-	-	-	-	-	-	-	-	30 U	3 U	3 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.4 U	0.4 U	0.4 U	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	-	-	-	-	-	-	-	-	30 U	3 U	3 U	5 U	0.5 U	0.5 U	2.5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	0.93 J	-	-	-	-	-	-	-	-	-	98 J	42	370 J	7 U	10 J	10 J	3.5 UJ	23 J	0.94 J	2.7 UJ	1.6 J	260	-
Benzene	ug/L	N	1	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	**200**	**36**	**8**	**45**	**4**	**4**	**86J**	**61J**	**10**	**7**	**6**	**9.1**	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	1 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	1 U	1 U	5 UJ	10 UJ	1 U	1 U	1 U	1 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 UJ	0.3 U	-
Carbon Tetrachloride	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 UJ	0.2 UJ	1 UJ	2 U	0.2 U	0.3 U	0.3 U	0.3 U	-
Chlorobenzene	ug/L	N	50	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
Chloroethane	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	3.1 J	-	-	-	-	-	-	-	-	-	22 J	41	36	6 J	38	41	6.7 J	10 UJ	35	15	16	15	-
Dibromochloromethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	1 U	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	18	12	4	5 J	0.4 U	0.4 U	2 UJ	4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	-	-	-	-	-	-	-	-	-	10 U	4 J	4 J	2 U	3 J	3 J	3.8 J	2 UJ	3.3 J	1.3 J	1.1 J	0.75 J	-
Methane	ug/L	N	NA	-	-	-	-	-	-	170	-	68	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	2 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
Methyl-t-butyl ether	ug/L	N	70	2.5	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	0.66 J	-	-	-	-	-	-	-	-	-	19 J	41 J	26	6 J	36	38	5.3 J	7.7 J	33	11	11	13	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.35 J	-	-	-	-	-	-	-	-	-	20 U	2 U	0.5 U	3 U	0.3 U	0.3 U	1.5 UJ	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	0.2 U	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
Tetrachloroethene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
Toluene	ug/L	N	600	0.2 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	11	2	1	2 J	1	1	8.3 J	2 UJ	1.8	1.5	2.3	0.92 J	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.3 U	0.3 U	0.3 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	2 U	0.2 U	0.2 U	1 UJ	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	87	4	2	10 U	3 J	4 J	20 J	14 UJ	1.8 J	1.3	4.6	0.77 J	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	0 U	0 U	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258R
			Field Sample ID	M244B3X	M244B4X	M244B5X	M244B6X	M244B7X	M244B8X	M244B9X	M244C1X	M244C3X	M244C4	M244C5	M244C6	M258B3X	M258B4X	M258B5X	M258B6	M258B7X	M258B8X	M258B9X	M258C1X	M258C2X	M258C3X	M258RC5X
			Sample Date	03/11/2013	09/10/2014	06/10/2016	05/08/2017	05/31/2018	05/23/2019	05/11/2020	11/19/2020	02/24/2021	05/10/2021	08/06/2021	11/09/2021	04/26/2012	08/16/2012	04/19/2013	08/19/2013	09/24/2013	03/27/2014	09/12/2014	12/05/2014	01/14/2015	03/03/2016	05/16/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	8 J	14	3 U	9 J	3 U	3 U	5 J	3U	5 J	3 U
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3U	3 U	3 U
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	1.2 UJ	0.7 U	0.7 U	1.2 UJ	0.7 U	8 J	26	40	6 J	27	35	6 U	18 J	6U	6 U	7 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 J	0.3 U	**350**	**280**	**380**	**300**	**290**	**450**	**270**	**370**	**300**	**410**	**74**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	300	230	300	300	270	380	250	290	410	270	140
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	15	11	20	6	11	76	17	240	62	350	10
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	70	47	77	57	66	66	61	77	91	83	45
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16000	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 J	0.5 U	0.7 J	0.6 J	0.6 J	0.5 U	0.6 J	0.5 U	0.5U	0.5 U	0.5 J
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	150	130	200	100	150	240	130	280	370	210	27
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	**9**	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	0.5 U
Styrene	ug/L	N	100	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	33	31	38	22	28	86	30	91	130	210	11
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	220	230	200	160	210	500	260	820	**2200**	**1400**	92
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	-	-	-	1100 J	-	-	1400 J	3700 J	-	-	510 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259
			Field Sample ID	M258RC6	M258RC7X	D0219191	M258RC8X	M258RC9X	D0708198	M258RD1X	D0814191	M258RD2X	D0218201X	M258RD3X	M258RD4X	M258RD5X	M258RD6	M258RD7	M258RD8	M258RD9	M259B3X	M259B4X	M259B5X	M259B6	M259B7X	M259B8X
			Sample Date	08/16/2018	11/30/2018	02/19/2019	02/19/2019	05/20/2019	07/08/2019	07/08/2019	08/14/2019	08/14/2019	02/18/2020	02/18/2020	10/15/2020	01/12/2021	04/08/2021	07/15/2021	10/15/2021	01/28/2022	04/26/2012	08/09/2012	04/19/2013	08/19/2013	09/24/2013	03/27/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	1 U	1 U	3 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	2 U	2 U	5 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 J	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	5 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	80	3 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 J	0.3 U	1 J	1 J	4 J	0.3 U	0.9 J	0.3 U	0.3 U	0.7 J	0.6 J	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	8 J	10 J	8 J	6 J	7 J	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	8 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	8 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	8 J	2 J	4 J	3 J	13 J	1 J	3 J	3 J	2 J	5 J	4 J	1.8 J	0.7 U	0.7 U	3.3 J	0.7 U	0.7 U	14 J	14 J	15 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**29**	**63**	**45**	**46**	**9**	**3J**	**10J**	**22**	**24**	**6**	**6**	**10**	**1.6**	**10**	0.3 U	0.3 U	**2.3**	**160**	**180**	**210**	**260**	**160**	**160**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 J	0.7 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	130	190	56	58	9	3 J	12 J	30	34	3 J	2 J	1 U	1.4 J	2.2 J	1 U	1 U	1 U	350	350	500	420	410	560
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	5 U	2 U	2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3	1	2	2	0.4 U	0.4 U	0.5 J	2	2	1	1	0.79 J	0.4 U	5.1	0.4 U	0.4 U	0.97 J	82	90	110	68	83	88
Isopropylbenzene	ug/L	N	700	33	55	17	17	7	9 J	24 J	11	11	1 J	1 J	4.4 J	3.5 J	1.9 J	0.2 U	0.2 U	0.41 J	32	38	37	29	39	45
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7500	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 J	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	23	34	13	14	0.6 J	0.4 J	1 J	8	9	0.8 J	0.7 J	0.5 U	0.5 U	0.88 J	0.5 U	0.5 U	0.5 U	520	560	720	370	620	590
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	5 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	8	7	4	4	0.9 J	0.7 J	2 J	2	2	0.7 J	0.7 J	0.43 J	0.24 J	2.3	0.2 U	0.2 U	0.45 J	86	97	100	80	88	120
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	2 U	0.8 U	0.8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	5 U	2 U	2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	3 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	57	51	17	18	3 J	4 J	12 J	22	23	5 J	5 J	3.1 J	1.4 U	5 J	0.4 U	0.4 U	0.4 U	**2000**	**2000**	**2800**	**1700**	**2000**	**2500**
Total TIC VOCS	ug/L	N	NA	510 J	850 J	200 J	200 J	64 J	62 J	91 J	-	-	-	-	-	0 U	-	-	0 U	0 U	-	-	-	2800 J	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260R	MW-260R	MW-260R
			Field Sample ID	M259B9X	M259C1X	M259C2X	M259C3X	M259C4X	M259C5X	M259C6X	M259C7X	M059A2X	M260A9X	D0821121	M260B1X	M260B2X	M260B4X	M260B5X	M260B6X	M260B7X	M260B8X	D0908161	M260B9X	M260RC1X	M260RC2X	D0521191
			Sample Date	08/18/2014	12/05/2014	01/14/2015	09/15/2015	03/03/2016	12/20/2016	02/08/2017	08/22/2017	03/29/2021	03/07/2012	08/21/2012	08/21/2012	03/26/2013	09/27/2013	05/28/2014	07/02/2015	03/08/2016	09/08/2016	09/08/2016	02/07/2017	11/26/2018	02/05/2019	05/21/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
1,1,1-Trichloroethane	ug/L	N	30	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.3 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	6 U	6 UJ	3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
1,1,2-Trichloroethane	ug/L	N	3	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	**11**	0.2 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	5 U	4 U	2U	2 U	2 U	4 U	4 U	2 U	-	100 U	20 U	20 U	100 U	20 U	20 U	20 U	40 U	20 U	20 U	400 U	4 U	4 UJ	2 UJ
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	0.5U	1 J	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.3 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 U	10 U	200 U	6 U	6 UJ	3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	5 U	4 U	2U	2 U	2 U	4 U	4 U	2 U	0.3 U	100 U	20 U	20 U	100 U	20 U	20 U	20 U	40 U	20 U	20 U	400 U	6 U	6 UJ	3 UJ
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.2 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 U	10 U	200 U	4 U	4 UJ	2 UJ
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.3 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	6 U	6 UJ	3 UJ
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.7J	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.2 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 U	10 U	200 U	4 U	4 UJ	2 UJ
1,4-Dichlorobenzene	ug/L	N	75	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.2 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 U	10 U	200 U	4 U	4 UJ	2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	8 U	10 J	3U	8 J	11	6 J	13 J	3 U	1.4 J	150 U	30 U	57 J	150 U	39 J	46 J	37 J	60 U	36 J	34 J	600 U	6 U	6 UJ	3 UJ
2-Hexanone	ug/L	N	40	8 U	6 U	3U	3 UJ	3 U	6 UJ	6 U	11 J	0.3 U	150 U	30 U	30 U	150 U	30 U	30 U	30 U	60 U	30 U	30 U	600 U	6 U	6 UJ	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	8 U	6 U	3U	3 U	3 U	6 U	6 U	3 U	0.5 U	150 U	30 U	30 U	150 U	30 U	30 U	30 U	60 U	30 U	30 U	600 U	10 U	10 UJ	5 UJ
Acetone	ug/L	N	6000	15 U	12 U	6U	12 J	20	15 J	20 J	12 J	6.8 J	300 U	120 J	210	300 U	130 J	60 U	160 J	180 J	150 J	140 J	1200 U	17 J	14 UJ	7 UJ
Benzene	ug/L	N	1	**170**	**210**	**380**	**260**	**230**	**370**	**290**	**270**	**41**	**19000**	**13000**	**14000**	**22000**	**14000**	**15000**	**15000**	**15000**	**13000**	**14000**	**14000**	**7200**	**6500J**	**10000J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Bromoform	ug/L	N	4	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	1 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.3 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 UJ	5 UJ	100 UJ	6 U	6 UJ	3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.2 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 UJ	10 UJ	200 U	4 U	4 UJ	2 UJ
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Chlorobenzene	ug/L	N	50	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Chloroethane	ug/L	N	NA	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Chloroform	ug/L	N	70	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.32 J	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Cyclohexane	ug/L	N	NA	430	430	280	280	350	360	320	410	48	**120J**	**190**	**240**	**300**	**190**	**300**	**180**	**390**	**190**	**190**	**420J**	53 J	8 J	28 UJ
Dibromochloromethane	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	1 U	0.5U	0.5 U	0.5 U	1 UJ	1 U	0.5 U	0.2 U	100 U	20 U	20 U	100 U	20 U	5 U	5 U	10 U	5 U	5 U	100 U	4 UJ	4 UJ	2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	54	54	72	54	100	71	93	130	66	**800**	660	**750**	**770**	660	**950**	700	**1100**	**850**	**850**	**1200**	39	12 J	59 J
Isopropylbenzene	ug/L	N	700	31	29	36	30	41	37	44	47	18	50 U	23 J	29 J	50 U	26 J	36 J	26 J	41 J	31 J	30 J	200 U	4 U	4 UJ	5 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.3 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 U	10 U	200 U	4 U	4 UJ	2 UJ
Methyl-t-butyl ether	ug/L	N	70	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	25 U	9 J	9 J	25 U	7 J	9 J	9 J	10 U	8 J	8 J	100 U	4 U	4 UJ	3 J
Methylcyclohexane	ug/L	N	NA	600	480	250	270	280	220	140	250	49	50 U	80	100	**160J**	87	**130**	99	**160**	100	98	200 U	43 J	4 UJ	11 J
Methylene chloride (Dichloromethane)	ug/L	N	3	5 U	4 U	2U	2 U	2 U	4 U	4 U	2 U	0.3 U	100 U	20 U	20 U	100 U	20 U	20 U	20 U	40 U	20 U	20 U	400 U	6 U	6 UJ	3 UJ
Styrene	ug/L	N	100	3 U	2 U	1U	1 U	1 U	2 U	2 U	1 U	0.2 U	50 U	10 U	10 U	50 U	10 U	10 U	10 U	20 U	10 U	10 U	200 U	4 U	4 UJ	2 UJ
Tetrachloroethene	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Toluene	ug/L	N	600	80	100	110	68	170	120	130	150	9.4	**6600**	**6500**	**6900**	**5600**	**5700**	**7700**	**5600**	**8000**	**6900**	**7000**	**8500**	26	13 J	59 J
trans-1,2-Dichloroethene	ug/L	N	100	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	40 U	8 U	8 U	40 U	8 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.2 U	100 U	20 U	20 U	100 U	20 U	5 U	5 U	10 U	5 U	5 U	100 UJ	4 U	4 UJ	2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	0.5U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.2 U	50 U	10 U	10 U	50 U	10 U	5 U	5 U	10 U	5 U	5 U	100 U	4 U	4 UJ	2 UJ
Xylene (total)	ug/L	N	1000	**1900**	**2100**	**1500**	**1200**	**1800**	**1400**	**1400**	**2100**	47	**5500**	**4300**	**5100**	**5000**	**4500**	**6300**	**4700**	**7200**	**5600**	**5500**	**7300**	78 J	20 UJ	120 J
Total TIC VOCS	ug/L	N	NA	5300 J	3700 J	-	3700 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	200 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R
			Field Sample ID	M260RC3X	M260RC4X	D1104191	M260RC5X	D0228201X	M260RC6X	M260RC7X	M260RC9X	M260RRC8X	D0331218	M260RRD1X	M260RRD2	M260RRD3	M260RRD4	M261RC4X	M261RA5X	M261RA6X	M261RA7X	M261RA8X	M261RA9X	M261RB1X	D0827208	M261RB2X
			Sample Date	05/21/2019	08/23/2019	11/04/2019	11/04/2019	02/28/2020	02/28/2020	05/19/2020	12/29/2020	01/06/2021	03/31/2021	03/31/2021	07/12/2021	10/07/2021	01/21/2022	11/27/2018	02/05/2019	05/01/2019	07/29/2019	11/06/2019	02/19/2020	05/19/2020	08/27/2020	08/27/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	3 UJ	8 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	7.5 U	7.5 U	6 U	3 UJ	15 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	-	-	-	-	-	-	-	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	3 UJ	8 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	7.5 U	7.5 U	6 U	3 UJ	15 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	3 UJ	8 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	7.5 U	7.5 U	6 U	3 UJ	15 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3 UJ	8 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	**150**	7.5 U	6 U	3 UJ	15 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	8 UJ	3 U	3 J	6 U	6 U	3 UJ	62 J	100 J	140 J	130 J	230	240 J	180 J	0.3 U	0.3 U	0.3 U	3 U	0.3 U	2 J	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 UJ	8 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	7.5 UJ	7.5 UJ	8 U	11 J	20 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	2 J	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	5 UJ	13 UJ	5 U	5 U	10 U	10 U	5 UJ	50 U	50 U	13 UJ	13 UJ	10 U	6.2 J	25 UJ	0.5 U	0.5 U	0.7 J	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	7 UJ	18 UJ	7 J	9 J	14 U	14 U	7 UJ	590 J	1100 J	980	960	2300	2500 J	1800 J	2 J	0.7 U	2 J	7 U	4 J	7 J	0.7 U	1.2 J	1.2 J
Benzene	ug/L	N	1	**10000J**	**12000J**	**7800**	**7800**	**3800**	**4200**	**2800J**	**7900**	**7900**	**6700**	**7400**	**5200**	**5000J**	**6400J**	**7**	**6**	**8**	**11**	**7**	**10**	**7**	**7.1**	**7.2**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	2 UJ	25 UJ	10 U	10 U	20 U	20 U	10 UJ	100 U	100 U	25 U	25 U	20 U	10 UJ	50 UJ	0.2 U	0.2 U	0.2 U	5 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 UJ	8 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	7.5 U	7.5 U	6 U	3 UJ	15 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	29 J	20 U	13 J	9.8 J	6 U	5.6 J	15 UJ	0.2 U	0.2 U	1 J	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	34 UJ	25 UJ	31 J	40 J	47 J	42 J	16 J	100 U	100 U	87 J	25 U	23 J	26 J	62 J	60	60	38	34 J	42	48	20	17	18
Dibromochloromethane	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	59 J	25 J	61	60	36	41	23 J	40 U	40 U	27	27	16 J	14 J	22 J	2	2	2	4 U	0.7 J	0.5 J	0.6 J	0.54 J	0.55 J
Isopropylbenzene	ug/L	N	700	5 J	5 UJ	7 J	6 J	4 J	6 J	2 J	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	36	45	22	21 J	35	39	18	14 J	18 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 UJ	5 UJ	2 U	2 U	6 U	6 U	3 UJ	30 U	30 U	7.5 U	7.5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	3 J	5 UJ	3 J	3 J	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.5 J	0.5 J	0.2 U	2 U	3	0.9 J	3	2.9	2.8
Methylcyclohexane	ug/L	N	NA	14 J	13 UJ	15 J	23 J	22 J	20 J	5 J	50 U	50 U	71 J	79 J	21 J	21 J	59 J	44	39	23	14 J	23	30	12	10	11
Methylene chloride (Dichloromethane)	ug/L	N	3	3 UJ	9 UJ	3 U	3 U	6 U	6 U	3 UJ	30 U	30 U	7.5 U	7.5 U	6 U	3 UJ	15 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	60 J	41 J	120	110	73	82	50 J	150	150	110	120	49	25 J	23 J	3	3	2	3 J	2	1	0.9 J	1	1.1
trans-1,2-Dichloroethene	ug/L	N	100	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	6 U	3 UJ	15 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	2 UJ	5 UJ	2 U	2 U	4 U	4 U	2 UJ	20 U	20 U	5 U	5 U	4 U	2 UJ	10 UJ	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	120 J	93 J	240	240	160	170	100 J	190 J	220 J	240	260	160	130 J	190 J	11	10	5	10 U	7	7	5 J	4.4 J	4.3 J
Total TIC VOCS	ug/L	N	NA	200 J	0 U	460 J	400 J	100 J	120 J	53 J	-	0 U	-	-	-	-	-	760 J	820 J	470 J	310 J	560 J	670 J	380 J	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262
			Field Sample ID	D0107218	M261RB3X	M261RB4X	M261RB5	M261RB6	M261RB7	M262B2X	M262B3X	M262B4X	M262B5X	M262B6X	M262B7X	M262B8X	M262B9X	M262C1X	M262C2X	M262C3X	M262C4X	M262C5X	M262C6X	M262C7X	M262C9X	M262D1
			Sample Date	01/07/2021	01/07/2021	03/31/2021	07/12/2021	10/07/2021	01/21/2022	03/21/2012	05/06/2013	06/20/2013	10/01/2013	07/02/2014	07/31/2014	08/29/2014	01/16/2015	12/15/2015	12/06/2016	11/28/2017	01/08/2019	10/11/2019	09/28/2020	12/02/2020	03/18/2021	06/08/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	2 U	2 U	-	2 U	2 U	-	2 U	2 UJ	2 U	2 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	1 U	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	2 U	2 U	-	2 U	2 U	-	2 U	2 UJ	2 U	2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	1 U	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	1 U	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	1 U	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 UJ	0.5 U	2.5 UJ	0.5 U	-	3 J	3 U	-	3 J	3 U	-	3 U	3 UJ	3 U	3 U	-	-	0.3 U	0.3 U	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 UJ	0.4 U	2 UJ	0.4 U	-	3 U	3 U	-	3 U	3 U	-	3 U	3 UJ	3 U	3 UJ	-	-	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	2.5 UJ	4.8 J	-	3 U	3 U	-	3 U	3 U	-	3 U	3 UJ	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	2.4 J	1.2 J	3.5 U	0.7 U	-	7 J	6 U	-	13 J	6 U	-	6 U	6 UJ	6 U	6 U	-	-	0.92 UJ	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	**9.6**	**13**	**8.3**	**8.1**	**8.7**	**13**	**11**	**9**	**20**	**37**	**14**	**14**	**47**	**5**	**17**	**46**	**22**	**36**	**5**	**1.5**	0.2 U	**2.5**	0.3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	5 U	1 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	1 U	1 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 J	0.43 J	0.2 U	0.3 U	1.5 U	0.36 J	-	1 U	1 U	-	2 J	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 UJ	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	36	9.1	46	9.1	5 J	12	-	14 U	3 J	-	8	4 J	-	3 J	4 J	2 U	2 U	-	-	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	2 U	2 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U	1 U	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.62 J	0.4 U	0.4 U	0.4 U	2 U	0.78 J	0.8 U	0.9 J	2 J	4 J	2	3	5	0.9 J	0.6 J	0.5 U	0.7 J	0.4 U	0.9 J	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	30	7.6	36	26	14 J	28	-	6	2 J	-	2 J	1 J	-	1 J	1 J	2 J	2 J	-	-	0.35 J	0.61 J	2 J	0.52 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2500	990	1800	170	2300	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	1 U	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	1.6	3.2	0.67 J	0.98 J	1.3 J	1.2	-	0.5 U	0.5 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	20	4.8 J	24	2.9 J	2.5 U	2.4 J	-	5	3 J	-	6	4 J	-	1 J	2 J	1 J	2 J	-	-	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	-	2 U	2 U	-	2 U	2 U	-	2 U	2 UJ	2 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	1 U	1 U	-	1 U	1 UJ	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	1	0.36 J	1.3	1.3	1 J	1.6	3 J	1 J	2 J	7	4	3	7	0.5 U	0.5 UJ	0.7 J	0.6 J	0.5 J	0.6 J	0.2 U	0.2 U	0.26 J	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	0.8 U	0.8 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	0.3 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	2 U	2 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 UJ	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	-	1 U	1 U	-	0.5 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	6.6	2.1 J	5.7 J	3.6	2 U	2.6	5 J	3 J	3 J	13	7	6	11	2	0.9 J	0.9 J	2	1 U	3 J	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	170 J	120 J	-	250 J	120 J	-	-	40 J	82 J	69 J	-	-	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-262	MW-262	MW-262	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-264	MW-264	MW-264
			Field Sample ID	M262D2	M262D3	M262D4	M263B2X	M263B3X	M263B4X	M263B5X	M263B6X	M263B7X	M263B8X	M263B9X	M263C1X	M263C2X	M263C3X	M263C4X	M263C5X	M263C6X	M263C7	M263C8	M263C9	M264B2X	M264B3X	M264B4X
			Sample Date	09/03/2021	12/08/2021	03/16/2022	03/09/2012	04/09/2013	05/29/2014	06/08/2016	05/08/2017	10/18/2018	01/18/2019	04/08/2019	07/11/2019	10/01/2019	01/14/2020	03/25/2020	12/15/2020	03/17/2021	06/03/2021	08/30/2021	12/10/2021	02/29/2012	03/21/2013	09/10/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.3 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	-	2 U	2 U	0.2 UJ	4 UJ	0.2 UJ	2 UJ	0.2 UJ	1 UJ	2 U	-	-	-	-	-	20 U	2 U	20 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.3 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	2 U	2 U	-	2 U	2 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.3 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	20 U	2 U	20 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	-	1 U	1 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	10 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	0.5 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.3 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	10 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	5 J	9 J	-	5 J	6 J	0.3 UJ	6 UJ	0.3 U	3 UJ	0.9 J	2 UJ	3 U	0.3 UJ	0.3 U	0.5 U	0.50 U	0.5 UJ	30 U	30	30 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	3 U	3 U	-	3 UJ	3 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.3 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.4 U	0.40 U	0.4 UJ	30 U	3 U	30 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	-	3 UJ	3 U	0.5 UJ	10 UJ	0.5 U	5 UJ	0.5 UJ	3 UJ	5 U	0.5 UJ	0.5 U	0.5 U	0.50 U	0.5 UJ	30 U	3 U	30 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	26	30	-	25	27	3 J	14 UJ	0.7 U	7 UJ	4 J	4 UJ	7 U	1.5 J	0.7 U	2.7 J	2.8 J	2.4 UJ	60 U	38	60 U
Benzene	ug/L	N	1	0.3 U	0.3 U	0.88 J	**58**	**75**	**60**	**95**	**65**	**130J**	**45J**	**56**	**120J**	**140J**	**60J**	**32**	**42J**	**23**	**80**	**96**	**57J**	5 U	**3J**	**8J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	1 UJ	5 UJ	10 U	1 UJ	1 U	1 U	1.0 U	1 UJ	10 U	1 U	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 UJ	0.5 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.3 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	10 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 J	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	28	33	-	32	18	11 J	4 UJ	2 J	15 J	12 J	8 J	10 U	3.9 J	1.1 J	11	15	5.3 J	79	95	50
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	2 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	20 U	2 U	5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	40	38	26	24	18	6 J	8 UJ	0.4 J	28 J	20 J	6 J	4 U	0.48 J	0.4 U	12	9.6	1.7 J	8 J	8	5 J
Isopropylbenzene	ug/L	N	700	0.45 J	0.2 U	1.5 J	5	7	-	8	6	5 J	4 UJ	1 J	8 J	8 J	3 J	2 U	1.6 J	0.66 J	4.2 J	4.9 J	1.7 J	12 J	13	10 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	10 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	5 U	2 J	5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	8.3	22	26	-	24	14	3 J	4 UJ	0.2 J	6 J	4 J	4 J	5 U	0.71 J	0.5 U	2.6 J	7.4	1.4 J	42 J	48	29 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	-	2 U	2 U	0.3 UJ	6 UJ	0.3 U	3 UJ	0.4 UJ	2 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.30 U	0.3 UJ	20 U	2 U	20 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	1 U	1 U	-	1 U	1 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	10 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	5	4 J	5 U	3	3	3 J	4 UJ	0.7 J	7 J	4 J	2 J	2 U	0.69 J	0.31 J	3.5	3.3	1.1 J	470	440	320
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	8 U	0.8 U	5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.3 U	0.30 U	0.3 UJ	10 U	1 U	5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	2 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	20 U	2 U	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	-	0.5 U	0.5 U	0.2 UJ	4 UJ	0.2 U	2 UJ	0.2 UJ	1 UJ	2 U	0.2 UJ	0.2 U	0.2 U	0.20 U	0.2 UJ	10 U	1 U	5 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	35	23	15	11	6	5 J	20 UJ	1 U	11 J	9 J	7 UJ	14 U	1.6 J	1.4 U	6.4	5.7	0.76 J	86	89	64
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	-	-	-	-	-	170 J	0 U	15 J	61 J	310 J	0 U	0 U	-	0 U	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265
			Field Sample ID	M264B5X	M264B6X	M264B7X	M264B8	M264B9	M264C1X	M264C2X	M264C3X	M264C4X	M264C5X	M264C6X	M264C7	M264C8	M265B3X	M265B4X	M265B5X	M265B6	D0927131	M265B7X	M265B8X	M265B9X	M265C1X	M265C2X
			Sample Date	12/04/2015	06/10/2016	07/22/2016	05/11/2017	06/07/2018	07/10/2018	10/22/2018	01/15/2019	06/14/2019	03/18/2020	03/11/2021	06/07/2021	12/10/2021	02/28/2012	08/21/2012	03/28/2013	08/16/2013	09/27/2013	09/27/2013	02/07/2014	11/13/2014	07/02/2015	12/10/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	20 U	2 U	20 U	20 U	20 U	0.2 U	2 U	0.2 UJ	0.2 UJ	-	-	-	10 U	50 U	4 U	100 U	100 U	100 U	100 U	40 U	2 U	200 U
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	10 U	1 U	10 U	10 U	10 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	20 U	2 U	20 U	20 U	20 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	10 U	50 U	4 U	100 U	100 U	100 U	100 U	40 U	2 U	200 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	10 U	1 U	10 U	10 U	10 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	10 U	1 U	10 U	10 U	10 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	10 U	1 U	10 U	10 U	10 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 UJ	30 U	3 U	30 U	30 U	30 U	2 J	3 U	2 J	0.3 U	12	1.1 J	5 U	15 U	130 J	26	**340J**	150 U	150 U	150 U	120 J	4 J	300 U
2-Hexanone	ug/L	N	40	3 UJ	30 U	3 U	30 U	30 U	30 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.4 U	4 U	15 U	75 U	6 U	150 U	150 U	150 U	150 U	60 U	3 U	300 U
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	30 U	3 U	30 U	30 U	30 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	15 U	75 U	6 U	150 U	150 U	150 U	150 U	60 U	3 U	300 U
Acetone	ug/L	N	6000	45 J	60 U	6 U	60 U	60 U	60 U	16 J	7 U	9 J	4 J	23	2.5 J	8.2 J	30 U	160 J	64	640 J	300 U	300 U	300 U	120 U	6 U	600 U
Benzene	ug/L	N	1	0.8 J	5 U	**2**	5 U	5 U	5 U	0.9 J	2 U	0.6 J	0.9 J	0.48 J	0.71 J	3 U	**3300**	**29000**	**5300**	**97000**	**48000**	**45000**	**63000**	**20000**	**220**	**21000**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Bromoform	ug/L	N	4	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	5 U	0.5 UJ	5 U	5 U	5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 UJ	10 U	1 U	10 U	10 U	10 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Chlorobenzene	ug/L	N	50	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
Chloroethane	ug/L	N	NA	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Chloroform	ug/L	N	70	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.3 J	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Cyclohexane	ug/L	N	NA	30 J	58	57	47 J	51	47 J	53	38 J	37	60 J	37	33	24 J	**170**	**140**	**140**	100 U	**150J**	**140J**	**260**	**210**	**270**	200 U
Dibromochloromethane	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	10 U	50 U	4 U	100 U	100 U	100 U	100 U	10 U	0.5 U	50 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.6 J	5 U	4	5 U	5 U	5 U	0.8 J	4 U	0.4 J	0.7 J	0.41 J	0.85 J	4 U	4 U	100 J	37	120 J	170 J	170 J	320	64	8	50 U
Isopropylbenzene	ug/L	N	700	6 J	11 J	9	10 U	11 J	10 U	5	7 J	6	8	5.5	5.1	4.3 J	5 U	25 U	8 J	50 U	50 U	50 U	50 U	20 U	5 J	100 U
Methane	ug/L	N	NA	-	-	-	-	-	-	15000	28000	-	-	-	-	-	-	-	-	21000	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	10 U	1 U	10 U	10 U	10 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
Methyl-t-butyl ether	ug/L	N	70	2 J	5 U	1	5 U	5 U	5 U	1	2 U	1	1	0.94 J	0.85 J	2 U	3 U	13 U	1 U	25 U	25 U	25 U	25 U	10 U	0.5 U	50 U
Methylcyclohexane	ug/L	N	NA	10 J	31 J	27	25 J	27 J	21 J	27	12 J	8	23	13	8	5.1 J	90	65 J	82	50 U	64 J	61 J	**160J**	**110**	**280**	100 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	20 U	2 U	20 U	5 U	5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	10 U	50 U	4 U	100 U	100 U	100 U	100 U	40 U	2 U	200 U
Styrene	ug/L	N	100	1 UJ	10 U	1 U	10 U	10 U	10 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	20 U	1 U	100 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
Toluene	ug/L	N	600	34 J	350	280	330	290	220	60	47	15	41	2	1	2 U	80	**1000**	230	**2500**	**1800**	**1700**	**3300**	**650**	16	**740**
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	4 U	20 U	2 U	40 U	40 U	40 U	40 U	10 U	0.5 U	50 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	10 U	50 U	4 U	100 U	100 U	100 U	100 U	10 U	0.5 U	50 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	5 U	0.5 U	5 U	5 U	5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	5 U	25 U	2 U	50 U	50 U	50 U	50 U	10 U	0.5 U	50 U
Xylene (total)	ug/L	N	1000	19 J	86	90	86	94	83	50	25 J	14	38	22	6.6	4 U	85	770	260	780	**1400**	**1400**	**2700**	420	45	280
Total TIC VOCS	ug/L	N	NA	310 J	-	670 J	-	-	830 J	490 J	230 J	-	-	-	-	-	-	-	-	12000 J	-	-	-	-	-	1300 J

Notes:

1. GWQS - Groundwater Quality Standard
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			Location ID	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265R	MW-265R	MW-265R	MW-265R	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266
			Field Sample ID	M265C3X	M265C4X	M265C5	M265C6	M265C7	M265C8X	M265C9X	M265D1X	M265D2X	M265RD5X	M265RC2X	M265RD6	M265RD7	M266B3X	M266B4X	M266B5	D0814148	D1204148	M266B8X	M266B9X	M266C1X	M266C3X	M266C7X
			Sample Date	02/09/2016	08/01/2016	08/16/2016	05/11/2017	11/01/2017	07/09/2018	10/24/2018	01/16/2019	07/12/2019	05/18/2020	11/09/2020	06/07/2021	12/14/2021	04/26/2012	04/11/2013	08/20/2013	08/15/2014	12/04/2014	12/04/2014	12/10/2015	06/08/2016	02/23/2017	01/30/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	1 U	1 U	3 U	3 U	5 U	3 U	3 U	0.3 U	0.3 U	150 UJ	0.3 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	4 U	10 UJ	10 U	20 U	10 U	2 U	0.2 U	0.2 U	100 UJ	-	-	-	-	-	2 U	2 U	2 U	2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	2 U	5 U	5 U	10 U	5 U	3 U	0.3 U	0.3 U	150 UJ	0.3 U	30 UJ	15 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	4 U	10 U	10 U	20 UJ	10 U	3 U	0.3 U	0.3 U	150 UJ	0.3 U	30 UJ	15 U	-	-	2 U	2 U	2 U	2 U	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 U	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	2 U	5 U	5 U	10 U	5 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	3 U	3 U	5 U	3 U	3 U	0.3 U	0.3 U	150 UJ	0.3 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	2 U	5 U	5 U	10 U	5 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	2 U	2 U	5 U	5 U	10 U	5 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	11 J	6 U	17 J	15 U	30 U	15 U	110	32	11	**590J**	0.3 U	92 J	25 U	-	-	3 U	3 U	3 U	3 U	-	-	-	-
2-Hexanone	ug/L	N	40	6 U	6 U	15 U	15 U	30 U	15 U	8 J	0.3 U	0.3 U	150 UJ	0.3 U	40 UJ	20 U	-	-	3 U	3 U	3 U	3 U	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	6 U	6 U	15 U	15 U	30 U	15 U	5 J	1 J	0.5 U	250 UJ	1.5 J	50 UJ	25 U	-	-	3 U	3 U	3 U	3 U	-	-	-	-
Acetone	ug/L	N	6000	12 U	16 J	43 J	30 U	60 U	30 U	7 U	55	17 J	870 J	2.9 UJ	120 J	35 U	-	-	6 U	6 U	6 U	6 U	-	-	-	-
Benzene	ug/L	N	1	**2800**	**1100**	**4500**	**1300**	**23000**	**3900**	**27000**	**6700**	**1200**	**56000J**	**17**	**37000J**	**33000**	**24**	**140**	**100**	**22**	**34**	**32**	**48**	**63**	**1**	**5**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Bromoform	ug/L	N	4	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	500 UJ	1 U	100 UJ	50 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	3 UJ	3 U	5 U	3 U	3 U	0.3 U	0.3 U	150 UJ	0.3 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 U	2 U	5 U	5 U	10 U	5 U	2 U	0.4 J	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Chlorobenzene	ug/L	N	50	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Chloroethane	ug/L	N	NA	1 U	1 U	3 UJ	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Chloroform	ug/L	N	70	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.5 J	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Cyclohexane	ug/L	N	NA	**240**	**110**	**130**	**110**	**170**	23 J	**180**	**230**	**210**	500 UJ	11	100 UJ	50 U	-	-	19	8	21	19	-	-	-	-
Dibromochloromethane	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	2 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	15	7	19	3 J	67	10	75	30	4	200 UJ	1.1	60 J	54	30	100	91	29	27	25	39	82	6	4
Isopropylbenzene	ug/L	N	700	5 J	3 J	5 U	5 U	10 U	5 U	10 J	9	4 J	100 UJ	0.57 J	20 UJ	10 U	-	-	28	9	18	18	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	18000	16000	-	-	-	-	-	-	-	14000	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 U	2 U	5 U	5 U	10 U	5 U	2 U	0.2 U	0.2 U	150 UJ	0.3 U	30 UJ	15 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	13 J	-	-	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Methylcyclohexane	ug/L	N	NA	**220**	100	**130**	76	85	12 J	100	**130**	**150**	250 UJ	4.2 J	50 UJ	28 J	-	-	9	3 J	9	8	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	4 U	4 U	10 U	10 U	5 U	3 U	3 U	0.3 U	0.3 U	150 UJ	0.3 U	30 UJ	15 U	-	-	2 U	2 U	2 U	2 U	-	-	-	-
Styrene	ug/L	N	100	2 U	2 U	5 U	5 U	10 U	5 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	1 U	1 U	1 U	-	-	-	-
Tetrachloroethene	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Toluene	ug/L	N	600	130	44	170	44	**990**	150	**1200**	300	35	**1600J**	1.6	560 J	90	22	76	7	45	46	44	63	99	9	9
trans-1,2-Dichloroethene	ug/L	N	100	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	0.8 U	0.5 U	0.5 U	0.5 U	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	**35**	0.2 U	0.2 U	100 UJ	0.2 U	20 U	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	30 UJ	15 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	1 U	3 UJ	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	2 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	3 U	3 U	5 U	3 U	2 U	0.2 U	0.2 U	100 UJ	0.2 U	20 UJ	10 U	-	-	1 U	0.5 U	0.5 U	0.5 U	-	-	-	-
Xylene (total)	ug/L	N	1000	110	50	140	28	590	75	610	230	32	800 J	7.7	730 J	540	360	680	450	230	190	180	320	540	150	60
Total TIC VOCS	ug/L	N	NA	-	460 J	-	-	-	340 J	4700 J	680 J	660 J	2500 J	-	-	-	-	-	980 J	320 J	730 J	500 J	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267R	MW-267R	MW-267R	MW-267R
			Field Sample ID	D0125191A	M266D2X	M266D3X	D0123201XA	M266D4X	M266D5X	D0111218	M266D6X	M266D7	M266D8	M267B4X	M267B5X	M267B6X	M267B7X	M267B8X	M267B9X	M267C1X	M267C2X	M267C3X	M267RC4X	M267RC6X	M267RC7X	M267RC8X
			Sample Date	01/25/2019	01/25/2019	07/10/2019	01/23/2020	01/23/2020	10/21/2020	01/11/2021	01/11/2021	04/12/2021	02/11/2022	03/07/2012	08/21/2012	03/26/2013	09/27/2013	05/28/2014	07/22/2015	03/08/2016	09/08/2016	02/07/2017	10/22/2018	02/05/2019	05/02/2019	07/30/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.3 U	3 UJ	0.3 U	3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	0.2 U	-	-	-	-	-	-	-	2 U	10 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	0.2 U	2 UJ	0.2 U	2 UJ
1,1-Dichloroethane	ug/L	N	50	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.3 U	3 UJ	0.3 U	3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	10 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	0.3 U	3 UJ	0.3 U	3 UJ
1,2-Dibromoethane	ug/L	N	0.03	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.2 U	2 UJ	0.2 U	2 UJ
1,2-Dichloroethane	ug/L	N	2	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.3 U	3 UJ	0.3 U	3 UJ
1,2-Dichloropropane	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.2 U	2 UJ	0.2 U	2 UJ
1,4-Dichlorobenzene	ug/L	N	75	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.2 U	2 UJ	0.2 U	2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	0.8 J	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	3 U	15 U	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	0.3 U	3 UJ	0.3 U	3 UJ
2-Hexanone	ug/L	N	40	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	3 U	15 U	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	0.3 U	3 UJ	0.3 U	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	-	-	0.5 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	15 U	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	0.5 U	5 UJ	0.5 U	5 UJ
Acetone	ug/L	N	6000	-	-	9 J	-	-	0.7 U	0.7 U	0.7 U	0.7 U	-	10 J	30 U	6 U	6 U	6 U	6 UJ	21	60 U	10 J	0.7 U	7 UJ	0.7 U	7 UJ
Benzene	ug/L	N	1	**5**	**5**	0.8 J	0.2 U	0.2 U	0.78 J	0.97 J	0.27 J	**3.7**	**9**	**8**	**5J**	**5**	1 J	1	0.5 UJ	**2**	5 U	1	1	2 UJ	**2**	2 UJ
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Bromoform	ug/L	N	4	-	-	0.2 U	-	-	1 U	1 U	1 U	1 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	10 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 UJ	0.5 UJ	0.3 U	3 UJ	0.3 U	3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 J	1 J	1 UJ	1 U	10 UJ	1 U	0.2 U	2 UJ	0.2 U	2 UJ
Carbon Tetrachloride	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Chlorobenzene	ug/L	N	50	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Chloroethane	ug/L	N	NA	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Chloroform	ug/L	N	70	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Cyclohexane	ug/L	N	NA	-	-	5 J	-	-	3.9 J	1 J	1 U	1.8 J	-	6	10 U	5 J	2 J	4 J	2 UJ	9	20 U	4 J	2 J	2 UJ	0.5 J	10 UJ
Dibromochloromethane	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	10 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	4	4	0.5 J	0.4 J	0.4 J	2.3	0.41 J	0.4 U	3.7	31	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.6 J	4 UJ	0.4 U	4 UJ
Isopropylbenzene	ug/L	N	700	-	-	9	-	-	17	4.7 J	2.2 J	9.7	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.6 J	2 UJ	0.4 J	2 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	0.2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.2 U	2 UJ	0.2 U	2 UJ
Methyl-t-butyl ether	ug/L	N	70	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Methylcyclohexane	ug/L	N	NA	-	-	2 J	-	-	1.5 J	0.5 U	0.5 U	0.57 J	-	1 J	5 U	1 J	1 U	1 J	1 UJ	3 J	10 U	1 U	1 J	2 UJ	0.2 U	5 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	0.3 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	10 U	2 U	2 U	2 U	2 UJ	2 U	20 U	2 U	0.3 U	3 UJ	0.3 U	4 UJ
Styrene	ug/L	N	100	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	0.2 U	2 UJ	0.2 U	2 UJ
Tetrachloroethene	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Toluene	ug/L	N	600	12	12	2	3	3	1.2	0.58 J	0.38 J	2.3	26	0.8 J	4 U	0.8 J	0.7 U	0.7 J	0.5 UJ	0.6 J	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	0.8 U	4 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	10 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 UJ	0.2 U	2 UJ	0.2 UJ	2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	0.2 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.2 U	2 UJ	0.2 U	2 UJ
Xylene (total)	ug/L	N	1000	100	100	6	14	14	55	15	4 J	57	170	9	6 J	8	3 J	5	0.5 UJ	6	5 U	3	2 J	10 UJ	1 U	14 UJ
Total TIC VOCS	ug/L	N	NA	-	-	430 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 J	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268R	MW-268R
			Field Sample ID	D110619	M267RC9X	D1219191	M267RD1X	D0302201	M267RD2X	M267RD3X	M267RD4X	M267RD5X	M267RD6X	M267RD7X	M267RD9	M267RE1	M267RE2	M267RE3	M268B2X	M268B3X	M268B6X	M268B8X	M268B9X	M268C1X	M268RC5X	M268RC6
			Sample Date	11/06/2019	11/06/2019	12/19/2019	12/19/2019	03/02/2020	03/02/2020	05/20/2020	09/14/2020	12/15/2020	01/07/2021	03/31/2021	07/12/2021	10/07/2021	12/09/2021	01/28/2022	04/24/2012	04/11/2013	08/15/2014	12/10/2014	07/08/2015	03/22/2016	09/08/2020	05/20/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 UJ	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	-	-	-	-	-	-	-	-	-	-	2 U	2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	1 U	1 U	-	-	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	2 U	2 U	-	-	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	1 U	1 U	-	-	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	1 U	1 U	-	-	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	1 U	1 U	-	-	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2 U	2 U	0.5 J	0.4 J	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.5 U	2.5 UJ	0.5 UJ	5 U	-	-	3 U	3 U	-	-	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 UJ	0.4 U	2 UJ	0.4 UJ	4 U	-	-	3 U	3 U	-	-	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	2.5 UJ	0.5 UJ	5 U	-	-	3 U	3 U	-	-	0.5 U	0.5 U
Acetone	ug/L	N	6000	4 U	4 U	4 J	3 J	0.7 UJ	2 UJ	0.7 UJ	0.99 UJ	1.8 UJ	0.74 J	0.91 J	0.7 U	3.5 UJ	0.7 UJ	7 U	-	-	6 U	6 U	-	-	21	0.7 U
Benzene	ug/L	N	1	1 J	1 J	1 J	1 J	1 J	1 J	**2J**	0.2 UJ	**4.3**	1	0.23 J	**1.7**	1.5 UJ	0.3 UJ	3 U	**6**	0.5 J	0.8 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Bromoform	ug/L	N	4	5 U	5 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	5 UJ	1 UJ	10 U	-	-	0.5 U	0.5 U	-	-	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.4 J	0.4 J	0.5 J	0.4 J	0.2 UJ	0.94 J	0.37 J	0.5 J	0.7 J	0.35 J	1.5 UJ	0.39 J	3 U	-	-	1 U	1 U	-	-	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Chloroform	ug/L	N	70	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	5 U	5 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	5 UJ	1 UJ	10 U	-	-	3 J	4 J	-	-	1 U	1 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2 U	2 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	2 UJ	0.4 UJ	4 U	8	0.8 U	0.7 J	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	20	16	-	-	1 J	1.6 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 UJ	0.2 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	1 U	1 U	-	-	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	3 U	3 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2.5 UJ	0.5 UJ	5 U	-	-	1 U	1 J	-	-	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	2 U	2 U	-	-	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	1 U	1 U	-	-	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Toluene	ug/L	N	600	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	14	0.8 J	5	2	0.6 J	0.5 J	1.7	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	1.5 UJ	0.3 UJ	3 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	0.2 UJ	2 U	-	-	0.5 U	0.5 U	-	-	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	7 U	7 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1.4 UJ	1.4 U	1.4 U	1.4 U	0.4 U	2 UJ	0.4 UJ	4 U	410	22	96	63	7	23	5.1 J	1.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	-	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 UJ	0 U	0 U	-	-	110 J	-	-	-	-	-

Notes:

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MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-269	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R
			Field Sample ID	M269B2X	M273B1X	M273B2X	M273B3X	M273B4X	D0528141	M273B5X	M273B6X	M273B7X	M273B8X	M273B9X	M273C2X	M273C3X	M273RC4X	M273RC5X	M273RC6X	M273RC7X	M273RC8X	M273RC8X	M273RC9X	M273RD1X	M273RD3X	M273RD5
			Sample Date	03/21/2012	03/07/2012	08/09/2012	03/27/2013	09/27/2013	05/28/2014	05/28/2014	07/02/2015	03/08/2016	09/08/2016	02/03/2017	11/27/2018	02/05/2019	07/30/2019	11/07/2019	12/11/2019	02/26/2020	05/18/2020	05/18/2020	08/24/2020	11/11/2020	02/24/2021	05/12/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,1,1-Trichloroethane	ug/L	N	30	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.6 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.6 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,1,2-Trichloroethane	ug/L	N	3	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	10 U	10 U	10 UJ	20 U	4 U	4 U	20 U	10 U	20 U	4 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	5 U	5 U	5 U	10 U	2 U	2 U	10 U	5 U	10 U	2 U	0.6 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.6 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	10 U	10 U	10 U	20 U	4 U	4 U	20 U	10 U	20 U	4 U	0.6 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.6 U	3 U
1,2-Dibromoethane	ug/L	N	0.03	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	5 U	5 U	5 U	10 U	2 U	2 U	10 U	5 U	10 U	2 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,2-Dichloroethane	ug/L	N	2	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.6 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.62 J	0.3 U	0.6 U	3 U
1,2-Dichloropropane	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	**1.9J**	2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	5 U	5 U	5 U	10 U	2 U	2 U	10 U	5 U	10 U	2 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	-	5 U	5 U	5 U	10 U	2 U	2 U	10 U	5 U	10 U	2 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	15 U	15 U	15 U	30 U	6 U	6 U	30 U	15 U	30 U	6 U	6 J	3 U	3 U	3 U	12	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.6 U	3 U
2-Hexanone	ug/L	N	40	-	15 U	15 U	15 U	30 U	6 U	6 U	30 U	15 U	30 U	6 U	0.6 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	2.4 J	0.6 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	15 U	15 U	15 U	30 U	6 U	6 U	30 U	15 U	30 U	6 U	1 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	1 U	5 U
Acetone	ug/L	N	6000	-	48 J	30 U	32 J	60 U	12 U	12 U	60 U	30 U	60 U	13 J	5 J	7 U	31 J	7 U	0.7 U	0.7 U	11 UJ	9 UJ	1.4 U	2.7 UJ	30 J	7 U
Benzene	ug/L	N	1	0.5 U	**1900**	**1400**	**2000**	**1500**	**1600**	**1600**	**1300**	**1800**	**880**	**1000**	**260**	**280**	**330**	**36**	**34**	**34**	**160**	**35**	**15**	**170**	**16**	**360**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.97 J	0.4 U	2 U
Bromoform	ug/L	N	4	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	10 U	10 U	1 U	1 U	1 U	1 U	2 U	1 U	2 U	10 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 UJ	1 U	0.6 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.6 U	3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	5 U	5 U	5 UJ	10 U	2 U	2 U	10 U	5 U	10 UJ	2 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Carbon Tetrachloride	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Chlorobenzene	ug/L	N	50	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Chloroethane	ug/L	N	NA	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Chloroform	ug/L	N	70	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Cyclohexane	ug/L	N	NA	-	**300**	**250**	**280**	**170**	**230**	**230**	**200**	**290**	**230**	**310**	**180**	**210**	**450**	**170**	**140**	100	**130**	45	2 U	100	91	**180**
Dibromochloromethane	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	10 U	10 U	10 U	20 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	**730**	480	620	530	660	650	430	560	230	390	190	200	240	82	72	60	100	53	21	68	22	130
Isopropylbenzene	ug/L	N	700	-	36	30	40	32 J	43	43	34 J	51	18 J	47	44	45 J	14 J	12 J	11	12	15	9	5.2 J	10	6.1 J	11 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	5 U	5 U	5 U	10 U	2 U	2 U	10 U	5 U	10 U	2 U	0.4 U	2 U	2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.6 U	3 U
Methyl-t-butyl ether	ug/L	N	70	-	17 J	17 J	12 J	8 J	8	8	9 J	9	7 J	3	0.8 J	2 U	3 J	2 U	0.5 J	0.9 J	4	1 J	0.43 J	2.8	0.4 U	5.7 J
Methylcyclohexane	ug/L	N	NA	-	**150**	**150**	**180**	100	**130**	**130**	**130**	**170**	**120**	**210**	**150**	**170**	**310**	69	92	89	97	29	14	74	**120**	**110**
Methylene chloride (Dichloromethane)	ug/L	N	3	-	10 U	10 U	10 U	20 U	4 U	4 U	20 U	10 U	20 U	4 U	0.6 U	3 U	10 UJ	3 U	0.3 U	0.8 J	0.3 U	3	0.6 U	0.3 U	0.6 U	3 U
Styrene	ug/L	N	100	-	5 U	5 U	5 U	10 U	2 U	2 U	10 U	5 U	10 U	2 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.5 J	0.4 U	0.2 U	0.4 U	2 U
Tetrachloroethene	ug/L	N	1	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 UJ	0.4 U	2 U
Toluene	ug/L	N	600	0.7 U	**610**	340	**620**	410	470	470	230	350	170	250	130	130	130	8 J	9	6	39	6	2.1	56	5	150
trans-1,2-Dichloroethene	ug/L	N	100	-	4 U	4 U	4 U	8 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	10 U	10 U	10 U	20 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	5 U	5 U	5 U	10 U	1 U	1 U	5 U	3 U	5 U	1 U	0.4 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.4 U	2 U
Xylene (total)	ug/L	N	1000	0.8 U	**4200**	**2900**	**4000**	**3000**	**3900**	**3900**	**2900**	**3700**	**1800**	**3300**	**1300**	**1400**	690	110	120	38	100	36	18	180	42	540
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3400 J	3600 J	1200 J	1200 J	1400 J	1400 J	1100 J	670 J	-	-	-	-

Notes:
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Chevron Perth Amboy Facility

			Location ID	MW-273R	MW-273R	MW-273R	MW-274	MW-274	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281
			Field Sample ID	M273RD6	M273RD7	M273RD8	M274A1X	M274A2X	M281A3X	M281A4X	M281A5X	M281A6X	M281A7X	M281A8X	M281A9X	M281B1X	M281B2	M281B3	M281B4	M281B5	M281B6	M281B7X	M281B8X	M281B9X	M281C1X	M281C2
			Sample Date	08/06/2021	11/03/2021	02/22/2022	07/19/2016	10/11/2016	03/09/2012	08/09/2012	03/21/2013	09/26/2013	05/30/2014	01/14/2015	03/22/2016	09/08/2016	05/03/2017	11/01/2017	05/16/2018	11/28/2018	04/24/2019	11/18/2019	03/04/2020	08/26/2020	03/12/2021	05/04/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 UJ	4 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	3 UJ	6 UJ	0.3 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	3 UJ	6 UJ	0.3 U	2 UJ	4 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2 UJ	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 UJ	4 UJ	0.2 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	3 UJ	6 UJ	0.3 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	3 UJ	6 UJ	0.3 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	5 UJ	10 UJ	0.5 U	3 UJ	6 U	3 U	3 U	3 U	3 U	3 U	3U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.5 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	4 UJ	8 UJ	0.4 U	3 UJ	6 U	3 U	3 U	3 U	3 U	3 U	3U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	5 UJ	10 UJ	0.5 U	3 UJ	6 U	3 U	3 U	3 U	3 U	3 U	3U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	7.2 UJ	14 UJ	4.1 J	18 J	12 U	6 U	6 U	6 U	6 U	6 U	6U	6 U	6 U	6 U	6 U	6 U	1 J	2 J	0.7 U	0.7 U	0.7 U	1.8 UJ	1.3 UJ	1.3 UJ
Benzene	ug/L	N	1	**460J**	**510J**	**370**	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	10 UJ	20 UJ	1 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	3 UJ	6 UJ	0.54 J	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	**170J**	**250J**	**310**	2 UJ	4 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	2 U	2 U	2 U	2 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	120 J	170 J	190	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	5.6 J	11 J	17	12 J	16	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5400
Methyl acetate	ug/L	N	7000	3 UJ	6 UJ	0.3 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	6.4 J	7.7 J	7.4	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	92	**180J**	**280**	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	3 UJ	6 UJ	0.3 U	2 UJ	4 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	3 UJ	6 UJ	0.3 U	1 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	130	60 J	39	0.5 UJ	1 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	3	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 UJ	6 UJ	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	2 U	2 U	2 U	2 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	2 UJ	4 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	490 J	620 J	640	0.6 J	1 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	300 J	480 J	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-281	MW-281	MW-281	MW-310	MW-310	MW-310	MW-312	MW-312	MW-312	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-315	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	M281C3	M281C4	M281C5	M310A2X	M310A3X	M310A4X	M312A2X	M312A3X	M312A4X	M314A3X	M314A5X	M314A6X	M314A7X	M314B2X	M314B6X	M314C1	M314C2	M314C4	M315A3X	M322A1X	M322A2	M322A2X	M322A3
			Sample Date	09/17/2021	10/20/2021	03/24/2022	03/29/2012	04/01/2013	02/07/2014	04/26/2012	10/01/2013	08/27/2014	03/28/2012	04/11/2013	03/28/2014	02/24/2016	01/26/2017	01/30/2018	05/04/2021	09/21/2021	03/24/2022	03/21/2012	03/15/2012	05/16/2012	05/17/2012	07/30/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	2 U	20 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 UJ	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	2 U	20 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.44 J	0.3 U	1 U	10 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.5 U	0.5 U	3 U	30 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UZ	0.3 U	0.4 U	0.4 U	3 U	30 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	3 U	30 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	7 J	6 U	6 U	6 U	6 U	6 U	6 J	6 U	7 J	0.99 UJ	0.7 U	0.7 U	6 U	60 U	6 U	13 J	6 U
Benzene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	**8**	**24**	**13**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	**2J**	5 U	**9**	0.7 J	**6**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	2 U	2 U	2 U	10	24	26 J	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	9	20 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	20 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	2.6 J	2.1 J	2.6 J	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	5	11	8	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 J	2 J	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	1 J	10 U	1 U	1 U	1 U
Methane	ug/L	N	NA	7200	8000	10000	-	-	-	-	-	-	-	-	-	-	-	-	18000	20000	20000	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	2 J	1 J	2 J	5	19	18	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	6	10 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	2 U	20 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	2 J	1 J	0.7 J	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 J	7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	0.8 U	8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.3 U	0.3 U	1 U	10 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	2 U	20 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	1 U	10 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	7	15	7	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	1.4 U	0.4 U	0.4 U	18	8 U	1 J	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-	-	0 U	0 U	0 U	-	0	0	0	5 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	M322A3X	M322A4	M322A5	M322A6	M322A7	M322A9	M322B1	M322B2	M322B3	M322B4	M322B5	M322B6	M322B7	M322B8	M322B9	M322C1	M322C2	M322C3	M322C4	M322C5X	M322C6	M322C7	M322C8X
			Sample Date	07/31/2012	11/19/2012	02/19/2013	06/12/2013	09/05/2013	11/07/2013	03/12/2014	05/19/2014	08/04/2014	10/29/2014	03/03/2015	06/08/2015	09/14/2015	11/18/2015	01/07/2016	04/06/2016	07/20/2016	10/13/2016	01/17/2017	03/17/2017	04/27/2017	07/18/2017	09/11/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	4 U
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ	4 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	60 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	5 J	3 U	3 U	30 U	3 U	3 UJ	6 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	60 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	30 U	3 U	3 U	6 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	60 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	30 U	3 U	3 U	6 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	120 U	6 U	6 U	6 U	6 U	6 UJ	12 J	7 J	6 U	29	6 UJ	6 U	60 U	6 U	66	12 U
Benzene	ug/L	N	1	1 J	**5**	**2J**	**5J**	**4J**	**6**	**3J**	10 U	**3**	**3**	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	3 J	2 U	40 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	4 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 UJ	2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	40 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	4 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	20 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	10 U	0.5 U	1	0.5 U	0.5 U	1 J	0.5 U	0.6 J	0.5 U	0.5 U	2	0.5 U	5 U	0.5 U	0.5 U	1 J
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U
Xylene (total)	ug/L	N	1000	0.8 U	1 J	0.8 U	2 J	0.8 U	1 J	1 J	10 U	2	3	1	3	3 J	2	2	1 J	1	9	2	5 U	1	0.5 U	3
Total TIC VOCS	ug/L	N	NA	0	0	0	0 U	0 U	0 U	0 U	0 U	11 J	0 U	0 U	0 U	0 UJ	7 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	M322C9	M322D1X	M322D2	M322D3	M322D6	M322D7	M322D8	D0402191	M322D9	D0702191	M322E1	D1002191	M322E2	D0102201	M322E3	M322E4	D0706201	M322E5	D1013201	M322E6	M322E7	M322E8	M322E9
			Sample Date	10/13/2017	12/01/2017	01/19/2018	04/13/2018	07/13/2018	10/25/2018	01/02/2019	04/02/2019	04/02/2019	07/02/2019	07/02/2019	10/02/2019	10/02/2019	01/02/2020	01/02/2020	04/01/2020	07/06/2020	07/06/2020	10/13/2020	10/13/2020	01/06/2021	04/01/2021	07/09/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.26 U	0.26 U	2 UJ	4 UJ	1 U	1 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	3 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.24 U	0.24 U	3 U	6 U	1.5 U	1.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.37 U	0.37 U	2 U	4 U	1 U	1 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.43 U	0.43 U	2 U	4 U	1 U	1 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	10 U	2 U	4 U	2 U	2 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.26 U	0.26 U	2 U	4 U	1 U	1 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	5 U	1 U	2 U	1 U	1 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.37 U	0.37 U	3 U	6 U	1.5 U	1.5 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	10 U	2 U	4 U	2 U	2 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.38 U	0.38 U	3 U	6 U	1.5 U	1.5 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	2 U	4 U	1 U	1 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.43 U	0.43 U	2 U	4 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3 U	0.43 U	0.43 U	3 U	6 U	1.5 U	1.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.35 U	0.35 U	2 U	4 U	1 U	1 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.34 U	0.34 U	2 U	4 U	1 U	1 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.33 U	0.33 U	2 U	4 U	1 U	1 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 U	3 U	6 U	3 U	3 U	1 J	1 J	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	1.9 U	1.9 U	3 U	6 U	1.5 U	1.5 U	0.5 U
2-Hexanone	ug/L	N	40	15 U	3 U	6 U	3 U	3 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	1.1 U	1.1 U	3 U	6 U	1.5 U	1.5 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	15 U	3 U	6 U	3 U	3 U	0.5 U	0.5 U	1 U	1 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	1.3 U	1.3 U	5 U	10 U	2.5 U	2.5 U	0.5 U
Acetone	ug/L	N	6000	30 U	11 J	12 U	6 J	6 U	17 J	15 J	11 UJ	10 UJ	7 UJ	9 J	13 J	13 J	7 U	7 U	12 J	6.9	5.9	7 U	14 U	3.5 U	3.6 J	5.1 J
Benzene	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	2 U	4 U	1 U	1 U	0.3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.34 U	0.34 U	2 U	4 U	1 U	1 U	0.2 U
Bromoform	ug/L	N	4	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	10 U	10 U	10 U	10 U	10 U	0.54 U	0.54 U	10 U	20 U	5 U	5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.55 U	0.55 U	3 U	6 U	1.5 U	1.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.82 U	0.82 U	2 U	4 U	1 U	1 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.21 U	0.21 U	2 U	4 U	1 U	1 U	0.3 U
Chlorobenzene	ug/L	N	50	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.38 U	0.38 U	2 U	4 U	1 U	1 U	0.3 U
Chloroethane	ug/L	N	NA	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.32 UJ	0.32 UJ	2 U	4 U	1 U	1 U	0.2 U
Chloroform	ug/L	N	70	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.33 U	0.33 U	2 U	4 U	1 U	1 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.4 U	0.4 U	2 U	4 U	1 U	1 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	2 U	4 U	1 U	1 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.22 U	0.22 U	2 U	4 U	1 U	1 U	0.2 U
Cyclohexane	ug/L	N	NA	10 U	2 U	4 U	2 U	2 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	10 U	10 U	10 U	10 U	10 U	0.32 U	0.32 U	10 UJ	20 UJ	5 U	5 U	1 U
Dibromochloromethane	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.28 U	0.28 U	2 U	4 U	1 U	1 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	3 U	0.5 U	1 U	0.5 UJ	0.5 U	0.2 UJ	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.31 U	0.31 U	2 U	4 U	1 U	1 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1 J	1 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-
Ethylbenzene	ug/L	N	700	3 U	0.5 U	1 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.8 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	0.3 U	0.3 U	4 U	8 U	2 U	2 U	0.4 U
Isopropylbenzene	ug/L	N	700	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.35 J	0.34 U	2 U	4 U	1 U	1 U	0.2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13000	12000
Methyl acetate	ug/L	N	7000	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	0.79 U	0.79 U	3 U	6 U	1.5 U	1.5 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.47 U	0.47 U	2 U	4 U	1 U	1 U	0.2 U
Methylcyclohexane	ug/L	N	NA	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	5 U	5 U	5 U	5 U	5 U	0.26 U	0.26 U	5 UJ	10 UJ	2.5 U	2.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	3 U	0.5 U	1 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	0.32 U	0.32 U	3 U	6 U	1.5 U	1.5 U	0.3 U
Styrene	ug/L	N	100	5 U	1 U	2 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.42 U	0.42 U	2 U	4 U	1 U	1 U	0.3 U
Tetrachloroethene	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.25 U	0.25 U	2 UJ	4 UJ	1 U	1 U	0.3 U
Toluene	ug/L	N	600	3 U	0.6 J	1 U	0.9 J	0.5 U	0.6 J	0.5 UJ	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.7 J	0.45 J	2 U	4 U	1 U	1 U	0.3 J
trans-1,2-Dichloroethene	ug/L	N	100	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.24 U	0.24 U	2 U	4 U	1 U	1 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.49 U	0.49 U	2 U	4 U	1 U	1 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.31 U	0.31 U	2 U	4 U	1 U	1 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.32 U	0.32 U	2 U	4 U	1 UJ	1 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	3 U	0.5 U	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.17 U	0.17 U	2 U	4 U	1 U	1 U	0.2 U
Xylene (total)	ug/L	N	1000	3 U	2	1 J	3	0.5 U	1 U	2 J	2 U	2 U	10 UJ	10 U	14 U	14 U	14 U	14 U	14 U	3.5	2.2	14 U	28 U	7 U	7 U	0.89 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-322	MW-322	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323
			Field Sample ID	M322F2	M322F3	M323A1X	M323A2	M323A2X	M323A3	M323A3X	M323A4	M323A5	M323A6	M323A7	M323A9	M323B1	M323B3	M323B4	M323B5	M323B6	D0915151	M323B7	M323B8	M323B9	M323C2	M323C3
			Sample Date	10/07/2021	01/19/2022	03/15/2012	05/16/2012	05/17/2012	07/30/2012	07/31/2012	11/20/2012	02/20/2013	06/12/2013	09/05/2013	11/05/2013	03/12/2014	08/05/2014	10/29/2014	03/03/2015	06/08/2015	09/15/2015	09/15/2015	11/18/2015	01/07/2016	07/22/2016	10/13/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	3 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 J	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	2.7 UJ	3.2 J	12 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	12 J	6 UJ	6 U	6 UJ
Benzene	ug/L	N	1	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	**4J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	3 J	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	15	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	1.9 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.24 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	29000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.58 J	0.49 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1	1.3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0	0	0	50 J	0	0	0	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323
			Field Sample ID	M323C4	M323C5X	M323C6	M323C7	M323C8X	M323C9	M323D1X	M323D3	D0413181	M323D4	M323D6	M323D7	M323D8	M323D9	M323E1	M323E2	M323E3	D0401201	M323E4	M323E6	M323E7	M323E8	M323E9
			Sample Date	01/17/2017	03/17/2017	04/27/2017	07/18/2017	09/05/2017	10/13/2017	12/01/2017	01/19/2018	04/13/2018	04/13/2018	07/13/2018	10/26/2018	01/02/2019	04/09/2019	07/09/2019	10/07/2019	01/02/2020	04/01/2020	04/01/2020	07/06/2020	10/13/2020	01/06/2021	04/01/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 UJ	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 J	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 UJ	0.7 U	2 J	0.7 U	0.7 U	0.7 U	0.7 U	4.4 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.3 J	0.2 J	0.2 U	0.3 J	0.3 J	0.3 J	0.3 J	0.28 J	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.32 U	1 UJ	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 UJ	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	1.2	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 UJ	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	1.1 J	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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Chevron Perth Amboy Facility

			Location ID	MW-323	MW-323	MW-323	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324
			Field Sample ID	M323F1	M323F2	M323F3	M324A1X	M324A2	M324A2X	M324A3	M324A3X	M324A4	M324A5	M324A6	M324A7	M324A8	M324A9	M324B1	M324B2	M324B3	D0310151	M324B4	M324B5	M324B6	D1117151	M324B7
			Sample Date	07/14/2021	10/07/2021	01/19/2022	03/13/2012	05/17/2012	05/18/2012	07/30/2012	07/31/2012	11/21/2012	02/21/2013	06/17/2013	09/09/2013	11/05/2013	03/11/2014	05/21/2014	08/07/2014	10/28/2014	03/10/2015	03/10/2015	05/28/2015	09/17/2015	11/17/2015	11/17/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.5 U	**2J**	**4J**	**3J**	**2J**	**2J**	1 J	**2J**	1 J	**2J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 J	0.51 J	0.38 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	16	26	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0	0	0	0	0	0	0	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324
			Field Sample ID	M324B8	M324B9	M324C1	M324C4	M324C5	M324C7	M324C8	M324C9	M324D1	M324D2	M324D3	M324D4	M324D5	M324D6	M324D7	M324D8	M324D9	M324E1	D0107211	M324E2	M324E3	D0714211	M324E4
			Sample Date	01/12/2016	04/07/2016	07/21/2016	01/18/2017	04/26/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/24/2018	01/04/2019	04/09/2019	07/09/2019	10/07/2019	01/06/2020	04/03/2020	07/08/2020	10/12/2020	01/07/2021	01/07/2021	04/12/2021	07/14/2021	07/14/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	2 J	0.7 J	1 UJ	3 J	0.7 U	0.7 UJ	0.7 U	1.3 J	0.7 U	0.7 U	0.7 U	0.7 U	1.2 UJ	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71	67	62
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-324	MW-324	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325
			Field Sample ID	M324E5	M324E6	D0313121	M325A1X	M325A2	M325A2X	M325A3	M325A3X	M325A4	M325A5	M325A6	M325A7	D1105131	M325A8	M325A9	M325B1	M325B2	M325B3	M325B4	M325B5	M325B6	M325B7	M325B8
			Sample Date	10/07/2021	01/17/2022	03/13/2012	03/13/2012	05/17/2012	05/18/2012	07/26/2012	07/27/2012	11/21/2012	02/21/2013	06/14/2013	09/09/2013	11/05/2013	11/05/2013	03/11/2014	05/21/2014	08/07/2014	10/28/2014	03/10/2015	05/28/2015	09/17/2015	11/17/2015	01/12/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ
Acetone	ug/L	N	6000	1 UJ	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	7 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.3 U	0.3 U	**4J**	**4J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0	0	0	0	0	0	0	0	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-326
			Field Sample ID	M325B9	M325C1	M325C3	M325C4	M325C6	M325C7	M325C8	M325C9	M325D1	M325D2	M325D3	M325D4	M325D5	M325D6	M325D7	M325D8	M325D9	M325E1	M325E2	M325E5	M325E4	M325E6	M326A1X
			Sample Date	04/07/2016	07/21/2016	01/18/2017	04/26/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/24/2018	01/04/2019	04/09/2019	07/09/2019	10/07/2019	01/06/2020	04/03/2020	07/08/2020	10/12/2020	01/07/2021	04/12/2021	07/14/2021	10/08/2021	01/14/2022	03/13/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	8
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	2 J	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	15 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326
			Field Sample ID	M326A2	M326A2X	M326A3	M326A3X	M326A4	M326A5	M326A6	M326A7	M326A9	M326B1	M326B3	M326B5	D0529151	M326B6	M326B7	M326B8	M326B9	M326C1	M326C2	M326C3	M326C4	M326C5	M326C6
			Sample Date	05/23/2012	05/24/2012	07/26/2012	07/27/2012	11/20/2012	02/20/2013	06/13/2013	09/05/2013	11/06/2013	03/10/2014	08/05/2014	03/23/2015	05/29/2015	05/29/2015	09/18/2015	11/18/2015	01/11/2016	04/12/2016	07/19/2016	10/13/2016	01/17/2017	04/21/2017	07/19/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	6	5 J	5	4 J	3 J	2 J	1 U	1 U	1 U	1 U	0.5 U	2	0.8 J	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	5 J	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	16 J	6 U	6 U	10 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	14 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0	0	0	0	0	0	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	13 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-327	MW-327	MW-327	MW-327	MW-327
			Field Sample ID	M326C8	M326C9	M326D1	M326D2	M326D3	M326D4	M326D5	M326D6	M326D7	M326D8	M326D9	M326E1	M326E2	M326E3	M326E4	M326E5	M326E6	M326E7	M327A1X	M327A2	M327A2X	M327A3	M327A3X
			Sample Date	10/10/2017	01/23/2018	04/10/2018	07/16/2018	10/29/2018	01/03/2019	04/03/2019	07/02/2019	10/02/2019	01/03/2020	04/07/2020	07/13/2020	10/14/2020	01/12/2021	04/13/2021	07/13/2021	10/06/2021	01/18/2022	03/14/2012	05/18/2012	05/18/2012	07/31/2012	08/01/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	1 J	0.4 J	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	0.7 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	91 J	6 U	6 U	2 J	2 J	14 UJ	17 J	6 J	5 J	0.9 J	22 J	0.7 U	0.83 J	16 J	0.7 U	0.7 U	0.75 J	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	3 J	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0	0	0	0	0

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327
			Field Sample ID	M327A5	M327A9	M327B1	M327B3	M327B4	M327B5	M327B6	M327B7	M327B8	M327B9	M327C1	M327C3	M327C4	D0418171	M327C5	M327C6	M327C8	M327C9	M327D1	D0716181	M327D2	M327D3	M327D4
			Sample Date	09/06/2013	11/11/2013	03/11/2014	08/07/2014	10/23/2014	03/23/2015	06/01/2015	09/15/2015	11/16/2015	01/11/2016	04/12/2016	10/21/2016	01/20/2017	04/18/2017	04/18/2017	07/21/2017	10/12/2017	01/22/2018	04/10/2018	07/16/2018	07/16/2018	10/29/2018	01/03/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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Chevron Perth Amboy Facility

			Location ID	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	M327D5	M327D6	M327D7	M327D8	M327D9	M327E1	M327F2	M327E3	M327E4	M327E5	M327E7	M327E8	M328A1X	M328A2	M328A2X	M328A3	M328A3X	M328A4X	M328A5	M328A5X	M328A6	M328A7	M328A8
			Sample Date	04/03/2019	07/02/2019	10/02/2019	01/03/2020	04/07/2020	07/10/2020	10/12/2020	01/08/2021	04/06/2021	07/13/2021	10/06/2021	01/14/2022	03/21/2012	05/23/2012	05/24/2012	07/25/2012	07/26/2012	04/25/2013	06/17/2013	06/25/2013	09/10/2013	11/12/2013	03/14/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	9 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	0.9 J	0.7 U	0.7 UJ	0.7 U	4.4 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.82 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	14	1 J	2 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 U	1 U	1 U	1 UJ	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	4 J	1 U	1 U	2 J	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.71 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0	19 J	0	18 J	19 J	0	0 U	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	M328B1X	M328B2X	M328B3	M328B4	M328B5X	M328B6	M328B7	M328B8	M328B9	M328C1X	M328C2	M328C3	M328C4	M328C5	M328C6	M328C7	M328C9	M328D1	M328D2	M328D3	M328D4	M328D5	M328D6
			Sample Date	07/02/2014	08/01/2014	08/08/2014	10/29/2014	01/16/2015	03/02/2015	06/01/2015	09/16/2015	11/19/2015	12/15/2015	01/13/2016	04/14/2016	07/25/2016	12/06/2016	01/23/2017	04/27/2017	07/24/2017	10/12/2017	01/25/2018	04/12/2018	07/18/2018	10/29/2018	01/09/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 U	30 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	60 U	6 U	6 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**5J**	0.5 U	0.5 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	0.2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 UJ	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Ethylbenzene	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 J	0.5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41
Methyl acetate	ug/L	N	7000	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 UJ	0 U	0 U	-	0 U	0 U	0 U	0 U	0 UJ	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333
			Field Sample ID	M328D7	M328D8	D1003191	M328D9	M328E1	M328E2	M328E4	M328E5X	M328E6	M328E7X	M328E8	M328E9X	M328F1	M328F2	M328F3	M328F4	M333A1	M333A1X	M333A2	M333A2X	M333A3	M333A4	M333A5
			Sample Date	04/05/2019	07/05/2019	10/03/2019	10/03/2019	01/09/2020	04/06/2020	07/09/2020	09/25/2020	10/12/2020	12/02/2020	01/05/2021	03/18/2021	04/13/2021	07/13/2021	10/06/2021	01/17/2022	05/16/2012	05/17/2012	07/24/2012	07/25/2012	03/10/2014	05/22/2014	08/06/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	1 J	0.7 U	0.7 U	0.7 U	0.7 U	4.4 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1.3 UJ	0.7 U	0.7 U	0.7 U	22	21	10 J	6 U	6 U	9 J	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.45 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.9 J	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	0.32 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6	4 J	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	1 U	1 U	-	-	-	1 U	-	1 U	-	1 U	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 J	2 J	1 U	1 J	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	31	30	-	-	-	3 U	-	20	-	7.4	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.26 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 J	3 J	1 U	2 J	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.88 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.3 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	1.1 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1 U	1 U	0.65 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	1 J	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	30 J	34 J	0	28 J	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-333	MW-333	MW-333	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R
			Field Sample ID	M333A6	M333A7	M333A8	M334A1	M334A1X	M334A2	M334A2X	M334A3	M334A4	M334A5	M334A6	M334B7	M334A8	M334RB1	M334RB3	M334RB4	M334RB5	M334RB6	D0719171	M334RB7	M334RB8	D0125181	M334RB9
			Sample Date	10/30/2014	03/09/2015	06/03/2015	05/17/2012	05/18/2012	07/31/2012	08/01/2012	03/10/2014	05/22/2014	08/06/2014	10/30/2014	03/09/2015	05/29/2015	01/15/2016	07/20/2016	10/17/2016	01/19/2017	04/21/2017	07/19/2017	07/19/2017	10/10/2017	01/25/2018	01/25/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	2 U	2 U	2 U	2 U	20 UJ	20 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	4 U	4 U	2 U	2 U	2 U	2 U	20 UJ	20 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	30 UJ	30 UJ
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	30 UJ	30 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	6 U	6 U	3 U	3 U	3 U	3 U	30 UJ	30 UJ
Acetone	ug/L	N	6000	7 J	6 U	6 U	6 U	7 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 UJ	6 U	12 U	12 U	6 U	16 J	14 J	6 U	60 UJ	60 UJ
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	**69**	**57**	**14**	**27**	**18**	**56**	**5**	**5**	**29**	**4**	**30**	**12**	**13**	1 J	**2**	0.5 U	0.5 U	0.8 J	5 UJ	5 UJ
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5 UJ	5 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	6	4 J	2 U	3 J	2 U	2 U	2 U	2 U	2 J	2 U	5 J	4 J	4 U	4 U	2 U	2 U	2 U	2 U	20 UJ	20 UJ
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	5 UJ	5 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	4 J	2 J	0.8 U	2 J	0.8 U	1	0.5 U	0.5 U	0.6 J	0.5 U	3	2	1 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	2 J	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	4 J	2 J	1 U	2 J	1 J	1 U	1 U	1 U	1 J	1 U	4 J	3 J	2 U	2 U	1 J	1 U	1 U	1 U	10 UJ	10 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	2 U	2 U	2 U	0.5 U	5 UJ	5 UJ
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	10 UJ	10 UJ
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	9	6	2 J	3 J	3 J	17	2	0.9 J	6	0.8 J	1 J	0.6 J	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	5 UJ
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	10	10	2 J	5	2 J	6	1	1	4	2	5	4	3	1 U	2	0.5 U	0.5 U	1	5 UJ	5 UJ
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	130 J	210 J	7 J	67 J	0 U	25 J	0 U	0 U	35 J	30 J	100 J	39 J	0 U	0 U	5 J	0 U	0 U	0 U	0 UJ	0 UJ

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336
			Field Sample ID	M334RC1	M334RC2	M334RC3	M334RC4	M334RC5	M334RC6	M334RC7	M334RC8	M334RC9	M334RD1	M334RD2	M334RD3	M334RD4	M334RD5	M334RD6	M334RD7	M336A1X	M336A2X	M336A3X	M336A4X	M336A5X	M336A6X	M336A7X
			Sample Date	04/12/2018	07/18/2018	10/26/2018	01/09/2019	04/05/2019	07/05/2019	10/03/2019	01/09/2020	04/06/2020	07/09/2020	10/14/2020	01/12/2021	04/13/2021	07/15/2021	10/08/2021	01/17/2022	04/17/2013	06/19/2013	03/14/2014	06/27/2014	07/29/2014	01/20/2015	07/07/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.26 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	16 U	5 U	5 U	5 UJ	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 U	4 U	40 U	20 U	20 U	20 UJ	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	5 U	5 U	5 UJ	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	2 U	4 U	40 U	20 U	20 U	20 UJ	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	20 U	5 U	5 U	5 UJ	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	0.3 U	0.3 U	3 U	0.5 J	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.3 UJ	0.3 U	0.50 U	0.5 U	0.5 U	3 U	51	**310**	39 J	36 J	39 J	46
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 UJ	0.3 U	0.40 U	0.4 U	0.4 U	3 U	6 U	60 U	30 U	30 U	30 UJ	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 UJ	0.5 U	0.50 U	0.5 U	0.5 U	3 U	7 J	60 U	30 U	30 U	30 UJ	3 U
Acetone	ug/L	N	6000	6 U	6 U	2 J	2 J	7 U	4 J	1 J	0.7 U	0.9 J	4.4 UJ	0.7 U	8.1 J	0.7 U	2.2 J	1.7 J	0.72 UJ	44	100	1100	160 J	160 J	200 J	120
Benzene	ug/L	N	1	**5**	**8**	**4**	**3**	**4J**	1	1	0.7 J	**2**	0.48 J	0.41 J	0.2 UJ	0.29 J	0.30 U	0.3 U	0.3 U	**240**	**110**	**62**	**120**	**170**	**130J**	**140**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	1 U	1 U	1 U	0.54 U	1 U	1 UJ	1 U	1.0 U	1 U	1 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	1 UJ	2 UJ	20 U	5 U	5 U	5 UJ	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.82 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 J
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	16 U	5 U	5 U	5 UJ	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	3 J	20 U	5 U	5 U	5 UJ	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	16 U	5 U	5 U	5 UJ	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	77 J	5 U	5 U	5 UJ	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	16 U	5 U	5 U	5 UJ	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Cyclohexane	ug/L	N	NA	4 J	6	3 J	2 J	2 U	4 UJ	2 J	2 J	5 J	2.5	2.8 J	3.2 J	2.6 J	2.9 J	2.6 J	2.3 J	**320**	**310**	**130**	**150**	**200**	**120J**	**250**
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	2 U	4 U	40 U	5 U	5 U	5 UJ	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.4 U	0.4 UJ	0.4 U	0.40 U	0.4 U	0.4 U	87	110	43 J	79	110	89 J	120
Isopropylbenzene	ug/L	N	700	1 U	1 U	0.9 J	0.7 J	2 U	0.7 J	0.8 J	0.8 J	0.9 J	0.74 J	0.79 J	0.71 J	0.74 J	0.71 J	0.71 J	0.73 J	100	66	25 J	42 J	56	47 J	66
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	1 U	10 U	5 U	5 U	5 UJ	0.5 U
Methylcyclohexane	ug/L	N	NA	4 J	4 J	2 J	2 J	2 U	3 J	2 J	2 J	3 J	2.7	2.1 J	1.5 J	2.7 J	2.6 J	1.9 J	2.3 J	**350**	**310**	100	**130**	**210**	82 J	**230**
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 UJ	0.3 U	0.30 U	0.3 U	0.3 U	2 U	4 U	40 U	20 U	20 U	20 UJ	2 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	20 U	10 U	10 U	10 UJ	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.3 J	0.2 J	2 U	0.2 U	0.2 U	0.2 J	0.3 J	0.38 U	0.2 U	0.2 UJ	0.2 J	0.20 U	0.2 U	0.2 U	28	21	14 U	13	15	7 J	14
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	0.8 U	2 U	16 U	5 U	5 U	5 UJ	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 UJ	0.2 U	0.30 U	0.3 U	0.3 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	2 U	4 U	40 U	5 U	5 U	5 UJ	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 UJ	0.2 U	0.20 U	0.2 U	0.2 U	1 U	2 U	10 U	5 U	5 U	5 UJ	0.5 U
Xylene (total)	ug/L	N	1000	2	3	3 J	1 J	10 U	1 J	1 U	1 U	1 U	1.8 J	1.4 U	1.4 UJ	1.4 U	0.92 J	0.52 J	0.54 J	53	32	17 J	22	32	9 J	25
Total TIC VOCS	ug/L	N	NA	45 J	51 J	28 J	53 J	0 U	38 J	57 J	83 J	97 J	-	-	-	-	-	-	-	2300 J	2500 J	1300 J	1300 J	1300 J	-	1400 J

Notes:

1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
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MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337
			Field Sample ID	M336A8X	M336A9X	M336B1X	M336B2X	M336B3X	M336B4X	M336B5X	M336B6X	M336B7X	M336B8X	M336B9X	M336C1	M336C2	D1206218A	M336C3	M336C4	M337A1X	M337A2X	M337A3X	M337A4X	M337A5X	M337A6X	M337A7X
			Sample Date	12/14/2015	06/15/2016	12/12/2016	05/10/2017	11/27/2017	07/03/2018	01/07/2019	10/11/2019	09/25/2020	12/02/2020	03/17/2021	06/08/2021	09/08/2021	12/06/2021	12/06/2021	03/16/2022	04/16/2013	06/24/2013	03/13/2014	07/01/2014	07/30/2014	03/11/2015	07/06/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	20 U	2 U	4 U	20 U	10 U	2 U	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	20 U	2 U	4 U	20 U	10 U	2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	30 U	6 J	6 U	30 U	15 U	3 U	-	-	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9 J	20	24	6 J	10 J	3 U	6 J
2-Hexanone	ug/L	N	40	30 U	3 U	6 U	30 U	15 U	3 U	-	-	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	3 U	3 U	11	3 U	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	30 U	3 U	6 U	30 U	15 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	120 J	18 J	12 U	60 U	30 U	6 U	-	-	2.1 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	11 J	36	56	20	28 J	6 U	6 U
Benzene	ug/L	N	1	**95**	**6**	**30**	**70**	**18**	**3**	**8J**	**96J**	**1.6**	**32**	**17**	**11**	**6.5**	**4.7**	**4.4**	0.3 U	**170**	**260**	**300**	**74**	**36J**	**260**	**110**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Bromoform	ug/L	N	4	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	1 UJ	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.24 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 UJ	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloroform	ug/L	N	70	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4.5	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	**110**	29	66	**120**	26	8	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**130**	**120**	97	13	11 J	42	29
Dibromochloromethane	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	1 U	2.6 J	1 U	2.2 J	2.2 J	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	64	18	24	59	12	1	4 U	16 J	0.4 U	0.66 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	120	130	89	21	13 J	71	28
Isopropylbenzene	ug/L	N	700	44 J	15	18	35 J	13 J	2 J	-	-	0.58 J	46	43	21	18	33	34	0.2 U	35	36	11	2 J	3 J	20	4 J
Methane	ug/L	N	NA	-	-	-	-	-	-	960	7100	1800	1500	640	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	**110**	28	78	99	34	13	-	-	0.5 U	12	11	17	12	18	23	0.5 U	**260**	**210**	**130**	20	21 J	49	55
Methylene chloride (Dichloromethane)	ug/L	N	3	20 U	2 U	4 U	20 U	3 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	**8**	2 U	2 UJ	2 U	2 U
Styrene	ug/L	N	100	10 U	1 U	2 U	10 U	5 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Tetrachloroethene	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Toluene	ug/L	N	600	9 J	0.7 J	3	6 J	3 U	0.5 U	2 U	9 J	0.2 U	1.6 UJ	0.83 J	2	2	1.7	1.6	0.2 U	10	16	10	3	2 J	9	2
trans-1,2-Dichloroethene	ug/L	N	100	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 UJ	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	5 U	0.5 U	1 U	5 U	3 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	9 J	1	4	6 J	3 U	0.5 U	10 U	7 U	1.4 U	2.1 J	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	52	40	27	6	6 J	19	10
Total TIC VOCS	ug/L	N	NA	800 J	270 J	500 J	900 J	210 J	48 J	-	-	0 U	-	-	-	-	-	-	0 U	4600 J	3400 J	1700 J	700 J	910 J	2100 J	1800 J

Notes:
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3. NA - No Criterion Available for the Analyte
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			Location ID	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338
			Field Sample ID	M337A8X	M337A9X	M337B1X	M337B2X	M337B3X	M337B4X	M337B5X	M337B6X	M337B7X	M337B8X	M337B9X	M337C1	M337C2	M337C3	M338A1X	D0620138	M338A2X	M338A3X	M338A4X	M338A5X	M338A6X	M338A7X	M338A8X
			Sample Date	12/11/2015	06/16/2016	12/14/2016	05/19/2017	11/28/2017	07/05/2018	01/07/2019	10/07/2019	09/24/2020	12/04/2020	03/30/2021	06/04/2021	09/03/2021	12/08/2021	05/06/2013	06/20/2013	06/20/2013	03/11/2014	06/30/2014	07/31/2014	01/15/2015	07/07/2015	12/14/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,1-Trichloroethane	ug/L	N	30	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,2-Trichloroethane	ug/L	N	3	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	**6.6**	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	10 U	2 U	2 U	4 U	2 U	2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	20 U
1,1-Dichloroethane	ug/L	N	50	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,2,4-Trichlorobenzene	ug/L	N	9	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	10 U	1 U	1 U	1 U	10 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	10 U	2 U	2 U	4 U	2 U	2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	20 U
1,2-Dibromoethane	ug/L	N	0.03	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	10 U	1 U	1 U	1 U	10 U
1,2-Dichloroethane	ug/L	N	2	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,2-Dichloropropane	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	10 U	1 U	1 U	1 U	10 U
1,4-Dichlorobenzene	ug/L	N	75	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	10 U	1 U	1 U	1 U	10 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 U	3 U	3 U	6 U	3 U	3 U	-	-	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	6 J	9 J	11	33 J	30 J	92	9 J	7 J	30 U
2-Hexanone	ug/L	N	40	15 U	3 U	3 U	6 U	3 UJ	3 U	-	-	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	30 U	30 U	13	3 U	3 U	30 U
4-Methyl-2-pentanone	ug/L	N	NA	15 U	3 U	3 U	6 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	30 U	30 U	3 J	3 U	3 U	30 U
Acetone	ug/L	N	6000	30 U	6 U	6 U	12 U	47	6 U	-	-	2.4 J	0.7 U	1.4 J	0.7 U	0.7 U	0.7 U	17 J	17 J	25	97 J	60 U	560	30	27	60 U
Benzene	ug/L	N	1	**290**	**300**	**220**	**410**	**9**	**5**	**5**	**8J**	**2**	1	**24**	**2.4**	**2.2**	**3.6**	**550**	**520**	**590**	**190**	**110**	**83**	**27**	**170**	**63**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.83 J	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Bromoform	ug/L	N	4	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 UJ	1 UJ	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	10 U	73	6	1 U	10 U
Carbon Tetrachloride	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Chlorobenzene	ug/L	N	50	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Chloroethane	ug/L	N	NA	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 UJ	1 UJ	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Chloroform	ug/L	N	70	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	2	0.5 U	0.5 U	5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	2	0.5 U	0.5 U	5 U
cis-1,2-Dichloroethene	ug/L	N	70	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
cis-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Cyclohexane	ug/L	N	NA	18 J	14	36	36	2 J	2 UJ	-	-	1 U	1 U	1.5 J	2.6 J	3.1 J	6.6	68	42 J	75 J	48 J	31 J	10	42	37	31 J
Dibromochloromethane	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	20 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	1 U	1 UJ	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	17	30	45	66	2	1	0.7 J	2 J	0.64 J	0.45 J	2.9	1.2	0.43 J	0.72 J	56	37 J	65 J	8 U	5 U	4	4	7	10 J
Isopropylbenzene	ug/L	N	700	9 J	21	26	17	3 J	1 U	-	-	10	0.98 J	8.6	8.6	14	13	29	22	33	10 U	10 U	3 J	3 J	5	10 U
Methane	ug/L	N	NA	-	-	-	-	-	-	2200	2500 J	6200	1700	8800	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	10 U	1 U	1 U	1 U	10 U
Methyl-t-butyl ether	ug/L	N	70	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Methylcyclohexane	ug/L	N	NA	13 J	29	43	38	6	2 J	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 J	83	47	74	64	46 J	24	73	57	43 J
Methylene chloride (Dichloromethane)	ug/L	N	3	10 U	2 U	2 U	4 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	20 U	20 U	2 U	2 U	2 U	20 U
Styrene	ug/L	N	100	5 U	1 U	1 U	2 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	10 U	1 U	1 U	1 U	10 U
Tetrachloroethene	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Toluene	ug/L	N	600	4 J	5	7	7	0.6 J	0.5 U	0.2 J	0.6 J	1.2	0.29 J	2	1.2	1.6	1.4	34	19 J	43 J	7 U	5 U	3	1	4	5 U
trans-1,2-Dichloroethene	ug/L	N	100	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	8 U	5 U	0.5 U	0.5 U	0.5 U	5 U
trans-1,3-Dichloropropene	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	20 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	10 U	5 U	0.5 U	0.5 U	0.5 U	5 U
Xylene (total)	ug/L	N	1000	8	9	18	26	1	0.6 J	1 U	1 UJ	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	87	70	93	15 J	6 J	7	7	6	5 J
Total TIC VOCS	ug/L	N	NA	1300 J	970 J	2100 J	1900 J	260 J	120 J	-	-	-	-	-	-	-	-	1600 J	1400 J	2100 J	1100 J	370 J	240 J	-	420 J	220 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339
			Field Sample ID	M338A9X	M338B1X	M338B2X	M338B3X	M338B4X	M338B5X	M338B6X	M338B7X	M338B8X	M338B9X	M338C1	M338C2	M338C3	M339A1X	M339A2X	M339A3X	M339A4X	M339A5X	M339A6X	M339A7X	M339A8X	M339B1X	M339B2X
			Sample Date	06/15/2016	12/13/2016	05/10/2017	11/28/2017	07/05/2018	01/09/2019	10/09/2019	09/15/2020	12/01/2020	03/23/2021	06/04/2021	09/03/2021	12/08/2021	04/29/2013	06/20/2013	07/03/2014	08/01/2014	01/16/2015	07/15/2015	12/11/2015	01/10/2019	10/15/2019	09/18/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	-	-	-	-	-	-	-	-	2 U	2 U	4 U	20 UJ	20 U	100 U	4 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	3 J	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	6 J	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	2 U	2 U	4 U	20 UJ	20 U	100 U	4 U	-	-	0.3 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.2 UJ
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.2 UJ
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 J	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 J	3 U	3 U	3 J	6 J	-	-	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	5 U	14	26	20 J	30 UJ	31 J	150 U	15 J	-	-	17 J
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 UJ	3 U	-	-	0.3 U	0.3 U	0.3 U	0.67 J	0.4 U	4 U	3 U	3 U	6 U	30 UJ	30 U	150 U	6 U	-	-	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	3 U	6 U	30 UJ	30 U	150 U	6 U	-	-	1.4 J
Acetone	ug/L	N	6000	18 J	6 U	6 U	13 J	20 J	-	-	30	52	3.4 J	8.7 J	4 J	7 U	37	57	36 J	60 UJ	60 U	300 U	36 J	-	-	56 J
Benzene	ug/L	N	1	**59**	**14**	**19**	**12**	**91**	**79**	**82**	**7.9**	**22**	**4.8**	**100**	**130**	**180**	**350**	**350**	**350**	**320J**	**270**	**260**	**460**	**510**	**510**	**360J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.81 J	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	1 U	1 UJ	1 U	5 UJ	5 U	25 U	1 U	-	-	0.3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 J	1 U	1 U	1 U	1 U	-	-	0.2 U	0.22 J	0.2 U	0.59 J	0.84 J	3 U	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.98 J
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 UJ	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Cyclohexane	ug/L	N	NA	15	12	3 J	2 J	14	-	-	23	3.2 J	1 U	9.4	4.7 J	10 U	**160**	**130**	79	**110J**	87	**980**	**110**	-	-	80 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 UJ	25 U	1 U	-	-	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	2 J	1.4 J	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	1 U	3.4 J	1.6 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	6	4	2	2	2	11	3	2.2	2.3	0.48 J	2.7	2.4	4 U	120	70	34	26 J	86	200	100	110	120	100 J
Isopropylbenzene	ug/L	N	700	4 J	5	2 J	6	2 J	-	-	6.3	5.4	2.8 J	8.5	9.9	8.9 J	64	34	13	10 J	43 J	240 J	46	-	-	68 J
Methane	ug/L	N	NA	-	-	-	-	-	4400	6700	7900	7200	2500	-	-	-	-	-	-	-	-	-	-	17000	12000	8900
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.3 UJ
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Methylcyclohexane	ug/L	N	NA	20	18	7	4 J	11	-	-	16	3.9 J	1.5 J	11	7.5	5 U	**210**	**150**	**120**	**110J**	**130**	**1800**	**140**	-	-	**160J**
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	2 U	2 U	4 U	20 UJ	20 U	100 U	4 U	-	-	0.3 UJ
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	1 U	1 U	2 U	10 UJ	10 U	50 U	2 U	-	-	0.2 UJ
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Toluene	ug/L	N	600	2	1	0.7 J	1	3	5 J	4	0.69 J	0.48 J	0.2 U	1.9	2.2	2 U	80	63	41	35 J	45	74	56	71	70	41 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.8 U	0.8 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	5 UJ	5 U	25 U	1 U	-	-	0.2 UJ
Xylene (total)	ug/L	N	1000	4	5	2	2	2	10 U	5 J	2.7 J	1.6 J	1.4 U	3.9	3.8	4 U	260	180	86	68 J	180	390	170	160	180	110 J
Total TIC VOCS	ug/L	N	NA	270 J	340 J	160 J	250 J	240 J	-	-	-	-	-	-	-	-	3800 J	3000 J	2100 J	2500 J	-	16000 J	3000 J	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-339	MW-339	MW-339	MW-339	MW-339	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-350
			Field Sample ID	M339B3X	M339B4X	M339B5	M339B6	M339B7	M340A1X	M340A2X	M340A3X	M340A4X	M340A5X	M340A6X	M340A7X	M340A8X	M340A9X	M340B1X	M340B3X	M340B4X	M340B5X	M340B6X	M340B7	M340B8	M340B9	M350A1X
			Sample Date	12/07/2020	03/30/2021	06/14/2021	09/08/2021	12/09/2021	04/29/2013	06/25/2013	07/03/2014	08/05/2014	01/16/2015	07/16/2015	12/11/2015	05/11/2017	07/05/2018	01/10/2019	10/07/2019	09/24/2020	12/07/2020	03/25/2021	06/14/2021	09/08/2021	12/22/2021	04/17/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
1,1,2-Trichloroethane	ug/L	N	3	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	2 U	2 U	20 U	20 UJ	2 U	40 U	10 UJ	20 U	2 U	-	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	10 U	10 UJ	1 U	20 U	5 UJ	10 U	1 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	2 U	2 U	20 U	20 UJ	2 U	40 U	10 UJ	20 U	2 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	2 U
1,2-Dibromoethane	ug/L	N	0.03	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	10 U	10 UJ	1 U	20 U	5 UJ	10 U	1 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
1,2-Dichloroethane	ug/L	N	2	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	1 U
1,2-Dichloropropane	ug/L	N	1	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	**1.1J**	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	10 U	10 UJ	1 U	20 U	5 UJ	10 U	1 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
1,4-Dichlorobenzene	ug/L	N	75	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	10 U	10 UJ	1 U	20 U	5 UJ	10 U	1 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	15 UJ	3 U	0.5 UJ	0.5 UJ	2.5 UJ	6 J	77	200	200 J	19	60 U	15 UJ	30 U	8 J	-	-	7.1 J	3 UJ	1.5 U	5 UJ	0.5 UJ	5 UJ	21
2-Hexanone	ug/L	N	40	15 UJ	3 U	0.4 UJ	0.4 UJ	2 UJ	3 U	5 J	30 U	36 J	3 U	60 U	15 UJ	30 U	9 J	-	-	0.3 UJ	3 UJ	1.5 U	4 UJ	0.4 UJ	4 UJ	3 U
4-Methyl-2-pentanone	ug/L	N	NA	25 UJ	5 U	0.5 UJ	0.5 UJ	2.5 UJ	3 U	3 U	30 U	36 J	3 U	60 U	15 UJ	30 U	3 U	-	-	0.5 UJ	5 UJ	2.5 U	5 UJ	0.5 UJ	5 UJ	3 U
Acetone	ug/L	N	6000	35 U	17 J	0.7 UJ	6.3 J	3.5 UJ	18 J	56	770	720 J	71	120 U	42 J	60 U	21	-	-	15 J	39 UJ	5.8 J	7 UJ	0.7 UJ	7 UJ	23
Benzene	ug/L	N	1	**280**	**170**	**300J**	**290J**	**210J**	**730**	**780**	**320**	**210J**	**640**	**660**	**500J**	**380**	**280**	**330**	**510J**	**260J**	**260**	**220**	**270J**	**370J**	**340J**	**100**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	10 U	2 U	**2.9J**	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
Bromoform	ug/L	N	4	50 U	10 U	1 UJ	1 UJ	5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	1 UJ	10 U	5 U	10 UJ	1 UJ	10 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	1 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	10 U	2 J	0.3 UJ	0.95 J	1.5 UJ	1 U	1 U	46 J	36 J	1 U	20 U	5 UJ	10 U	1 U	-	-	1.5 J	2 U	1.3 J	3 UJ	0.78 J	3 UJ	1 U
Carbon Tetrachloride	ug/L	N	1	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
Chlorobenzene	ug/L	N	50	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
Chloroethane	ug/L	N	NA	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
Chloroform	ug/L	N	70	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
cis-1,2-Dichloroethene	ug/L	N	70	10 U	2 U	0.3 UJ	0.3 UJ	1.5 J	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
Cyclohexane	ug/L	N	NA	50 U	44 J	92 J	59 J	61 J	80	70	38 J	31 UJ	78	40 U	46 J	34 J	47	-	-	75 J	50	36	29 J	48 J	48 J	**110**
Dibromochloromethane	ug/L	N	1	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 UJ	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	2 U	2 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	2 U
Ethane	ug/L	N	NA	3.1 J	6.8 J	-	-	-	-	-	-	-	-	-	-	-	-	1.5 J	3.8 J	3.7 J	3.1 J	3.8 J	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	25 J	18	44 J	48 J	22 J	400	540	200	150 J	410	340	310 J	180	260	260	320 J	200 J	190	21	38 J	84 J	110 J	41
Isopropylbenzene	ug/L	N	700	17 J	19 J	34 J	34 J	23 J	36	31	14 J	12 J	25	20 U	16 J	16 J	18	-	-	22 J	15 J	20 J	15 J	21 J	18 J	43
Methane	ug/L	N	NA	11000	11000 J	-	-	-	-	-	-	-	-	-	-	-	-	4700	4000 J	4200	6500	8000	-	-	-	-
Methyl acetate	ug/L	N	7000	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	10 U	10 UJ	1 U	20 U	5 UJ	10 U	1 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	1 U
Methyl-t-butyl ether	ug/L	N	70	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	0.5 U	0.5 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	0.5 U
Methylcyclohexane	ug/L	N	NA	50 J	48 J	**110J**	53 J	53 J	89	87	82	75 J	**110**	37 J	56 J	46 J	67	-	-	89 J	62	37	29 J	48 J	40 J	**270**
Methylene chloride (Dichloromethane)	ug/L	N	3	15 U	3 U	0.3 UJ	0.3 UJ	1.5 UJ	2 U	2 U	20 U	20 UJ	2 U	40 U	10 UJ	20 U	0.5 U	-	-	0.3 UJ	3 U	1.5 U	3 UJ	0.3 UJ	3 UJ	2 U
Styrene	ug/L	N	100	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	10 U	10 UJ	1 U	20 U	5 UJ	10 U	1 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
Tetrachloroethene	ug/L	N	1	10 U	**6.1J**	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
Toluene	ug/L	N	600	17 J	12	26 J	31 J	16 J	320	340	120	70 J	160	85	79 J	56	80	90	140 J	55 J	83	26	44 J	80 J	77 J	24
trans-1,2-Dichloroethene	ug/L	N	100	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	0.8 U	0.8 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	10 U	2 U	0.3 UJ	0.3 UJ	1.5 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	3 UJ	0.3 UJ	3 UJ	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	2 U	2 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	10 U	2 U	0.2 UJ	0.2 UJ	1 UJ	1 U	1 U	5 U	5 UJ	0.5 U	10 U	3 UJ	5 U	0.5 U	-	-	0.2 UJ	2 U	1 U	2 UJ	0.2 UJ	2 UJ	1 U
Xylene (total)	ug/L	N	1000	70 U	23 J	55 J	61 J	37 J	**1400**	**1400**	800	580 J	**1300**	500	550 J	140	210	140	140 J	130 J	110	16 J	11 J	48 J	64 J	47
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	4300 J	3300 J	1900 J	2500 J	-	1900 J	3000 J	1400 J	1900 J	-	-	-	-	-	-	-	-	3100 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-351
			Field Sample ID	M350A2X	M350A3X	M350A4X	M350A5X	M350A6X	M350A7X	M350A8X	M350A9X	M350B1X	D0518178	M350B2X	M350B3X	M350B4X	M350B5X	M350B6X	M350B8X	M350B9X	M350C1X	D0608211A	M350C2	M350C3	M350C4	D0430138
			Sample Date	06/24/2013	03/11/2014	06/27/2014	07/30/2014	01/15/2015	07/07/2015	12/11/2015	06/09/2016	12/12/2016	05/18/2017	05/18/2017	11/28/2017	07/03/2018	01/09/2019	10/14/2019	09/24/2020	12/02/2020	03/17/2021	06/08/2021	06/08/2021	09/03/2021	12/06/2021	04/30/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.54 J	0.3 U	1.5 U	1.5 U	0.3 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	2 U	2 U	40 UJ	2 U	2 U	4 U	2 U	4 U	2 U	2 U	2 U	2 U	-	-	-	-	-	-	-	-	-	2 UJ
1,1-Dichloroethane	ug/L	N	50	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	1 U	1 U	20 UJ	1 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	2 U	2 U	40 UJ	2 U	2 U	4 U	2 U	4 U	2 U	2 U	2 U	2 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	1 U	1 U	20 UJ	1 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
1,2-Dichloropropane	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	1 U	1 U	20 UJ	1 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	2 U	1 U	1 U	20 UJ	1 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	39	13	17	60 UJ	14	3 U	6 U	17	6 U	18	23	3 U	16	-	-	9 J	0.3 U	0.3 U	0.5 U	2.5 U	2.5 U	0.5 U	12
2-Hexanone	ug/L	N	40	6 U	7 J	13	60 UJ	3 U	3 U	6 U	3 U	6 U	3 U	3 U	3 UJ	3 U	-	-	0.3 U	0.3 U	0.3 U	0.4 U	2 U	2 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	16 J	11	45	60 UJ	3 U	3 U	6 U	3 U	6 U	3 U	3 U	3 U	3 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	2.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	54	23	37	120 UJ	47	18 J	15 J	24	14 J	26 J	56 J	12 J	22	-	-	16 J	3.8 J	5.7 J	3.6 J	3.5 U	3.5 U	0.7 U	19 J
Benzene	ug/L	N	1	**120**	**76**	**56**	**240J**	**170**	**93**	**160**	**180**	**90**	**150**	**140**	**180**	**190**	**150**	**180J**	**42**	**49**	**24**	**27**	**24**	**60**	**3.3**	**230**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	**7.4**	1 U
Bromoform	ug/L	N	4	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	2 UJ	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 U	2 J	1 U	20 UJ	1 U	1 U	2 U	3 J	2 U	2 J	1 U	1 U	1 U	-	-	0.2 U	0.52 J	0.2 U	0.46 J	1.5 U	1.5 U	0.41 J	1 U
Carbon Tetrachloride	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
Chlorobenzene	ug/L	N	50	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
Chloroethane	ug/L	N	NA	2 J	1 U	0.5 U	10 UJ	1	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
Chloroform	ug/L	N	70	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	92	**150**	59	40 UJ	**110**	33	29	58	58	64	70 J	42	51 J	-	-	20	1 U	27	1 U	5 U	5 U	1 U	78
Dibromochloromethane	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	4 U	2 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2 J	1.1 J	1 U	3.4 J	1 U	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	43	20	14	28 J	36	26	33	53	16	40	35 J	34	44	26	20 J	3.4	12	2	4.5	4.4 J	4.2 J	3	41
Isopropylbenzene	ug/L	N	700	42	18	12	20 UJ	27	22	28	43	24	47	43 J	37	46	-	-	15	44	8.3	44	40	45	42	40
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	13000	8100	5400	6700	6400	-	-	-	-	-
Methyl acetate	ug/L	N	7000	2 U	1 U	1 U	20 UJ	1 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	1 U	0.5 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	**190**	**210**	**150**	90 J	**140**	59	51	82	88	84	95	60	62	-	-	28	0.5 U	26	0.5 U	2.5 U	2.5 U	0.5 U	**140**
Methylene chloride (Dichloromethane)	ug/L	N	3	4 U	2 U	2 U	40 UJ	2 U	2 U	4 U	2 U	4 U	2 U	2 U	0.5 U	0.5 U	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	0.3 U	2 U
Styrene	ug/L	N	100	2 U	1 U	1 U	20 UJ	1 U	1 U	2 U	1 U	2 U	1 U	1 U	1 U	1 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
Toluene	ug/L	N	600	19	13	8	15 J	18	10	9	17	10	15	15	10	13	12	9 J	7.2	1.4 UJ	4.4	3.3	3.1 J	2.1 J	1.4	24
trans-1,2-Dichloroethene	ug/L	N	100	2 U	0.8 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.3 U	1.5 U	1.5 U	0.3 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	4 U	2 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	2 U	1 U	0.5 U	10 UJ	0.5 U	0.5 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.2 U	1 U
Xylene (total)	ug/L	N	1000	37	18	11	18 J	28	17	26	32	18	35	32	39	43	36	40 J	15	18	8.3	19	16	2 U	7	86
Total TIC VOCS	ug/L	N	NA	2500 J	1400 J	950 J	1000 J	-	920 J	1100 J	1100 J	1100 J	1400 J	1300 J	1100 J	1200 J	-	-	-	-	-	-	-	-	-	1800 J

Notes:
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2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351
			Field Sample ID	M351A1X	M351A2X	M351A3X	D0630148	M351A4X	D0804148	M351A5X	D0115158A	M351A6X	D0707158	M351A7X	D121115A8	M351A8X	D0610168	M351A9X	M351B1X	M351B2X	D1129178	M351B3X	M351B4X	M351B5X	D1008198	M351B6X
			Sample Date	04/30/2013	06/25/2013	03/11/2014	06/30/2014	06/30/2014	08/04/2014	08/04/2014	01/15/2015	01/15/2015	07/07/2015	07/07/2015	12/11/2015	12/11/2015	06/10/2016	06/10/2016	12/09/2016	05/10/2017	11/29/2017	11/29/2017	07/05/2018	01/09/2019	10/07/2019	10/08/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	4 U	20 U	20 U	20 U	20 UJ	20 UJ	2 U	2 U	2 U	2 U	4 UJ	20 UJ	2 U	4 U	2 U	2 U	4 UJ	4 UJ	2 UJ	-	-	-
1,1-Dichloroethane	ug/L	N	50	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	2 U	10 U	10 U	10 U	10 UJ	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	4 U	20 U	20 U	20 U	20 UJ	20 UJ	2 U	2 U	2 U	2 U	4 UJ	20 UJ	2 U	4 U	2 U	2 U	4 UJ	4 UJ	2 U	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	2 U	10 U	10 U	10 U	10 UJ	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
1,2-Dichloroethane	ug/L	N	2	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,2-Dichloropropane	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	2 U	10 U	10 U	10 U	10 UJ	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	1 U	2 U	10 U	10 U	10 U	10 UJ	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	12	6 J	43 J	30 U	46 J	96 J	36 J	5 J	5 J	7 J	7 J	6 UJ	30 UJ	3 U	7 J	6 J	6 J	6 UJ	6 UJ	5 J	-	-	-
2-Hexanone	ug/L	N	40	3 U	6 U	30 U	30 U	30 U	35 J	30 UJ	3 U	3 U	3 U	3 U	6 UJ	30 UJ	3 U	6 U	3 U	3 U	6 UJ	6 UJ	3 U	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	6 U	30 U	30 U	30 U	30 UJ	36 J	3 U	3 U	3 U	3 U	6 UJ	30 UJ	3 U	6 U	3 U	3 U	6 UJ	6 UJ	3 U	-	-	-
Acetone	ug/L	N	6000	19 J	12 U	150 J	63 J	200 J	380 J	82 J	13 J	6 U	6 U	12 J	15 J	60 UJ	14 J	31 J	12 J	13 J	12 UJ	12 UJ	9 J	-	-	-
Benzene	ug/L	N	1	**240**	**420**	**610**	**380**	**300**	**120J**	**580J**	**270J**	**360J**	**140**	**150**	**830J**	**820J**	**520**	**440**	**280**	**320**	**380J**	**340J**	**23**	**91**	**290**	**230**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Bromoform	ug/L	N	4	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	2 U	10 U	10 U	11 J	10 J	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
Carbon Tetrachloride	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Chlorobenzene	ug/L	N	50	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 J	-	-	-
Chloroethane	ug/L	N	NA	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Chloroform	ug/L	N	70	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Cyclohexane	ug/L	N	NA	99	**110**	77	40 J	21 J	20 UJ	73 J	41 J	60 J	52 J	35 J	62 J	44 J	45	47	65	37	7 J	7 J	5	-	-	-
Dibromochloromethane	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	4 U	20 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 UJ	1 UJ	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	2 J	1.3 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	41	48	51	22	21	15 J	51 J	22 J	30 J	13	13	50 J	45 J	33	44	45	21	17 J	12 J	0.9 J	5	7 J	5 J
Isopropylbenzene	ug/L	N	700	40	36	25 J	10 U	10 U	10 UJ	19 J	12 J	16 J	7	7	19 J	15 J	13	17	25	17	11 J	10 J	2 J	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3000	11000 J	7300 J
Methyl acetate	ug/L	N	7000	1 U	2 U	10 U	10 U	10 U	10 UJ	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	1 U	5 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Methylcyclohexane	ug/L	N	NA	**140**	**140**	83	48 J	26 J	13 J	68 J	48 J	69 J	64	62	61 J	47 J	52	51	80	38	5 J	4 J	5 J	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	4 U	20 U	20 U	20 U	20 UJ	20 UJ	2 U	2 U	2 U	2 U	4 UJ	20 UJ	2 U	4 U	2 U	2 U	1 UJ	1 UJ	0.5 U	-	-	-
Styrene	ug/L	N	100	1 U	2 U	10 U	10 U	10 U	10 UJ	10 UJ	1 U	1 U	1 U	1 U	2 UJ	10 UJ	1 U	2 U	1 U	1 U	2 UJ	2 UJ	1 U	-	-	-
Tetrachloroethene	ug/L	N	1	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Toluene	ug/L	N	600	25	42	42 J	10	11	9 J	28 J	14 J	20 J	7	7	42 J	39 J	29	37	36	19	10 J	11 J	1	5	12	10
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	2 U	8 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	4 U	20 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	2 U	10 U	5 U	5 U	5 UJ	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	5 UJ	0.5 U	1 U	0.5 U	0.5 U	1 UJ	1 UJ	0.5 U	-	-	-
Xylene (total)	ug/L	N	1000	87	96	47 J	19 J	13 J	12 J	37 J	17 J	24 J	16	16	39 J	33 J	32	37	45	18	13 J	11 J	0.8 J	6	15 J	11 J
Total TIC VOCS	ug/L	N	NA	1700 J	2200 J	2500 J	540 J	300 J	190 J	1500 J	-	-	570 J	540 J	1200 J	1200 J	790 J	1100 J	890 J	770 J	1300 J	1200 J	150 J	-	-	-

Notes:
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			Field Sample ID	M351B7X	M351B8X	M351B9X	M351C1	D090320218A	M351C2	M351C3	M352A1X	M352A2X	M352A3X	M352A4X	M352A5X	M352RA6X	D0117198	M352RA7X	M352RA8X	M352RA9X	M352B1X	M352RB2X	M352RB3X	M352RB4X	M352RB5X	M352RB6
			Sample Date	09/15/2020	12/01/2020	03/25/2021	06/08/2021	09/03/2021	09/03/2021	12/07/2021	11/08/2013	03/17/2014	06/05/2014	10/16/2017	12/08/2017	10/18/2018	01/17/2019	01/17/2019	04/08/2019	07/12/2019	09/30/2019	01/22/2020	03/26/2020	12/10/2020	03/15/2021	06/02/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	4 U	4 U	2 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	1 UJ	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	4 U	2 UJ	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	1.8 J	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	6 U	17 J	32 J	17	29	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 UJ	1.5 U	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	2 J	0.4 U	0.4 U	0.4 U	0.4 U	6 U	6 U	3 UJ	3 U	12	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 UJ	1.5 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	6 U	6 U	3 UJ	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	50 UJ	2.5 U	0.5 U
Acetone	ug/L	N	6000	9.5 J	2.9 UJ	2.4 J	1.9 J	0.7 U	5.4 J	8.9 J	26 J	73	61 J	35	61	2 J	1 J	1 J	1 J	0.7 U	2 J	0.7 U	0.7 UJ	70 UJ	3.5 U	0.7 U
Benzene	ug/L	N	1	**260**	**220**	**220**	**530**	**430**	**430**	**340**	**410**	**410**	**390J**	**150**	**250**	0.2 U	0.7 J	0.7 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.5 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.78 J
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	100 U	5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.47 J	0.2 U	0.3 U	0.3 U	0.3 U	0.44 J	2 U	2 U	1 UJ	1 J	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	20 U	1 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
Cyclohexane	ug/L	N	NA	56	44	28	34	28	26	42	**220**	**320**	**270J**	**220**	**280**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	100 U	5 U	15
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	20 U	1 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
Ethane	ug/L	N	NA	1 U	1 U	1.2 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	13	7.9	7.8	13	7.8	6.8	7.9	210	140	160 J	41	49	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	40 U	2 U	0.4 U
Isopropylbenzene	ug/L	N	700	20	12	15	21	18	16	18	90	70	69 J	92	91	0.3 J	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.24 J
Methane	ug/L	N	NA	7400	7400	4000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
Methylcyclohexane	ug/L	N	NA	32	38	12	8.7	11	10	16	**200**	**210**	**230J**	**190**	**250**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	2 J	2 J	50 U	2.5 U	5.7
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	4 U	2 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	30 U	1.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
Toluene	ug/L	N	600	30	21	14	32	25	23	17	70	65	65 J	51	57	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4 U	4 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	20 U	1 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	1 U	0.2 U
Xylene (total)	ug/L	N	1000	27	23	14	22	16	15	18	82	77	73 J	55	65	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	140 U	7 U	0.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	2700 J	3300 J	3400 J	2300 J	-	0 U	0 U	0 U	0 U	0 U	0 U	170 J	140 J	0 U	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-352R	MW-352R	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353
			Field Sample ID	M352RB7	M352RB8	M353A1X	M353A2X	M353A3X	M353A4X	M353A5X	M353A6X	M353A7X	D0211151	M353A8X	M353B1X	M353B2X	M353B3X	M353B4X	M353B5X	M353B7X	M353B8X	M353B9X	M353C1X	M353C2X	M353C3X	M353C4X
			Sample Date	08/27/2021	12/10/2021	06/05/2013	09/12/2013	11/15/2013	01/16/2014	04/08/2014	07/03/2014	11/20/2014	02/11/2015	02/11/2015	08/11/2015	10/16/2015	05/05/2016	10/27/2016	04/04/2017	09/15/2017	04/18/2018	09/05/2018	05/01/2019	08/27/2019	05/05/2020	09/09/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-
1,1-Dichloroethane	ug/L	N	50	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	3.0 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	3.0 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2.0 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	3.0 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	3.0 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	5.0 U	5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.4 J	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	4.0 U	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	5.0 U	5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	7.0 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	3 J	1 J	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	3.0 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	10 U	10 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	3.0 U	3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	10 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 U
Dibromochloromethane	ug/L	N	1	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2.0 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	4.0 U	4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	2.0 U	2 U	3 J	4 J	2 J	1 U	2 J	3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	3.0 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	2.0 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	5.0 U	5.2 J	18	7	1 U	7	9	7	1 U	1 U	1 U	2 J	1 U	1 U	2 J	1 U	1 U	1 J	0.2 U	0.2 U	1 J	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	3.0 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U
Styrene	ug/L	N	100	3.0 U	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	3.0 U	**4.3J**	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	12	2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	3.0 U	3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3.0 U	3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2.0 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	2.0 U	2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	4.4 J	4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	0.0 U	0 U	540 J	380 J	240 J	460 J	270 J	290 J	110 J	19 J	27 J	57 J	37 J	49 J	0 U	150 J	39 J	6 J	12 J	10 J	25 J	8 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-353	MW-353	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354
			Field Sample ID	M353C5X	M353C6	M354A1X	M354A2X	M354A3X	M354A4X	M354A5X	M354A6X	M354A7X	M354A8X	M354B1X	M354B2X	M354B3X	M354B4X	M354B5X	D0915171	M354B6X	M354B7X	M354B8X	M354B9X	M354C1X	M354C2X	M354C3X
			Sample Date	03/03/2021	09/30/2021	06/05/2013	09/12/2013	11/15/2013	01/16/2014	04/08/2014	07/03/2014	11/20/2014	02/11/2015	08/11/2015	10/16/2015	05/05/2016	10/27/2016	04/04/2017	09/15/2017	09/15/2017	04/18/2018	09/05/2018	05/01/2019	08/27/2019	05/05/2020	09/09/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 UJ	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 UJ	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 UJ	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	4400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1.7 J	0.58 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-354	MW-354	MW-354	MW-354	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355
			Field Sample ID	M354C4X	M354C5	M354C6	M354C8	M355A1X	M355A2X	D1115131	M355A3X	M355A4X	M355A6X	M355A7X	M355A8X	M355A9X	M355B2X	M355B3X	M355B4X	M355B5X	D0404171	M355B6X	M355B7X	D0418181	M355B8X	M355B9X
			Sample Date	03/03/2021	04/30/2021	09/01/2021	03/23/2022	06/05/2013	09/12/2013	11/15/2013	11/15/2013	01/16/2014	04/10/2014	07/03/2014	11/20/2014	02/11/2015	08/13/2015	10/16/2015	05/05/2016	10/27/2016	04/04/2017	04/04/2017	09/15/2017	04/18/2018	04/18/2018	09/05/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 UJ	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	1 UJ	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	-	5.5	4.9 UJ	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ, UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356
			Field Sample ID	M355C1X	M355C2X	M355C3X	M355C4X	M355C5X	M355C6	M355C7	M356A1X	M356A2X	M356A3X	M356A4X	M356A5X	M356A6X	M356A7X	M356A8X	M356B1X	M356B2X	M356B3X	M356B4X	M356B5X	M356B6X	M356B7X	M356B8X
			Sample Date	03/27/2019	09/03/2019	02/21/2020	08/31/2020	02/08/2021	07/29/2021	02/14/2022	06/05/2013	09/12/2013	11/15/2013	01/17/2014	04/10/2014	07/01/2014	11/20/2014	02/11/2015	08/13/2015	10/16/2015	05/05/2016	10/28/2016	04/04/2017	09/19/2017	04/18/2018	09/05/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	2 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ, UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	-	-	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
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Chevron Perth Amboy Facility

			Location ID	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357
			Field Sample ID	M356B9X	M356C1X	M356C2X	M356C3X	M356C4X	M356C5	M356C6	M357A1X	M357A2X	M357A3X	M357A4X	M357A5X	M357A6X	M357A7X	M357A8X	M357A9X	M357B1X	M357B2X	M357B3X	D1028161	M357B4X	M357B5X	M357B6X
			Sample Date	03/27/2019	09/03/2019	02/21/2020	08/31/2020	02/08/2021	07/29/2021	02/14/2022	06/06/2013	09/13/2013	11/19/2013	01/17/2014	05/06/2014	07/01/2014	11/25/2014	02/12/2015	05/13/2015	08/13/2015	10/27/2015	05/06/2016	10/28/2016	10/28/2016	04/05/2017	09/19/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	2 UJ	0.7 U	0.8 J	0.7 U	0.98 J	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	69	6 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ, UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	-	-	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358
			Field Sample ID	M357B7X	M357B8X	M357B9X	M357C1X	M357C2X	M357C3X	M357C4	M357C5	M358A1X	M358A2X	M358A3X	M358A4X	M358A5X	M358A6X	M358A8X	M358A9X	M358B1X	M358B2X	M358B3X	M358B4X	M358B5X	M358B6X	M358B7X
			Sample Date	04/25/2018	10/03/2018	05/03/2019	08/29/2019	05/01/2020	11/24/2020	06/25/2021	12/27/2021	06/27/2013	09/13/2013	11/19/2013	01/29/2014	05/06/2014	07/03/2014	08/28/2014	11/25/2014	02/12/2015	05/13/2015	08/13/2015	10/27/2015	05/06/2016	10/28/2016	04/05/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	**11J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.3U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	0.2U	0.2 UJ	0.2 U	0.2 U	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	**150J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	7.6 J	3 U	3 U	3 U	3 U	3 U	3 U	11 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	4 J	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	6 U	7J	2 UJ	6 J	13 UJ	8.1 UJ	13 J	41	6 U	6 U	6 U	6 U	6 U	6 U	300 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**14J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 UJ	0.2U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330000	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	75 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	0.2U	0.2 U	1 U	1 U	1 UJ	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.4U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	0.2U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	0.2U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ, UJ	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.87 J	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.2U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	**7J**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	1U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	0U	-	-	-	-	0 U	-	0 U	0 U	93 J	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373
			Field Sample ID	M358B8X	M358B9X	M358C1X	M358C2X	M358C3X	M358C4X	M358C5X	M358C6X	M358C7	M358C8	M373A1X	M373A2X	M373A3X	M373A4X	M373A6X	M373A7X	M373A8X	M373A9X	M373B2X	M373B3X	M373B4X	M373B5X	M373B6X
			Sample Date	09/19/2017	04/25/2018	10/02/2018	04/25/2019	08/29/2019	04/28/2020	11/24/2020	03/05/2021	05/04/2021	10/27/2021	01/09/2014	04/15/2014	07/10/2014	11/25/2014	04/10/2015	06/12/2015	08/25/2015	10/29/2015	11/11/2016	03/21/2017	09/20/2017	03/27/2018	08/09/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.3U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	0.2U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	0.3 U	0.5 J	0.3 U	0.3 J	0.3 U	0.3 U	0.3 U	0.5 U	3 U	3 U	10 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 J
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.3U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5U
Acetone	ug/L	N	6000	6 U	6 U	4 J	7 J	2 J	2 J	1.1 UJ	2.1 J	1.6 UJ	2.1 J	6 U	6 U	7 J	6 U	10 J	8 J	7 J	8 J	6 U	6 U	9 J	6 U	9J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Bromoform	ug/L	N	4	0.5 U	0.5 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.2U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Cyclohexane	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	1 U	1 U	1 U	2 U	2 U	3 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4U
Isopropylbenzene	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	82	40	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 J	2	1	0.5 U	2	3	1	1	2	0.7 J	1	0.9 J	1
Methylcyclohexane	ug/L	N	NA	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.2U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1U
Total TIC VOCS	ug/L	N	NA	-	-	0 U	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374
			Field Sample ID	M373B7X	D0820191B	M373B8X	M373B9X	M373C1X	M373C2X	M374A1X	D0710141	M374A2X	M374A3X	M374A5X	M374A4X	M374A6X	M374A7X	M374A8X	M374A9X	M374B1X	M374B2X	D0131171	M374B3X	M374B5X	M374B7X	M374C2
			Sample Date	03/25/2019	08/20/2019	08/20/2019	03/26/2020	08/11/2020	03/05/2021	04/10/2014	07/10/2014	07/10/2014	08/15/2014	11/18/2014	12/04/2014	04/10/2015	06/12/2015	08/25/2015	10/30/2015	05/11/2016	11/04/2016	01/31/2017	01/31/2017	07/27/2017	02/06/2018	05/03/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 J	0.3 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.4 J	0.3 U	0.3 U	0.3 U	2.1 J	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	2 J	3 J	7 J	0.7 U	9.6 UJ	3.8 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**51**	**95**	**96**	**54**	**32**	**41**	**32**	**44**	**55**	**31**	**16**	**5**	**3**	**3**	**8**	**3**	**1.6**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	0.2 U	1 U	1 U	1 U	1 U	1 U	37 J	35	35	22	35	33	32	35	24	31	28	25	17	17	11	19	1.6 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	37	110	110	86	61	66	26	53	95	43	11	2	3	3	4	1	1.8
Isopropylbenzene	ug/L	N	700	0.8 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	15	25	26	23	27	22	10	27	27	28	24	19	18	17	14	9	13
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7900
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.3 J	0.2 U	0.2 J	0.2 U	1.3	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	25	22	23	16	26	23	20	22	16	22	20	15	15 J	15 J	6	10	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.6 UJ	0.6 UJ	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	32	80	80	98	53	59	24	36	68	34	20	4	4	4	16	7	2.5
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1 U	1.4 U	1.4 U	650	800	810	850	880	760	390	790	1000	690	650	380	310	300	260	190	150
Total TIC VOCS	ug/L	N	NA	0 U	-	-	-	-	-	880 J	1600 J	1600 J	1500 J	1600 J	1400 J	560 J	1400 J	1600 J	1400 J	830 J	1200 J	710 J	690 J	600 J	390 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-374	MW-374	MW-374	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376
			Field Sample ID	M374C3	M374C4	M374C5	M375A1X	M375A2X	M375A3X	D1118141	M375A4X	M375A5X	M375A6X	M375A7X	M375A8X	M375A9X	M375B1X	D0609171	M375B2X	M375B3X	M376A1X	M376A2X	D0717141	M376A3X	M376A5X	M376A4X
			Sample Date	09/28/2021	11/02/2021	03/18/2022	01/10/2014	04/10/2014	07/10/2014	11/18/2014	11/18/2014	04/15/2015	06/12/2015	08/25/2015	10/30/2015	05/11/2016	11/04/2016	06/09/2017	06/09/2017	12/06/2017	01/15/2014	04/17/2014	07/17/2014	07/17/2014	11/19/2014	12/08/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	1.2 J	0.7 U	0.7 U	6 J	6 U	6 U	6 U	6 U	6 U	6 U	8 J	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 J	11 J	10 J	6 U	6 U
Benzene	ug/L	N	1	0.3 U	**2.6**	**22**	1 J	**5**	1	1	1	0.5 U	0.6 J	1	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	**24**	**130**	**240**	**220**	**98**	**240**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	**4.4**	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	21	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1 U	1 U	10	25	16 J	24	8	7	8	25	17	13	23	14	11	11	10 J	14	21 U	19 J	17 J	15	45
Dibromochloromethane	ug/L	N	1	**1.4**	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	1 U	11	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	25	2 J	5	1	0.9 J	0.9 J	1 J	0.6 J	2	1	0.6 J	0.7 J	0.5 U	0.5 U	0.7 J	3 J	11	3	3	2	7
Isopropylbenzene	ug/L	N	700	0.2 U	3.8 J	11	35	28	24	29	28	18	32	31	32	37	33	34	37	46	2 J	5	3 J	2 J	2 J	6
Methane	ug/L	N	NA	3 U	5500	3400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	23	16	10	9	8	4 J	14	9	8	16	11	20	20	18	4 J	9	3 J	3 J	4 J	16
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	2.4	42	4 J	7	3	2	2	3	3	7	5	3	1	0.8 J	0.8 J	1 U	5 J	17	18	15	11	29
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.4 U	75	200	76	120	120	87	85	40	66	47	37	50	10	7	7	7	100	210	99	84	97	270
Total TIC VOCS	ug/L	N	NA	0 U	-	-	850 J	610 J	600 J	630 J	600 J	290 J	530 J	470 J	380 J	440 J	440 J	480 J	490 J	550 J	170 J	240 J	210 J	190 J	250 J	330 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-377	MW-377	MW-377
			Field Sample ID	M376A6X	M376A7X	M376A8X	M376A9X	M376B1X	M376B3X	M376B4X	M376B5X	M376B7X	M376B8X	M376B9X	D0214201X	M376C1X	M376C2X	M376C3X	M376M4	M376C5	D1102211	M376C6	M376C7	M377A1X	M377A2X	M377A3X
			Sample Date	04/14/2015	05/15/2015	09/01/2015	10/14/2015	11/03/2015	11/03/2016	03/21/2017	08/25/2017	08/09/2018	03/15/2019	08/27/2019	02/14/2020	02/14/2020	08/21/2020	03/29/2021	05/25/2021	09/23/2021	11/02/2021	11/02/2021	03/18/2022	01/15/2014	04/17/2014	07/17/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	20 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 UJ	0.3 U	1.3	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**1.2**	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	5 J	5 J	0.3 U	2 J	2 J	0.3 U	1 J	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	30 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	30 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	30 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	8 J	6 U	6 U	6 U	13J	25 J	0.7 U	5 J	6 J	3.6 UJ	4.5 J	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	60 U	6 J	8 J
Benzene	ug/L	N	1	**220**	**140**	**19**	**220**	**160**	**94**	**250**	**330**	**120**	**300**	**65**	**160**	**160**	**42**	**150**	**45**	**2.7**	**2.6**	**4.2**	**85**	**74**	**150**	**170**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.3U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.23 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	13	9	2 U	10	8	6	54	31	37	**140**	20	**140**	**140**	16	**110**	28	2.1 J	1 U	1.1 J	**130**	60	75 J	100 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	82 J	6	6.6	5.6	98	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	5	4	0.5 U	4	3	2	11	9	3	17	2	13	12	1.5	10	2.7	0.4 U	0.54 J	0.73 J	7.6	17 J	26	27
Isopropylbenzene	ug/L	N	700	3 J	2 J	1 U	3 J	2 J	2 J	8	7	3J	18	4 J	19	18	2.9 J	15	3.6 J	0.47 J	0.2 U	0.33 J	14	36 J	45	44
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12000	450	650	520 J	14000	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	4 J	2 J	1 U	4 J	2 J	3 J	40 J	13	11	**110**	3 J	100	100	1.8 J	80	20	1.6 J	0.5 U	0.5 U	95	40 J	66	56
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	20 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
Toluene	ug/L	N	600	18	10	1	14	10	9	25	36	20	69	14	45	45	9.5	41	16	1.3	1.2	2.1	38	29 J	36	44
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	8 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	140	94	9	130	87	87	280	370	230	750	160	700	700	110	590	160	15	11	19	550	64	100	100
Total TIC VOCS	ug/L	N	NA	130 J	120 J	59 J	120 J	95 J	80 J	260 J	270 J	210J	560 J	160 J	770 J	790 J	-	-	-	-	-	-	-	440 J	530 J	600 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377
			Field Sample ID	M377A4X	M377A5X	M377A6X	M377A8X	M377A7X	M377A9X	M377B1X	M377B2X	M377B4X	M377B5X	M377B6X	M377B8X	M377B9X	M377C1X	M377C2X	M377C3X	M377C4X	M377C5X	M377C6X	M377C7	M377C8	M377C9	M377D1
			Sample Date	09/12/2014	11/19/2014	04/09/2015	05/13/2015	05/15/2015	09/01/2015	10/14/2015	11/03/2015	11/03/2016	03/21/2017	08/25/2017	08/09/2018	03/15/2019	07/11/2019	08/27/2019	03/06/2020	08/21/2020	10/16/2020	01/11/2021	04/08/2021	07/15/2021	10/15/2021	01/28/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.89 J	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	20 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 UJ	10 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	20 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	3 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 UJ	0.3 U	0.3 U	3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	30 U	4 J	15 U	3 U	3 U	3 U	3 U	3 U	5 J	15 U	3 J	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.5 U	0.5 U	5 U
2-Hexanone	ug/L	N	40	3 U	30 U	3 U	15 U	3 U	3 U	3 U	3 UJ	3 U	3 U	15 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.4 U	0.4 U	4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	30 U	3 U	15 U	3 U	3 U	3 U	3 UJ	3 U	3 U	15 U	0.5U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.5 U	0.5 U	0.5 U	0.5 U	5 U
Acetone	ug/L	N	6000	6 U	60 U	7 J	30 U	8 J	6 U	6 U	9 J	6 U	12 J	30 U	7J	6 UJ	2 J	0.7 U	2 UJ	2.2 UJ	0.7 U	3.5 U	1 J	3.9 J	0.7 U	7 U
Benzene	ug/L	N	1	**9**	**67**	**330**	**120**	**190**	**15**	**37**	**93**	**5**	**700**	**510**	**33**	**47**	**5**	**2**	**44**	**25**	**13**	**120**	**100**	**62**	**13**	160 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Bromoform	ug/L	N	4	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	1 U	1 U	1 UJ	1 U	5 U	1 U	1 U	1 U	10 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	3 U	0.3U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 UJ	5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Chlorobenzene	ug/L	N	50	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Chloroethane	ug/L	N	NA	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Chloroform	ug/L	N	70	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Cyclohexane	ug/L	N	NA	7	36 J	**110**	41	62	2 U	15	25	2 U	86	55	14	20	2 J	2 J	19 J	15	12	36	45	30	11	37 J
Dibromochloromethane	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	2	11	43	14	20	1	5	9	0.5 U	44	16	8	12	2	1	14	6.5	7	17	17	13	7.5	22
Isopropylbenzene	ug/L	N	700	5	26 J	54	20 J	30	4 J	22	27	1 J	44	30	23	28	6	4 J	33	15 J	17	34	34	26	17	35 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.2U	0.4 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Methylcyclohexane	ug/L	N	NA	5 J	17 J	72	20 J	35	2 J	11	15	1 U	33 J	17 J	8	9 J	1 J	1 J	15 J	7.9 J	3 J	14 J	13	4 J	2.3 J	6 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	20 U	2 U	10 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	0.3U	1 J	0.6 UJ	0.4 UJ	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	3 U
Styrene	ug/L	N	100	1 U	10 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Tetrachloroethene	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Toluene	ug/L	N	600	5	30	87	31	42	1	14	26	0.6 J	120	57	25	30	7	5	37	19	17	51	45	41	23	88
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.3 U	0.3 U	3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.2U	0.4 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	1 U	0.2 U	0.2 U	0.2 U	2 U
Xylene (total)	ug/L	N	1000	6	50	200	52	82	5	37	66	2	250	140	36	54	8	7	61	34	31	87	83	64	35	97
Total TIC VOCS	ug/L	N	NA	94 J	140 J	650 J	310 J	340 J	88 J	250 J	350 J	11 J	760 J	470 J	220J	320 J	90 J	120 J	320 J	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-379	MW-379	MW-379	MW-379	MW-379
			Field Sample ID	M378A1X	M378A2X	M378A3X	M378A4X	M378A5X	M378A6X	M378A7X	M378A8X	M378B1X	M378B2X	M378B4X	D0111198	M378B5X	M378B7X	M378B8	M378B9	M378C1	M378C2	M379A1X	M379A2X	M379A3X	M379A4X	M379A5X
			Sample Date	01/09/2014	05/06/2014	07/11/2014	11/25/2014	04/14/2015	06/10/2015	09/03/2015	11/05/2015	11/03/2016	06/14/2017	12/06/2017	01/11/2019	01/11/2019	10/14/2019	05/21/2021	09/23/2021	12/13/2021	03/23/2022	01/15/2014	04/15/2014	07/11/2014	04/14/2015	06/16/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	9 J	4 J	3 J	35	5 J	25	3 U	3 U	3 U	3 U	3 U	-	-	-	0.3 U	5.2 J	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	-	-	-	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	18 J	6 U	8 J	16 J	6 U	27	6 U	10 J	6 U	6 U	51	-	-	-	5.2 J	29	0.7 U	8 J	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**970**	**160**	**190**	**490**	**290**	**350**	**270**	**270**	**160**	**250**	**130**	**5**	**6**	**320**	**6.9**	**3.3**	**4.1**	**1.8**	0.5 U	**3**	0.5 U	1	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 UJ	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	2.6	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	**230**	**130**	**130**	**260**	56	**150**	**180**	89	**150**	55	**200**	-	-	-	**160**	**140**	**270**	**130**	2 U	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	200	55	48	73	17	24	20	16	3	2	2	2	2	5	0.46 J	0.4 U	0.4 U	0.4 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	110	28	35	54	39	37	48	37	34	46	52	-	-	-	37	15	24	23	1 U	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	16000	16000	17000	21000	6600	21000	18000	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	**240**	100	82	**170**	32	88	**130**	44	**110**	35	91	-	-	-	**140**	**170**	**290**	**130**	1 U	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	-	-	-	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	11	1	2	8	2	4	42	8	6	0.9 J	3 J	0.4 J	0.5 J	13	1.6	1.2	1.1	0.72 J	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	30	4	9	21	4	7	15	3	3	0.7 J	3	2 J	3 J	7	3.2 J	1	1.3	0.91 J	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	2000 J	650 J	730 J	1100 J	470 J	1400 J	790 J	470 J	550 J	480 J	540 J	-	-	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U

Notes:

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			Field Sample ID	M379A6X	M379A7X	M379A9X	M379B1X	M379B2X	M379B3X	M379B4X	M379B5X	M379B6X	M379B7X	M380A1X	M380A2X	M380A3X	M380A4X	D0610151	M380A5X	M380A6X	M380A7X	M380A9X	M380B1X	M380B2X	M380B3X	M380B4X
			Sample Date	08/27/2015	10/29/2015	11/09/2016	03/22/2017	08/24/2017	05/02/2018	08/16/2018	05/29/2019	10/22/2019	06/23/2020	01/15/2014	04/15/2014	07/11/2014	04/14/2015	06/10/2015	06/10/2015	08/27/2015	10/29/2015	11/08/2016	03/22/2017	08/30/2017	05/02/2018	08/16/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	9 J	3 U	3 U	3 U	3 U	3 U	0.3 U
2-Hexanone	ug/L	N	40	3 UJ	3 UJ	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	22	7 J	6 U	6 U	6 U	6 U	4 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	**7**	**5**	**4**	**3**	**2**	**2**	0.5 U	**4**	0.5 U	**4**	1	0.7 J	0.3 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	61	38	15	10	2 U	2 U	2 U	2 U	2 U	15	2 U	6	3 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	46	35	25	20	13	12	0.5 U	8	0.5 U	16	0.9 J	6	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	40	29	30	15	18	17	4 J	10	1 J	18	10	11	10
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	**240**	**200**	44	22	37	37	1 U	19	9	19	19	19	16
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 J	0.7 J	0.7 J	0.6 J	0.6 J	0.6 J	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.3 J
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1.4 U	6	4	4	4	3	3	1 J	4	0.5 U	3	1	0.9 J	1 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	-	-	-	-	-	-	-	0 U	1100 J	940 J	830 J	590 J	530 J	520 J	190 J	600 J	94 J	600 J	240 J	240 J	260 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-380	MW-380	MW-380	MW-380	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-391	MW-391
			Field Sample ID	M380B5X	M380B6X	M380B7X	M380B8X	M383A1X	M383A2X	D0409151	M383A3X	M383A4X	M383A5X	M383A6X	M383A8X	M383B9X	M383B1X	M383B2X	D0816181	M383B3X	M383B4X	M383B5X	M383B7X	M383B8X	M391A1X	M391A2X
			Sample Date	05/29/2019	10/22/2019	06/25/2020	10/30/2020	04/15/2014	07/11/2014	04/09/2015	04/09/2015	06/16/2015	08/27/2015	10/29/2015	11/08/2016	03/22/2017	08/24/2017	05/02/2018	08/16/2018	08/16/2018	05/17/2019	10/21/2019	05/15/2020	11/13/2020	06/25/2014	08/19/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	**22**	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	-	-	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 J	0.33 J	0.3 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2 J	0.3 U	0.3 U	0.3 U	3 U	6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2 J	2 J	0.3 U	0.3 U	0.3 U	0.3 U	3 J	5 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	3 U	6 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	3 U	6 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	3 J	2 J	0.7 U	4 J	6 U	16 J	11 J	10 J	9 J	7 J	6 U	6 U	22	13 J	13 J	11 J	12 J	0.7 U	0.8 J	0.7 U	0.7 U	8 J	10 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	**1.6**	**1300**	**870**	**60**	**51**	**15**	1	0.5 U	0.5 U	0.5 U	0.7 J	0.5 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**210**	**210**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.8 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	65	1 U	1 U	1 UJ	4 J	4 U	3 J	3 J	2 U	2 U	2 U	2 U	2 U	2 J	2 U	0.6 J	0.6 J	2 UJ	1 U	1 U	1 U	**280**	**210**
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	10	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.7 J	0.4 U	0.4 U	0.4 U	65	69
Isopropylbenzene	ug/L	N	700	8	3 J	7	8.3	19	2 U	5	3 J	5 J	1 J	1 J	1 U	7	8	5 J	6	5	10	2 J	2 J	0.44 J	22	24
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	15	14	0.5 U	0.5 U	40	49	48	55	6	1 U	2 J	1 U	4 J	**180**	14	31	29	14	9	14	27	**130**	100
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 J	0.4 J	0.3 U	0.3 U	2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 UJ	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.2 U	0.2 U	0.22 J	0.36 J	0.8 J	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	66	78
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1.4 U	1.4 U	14	10	3	3	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 U	1 U	1 U	1 U	1 U	1 U	1.4 U	910	**1100**
Total TIC VOCS	ug/L	N	NA	190 J	250 J	-	-	180 J	83 J	87 J	70 J	59 J	40 J	15 J	0 U	90 J	170 J	78 J	180 J	170 J	220 J	41 J	80 J	-	2100 J	1400 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391R	MW-391R	MW-391R	MW-391R	MW-391R	MW-391R	MW-392	MW-392	MW-393	MW-393	MW-393	MW-395
			Field Sample ID	M391A3X	M391A4X	D0430188	M391A5X	D0809188	M391A6X	M391A7X	D0204198A	M391A8X	M391A9X	M391B1X	M391RB2X	M391RB3X	M391RB4	M391RB5	M391RB6	M391RB7	M392A1X	M392A2X	M393A1X	M393A3X	M393A4X	M395A1X
			Sample Date	12/11/2014	11/14/2017	04/30/2018	04/30/2018	08/09/2018	08/09/2018	11/05/2018	02/04/2019	02/04/2019	05/01/2019	07/10/2019	10/20/2020	01/14/2021	04/09/2021	07/15/2021	10/08/2021	01/27/2022	08/19/2014	12/11/2014	09/12/2014	05/13/2015	10/14/2015	05/06/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	1.5 U	3 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	1.5 U	3 U	3 U	6 UJ	15 UJ	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	1.5 U	3 U	3 U	6 UJ	15 UJ	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	1.5 U	3 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	**2**	0.2 U	0.2 U	0.2 U	0.2 U	10 U	**1.7J**	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	5 J	3 U	3 U	3 J	4 J	4 J	5 J	5 J	3 J	20	110 J	14 J	12 J	5 U	10 UJ	25 UJ	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	2.3 J	3 U	4 U	8 UJ	20 UJ	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 J	0.5 U	25 UJ	4.3 J	5 U	5 U	10 UJ	25 UJ	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	11 J	14 J	6 U	6 U	4 UJ	6 UJ	6 J	10 J	10 J	7 J	40	610 UJ	120	80 J	35 J	20 J	35 UJ	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	**310**	**420**	**93J**	**69J**	**55**	**59**	**280**	**340**	**360**	**84**	**260**	19 UJ	**14**	**13**	**13**	**15J**	15 UJ	**20**	**34**	0.5 U	0.5 U	0.5 U	**48**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	50 U	5 U	10 U	10 U	20 UJ	50 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	**16J**	1.5 UJ	3 U	3 U	6 UJ	15 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	11 J	2.4 J	2 U	3 U	6 UJ	15 UJ	2 J	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 UJ	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	25 J	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	**310**	**310**	100	82	59	61	**190**	**310**	**340**	**180**	**280**	50 U	7.2 J	10 U	10 U	20 UJ	50 UJ	6	3 J	2 U	2 U	2 U	90
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	110	83	19 J	10 J	9	10	65	73	73	17	42	20 U	2 J	4 J	4 U	8 UJ	20 UJ	10	6	0.5 U	0.5 U	0.5 U	69
Isopropylbenzene	ug/L	N	700	37	33	12 J	6 J	6	6	36	38	38	9	24	10 U	1.2 J	2 U	2 U	4 UJ	10 UJ	6	5 J	1 U	1 U	1 U	11
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	15 U	1.5 U	3 U	3 U	6 UJ	15 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	**200**	**150**	34	30	14	15	**130**	**160**	**160**	60	97	74 J	**120**	69	59	33 J	27 J	2 J	2 J	1 U	1 U	1 U	80
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	15 U	1.5 U	3 U	3 U	6 UJ	15 UJ	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	130	170	29 J	21 J	16	17	95	130	130	35	95	10 UJ	3.2 J	4.3 J	4.1 J	4.8 J	10 UJ	26	27	0.5 U	0.5 U	0.5 U	100
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	3 U	6 UJ	15 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 UJ	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	10 U	1 U	2 U	2 U	4 UJ	10 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	**1700**	**1500**	420 J	310 J	210	220	**1300**	**1600**	**1700**	460	1000	70 U	15 J	21 J	4 U	8 UJ	20 UJ	190	140	0.5 U	0.5 U	0.5 U	390
Total TIC VOCS	ug/L	N	NA	-	1800 J	760 J	610 J	370 J	390 J	6200 J	5300 J	5500 J	600 J	1300 J	0 U	0 U	0 U	0 U	-	0 U	2200 J	-	89 J	20 J	31 J	1000 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-396	MW-396	MW-396	MW-396	MW-396	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R
			Field Sample ID	M395A2X	M395A3X	M395A4X	M395A5X	M395A6X	M395A7X	M395A8X	M395A9X	M395B1X	D1206171	M395B2X	D0318148	M396A1X	M396A2X	M396A3X	M396A4X	M396RA5X	M396RA6X	M396RA7X	M396RA8X	M396RA9X	M396RB1X	M396RB2X
			Sample Date	07/10/2014	11/18/2014	04/10/2015	06/12/2015	08/25/2015	10/30/2015	05/11/2016	11/04/2016	06/09/2017	12/06/2017	12/06/2017	03/18/2014	03/18/2014	06/13/2014	10/17/2017	12/11/2017	10/18/2018	01/17/2019	04/09/2019	07/12/2019	09/30/2019	01/23/2020	03/26/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	0.5 UJ	0.5 U	10 U	0.3 U	6 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	1 J	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	2 UJ	2 U	40 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.3 U	6 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	10 U	2 UJ	2 U	40 U	0.3 U	6 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.2 J	4 U	0.2 J	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.3 U	6 U	0.3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	15 U	4 J	3 U	60 U	3 J	6 U	0.3 U	2 J	2 J	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	15 U	3 UJ	3 U	60 UJ	0.3 U	6 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	15 U	15 U	3 UJ	3 U	60 U	0.5 U	10 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	30 U	30 U	10 J	6 U	120 U	12 J	14 U	3 UJ	14 J	12 J	6 J	3 UJ
Benzene	ug/L	N	1	**25**	**37**	**28**	**24**	**8**	**16**	**5**	**12**	**3**	**11**	**11**	**120**	**140**	**150J**	**160**	**100**	**25**	**30**	**16**	**4**	**39J**	0.8 J	**25**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	1 UJ	1 UJ	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 UJ	0.5 U	10 U	0.3 U	6 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 UJ	0.5 U	10 U	0.2 U	6 J	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	87	67	**110**	74	55	44	47	52	43	34 J	48 J	19 J	19 J	23 J	10	40 U	5	4 U	1 J	0.8 J	7 J	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	10 U	0.5 UJ	0.5 UJ	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	41	61	45	39	5	8	3	3	2	2	2	40	51	23 J	96	53	26	9 J	1	0.4 U	1 J	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	12	13	12	11	15	7	13	8	11	7	6	5 J	6 J	2 J	10	20 U	6	4 U	1 J	0.2 J	1 J	0.2 U	0.2 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	89	57	96	71	62	43	54	52	47	47	46	14 J	15 J	20 J	8	20 U	7	4 U	1 J	0.8 J	1 J	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	10 U	10 U	2 UJ	0.5 U	10 U	0.3 U	6 U	0.3 U	1 U	0.8 J	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 UJ	1 U	20 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Toluene	ug/L	N	600	58	75	66	50	24	42	17	24	9	19	19	6 J	6 J	0.5 UJ	5	10 U	0.5 UJ	4 U	0.2 U	0.2 U	0.5 J	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10 U	10 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 UJ	0.5 U	10 U	0.2 U	4 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	260	500	370	340	180	240	140	180	91	200	190	130	140	110 J	41	10 U	2 J	20 U	1 U	1 U	1 UJ	1 U	1 U
Total TIC VOCS	ug/L	N	NA	850 J	1000 J	940 J	710 J	590 J	610 J	400 J	610 J	330 J	510 J	460 J	510 J	600 J	740 J	430 J	-	340 J	0 U	210 J	110 J	180 J	250 J	200 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397
			Field Sample ID	M396RB3X	M396RB4X	D060220211A	M396RB5	M396RB6	M396RB7	M397A1X	M397A2X	M397A3X	M397A4X	M397A5X	M397A6X	M397A7X	M397A8X	D0930198	M397A9X	M397B1X	D0324208	M397B2X	M397B3X	M397B4X	M397B5	M397B6
			Sample Date	12/11/2020	03/15/2021	06/02/2021	06/02/2021	08/27/2021	12/09/2021	03/18/2014	06/13/2014	10/16/2017	12/12/2017	10/17/2018	01/17/2019	04/09/2019	07/12/2019	09/30/2019	09/30/2019	01/23/2020	03/24/2020	03/24/2020	12/11/2020	03/16/2021	06/04/2021	09/15/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 UJ	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.53 J
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.94 J
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.6 J
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 U	0.5 U	0.50 U	0.5 U	3 U	5 J	3 J	3 U	0.3 U	3 J	0.3 U	0.3 U	0.3 U	3 U	0.3 U	7 J	5 J	0.3 U	0.3 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	1.1 J	0.87 J	1.1 J	0.4 U	0.40 U	0.4 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	2.8 UJ	1.2 UJ	3.4 J	3.1 J	2.9 J	1.1 J	7 J	12 J	14 J	26	10 J	6 J	0.7 U	4 J	6 J	7 U	0.7 U	15 J	12 J	0.7 U	3.8 J	4.6 J	0.7 U
Benzene	ug/L	N	1	**12**	**23**	0.3 U	0.3 U	0.30 U	0.3 U	**19**	**5**	**2**	**2**	0.4 J	0.8 J	0.7 J	**6**	0.4 J	2 U	0.4 J	0.8 J	0.7 J	0.52 J	0.77 J	0.3 U	**18**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 J	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1.0 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	10 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 J	0.35 J
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	1	0.2 U	0.2 U	0.2 U	2	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1.0 U	1 U	22	15	13	19	6 J	13	19	8	12	10 U	9	15	15	5.7	4.9 J	2.3 J	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 UJ	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	2 J	2	0.6 J	0.6 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	1.1
Isopropylbenzene	ug/L	N	700	0.31 J	0.43 J	0.2 U	0.2 U	0.20 U	0.2 U	33	34	34	32	14	28	40	1 J	23 J	15 J	16	46	48	30	24	14	23
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	24	23	29	32	10	33	38	0.8 J	19 J	11 J	26	55	56	12	5.3	0.84 J	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	1 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.25 J	0.23 J	0.2 U	0.2 U	0.20 U	0.2 U	5 J	4	4	5	1 J	3	2	0.2 U	1	2 U	1	2	2	0.56 J	1.3	0.2 U	0.92 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	**12J**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	2 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	2 UJ	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	0.4 U	0.4 U	0.40 U	0.4 U	45	36	17	19	5 J	12	9	1 U	8 J	14 U	6	11	11	3.3 J	3.7 J	0.4 U	7.7
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	670 J	580 J	430 J	-	230 J	470 J	500 J	110 J	300 J	0 U	400 J	770 J	830 J	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-397	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-402	MW-402
			Field Sample ID	M397B7	D0612148	M398A1X	M398A2X	M398A3X	D1208178	M398A4X	D1017188A	M398A5X	M398A6X	M398A7X	M398A8X	M398A9X	M398B1X	M398B2X	M398B3X	M398B4X	M398B5	M398B6	D121021A	M398B7	M402A1	M402A2
			Sample Date	12/10/2021	06/12/2014	06/12/2014	09/24/2014	10/16/2017	12/08/2017	12/08/2017	10/17/2018	10/17/2018	01/18/2019	04/08/2019	07/11/2019	09/30/2019	01/14/2020	03/24/2020	12/14/2020	03/16/2021	06/03/2021	08/30/2021	12/10/2021	12/10/2021	09/26/2014	10/28/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	**7**	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	4 UJ	4 UJ	2 U	2 U	20 U	20 U	2 U	2 U	2 U	0.2 UJ	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	1 UJ	1 UJ	0.6 J	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	1.1 J	0.35 J	0.3 U	0.30 U	0.3 U	0.3 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	4 UJ	4 UJ	2 U	2 U	20 U	20 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 J	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	6 UJ	6 UJ	3 U	3 J	30 U	30 U	3 J	3 U	3 U	0.3 U	3 U	0.3 U	2 J	3 J	0.30 U	1.5 J	0.5 U	1.4 J	0.5 U	1.9 J	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	6 UJ	6 UJ	3 U	3 U	30 U	30 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.30 U	0.3 U	0.4 U	0.40 U	0.4 U	0.4 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	6 UJ	6 UJ	3 U	3 U	30 U	30 U	5 U	5 U	5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	3 U	3 U
Acetone	ug/L	N	6000	0.7 U	12 UJ	12 UJ	6 U	9 J	60 U	60 U	16 J	23 J	7 U	9 J	9 J	3 J	2 J	12 J	4.0 J	2.2 J	4.5 J	2.1 J	9 J	5 J	6 U	6 U
Benzene	ug/L	N	1	0.3 U	**40J**	**43J**	**67**	**4**	5 U	5 U	**3J**	**3J**	2 U	1	**3J**	**2**	0.8 J	1	**1.1**	**1.2**	**1.1**	0.89 J	0.86 J	0.69 J	0.5 U	0.7 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1.0 U	1 U	1 U	0.5 UJ	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	0.30 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	1 UJ	1 UJ	0.5 U	0.5 UJ	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 UJ	0.5 U
Chloroform	ug/L	N	70	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.3 J	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	1.3 J	47 J	47 J	62	48	20 U	20 U	24 J	23 J	6 J	10	24 J	25	3 J	17	40	18	20	26	28	27	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 UJ	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	59 J	63 J	140	3	5 U	5 U	4 U	4 U	4 U	0.8 J	4 U	0.6 J	0.6 J	0.4 U	0.45 J	0.4 U	0.46 J	0.40 U	0.4 U	0.4 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	7.5	12 J	13 J	23	26	14 J	15 J	17 J	15 J	13 J	18	21 J	21	8	16	21	17	14	14	15	14	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1.6 J	47 J	46 J	69	42	10 U	10 U	25 J	25 J	3 J	5 J	12 J	12	3 J	7	30	7.9	7.2	20	14	16	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	4 UJ	4 UJ	2 U	0.5 U	5 U	5 U	3 U	3 U	3 U	0.3 U	3 U	0.3 U	0.3 U	0.6 J	0.30 U	0.3 U	0.3 U	0.30 U	0.3 U	0.3 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	2 UJ	2 UJ	1 U	1 U	10 U	10 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.55 J	4 J	5 J	5	1	5 U	5 U	2 U	2 U	2 U	0.7 J	2 U	1	0.3 J	2	2.1	2.1	0.8 J	0.95 J	1.3	0.98 J	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.2 U	0.3 U	0.30 U	0.3 U	0.3 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 UJ	2 UJ	2 U	0.2 U	2 U	0.2 UJ	0.2 U	0.2 UJ	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	1 UJ	1 UJ	0.5 U	0.5 U	5 U	5 U	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.20 U	0.2 U	0.2 U	0.20 U	0.2 U	0.2 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.4 U	76 J	82 J	96	17	5 U	5 U	10 U	10 U	10 U	1 U	10 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	0.40 U	0.58 J	0.5 J	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	770 J	820 J	730 J	520 J	-	-	430 J	380 J	120 J	500 J	170 J	440 J	150 J	350 J	-	-	-	-	-	-	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402
			Field Sample ID	M402A3	M402A4	M402A5	M402A6	M402A7	M402A8	M402A9	M402B2	M402B3X	M402B4	M402B5X	M402B7	M402B8	M402B9	M402C1	M402C2	M402C4	M402C5	M402C6	D0925191	M402C7	M402C8	M402C9
			Sample Date	03/10/2015	05/28/2015	09/17/2015	11/17/2015	01/12/2016	04/07/2016	07/21/2016	01/19/2017	03/22/2017	04/24/2017	05/17/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/25/2018	01/04/2019	04/02/2019	07/01/2019	09/25/2019	09/25/2019	01/06/2020	04/03/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	10 U	2 UJ	2 U	2 U	2 U	4 U	-	2 U	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	10 U	2 UJ	2 U	2 U	2 U	4 U	-	2 U	-	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	15 U	3 UJ	3 U	3 U	3 U	6 U	-	3 U	-	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.6 U	0.6 J	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	15 U	3 UJ	3 UJ	3 U	3 U	6 U	-	3 U	-	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	15 U	3 UJ	3 UJ	3 U	3 U	6 U	-	3 U	-	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 U	6 U	30 U	6 UJ	6 U	6 U	6 U	12 U	-	6 U	-	6 U	6 U	6 U	6 U	0.7 U	1 J	5 UJ	6 J	0.7 U	0.7 U	0.7 UJ	0.7 U
Benzene	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 J	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	3 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 UJ	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	10 U	2 UJ	2 U	2 U	2 U	4 U	-	2 U	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.4 U	0.2 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.8 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 UJ	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	10 U	2 UJ	2 U	2 U	2 U	4 U	-	2 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	5 U	1 UJ	1 U	1 U	1 U	2 U	-	1 U	-	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	1 U	-	0.5 U	-	0.5 U	0.5 U	0.5 J	0.5 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 UJ	0 U	0 U	0 U	0 U	-	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-403	MW-403	MW-403	MW-403	MW-403	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R
			Field Sample ID	M402D1	M402D2X	M402D3	M402D4X	M402D5	M402D6X	M402D7	M402D9	M402E1	M403A1X	M403A2X	M403A3X	M403A4X	M403A5X	M403RA6X	M403RA7X	M403RA8X	M403RA9X	M403RB1X	D0122208	M403RB2X	M403RB3X	M403RB4X
			Sample Date	07/08/2020	09/24/2020	10/14/2020	12/08/2020	01/07/2021	03/25/2021	04/02/2021	10/08/2021	01/14/2022	06/06/2014	07/28/2014	12/04/2014	10/16/2017	12/08/2017	10/18/2018	01/17/2019	04/08/2019	07/12/2019	10/01/2019	01/22/2020	01/22/2020	03/25/2020	08/17/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.6 U	6 U	3 U	3 U	6 UJ	0.3 U	3 U	3 U	3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	20 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	10 UJ	0.6 U	6 U	3 U	3 U	6 UJ	0.3 U	3 U	3 U	3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	20 UJ	0.6 U	6 U	3 U	3 U	6 UJ	0.3 U	3 U	3 U	3 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	10 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.6 U	6 U	3 U	3 U	6 UJ	0.3 U	3 U	3 U	3 UJ
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	10 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	10 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	2.6 J	0.5 U	0.5 U	5 J	3 U	3 J	3 U	30 UJ	26	19 J	3 U	3 U	6 UJ	0.3 U	3 U	3 U	82 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 U	3 U	3 U	30 UJ	0.6 U	6 U	3 U	3 U	6 UJ	0.3 U	3 U	3 U	3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	30 UJ	2 J	10 U	5 U	5 U	10 UJ	0.5 U	5 U	5 U	5 UJ
Acetone	ug/L	N	6000	1.1 J	1.2 J	0.7 U	1.9 J	0.79 J	0.7 U	15 J	1.3 J	0.92 J	16 J	6 U	17 J	6 U	60 UJ	170	100 J	10 J	19 J	19 J	0.7 U	7 U	7 U	340 J
Benzene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**520**	**430**	**840**	**65**	**38J**	**680**	**620**	**620**	**1300**	**1200J**	**52J**	**80J**	**120**	2 UJ
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	20 UJ	1 U	10 U	10 U	10 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.6 U	6 U	3 U	3 U	6 UJ	0.3 U	3 U	3 U	4.8 J
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	8	6	8	1 U	10 UJ	22	20 J	2 U	2 U	4 UJ	0.2 J	2 U	2 U	2 UJ
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 J	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.6 J	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	6.8 J
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	110 J
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	51	9	22	2 U	20 UJ	37	59 J	47 J	86	77 J	14	11 J	10 U	10 UJ
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Ethane	ug/L	N	NA	-	1 U	-	1 U	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	55	17	41	3	5 UJ	310	270	110	180	18 J	3 J	6 J	8 J	4 UJ
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	23	6	15	4 J	10 UJ	13	18 J	28 J	46 J	40 J	13 J	18 J	11 J	2 UJ
Methane	ug/L	N	NA	-	5200	-	17000	-	16000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	10 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.3 U	3 U	3 U	3 UJ
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	50	9	21	2 J	10 UJ	26	39 J	37 J	55	32 J	6	5 U	5 U	5 UJ
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.5 U	5 UJ	0.6 U	6 U	3 U	3 U	10 UJ	0.3 U	3 U	3 U	**8.8J**
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	10 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	26	7	26	2	5 UJ	8	6 J	3 J	11	12 J	0.5 J	2 U	2 U	2 UJ
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.4 U	4 U	2 U	2 U	4 UJ	0.2 U	2 U	2 U	2 UJ
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	73	29	66	8	9 J	490	280	95	88	28 UJ	4 J	14 U	14 U	14 UJ
Total TIC VOCS	ug/L	N	NA	-	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	1100 J	230 J	510 J	130 J	-	2400 J	1100 J	1400 J	2300 J	1600 J	450 J	460 J	190 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-404	MW-404	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R
			Field Sample ID	M403RB5X	M403RB7	M403RB8	M403RB9	M403RC1	M404A1X	M404A2X	M404RA4X	M404RA5X	M404RA6X	M404RA7X	M404RA8X	M404A9X	M404RB1X	M404RB2X	M404RB3X	M404RB4X	M404RB5X	M404RB6X	M404RB7X	M404RB8X	M404RB9X	M404RC1X
			Sample Date	12/11/2020	05/06/2021	06/02/2021	08/27/2021	12/10/2021	06/24/2014	08/13/2014	04/26/2017	09/05/2017	11/30/2017	03/06/2018	06/14/2018	09/05/2018	12/10/2018	02/22/2019	06/10/2019	09/12/2019	12/13/2019	03/10/2020	06/19/2020	10/02/2020	12/18/2020	03/12/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	60 U	15 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	6 U	0.3 U	30 U	0.6 U	0.3 UJ	0.24 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.3 J	20 U	0.4 U	0.5 J	0.37 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	0.2 U	2 UJ	4 U	0.2 UJ	20 U	0.4 U	0.2 U	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	60 U	15 U	6 UJ	6.0 U	15 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.3 U	3 U	6 U	0.3 U	30 U	0.6 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	60 U	15 U	6 UJ	6.0 U	15 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	0.3 U	3 U	6 U	0.3 U	30 U	0.6 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	40 U	10 U	4 UJ	4.0 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	60 U	15 UJ	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 UJ	6 U	0.3 U	30 U	0.6 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	40 U	10 U	6 UJ	6.0 U	15 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	40 U	10 U	6 UJ	6.0 U	15 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	60 U	76 J	120 UJ	70 J	120 J	13	3 UJ	3 U	6 J	3 U	3 U	3 U	2 J	3 U	6 U	0.9 J	30 U	4 J	4 J	6	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	60 U	15 U	8 UJ	8.0 U	20 UJ	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	3 U	6 U	0.3 U	30 U	0.6 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	100 U	25 U	11 J	10 U	25 UJ	3 U	4 J	3 U	3 U	3 U	3 U	3 U	0.5 U	5 U	11 J	0.5 U	50 U	1 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	180 UJ	430 J	510 J	430	820 J	40	17 J	6 U	18 J	10 J	120	12 J	17 J	7 U	14 U	3 J	70 U	36 J	23	100	3.2 UJ	4.6 J	2.5 UJ
Benzene	ug/L	N	1	40 U	**150**	**210J**	**310**	**170J**	**54**	**13J**	**280**	**360**	**50**	**25**	**160**	**41**	**39**	**47**	**42**	**58J**	**66**	**88**	**25**	**47**	**38**	**20**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 UJ	4 U	0.2 U	20 U	0.4 U	0.2 UJ	0.34 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	200 U	50 U	20 UJ	20 U	50 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	100 U	2 U	1 UJ	0.54 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	60 U	15 U	6 UJ	6.0 U	15 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	6 U	0.3 U	30 UJ	0.6 U	0.3 UJ	0.55 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	40 U	10 U	6 UJ	6.0 U	15 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 J	0.82 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	40 U	10 UJ	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	2 UJ	4 U	0.2 U	20 U	0.4 U	0.2 UJ	0.21 UJ	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 UJ	0.32 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	2 U	4 U	0.2 U	20 U	0.4 U	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	200 U	50 U	20 UJ	20 J	50 UJ	30	25 J	46	42	16	18	16	31	21 J	34 J	23	100 UJ	32	30	7	38	15	3.6 J
Dibromochloromethane	ug/L	N	1	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	80 U	25 J	32	52	20 J	34	17 J	58	64	44	30	47	39	35	40	48	40 U	50	50	10	37	27	16
Isopropylbenzene	ug/L	N	700	40 U	10 U	4.5 J	7.7 J	10 UJ	4 J	2 J	5	6	5 J	4 J	5 J	5 J	3 J	4 J	5	20 U	5 J	5	1	4 J	2.9 J	1.6 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	60 U	15 U	6 UJ	6.0 U	15 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	100 U	25 U	10 UJ	10 U	25 UJ	21	19 J	28	27	9	9	8	19	12 J	18 J	12	50 U	19	22	4.3	26	9	2.7 J
Methylene chloride (Dichloromethane)	ug/L	N	3	60 U	15 U	6 UJ	**11J**	15 UJ	2 U	2 UJ	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	6 U	0.4 UJ	30 U	0.6 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	40 U	10 U	6 UJ	6.0 U	15 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	40 U	10 U	7.1 J	6.9 J	10 UJ	5	2 J	12	8	3	2	4	2	3 J	4 U	3	20 UJ	4	4	1.4	3.4	2.9	1.6
trans-1,2-Dichloroethene	ug/L	N	100	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	40 U	10 U	6 UJ	6.0 U	15 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 UJ	0.31 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 UJ	4 U	0.2 UJ	20 U	0.4 U	0.2 UJ	0.32 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	40 U	10 U	4 UJ	4.0 U	10 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	4 U	0.2 U	20 U	0.4 U	0.2 UJ	0.17 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	280 U	70 U	8 UJ	8.0 U	20 UJ	66	23 J	120	57	30	24	44	34	25 J	34 J	35	140 U	45	57	9.4	35	26	16
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0.0 U	0 U	530 J	250 J	670 J	570 J	330 J	220 J	380 J	380 J	57 J	0 U	370 J	0 U	350 J	430 J	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-404R	MW-404R	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406
			Field Sample ID	M404RC2	M404RC4	M405A1X	M405A2X	M405A3X	M405A4X	M405A5X	M405A6X	M405A7X	M405A8X	M405A9X	M405B1X	D0903199	M405B2X	M405B3X	M405B4X	M405B5	D0620148	M406A1X	D0813148	M406A2X	M406A3X	M406A4X
			Sample Date	05/26/2021	12/28/2021	08/15/2014	12/10/2014	12/12/2014	05/08/2017	11/21/2017	02/13/2018	05/22/2018	08/29/2018	11/19/2018	02/26/2019	09/03/2019	09/03/2019	04/09/2020	10/06/2020	07/01/2021	06/20/2014	06/20/2014	08/13/2014	08/13/2014	12/03/2014	03/11/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	2 U	2 U	2 U	-	2 U	4 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.27 J	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	2 U	-	2 U	4 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	1.3	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.59 J	3 U	3 U	3 U	-	3 U	6 U	3 U	0.3 U	0.4 J	0.3 U	0.3 U	1 J	0.3 U	0.3 U	-	3 J	4 J	3 UJ	3 UJ	3 U	3 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 U	3 U	3 U	3 U	-	3 U	6 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	3 U	3 U	3 UJ	3 UJ	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	3 U	-	3 U	6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	3 U	3 U	3 UJ	3 UJ	3 U	3 U
Acetone	ug/L	N	6000	9 J	0.7 U	6 U	6 U	6 U	-	6 U	12 U	6 U	2 J	2 J	3 J	9 J	6 J	2 J	3.2 UJ	-	8 J	11 J	6 UJ	6 UJ	6 U	6 U
Benzene	ug/L	N	1	**19**	**45**	1	0.6 J	0.5 U	0.5 U	1	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J	0.43 J	0.3 U	**150**	**130**	**48J**	**35J**	**100**	**16**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	1 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	14	26	2 U	2 U	2 U	-	2 U	4 U	2 U	1 J	0.3 J	0.6 J	1 U	1 U	1 UJ	1 U	-	20	19	11 J	9 J	19	5 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.5 U	0.5 U	0.5 UJ	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Ethane	ug/L	N	NA	4.5 J	5.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	12	24	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	33	31	13 J	10 J	27	6
Isopropylbenzene	ug/L	N	700	1.4 J	2.9 J	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	3 J	3 J	2 J	1 J	3 J	1 U
Methane	ug/L	N	NA	14000	15000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	8.5	14	1 U	1 U	1 U	-	1 U	2 U	1 U	0.8 J	0.2 U	0.3 J	0.5 U	0.5 U	0.5 U	0.5 U	-	12	12	6 J	5 J	12	3 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	2 U	-	0.5 U	1 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.4 UJ	0.3 U	0.3 U	-	2 U	2 U	2 UJ	2 UJ	2 U	2 U
Styrene	ug/L	N	100	0.2 U	0.3 U	1 U	1 U	1 U	-	1 U	2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.2 UJ	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Toluene	ug/L	N	600	1.2	2.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7	6	3 J	3 J	3	1
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	1 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	-	1	0.9 J	0.5 UJ	0.5 UJ	0.6 J	0.5 U
Xylene (total)	ug/L	N	1000	13	26	0.8 J	0.5 U	0.5 U	0.5 U	0.9 J	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	0.4 U	38	36	19 J	16 J	25	8
Total TIC VOCS	ug/L	N	NA	-	-	0 U	-	0 U	-	-	0 U	9 J	0 U	0 U	8 J	-	-	14 J	0 U	-	420 J	420 J	270 J	99 J	330 J	76 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-407
			Field Sample ID	M406A5X	M406A6X	M406A7X	D0313188	M406A8X	M406A9X	D0904188A	M406B1X	M406B2X	M406B3X	M406B4X	M406B5X	M406B6X	M406B7X	M406B8X	M406B9X	M406C1X	M406C2X	D052720211A	M406C3	M406C4	M406C5	M407A1X
			Sample Date	03/08/2017	09/13/2017	11/30/2017	03/13/2018	03/13/2018	06/13/2018	09/04/2018	09/04/2018	12/10/2018	02/26/2019	06/06/2019	09/11/2019	12/09/2019	03/10/2020	06/18/2020	10/01/2020	12/15/2020	03/10/2021	05/27/2021	05/27/2021	09/01/2021	10/27/2021	06/24/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.24 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	1.7	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 J	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	20
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U
Acetone	ug/L	N	6000	10 J	6 U	6 U	6 U	6 U	6 U	3 J	0.7 U	0.7 U	2 J	1 UJ	5 J	0.7 U	0.7 U	4.4 U	0.7 U	0.7 U	0.7 U	5.6 J	5.8 J	0.7 U	4 J	12 J
Benzene	ug/L	N	1	**72**	**62**	**110**	**110**	**110**	**76**	**130**	**140**	**79**	**29**	**57**	**180**	**98**	**44**	**59**	**92**	**30**	**73**	**23**	**25**	**22**	**1.3**	**35**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Bromoform	ug/L	N	4	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 UJ	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.55 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Cyclohexane	ug/L	N	NA	13	12	20	14	14	16	19	20	16	6	14	29	20	10	14	18	17	13	9.9	13	8.1	2.4 UJ	6
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.1	8	8.5	3.8 J	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	20	20	32	29	29	21	35	37	21	11	21	62	28	14	19	26	14	23	9.4	12	8.5	0.83 J	6
Isopropylbenzene	ug/L	N	700	2 J	2 J	4 J	3 J	3 J	2 J	4 J	4 J	3 J	1 J	2 J	5	4 J	2 J	2.3	2.8 J	2.1 J	2.3 J	1.5 J	2 J	1.5 J	0.2 U	1 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21000	19000	18000	12000	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Methylcyclohexane	ug/L	N	NA	5	5	15	6	7	10	11	12	9	3 J	7	17	10	4 J	7.9	11	10	7.6	5.1	6.6	5.1	1.4 J	7
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 UJ
Toluene	ug/L	N	600	3	3	4	3	3	3	4	4	2	2	2	5	3	2	2.2	2.6	1.9	2	1.4	1.9	1.1	0.2 U	5
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.31 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.32 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.9 J	0.8 J	0.7 J	0.5 U	1 J	1	0.8 J	0.2 U	0.2 U	1 J	0.7 J	0.2 UJ	0.42 J	**1.1**	0.2 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Xylene (total)	ug/L	N	1000	20	17	33	20	20	21	33	34	21	12	20	46	26	14	19	23	17	17	12	16	11	0.52 J	22
Total TIC VOCS	ug/L	N	NA	140 J	200 J	350 J	210 J	200 J	250 J	280 J	330 J	320 J	80 J	250 J	560 J	350 J	130 J	-	-	-	-	-	-	-	-	440 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-415	MW-415	MW-419	MW-419
			Field Sample ID	M407A2X	M407A3X	M407A4X	M407A5X	M407A6X	M407A7X	M407A8X	M407A9X	M407B1X	M407B2X	M407B3X	M407B4X	M407B5X	M407B6X	M407B7X	M407B8X	M407B9X	M407C1	M407C2	M415A1X	M415A2X	M419A1X	M419A2X
			Sample Date	08/13/2014	03/09/2017	09/08/2017	12/05/2017	03/13/2018	06/15/2018	09/04/2018	12/11/2018	02/22/2019	06/14/2019	09/11/2019	12/10/2019	03/11/2020	06/19/2020	10/02/2020	12/15/2020	03/12/2021	05/28/2021	12/17/2021	05/29/2015	08/26/2015	12/10/2015	07/21/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.26 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	15 U	0.24 U	6 U	15 UJ	0.3 U	3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.37 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.43 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	10 U	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.26 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 UJ	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	15 U	0.37 U	6 U	15 UJ	0.3 U	3 U	0.3 U	1 U	1 U	1 U	1 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 UJ	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	15 U	0.38 U	6 U	15 UJ	0.3 U	3 U	0.3 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.5 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.43 U	4 U	10 UJ	0.2 U	2 U	0.2 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 UJ	2 U	0.8 J	0.3 U	0.3 U	15 U	0.43 U	6 U	15 UJ	0.3 U	3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.35 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.34 U	4 U	10 UJ	0.2 U	2 U	0.3 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.33 U	4 U	10 UJ	0.2 U	2 U	0.3 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	5 J	11	7 J	19	3 U	6 J	3 J	0.3 U	12 J	5 J	1 J	4 J	15 U	77	6 U	15 UJ	0.3 U	8.3 J	10	7 J	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	3 UJ	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	15 U	1.1 U	6 U	15 UJ	0.3 U	3 U	0.4 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	4 J	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	25 U	1.3 U	10 U	25 UJ	0.5 U	5 U	0.5 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 UJ	17 J	24	16 J	6 U	6 U	12 J	4 J	8 J	4 J	4 J	6 J	35 U	45	14 U	35 UJ	0.7 UJ	31 J	12 J	13 J	6 U	7 J	9 J
Benzene	ug/L	N	1	**35J**	**34**	**30**	**26**	**9**	**29**	**27**	**25**	**22**	**26**	**22**	**19**	**19J**	**23**	**17J**	**14J**	**13**	**21**	**7.4**	**64**	**86**	**5**	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	10 U	0.34 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	1 U	1 U	50 UJ	0.54 U	20 U	50 UJ	1 U	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	15 U	0.55 U	6 U	15 UJ	0.3 U	3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.4 J	1 U	0.2 U	0.2 U	0.2 U	10 U	0.82 U	4 U	10 UJ	0.2 U	2 U	0.3 U	1 U	6	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	10 U	0.21 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.38 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.32 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 J	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.33 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.4 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.22 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.22 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	6 J	5 UJ	6	5	5 J	6	5	5 J	3 J	5	5	6	50 U	5	20 U	50 UJ	5.1	10 U	4.3 J	**110**	56	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 UJ	0.28 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.31 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1 J	1.7 J	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	6 J	8	7	6	3	7	7	7	4 J	8	7	6	20 U	5.1	8 U	20 UJ	6.7	4 U	5.2	480	350	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	1 J	1 J	1 J	1 U	1 U	1 J	1 J	1 J	1 U	1 J	1 J	1 J	10 U	0.86 J	4 U	10 UJ	1.3 J	2 U	0.91 J	32	26	12	32
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10000	13000	-	-	-	-
Methyl acetate	ug/L	N	7000	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	15 U	0.79 U	6 U	15 UJ	0.3 U	3 U	0.3 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.47 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	5 J	4 J	4 J	4 J	3 J	5 J	4 J	4 J	2 J	4 J	4 J	4 J	25 U	3.1	10 UJ	25 UJ	4 J	5 U	3.2 J	**160**	94	18	34
Methylene chloride (Dichloromethane)	ug/L	N	3	2 UJ	2 U	2 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	15 U	0.32 U	6 U	15 UJ	0.3 U	3 U	0.3 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 UJ	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.42 U	4 U	10 UJ	0.2 U	2 U	0.3 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.25 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	5 J	4	5	2	0.5 U	3	4	4	2 J	3	3	2	10 U	1.9	4 U	10 UJ	1.2	2 U	0.83 J	100	26	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.24 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.49 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.31 U	4 U	10 UJ	0.2 U	2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	1 U	0.2 U	0.2 U	0.2 U	10 U	0.32 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	10 U	0.17 U	4 U	10 UJ	0.2 U	2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	22 J	28	27	15	4	17	21	20	16 J	24	22	23	70 U	18	28 U	70 UJ	24	14 U	16	**1700**	860	1	3
Total TIC VOCS	ug/L	N	NA	490 J	200 J	300 J	100 J	23 J	290 J	260 J	300 J	50 J	360 J	430 J	260 J	0 U	-	-	0 U	-	-	-	3600 J	2700 J	360 J	600 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-419	MW-419	MW-419	MW-419	MW-420	MW-420	MW-420	MW-420	MW-420	MW-421	MW-421	MW-421	MW-421	MW-421	MW-421	MW-421	MW-421	MW-422	MW-422	MW-422	MW-422	MW-422	MW-422
			Field Sample ID	D0710188A	M419A3X	M419A4X	M419A5X	M420A1X	M420A2X	M420A3X	M420A4X	M420A5X	M421A1X	D0720168	M421A2X	M421A3X	M421A4X	M421A5X	M421A6	M421A7	M422A1X	M422A2X	M422A3X	M422A4X	M422A5X	M422A6X
			Sample Date	07/10/2018	07/10/2018	10/25/2018	01/15/2019	12/02/2015	08/01/2016	07/09/2018	10/25/2018	01/14/2019	12/03/2015	07/20/2016	07/20/2016	07/11/2018	10/25/2018	01/15/2019	06/09/2021	12/15/2021	10/12/2015	12/03/2015	07/22/2016	07/10/2018	10/22/2018	01/15/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	4 UJ	2 U	2 U	0.2 U	0.2 U	2 U	2 U	10 U	2 UJ	0.2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	2 UJ	1 U	1 U	0.3 U	0.3 U	1 U	1 UJ	5 U	1 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	4 UJ	2 U	2 U	0.3 U	0.3 U	2 U	2 U	10 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.2 U	0.2 U	1 U	1 U	5 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.2 U	0.2 U	1 U	1 U	5 U	1 UJ	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.2 U	0.2 U	1 U	1 U	5 U	1 UJ	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	0.3 U	0.3 U	46 J	7 J	17	8 J	6 J	3 U	3 U	15 U	3 UJ	0.3 U	0.3 U	12	0.5 U	3 U	3 U	5 J	3 U	3 J	2 J
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.3 U	6 UJ	3 U	3 U	0.3 U	0.3 U	3 U	3 U	15 U	3 UJ	0.3 J	0.3 U	0.75 J	0.4 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	0.5 U	0.5 U	6 UJ	3 U	3 U	0.9 J	0.5 U	3 U	3 U	15 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.5 U	2 J
Acetone	ug/L	N	6000	6 UJ	8 J	4 J	2 J	71 J	20 J	36	15 J	18 J	6 U	6 U	30 U	7 J	2 J	0.7 U	13 J	4.1 J	6 U	6 U	26	6 UJ	10 J	4 J
Benzene	ug/L	N	1	0.5 U	0.5 U	0.2 U	**2**	**2900J**	**470**	**300**	**400**	**280**	**130**	**210J**	**130J**	**22J**	**62**	**4**	**4.4**	**3.3**	**27**	**11**	**11**	**5**	**13**	**6**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	1 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.2 U	0.3 J	1 U	1 U	5 U	1 J	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 UJ	0.2 U	1 UJ	0.5 U	0.5 U	0.4 UJ	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	3	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 U	25	2 J	140 J	82	94 J	83	65	20	4 J	10 U	9 J	8	10	24	11	**130**	**110**	97	**120J**	**190**	**150**
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.4 U	0.4 U	130 J	32	46	13	11	7	5	4 J	2 J	5	1	2.1	1.4	1 J	0.6 J	0.5 U	0.5 U	1 J	0.5 J
Isopropylbenzene	ug/L	N	700	11	11	30	10	21 J	7	10	4 J	2 J	4 J	2 J	5 U	2 J	4 J	4 J	0.81 J	0.99 J	23	20	15	19	23	16
Methane	ug/L	N	NA	-	-	11000	13000	-	-	-	11000	15000	-	-	-	-	15000	18000	-	-	-	-	-	-	20000	23000
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.2 U	0.2 U	1 U	1 U	5 U	1 UJ	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2	2	2	1	0.6 J	1
Methylcyclohexane	ug/L	N	NA	21	22	51	22	120 J	69	85	71	54	15	3 J	5 U	6 J	6	5 J	21	11	90	71	68	65	**130**	**120**
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.3 U	0.3 U	4 UJ	2 U	0.5 U	0.3 U	0.3 U	2 U	2 U	10 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	2 UJ	1 U	1 U	0.2 U	0.2 U	1 U	1 U	5 U	1 UJ	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.2 UJ	0.2 U	310 J	63	130	33	30	19	32 J	22 J	10 J	28	3	3.6	2.3	7	4	5	8	5	4
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	1 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.5 U	0.5 U	3 U	0.5 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1	2	4 J	1 J	**1100J**	250	370	110	120	72	54	43	53 J	100	62	40	24	10	9	7	8	8	7
Total TIC VOCS	ug/L	N	NA	360 J	370 J	990 J	380 J	1700 J	610 J	800 J	560 J	400 J	150 J	200 J	29 J	170 J	260 J	140 J	-	-	-	780 J	420 J	330 J	2100 J	960 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-422	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-424	MW-424	MW-433	MW-433	MW-433	MW-466	MW-466	MW-466
			Field Sample ID	M422A7	M423A1X	M423A2X	M423A3X	M423A4X	M423A5X	M423A6X	M423A7X	M423A8X	D0507218	M423A9	M423B1	M423B2	M423B3	M423B4	M424A1X	M424A2X	D0826158	M433A1X	M433A2X	M466A1X	M466A2X	M466A3X
			Sample Date	06/09/2021	10/12/2015	12/10/2015	07/18/2016	07/11/2018	10/19/2018	01/14/2019	11/19/2020	02/25/2021	05/07/2021	05/07/2021	06/10/2021	08/05/2021	11/11/2021	12/14/2021	09/15/2015	12/16/2015	08/26/2015	08/26/2015	10/13/2015	12/03/2015	08/01/2016	07/09/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 UJ
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.23 J	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	17	3 UJ	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 J	3 U	16	36 J	6 J	3 U
2-Hexanone	ug/L	N	40	0.4 U	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	1.2 J	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	0.4 U	3 UJ	3 U	3 U	3 U	3 U	30 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3 U
Acetone	ug/L	N	6000	13 J	6 U	6 U	6 U	6 U	1 J	4 J	7.8 J	1.1 J	0.7 U	0.75 J	0.7 U	1.2 UJ	0.7 U	0.7 U	6 U	6 U	22 J	15 J	180	85 J	22	6 U
Benzene	ug/L	N	1	**6.4**	1	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.64 J	**5.1**	**5.2**	0.3 U	0.3 U	0.3 U	**3.7**	**84**	**34**	**3J**	**2J**	1	**510**	**160**	**61**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	1 U	1 U	3 J	3 J	1 U	10 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	68	19	5 J	8	4 J	0.7 J	0.7 J	1 J	4 J	2 J	1.7 J	1 U	1 U	1.4 J	1 U	**110**	53	10	8	4 J	96	49	11
Dibromochloromethane	ug/L	N	1	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.78 J	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	76	19	1	0.8 J	0.5 U	59	21	0.6 J
Isopropylbenzene	ug/L	N	700	8.2	1 J	1 U	1 J	1 U	0.2 U	0.2 U	0.2 U	0.23 J	0.39 J	0.37 J	0.2 U	0.2 U	0.2 U	0.2 U	11	2 J	1 U	1 U	1 U	18 J	7	2 J
Methane	ug/L	N	NA	-	-	-	-	-	9300	11000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.83 J	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	58	32	12	13	3 J	3 J	2 J	2.3 J	19	6.5	5.9	0.5 U	0.5 U	0.53 J	0.77 J	71	36	14	12	4 J	74	47	7
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	0.5 U
Styrene	ug/L	N	100	0.3 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	150	13	3 J	2 J	1	160	23	3
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	5.9	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	0.4 U	530	260	10 J	6 J	2	340	43	6
Total TIC VOCS	ug/L	N	NA	-	-	11 J	36 J	0 U	17 J	28 J	0 U	-	-	-	0 U	0 U	-	-	4600 J	-	150 J	110 J	210 J	1400 J	350 J	130 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-466	MW-466	MW-467	MW-467	MW-467	MW-467	MW-467	MW-467	MW-467	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474
			Field Sample ID	M466A4X	M466A5X	M467A1X	M467A2X	M467A3X	M467A4X	M467A5X	M467A6	M467A7	M474A1	M474A3	M474A4	M474A6	M474A7	M474A8	M474A9	M474B1	M474B2	M474B3	M474B4	M474B5	M474B6	M474B7
			Sample Date	10/25/2018	01/15/2019	12/02/2015	08/01/2016	07/09/2018	10/22/2018	01/14/2019	06/10/2021	12/14/2021	01/08/2016	07/20/2016	10/17/2016	01/19/2017	04/18/2017	07/19/2017	10/10/2017	01/25/2018	04/12/2018	07/18/2018	10/26/2018	01/09/2019	04/05/2019	07/05/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	2 U	3 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 UJ	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	2 U	2 U	2 U	1 U	2 U	-	-	2 U	2 U	2 U	4 U	2 U	2 U	2 U	20 U	2 U	2 U	0.2 U	0.2 U	2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	1 U	1 U	1 U	2 U	3 U	6 U	1.5 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.3 U	0.3 U	3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	2 U	2 U	2 U	2 U	3 U	6 U	1.5 UJ	2 U	2 U	2 U	4 U	2 U	2 U	2 U	20 U	2 U	2 U	0.3 U	0.3 U	3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	4 U	1 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	2 U	3 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	6 U	1.5 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	6 U	1.5 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	3 U	3 U	3 U	18 J	3 U	19 J	2.5 UJ	3 U	3 U	3 U	6 U	3 U	3 U	3 U	30 U	3 U	3 U	0.3 U	0.3 U	3 U	1 J
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	3 U	3 U	3 U	2 U	3 U	8 U	2 UJ	3 U	3 U	3 U	6 U	3 U	3 U	3 U	30 U	3 U	3 U	0.3 U	0.3 U	3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	3 U	3 U	3 U	3 U	5 U	10 U	2.5 UJ	3 U	3 U	3 U	6 U	3 U	3 U	3 U	30 U	3 U	3 U	0.5 U	0.5 U	5 U	0.5 U
Acetone	ug/L	N	6000	3 J	0.7 U	6 U	6 U	18 J	45 J	14 J	34 J	3.5 UJ	6 U	6 U	6 U	12 U	6 U	6 U	6 U	60 U	6 U	6 U	0.7 U	0.7 U	7 U	5 J
Benzene	ug/L	N	1	**30**	**22**	**39**	**49**	**18**	**15**	**5J**	6 U	1.5 UJ	**17**	**9**	**23**	**3**	**4**	**3**	**6**	5 U	**3**	**5**	**7**	**5**	**3J**	**4**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	20 U	5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	2 U	3 U	6 U	1.5 UJ	0.5 U	0.5 UJ	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	6 U	1.5 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	3 J	4 U	1 UJ	0.5 U	0.5 UJ	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Chloroform	ug/L	N	70	0.3 UJ	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 UJ	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Cyclohexane	ug/L	N	NA	21	27	46	92	**150**	**450**	41 J	20 U	5 UJ	20	14	20	6 J	14	6	21	22 J	23	19	15	13	9 J	14
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 J	0.4 U	4	37	70 J	110	43	8 U	2 UJ	10	7	9	2 J	6	2	5	5 U	1	4	3	2	4 U	3
Isopropylbenzene	ug/L	N	700	2 J	2 J	31	34	64	120	37 J	4 U	1.2 J	2 J	1 J	2 J	2 U	2 J	1 U	2 J	10 U	2 J	2 J	2 J	2 J	2 U	2 J
Methane	ug/L	N	NA	17000	19000	-	-	-	18000	23000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	6 U	1.5 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.6 J	0.7 J	0.8 J	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	14	16	82	99	**280**	**1100**	60	10 U	5.8 J	9	5	8	4 J	7	2 J	9	11 J	7	9	8	6	3 J	6
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	2 U	2 U	0.5 U	2 U	3 U	6 U	1.5 UJ	2 U	2 U	2 U	4 U	2 U	2 U	0.5 U	5 U	0.5 U	0.5 U	0.3 U	0.3 U	3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	1 U	1 U	1 U	1 U	2 U	6 U	1.5 UJ	1 U	1 U	1 U	2 U	1 U	1 U	1 U	10 U	1 U	1 U	0.2 U	0.2 U	2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Toluene	ug/L	N	600	1	2	2	7	12	21	7 J	4 U	1 UJ	23	17	11	1 J	3	11	27	5 U	8	24	13	7	5 J	18
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	6 U	1.5 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	1 U	2 U	4 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.2 U	0.2 U	2 U	0.2 U
Xylene (total)	ug/L	N	1000	6	6	12	49	110	210	72	8 U	2 UJ	57	37	40	9	23	22	58	18	24	52	46	29	21 J	37
Total TIC VOCS	ug/L	N	NA	130 J	110 J	520 J	670 J	2500 J	5300 J	1100 J	0 U	-	480 J	230 J	230 J	46 J	180 J	150 J	310 J	79 J	180 J	310 J	260 J	420 J	160 J	260 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-489	MW-489	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520
			Field Sample ID	M474B8	M474B9	M474C1	M474C2	M474C3	M474C4	M474C5	M474C6	M474C7	M474C8	M489A1X	M489A2X	D1031177	M520A1X	D0205188	M520A2X	M520A3	M520A4	M520A5X	M520A6	M520A7X	M520A8X	M520A9X
			Sample Date	10/03/2019	01/08/2020	04/06/2020	07/09/2020	10/12/2020	01/08/2021	04/14/2021	07/12/2021	10/06/2021	01/19/2022	07/13/2016	10/11/2016	10/31/2017	10/31/2017	02/05/2018	02/05/2018	05/10/2018	08/02/2018	11/20/2018	02/27/2019	05/15/2019	08/29/2019	11/05/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.24 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.37 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.26 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.37 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.38 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.43 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.43 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.35 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	1.9 U	0.3 U	0.3 U	0.3 U	-	0.5 U	0.5 U	3 UJ	3 U	3 U	3 U	4 J	5 J	3 U	3 U	0.3 U	1 J	0.9 J	2 J	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	1.1 U	0.3 U	0.3 U	0.3 U	-	0.4 U	0.4 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	1.3 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	4.4 UJ	1.1 J	0.86 J	0.7 U	-	0.96 J	0.7 U	6 UJ	6 U	16 J	6 U	18 J	21	6 U	6 U	3 J	4 J	4 J	6 J	3 J
Benzene	ug/L	N	1	**6**	1 J	**2**	**1.4**	0.85 J	0.2 U	0.98 J	-	0.67 J	**1.1**	**75J**	**50**	**120**	**97**	**98**	**110**	**25**	**43**	**85**	**20**	**89**	**14**	**33**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	-	0.22 J	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.54 U	1 U	1 U	1 U	-	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.55 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.82 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.38 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.33 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.6 J
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.43 J	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.22 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	15	10	14	10	16	9.9	19	-	16	17	2 UJ	2 U	13	13	22	22	5	19	19	1 J	7 UJ	13	5
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.28 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	19	21	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	3	0.4 J	0.7 J	0.6 J	0.67 J	0.4 U	0.76 J	-	0.56 J	0.4 U	56 J	29	32 J	24 J	29	33	0.6 J	10	19	3	15	5	16
Isopropylbenzene	ug/L	N	700	2 J	2 J	2 J	1.6	1.6 J	1.3 J	2 J	-	1.5 J	1.9 J	1 UJ	1 U	8	9	8	8	10	21	19	2 J	6	18	16
Methane	ug/L	N	NA	-	-	-	-	-	-	21000	24000	-	22000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.3 U	0.3 U	0.79 U	0.3 U	0.3 U	0.3 U	-	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.47 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	4	4	9	10	2	4	5	2	2	5	2
Methylcyclohexane	ug/L	N	NA	8	5 J	6	5.3	7.8	3.8 J	6.4	-	5.3	6.5	1 UJ	1 U	3 J	3 J	6	6	1 J	6	5 J	0.2 U	1 J	3 J	1 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.32 U	0.3 U	0.42 J	0.3 U	-	0.3 U	0.3 U	2 UJ	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.42 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.25 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	14	3	5	5	4.6	1.1	3.2	-	3.6	1.6	78 J	73	82 J	59 J	40	43	0.5 U	15	46	1 J	7	9	14
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.24 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.49 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.31 U	0.2 U	0.2 U	0.2 U	-	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.2 U	0.32 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.17 U	0.2 U	0.2 U	0.2 U	-	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	45	14	17	19	17	4.9 J	13	-	11	8.5	200 J	150	150 J	110 J	130	140	0.8 J	25	67	3 J	25	29	70
Total TIC VOCS	ug/L	N	NA	450 J	190 J	220 J	-	-	-	-	-	-	-	97 J	240 J	240 J	230 J	270 J	280 J	150 J	280 J	240 J	5 J	100 J	220 J	130 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-520	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521	MW-521
			Field Sample ID	M520B1X	M520B2X	M520B3X	M520B4X	M520B5	M520B4	M520B7	M521A1A	M521A2X	M521A3	M521A4	M521A5	M521A6	M521A7X	M521A8X	M521A9X	M521B1X	M521B2X	M521B3X	M521B4X	M521B5	M521B4	M521B7
			Sample Date	05/13/2020	08/26/2020	11/05/2020	02/12/2021	05/21/2021	08/06/2021	11/03/2021	10/31/2017	02/05/2018	05/10/2018	08/02/2018	11/27/2018	02/27/2019	05/15/2019	07/29/2019	11/08/2019	05/13/2020	08/26/2020	11/05/2020	02/12/2021	05/21/2021	08/06/2021	11/03/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.32 J	0.2 U	3 U	3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	10 U	2 U	2 U	20 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	1 U	1 U	10 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	2 UJ	20 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	1 U	10 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	1 U	1 U	10 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	1 U	1 U	10 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	15 U	13	3 U	30 U	0.3 U	11 J	5 J	3 U	0.3 U	9 J	0.3 U	4.6 J	7.9 J	0.3 U	5 U	5 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	15 U	3 U	3 U	30 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 UJ	0.3 U	1.4 J	1.7 J	4 U	4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 U	3 U	3 U	30 U	0.5 U	3 U	0.5 U	5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U
Acetone	ug/L	N	6000	3 UJ	0.7 U	3.4 UJ	2.2 J	2.2 J	3.3 J	0.89 J	30 U	34	6 U	60 U	5 J	37 J	22	7 U	0.7 U	18 UJ	11 J	13 UJ	18 J	0.7 U	7 U	7 U
Benzene	ug/L	N	1	**54**	**48**	**57**	**73**	**71**	**19**	**45**	**45**	**3600J**	**590**	**180**	**230**	**2000**	**83**	**8J**	**77**	**820**	**350**	**500**	**1100**	**130**	**8.5J**	**7.7J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	5 U	1 U	2 U	1 U	1 U	1 U	1 U	10 U	10 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	3 U	0.5 U	0.5 U	5 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	1 U	1 U	10 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 J	0.2 U	3 U	3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 UJ
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Cyclohexane	ug/L	N	NA	11	21	11	31	18	8	7	10 U	**150**	72	21 J	15	43	30 UJ	20 U	10	73	94	54	73	13	10 U	10 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 UJ	5 UJ	0.2 UJ	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	16	19	21	30	20	13	44	8	**860**	240	160	90	640	94	8 J	61	590	470	470	420	71	23	23
Isopropylbenzene	ug/L	N	700	17	19	15	20	14	11	9.2	5 U	49	23	12 J	13	40	18	2 U	6	45	37	51	31	7.4	3.1 J	2.4 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	1 U	1 U	10 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
Methyl-t-butyl ether	ug/L	N	70	2	2.1	1.9	4.5	2.1	1.8	2	26	**140**	26	29	21	36	27	15	14	19	14	19	12	9.1	11	5.5 J
Methylcyclohexane	ug/L	N	NA	2 J	5	5.1	7	3.5 J	2 J	2.5 J	5 U	48	27	19 J	7	17 J	23	10 U	5 J	48	39	51	35	9.7	8.9 J	9.1 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.3 U	2 U	0.3 U	3 U	0.3 U	0.6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	1 U	1 U	10 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
Toluene	ug/L	N	600	8	32	18	22	8	18	30	3 U	**910**	23	26	3	160	11	3 J	22	160	200	90	77	18	5.1 J	6.2 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 U	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.5 U	5 UJ	0.2 U	1 U	0.2 U	2 U	0.2 U	0.4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U
Xylene (total)	ug/L	N	1000	33	74	83	62	38	80	310	13	**3600**	480	490	66	**1100**	360	39 J	350	**2900**	**3100**	**3100**	**1400**	420	250	310
Total TIC VOCS	ug/L	N	NA	170 J	-	-	-	-	-	-	80 J	3000 J	2200 J	1200 J	620 J	1300 J	890 J	0 U	600 J	4700 J	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-540	MW-540	MW-540
			Field Sample ID	M538A1X	D0518181	M538A2X	M538A3X	M538A4X	M538A5X	M538A6X	M538A7X	M538A8	M539A1X	M539A2X	D0827189	M539A3X	M539A4X	M539A5X	M539A6X	M539A7X	M539A8X	M539A9	M539B1	M540A1X	M540A2X	M540A3X
			Sample Date	02/13/2018	05/18/2018	05/18/2018	08/30/2018	11/16/2018	03/01/2019	09/06/2019	09/08/2020	10/06/2021	02/13/2018	05/18/2018	08/27/2018	08/27/2018	11/16/2018	03/01/2019	09/03/2019	04/10/2020	10/05/2020	01/11/2022	03/30/2022	02/12/2018	05/18/2018	08/27/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	1 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	2 U	2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	-	-	10 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	2 U	2 UJ	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	1 U	1 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 UJ	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	4 U	2 U	2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	10 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 UJ	0.3 UJ
1,2-Dibromoethane	ug/L	N	0.03	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 UJ	0.2 UJ
1,2-Dichloroethane	ug/L	N	2	1 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 UJ	0.2 UJ
1,4-Dichlorobenzene	ug/L	N	75	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 UJ	0.2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	6 U	3 U	3 U	1 J	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	15 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	3 U	3 UJ	0.3 UJ
2-Hexanone	ug/L	N	40	6 U	3 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	15 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	3 U	3 UJ	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	6 U	3 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	15 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	0.5 UJ
Acetone	ug/L	N	6000	27 J	6 U	6 U	8 UJ	1 J	0.7 U	5 J	2 UJ	0.7 U	30 U	6 J	6 J	4 J	2 J	1 UJ	2 J	0.7 U	1.7 UJ	0.7 U	0.7 U	6 U	7 J	6 J
Benzene	ug/L	N	1	1 U	0.5 U	0.5 U	0.5 J	0.5 J	0.3 J	0.5 J	0.29 J	0.3 U	3 U	0.7 J	0.4 J	0.4 J	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	**170**	**170J**	**150J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Bromoform	ug/L	N	4	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 UJ	0.2 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	1 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 U	1 J	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	0.3 U	1 U	1 UJ	0.2 UJ
Carbon Tetrachloride	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
Chlorobenzene	ug/L	N	50	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
Chloroethane	ug/L	N	NA	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Chloroform	ug/L	N	70	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Cyclohexane	ug/L	N	NA	4 U	2 U	2 U	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U	10 U	6	28	29	2 J	7	16	1 UJ	20	5.1	1 U	7	30 J	16 J
Dibromochloromethane	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1 U	0.5 U	0.5 U	0.8 J	0.5 J	0.6 J	0.7 J	0.4 U	0.4 U	3 U	1	1	1	0.4 J	0.6 J	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	27	81 J	59 J
Isopropylbenzene	ug/L	N	700	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	1 U	0.6 J	0.6 J	0.2 U	0.4 J	0.5 J	0.2 U	0.71 J	0.44 J	0.2 U	2 J	5 J	4 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8800	-	-	-
Methyl acetate	ug/L	N	7000	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 UJ	0.2 UJ
Methyl-t-butyl ether	ug/L	N	70	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Methylcyclohexane	ug/L	N	NA	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	5 U	7	21	22	2 J	5 J	16	0.5 U	14	3.2 J	0.5 U	5	24 J	12 J
Methylene chloride (Dichloromethane)	ug/L	N	3	1 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.3 UJ
Styrene	ug/L	N	100	2 U	1 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	5 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 UJ	0.2 UJ
Tetrachloroethene	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
Toluene	ug/L	N	600	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	120	110 J	100 J
trans-1,2-Dichloroethene	ug/L	N	100	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.5 U	0.5 UJ	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 UJ	0.2 UJ
Xylene (total)	ug/L	N	1000	1 U	0.5 U	0.5 U	1 UJ	1 U	1 U	1 U	1.4 U	0.4 U	3 U	2	3 J	3 J	1 U	1 U	1 U	1 U	1.4 U	0.4 U	0.4 U	130	390 J	280 J
Total TIC VOCS	ug/L	N	NA	51 J	13 J	6 J	150 J	140 J	190 J	-	0 U	-	0 U	23 J	41 J	710 J	0 U	58 J	-	28 J	-	-	0 U	630 J	1200 J	810 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-540	MW-540	MW-540	MW-540R	MW-540R	MW-540R	MW-540R	MW-540R	MW-540R	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541R	MW-541R	MW-541R	MW-541R	MW-542	MW-542	MW-542	MW-542
			Field Sample ID	M540A4X	M540A5X	M540A6X	M540RA7X	M540RA8X	M540RA9X	M540RB1	M540RB2	M540RB3	M541A1X	M541A2X	M541A3X	M541A4X	M541A5X	M541A6X	M541RA7X	D1006208	M541RA8X	M541RA9	M542A1X	M542A2X	M542A3X	M542A4X
			Sample Date	11/21/2018	02/27/2019	09/06/2019	04/17/2020	10/06/2020	02/16/2021	05/24/2021	09/02/2021	11/23/2021	02/12/2018	05/18/2018	08/28/2018	11/20/2018	02/28/2019	09/04/2019	04/10/2020	10/06/2020	10/06/2020	10/01/2021	02/13/2018	05/23/2018	08/28/2018	11/20/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 U	5 U	0.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 U	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	4 U	-	-	-	-	-	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	20 U	2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 J	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 J	0.2 J	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 U	10 U	1 U	0.3 U	0.4 J
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 U	20 U	2 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	10 U	1 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.3 U	5 U	0.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	10 U	1 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	10 U	1 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1 J	5 J	0.3 U	6 U	3 U	1.4 J	1.5 UJ	2.5 UJ	5 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 J	3 U	3 U	0.5 U	30 U	3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	8 J	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	2 UJ	4 UJ	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	0.4 U	30 U	3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	5 J	0.5 U	10 U	5 U	0.5 UJ	2.5 UJ	2.5 UJ	5 UJ	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	30 U	3 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	4 J	21	4 J	14 U	7 U	3.7 J	3.5 UJ	3.5 UJ	20 J	6 U	6 U	3 J	0.7 U	4 J	3 J	8 J	7 U	7 U	0.7 U	60 U	6 U	4 J	3 J
Benzene	ug/L	N	1	**150**	**140**	**150**	**56**	**110**	**99J**	**93J**	**66J**	**66J**	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 J	2 U	2 U	0.35 J	5 U	0.5 U	0.4 J	0.4 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	0.2 U	1 U	20 U	10 U	1 UJ	5 UJ	5 UJ	10 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	1 U	1 U	10 U	10 U	1 U	5 U	0.5 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	3 U	3 U	0.3 U	5 U	0.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 U	4 U	2 U	1.5 J	1.1 J	1.5 UJ	3 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	2 J	2 U	2 U	0.36 J	10 U	1 U	0.2 U	0.3 J
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	8 J	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	23	21	28	20 U	10 U	2.7 J	5 UJ	5 UJ	10 UJ	2 U	2 U	0.2 U	0.2 U	0.2 U	1 U	2 J	10 U	10 U	1 U	20 U	4 J	4 J	4 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	45	53	64	14 J	17	11 J	8.5 J	4.3 J	4 UJ	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	4 U	0.4 U	5 U	0.5 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 J	4 J	4 J	4 U	2 U	1 J	1 UJ	1 UJ	2 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	1 J	2 U	2 U	0.2 U	10 U	1 U	0.5 J	0.6 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.2 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	3 U	0.3 U	10 U	1 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.3 J	0.3 J
Methylcyclohexane	ug/L	N	NA	19	16	17	10 U	5 U	1.9 J	2.5 UJ	2.5 UJ	5 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	5 U	5 U	0.5 U	10 U	3 J	2 J	2 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	6 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.7 UJ	0.3 U	3 U	3 U	0.3 U	5 U	0.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	10 U	1 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	**6J**	0.5 U	0.2 U	0.2 U
Toluene	ug/L	N	600	82	64	51	10 J	6.9 J	5.9 J	5.3 J	3.3 J	2.2 J	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1.5 UJ	3 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.3 U	5 U	0.5 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	4 U	2 U	0.2 UJ	1 UJ	1 UJ	2 UJ	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	0.2 U	5 U	0.5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	400	290	280	45 J	62	51 J	48 J	15 J	11 J	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	14 U	14 U	0.4 U	5 U	0.8 J	1 U	1 U
Total TIC VOCS	ug/L	N	NA	1100 J	850 J	-	0 U	-	-	-	-	-	0 U	0 U	0 U	0 U	0 U	-	180 J	0 U	0 U	-	0 U	250 J	240 J	240 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

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Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-542	MW-542	MW-542	MW-542	MW-542	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-544	MW-544	MW-544	MW-544	MW-544
			Field Sample ID	M542A5X	M542A6X	M542A7X	M542A8X	M542A9	D0214189	M543A1X	M543A2X	M543A3X	M543A4X	M543A5X	M543A6X	M543RA7X	M543RA8X	M543RA9X	M543RB1	M543RB2	M543RB3	M544A1X	M544A2X	M544A3X	M544A4X	D0220199
			Sample Date	02/28/2019	09/04/2019	04/09/2020	10/07/2020	10/01/2021	02/14/2018	02/14/2018	05/23/2018	08/29/2018	11/15/2018	02/21/2019	09/06/2019	04/09/2020	10/05/2020	02/17/2021	05/25/2021	09/01/2021	11/15/2021	02/14/2018	05/23/2018	08/29/2018	11/14/2018	02/20/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.5 J	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	**7**	0.2 U	**6**	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	-	-	2 U	2 U	2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	-	-	-	-	-	2 U	2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.6 J	2 U	0.43 J	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	1.5 U	1 U	1 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 UJ	**3.4J**	1.5 UJ	1.5 U	2 U	2 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 J	2 U	0.3 J	0.8 J	0.8 J	2 U	0.75 J	1 UJ	1 UJ	1.1 J	1 U	1 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	**4J**	0.3 U	0.3 U	0.3 U	3 U	0.46 J	**9.2J**	1.5 UJ	1.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	1	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	1 J	0.7 J	0.3 U	0.3 U	0.5 U	3 U	3 U	3 U	4 J	3 U	0.3 U	0.3 U	0.3 U	9.3 J	3.3 J	1.5 UJ	2.5 UJ	7.2 J	3 U	3 J	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	3 U	3 U	3 U	0.3 U	3 U	3 J	0.3 U	3 J	3 U	0.3 UJ	1.5 UJ	2 UJ	2 U	3 U	3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 UJ	2.5 UJ	2.5 UJ	2.5 U	3 U	3 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	4 J	4 J	2 J	0.7 U	4.1 J	6 U	6 U	6 U	16 J	7 U	3 J	0.7 U	18 J	21 J	8.6 J	7.3 J	5.8 UJ	9.8 J	6 U	24 J	3 J	4 J	0.7 U
Benzene	ug/L	N	1	0.3 J	0.5 J	0.3 J	0.23 J	0.96 J	0.7 J	0.8 J	0.7 J	**64**	**83**	**6**	**99**	**340**	**320**	**350J**	**340J**	**280J**	**340**	0.5 U	0.5 U	**14**	**15**	0.3 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	1 U	1 U	10 U	1 UJ	5 UJ	5 UJ	5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 UJ	3 U	0.3 UJ	1.5 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 UJ	0.2 U	0.3 U	1 U	1 U	1 U	0.4 J	2 U	0.2 U	0.2 U	0.5 J	2 U	1.4 J	2.2 J	1.5 UJ	1.5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	1 J	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.4 J	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	4 J	4 J	3 J	2.3 J	1.8 J	9	6	7 J	42	55	31	63	100 J	**110**	58 J	55 J	36 J	**110**	2 U	2 U	6	16	0.4 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	9	10	10	180	340	84	260	380	610	350 J	330	260 J	510	0.6 J	0.5 U	27	38	1
Isopropylbenzene	ug/L	N	700	0.6 J	0.6 J	0.5 J	0.31 J	0.2 U	6	6	6	22	32 J	12	22	29	61	27 J	22 J	18 J	48	1 U	1 U	3 J	9	0.4 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	1.5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Methyl-t-butyl ether	ug/L	N	70	0.3 J	0.3 J	0.3 J	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	2 J	2 J	2 J	1.3 J	1.4 J	11	11	13 J	36	60	42	64	76	**160**	48 J	43 J	33 J	**170**	2 J	1 U	2 J	11	0.2 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.8 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 UJ	1.5 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 U	1 U	1 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	1 U	1 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 U	0.2 J	0.2 U	0.2 U	0.39 J	0.5 U	0.5 U	0.5 U	13	26	4	19	65	85	82 J	70 J	60 J	93	0.5 U	0.5 U	0.8 J	6	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 UJ	1 UJ	1.5 UJ	1.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.2 UJ	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.2 U	2 U	0.2 U	0.2 U	0.8 J	2 U	0.2 UJ	1 UJ	1 UJ	1 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	1 U	1 U	1.4 U	0.66 J	10	11	12	330	770	180	560	990	**1600**	830 J	720 J	540 J	**1100**	0.8 J	0.8 J	2 J	35	1 U
Total TIC VOCS	ug/L	N	NA	220 J	-	290 J	-	-	390 J	320 J	260 J	1600 J	2900 J	1100 J	-	2500 J	-	-	-	-	-	35 J	0 U	120 J	570 J	29 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550
			Field Sample ID	M544A5X	M544A6X	D0408208	M544A7X	M544A8X	M544A9X	M544B1	M544B2	M544B3	D1126188	M550A1X	M550A2X	D0503198	M550A3X	M550A4X	M550A5X	D0219208	M550A6X	D0519208	M550A7X	M550A8X	M550A9X	M550B1X
			Sample Date	02/20/2019	09/06/2019	04/08/2020	04/08/2020	10/05/2020	02/17/2021	05/25/2021	09/01/2021	11/15/2021	11/26/2018	11/26/2018	02/04/2019	05/03/2019	05/03/2019	07/29/2019	11/07/2019	02/19/2020	02/19/2020	05/19/2020	05/19/2020	08/27/2020	01/06/2021	04/02/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	0.2 U	0.2 U	0.2 UJ	0.2 UJ	-	-	-	-	-	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.3 J	0.3 J	2 UJ	0.28 J	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.3 U	0.3 U	9.3 J	4.1 J	5.3 J	2.5 U	2.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
2-Hexanone	ug/L	N	40	0.3 U	0.3 U	5 J	0.3 U	3 UJ	0.3 U	1.5 UJ	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	2.5 UJ	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	5 J	11 J	10 J	20 J	17 J	25 J	4.6 UJ	13 J	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	2.1 J	0.7 U	0.7 U
Benzene	ug/L	N	1	0.3 J	**9**	**11**	**10**	**9.2J**	**9.4**	**5.2J**	**7.1**	**10**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.4 J	0.5 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.2 U	1 U	1 U	1 U	10 UJ	1 U	5 UJ	5 U	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	15	15	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	0.5 J	14	39	42	79 J	35	22 J	19 J	54	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 UJ	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 J	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	1	10	90	76	140 J	79	48 J	73	150	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.4 J	6	15	15	27 J	12	9.6 J	10 J	21 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.2 U	0.2 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	0.2 U	4 J	28	31	88 J	25	14 J	14 J	76	0.4 J	0.2 J	0.2 U	0.2 U	0.2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	1.5 UJ	1.5 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.2 J	5	13	13	17 J	15	12 J	14	20	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1.5 U	1.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	1 UJ	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1 U	17	130	110	210 J	110	72 J	110	210	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	22 J	-	390 J	460 J	-	-	-	-	-	0 U	0 U	0 U	0 U	720 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-550	MW-550	MW-550	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-552	MW-552	MW-552
			Field Sample ID	M550B2	M550B3	M550B4	M551A1X	D0204198B	M551A2X	M551A3X	D0726198	M551A4X	M551A5X	M551A6X	M551A7X	M551A8X	M551A9X	M551B1X	M551B2X	M551B3	D1007218	M551B4	M551B5	M552A1X	D0821198	M552A2X
			Sample Date	07/14/2021	10/08/2021	01/21/2022	11/26/2018	02/04/2019	02/04/2019	05/03/2019	07/26/2019	07/26/2019	11/06/2019	12/19/2019	02/28/2020	05/18/2020	08/24/2020	01/06/2021	04/01/2021	07/14/2021	10/07/2021	10/07/2021	01/21/2022	07/25/2019	08/21/2019	08/21/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	3 UJ	3 UJ	2 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	3 U	0.3 UJ	0.3 UJ
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-	2 U	0.2 UJ	0.2 UJ
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 UJ	0.3 UJ	3 UJ	3 UJ	2 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	3 U	0.3 UJ	0.3 UJ
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	3 UJ	3 UJ	2 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	3 U	0.3 UJ	0.3 UJ
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	3 UJ	3 UJ	2 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	3 U	0.3 UJ	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	2 J	5 J	4 J	1 J	3 UJ	3 UJ	2 UJ	1 J	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	2.5 U	2.5 UJ	2.5 UJ	0.5 U	3 U	3 J	2 J
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	3 UJ	3 UJ	2 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	2 U	2 UJ	2 UJ	0.4 U	3 U	0.3 UJ	0.3 UJ
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	5 UJ	5 UJ	3 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	2.5 U	2.5 U	2.5 U	2.5 UJ	2.5 UJ	0.5 U	5 U	0.5 UJ	0.5 UJ
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	0.7 U	31 J	32 J	3 J	10 J	14 J	4 UJ	6 J	2 J	2 UJ	4.3 J	3.5 U	3.5 U	13 J	3.5 UJ	5.7 J	6.5 J	22 J	11 J	9 J
Benzene	ug/L	N	1	0.3 U	0.3 U	0.3 U	**170**	**150J**	**150J**	**230J**	**66J**	**66J**	**81J**	**52J**	**74**	**49J**	**92**	**6.1**	**78**	**38**	**5.8J**	**5.6J**	**4**	**340**	**37J**	**36J**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Bromoform	ug/L	N	4	1 U	1 U	1 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	5 UJ	5 UJ	5 UJ	1 U	1 U	1 UJ	1 U	5 U	5 U	5 U	5 UJ	5 UJ	1 U	2 U	1 UJ	1 UJ
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	3 UJ	3 UJ	2 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	3 U	0.3 UJ	0.3 UJ
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	0.9 J	0.8 J	0.8 J	0.4 J	4 J	3 J	1 UJ	0.2 U	0.9 J	1 J	0.42 J	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	11 J	10 J
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 UJ	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.3 J	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	60	17 J	16 J	52 J	20 UJ	4 J	11 J	2 J	4 J	5 J	23	5 U	5 U	42	5 UJ	5 UJ	3.6 J	6 J	5 J	6 J
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	130	130 J	120 J	220 J	23 J	25 J	26 J	7 J	27	18 J	43	5.3	49	29	2 UJ	2 UJ	3.6	91	45 J	45 J
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	10	10 J	10 J	20 J	2 UJ	2 UJ	9 J	0.6 J	5	4 J	7.1	4.3 J	9.9 J	24 J	2 J	1.7 J	2.1 J	5 J	5 J	5
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.3 U	0.3 UJ	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 U	25	28 J	28 J	27 J	18 J	18 J	26 J	22 J	28	20 J	23	24	28	**120**	19 J	19 J	14	2 U	0.2 UJ	0.2 UJ
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	52	12 J	12 J	58 J	10 UJ	3 J	3 UJ	2 J	1 J	2 J	8.4	2.5 U	3.4 J	16 J	2.5 UJ	2.5 UJ	0.5 U	4 J	6 J	6 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 UJ	0.3 UJ	4 UJ	5 UJ	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U	1.5 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	7 UJ	0.5 UJ	0.3 UJ
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 J	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	17	17 J	16 J	31 J	12 J	11 J	15 J	3 J	10	10 J	26	4.4 J	25	17	1 UJ	1 UJ	2.1	26	7 J	7 J
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1.5 U	1.5 UJ	1.5 UJ	0.3 U	2 U	0.2 UJ	0.2 UJ
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	2 UJ	2 UJ	1 UJ	0.2 U	0.2 U	0.2 UJ	0.2 U	1 U	1 U	1 U	1 UJ	1 UJ	0.2 U	2 U	0.2 UJ	0.2 UJ
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	550	360 J	360 J	420 J	76 J	78 J	110 J	30 J	80	70 J	170	30	200	140	2 UJ	2 UJ	16	710	300 J	320 J
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	1000 J	1000 J	1000 J	1600 J	160 J	0 U	440 J	-	380 J	260 J	-	-	-	-	0 UJ	0 UJ	-	320 J	570 J	510 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-552	MW-552	MW-552	MW-552	MW-552	MW-552	MW-552	MW-552	MW-562	MW-562	MW-562	MW-562	MW-562	MW-562	MW-562	MW-562	MW-562	MW-562	MW-563	MW-563	MW-564S	MW-565	MW-567
			Field Sample ID	M552A3X	M552A4X	M552A5X	M552A6X	M552A7X	M552A9	M552B1	M552B2	M562A1X	M562A2X	M562A3X	M562A4X	M562A6X	M562A7X	M562A9	D1201218	M562B1	M562B2	M563DA1X	M563SA1X	M564SA1	M562A5X	M567DA1X
			Sample Date	11/12/2019	02/14/2020	06/03/2020	08/06/2020	11/04/2020	06/17/2021	12/01/2021	03/02/2022	07/25/2019	08/22/2019	11/07/2019	02/14/2020	08/07/2020	11/04/2020	06/17/2021	12/01/2021	12/01/2021	03/02/2022	07/12/2019	07/12/2019	07/25/2019	06/04/2020	07/12/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	5600 U	0.2 U	20 U
1,1,1-Trichloroethane	ug/L	N	30	2 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	30 U	3 U	4800 U	0.3 U	30 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	6000 U	0.2 U	20 U
1,1,2-Trichloroethane	ug/L	N	3	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	4800 U	0.2 U	20 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	1 U	4 UJ	-	-	-	-	-	-	1 U	1 UJ	2 U	4 UJ	-	-	-	-	-	-	20 U	2 U	4400 U	-	20 U
1,1-Dichloroethane	ug/L	N	50	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	3600 U	0.2 U	20 U
1,2,4-Trichlorobenzene	ug/L	N	9	2 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	30 U	3 U	-	0.3 U	30 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	30 U	3 U	-	0.3 U	30 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	5200 U	0.2 U	20 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	8000 U	0.25 J	20 U
1,2-Dichloroethane	ug/L	N	2	2 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	30 U	3 U	3200 U	0.3 U	30 U
1,2-Dichloropropane	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	5200 U	0.2 U	20 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	7600 U	0.2 U	20 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	6800 U	0.2 U	20 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2 U	6 UJ	6 U	3 U	3 UJ	2 J	0.5 U	0.5 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	**380J**	30 J	8400 U	0.3 U	**310J**
2-Hexanone	ug/L	N	40	2 U	6 UJ	6 U	3 U	3 UJ	0.4 U	0.4 U	0.4 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	30 U	7 J	7200 U	0.61 J	30 U
4-Methyl-2-pentanone	ug/L	N	NA	3 UJ	10 UJ	10 U	5 U	5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 UJ	5 U	10 UJ	5 UJ	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	50 UJ	5 UJ	32000 J	0.5 U	50 UJ
Acetone	ug/L	N	6000	4 U	14 UJ	21 J	7 U	7 UJ	97	0.7 U	2 J	10 J	8 J	7 U	14 UJ	7 UJ	7 UJ	1.2 UJ	0.7 U	0.7 U	0.7 U	470 J	120 J	200000 U	0.73 J	460 J
Benzene	ug/L	N	1	**15**	**41J**	**1000**	**490**	**6.3J**	**2.1**	**1.3**	**1.1**	1 U	1 J	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	**83000**	**12000**	**950000**	0.2 U	**59000**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	4800 U	0.2 U	20 U
Bromoform	ug/L	N	4	5 U	20 UJ	20 U	10 U	10 UJ	1 U	1 U	1 U	1 U	5 UJ	10 U	20 UJ	10 UJ	10 UJ	1 UJ	1 U	1 U	1 U	20 U	2 U	6800 U	1 U	20 U
Bromomethane (Methyl bromide)	ug/L	N	10	2 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	2 U	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	30 U	3 U	7200 U	0.3 U	30 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	4 J	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 J	200000 U	0.89 J	20 U
Carbon Tetrachloride	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	5600 U	0.2 U	20 U
Chlorobenzene	ug/L	N	50	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	5200 U	0.2 U	20 U
Chloroethane	ug/L	N	NA	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	7600 U	0.2 U	20 J
Chloroform	ug/L	N	70	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	3700 U	0.2 U	20 U
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	4 UJ	4 U	2 U	2 UJ	0.49 J	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	9600 U	0.2 U	20 U
cis-1,2-Dichloroethene	ug/L	N	70	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	4800 U	0.2 U	20 U
cis-1,3-Dichloropropene	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	4000 U	0.2 U	20 U
Cyclohexane	ug/L	N	NA	5 U	20 UJ	20 U	10 U	10 UJ	1 U	1 U	1 U	1 U	5 UJ	10 U	20 UJ	10 UJ	10 UJ	1 UJ	1 U	1 U	1 U	20 U	220	-	1 U	55 J
Dibromochloromethane	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	5200 U	0.2 U	20 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	5200 U	0.2 U	20 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	27	9 J	120	53	6.8 J	0.4 U	0.4 U	0.4 U	2 U	2 UJ	4 U	8 UJ	4 UJ	4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	68 J	180	**10000J**	0.4 U	120
Isopropylbenzene	ug/L	N	700	3 J	4 UJ	14 J	5.6 J	2.3 J	0.2 U	0.2 U	0.2 U	1 J	1 J	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	28 J	9600 U	0.2 U	20 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	-	0.3 U	20 U
Methyl-t-butyl ether	ug/L	N	70	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	6000 U	0.2 U	20 U
Methylcyclohexane	ug/L	N	NA	4 J	10 UJ	10 U	5 U	5 UJ	0.5 U	0.5 U	0.5 U	1 U	3 UJ	5 U	10 UJ	5 UJ	5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	20 U	120	-	0.5 U	67 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	6 UJ	6 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	3 UJ	2 UJ	3 U	6 UJ	3 UJ	3 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	43 UJ	**15**	200000 U	0.3 U	44 UJ
Styrene	ug/L	N	100	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	8000 U	0.2 U	20 U
Tetrachloroethene	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	10000 U	0.2 U	20 U
Toluene	ug/L	N	600	3 J	4 UJ	9.7 J	7.9 J	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	**2000**	**980**	80000 U	0.2 U	**1800**
trans-1,2-Dichloroethene	ug/L	N	100	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	3400 U	0.2 U	20 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	4800 U	0.2 U	20 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.3 UJ	0.3 U	0.3 U	0.3 U	20 U	2 U	7200 U	0.2 U	20 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	6000 U	0.2 U	20 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	4 UJ	4 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	1 U	1 UJ	2 U	4 UJ	2 UJ	2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	20 U	2 U	4800 U	0.2 U	20 U
Xylene (total)	ug/L	N	1000	170	28 UJ	92 J	58 J	15 J	0.4 U	0.4 U	0.4 U	5 U	7 UJ	14 U	28 UJ	14 UJ	14 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	420 J	**2100**	-	1.4 U	860
Total TIC VOCS	ug/L	N	NA	310 J	0 U	0 U	-	-	0 U	0 U	-	0 U	0 U	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	12000 J	2300 J	-	-	7900 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-567	MW-569	MW-569	MW-570	MW-570	MW-572	MW-572	MW-574	MW-574	MW-574	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-576	MW-576	MW-576	MW-576
			Field Sample ID	M567SA1X	M569DA1X	M569SA1X	M570DA1X	M570SA1X	M572DA1X	M572SA1X	D0711198B	M574DA1X	M574SA1X	M575A1X	D0914208	M575A2X	D1209208	M575A3X	M575A4X	M575A5	M575A6	M575A7	D0309208	M576A1X	M576A2X	M576A3X
			Sample Date	07/12/2019	07/12/2019	07/12/2019	07/11/2019	07/11/2019	07/11/2019	07/11/2019	07/11/2019	07/11/2019	07/11/2019	03/10/2020	09/14/2020	09/14/2020	12/09/2020	12/09/2020	03/08/2021	06/01/2021	08/27/2021	12/09/2021	03/10/2020	03/10/2020	09/14/2020	12/09/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	6 U	30 U	6 U	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	-	-	-	-	-	-	-	-	2 U	2 U	-	-
1,1-Dichloroethane	ug/L	N	50	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	6 U	30 U	6 U	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	6 U	30 U	6 U	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	6 U	30 U	6 U	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	29 J	**590J**	65 J	27 J	34 J	11 J	2 J	4 J	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	3 U	3 U	6 U	0.96 J
2-Hexanone	ug/L	N	40	6 U	30 U	8 J	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	0.4 U	0.4 U	3 U	3 U	6 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	10 UJ	50 U	10 U	5 U	5 U	5 U	0.5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	5 U	10 U	0.5 U
Acetone	ug/L	N	6000	57 J	690 J	140 J	42 J	76 J	41 J	11 J	7 U	7 U	12 J	1 UJ	4 J	5.2 J	0.96 UJ	2.4 UJ	0.7 U	1.2 J	6.8 UJ	4.4 J	17 UJ	7 UJ	14 U	4.3 UJ
Benzene	ug/L	N	1	**15000**	**27000**	**14000**	**23000**	**4900**	**4700**	**20**	**140**	**130**	**15**	**4**	**2.9**	**2.8**	**3.6**	**3.5**	**1.3**	0.71 J	0.74 J	0.54 J	**230J**	**130J**	**220**	**120**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Bromoform	ug/L	N	4	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	10 U	20 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	6 U	30 U	6 U	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	4 U	20 U	4 U	5 J	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Chlorobenzene	ug/L	N	50	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Chloroethane	ug/L	N	NA	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Chloroform	ug/L	N	70	4 U	20 U	4 U	2 U	2 U	2 U	0.2 J	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	5 J	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Cyclohexane	ug/L	N	NA	130	20 U	700	140	1100	1200	10	18 J	17 J	44 J	1 U	1 U	1 U	1.7 J	1.6 J	1 U	1 U	1 U	1 U	65 J	30 J	38 J	21
Dibromochloromethane	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	160	40 U	530	130	470	400	0.8 J	4 U	4 U	4 U	0.4 U	0.4 U	0.4 U	0.49 J	0.44 J	0.4 U	0.4 U	0.4 U	0.4 U	44 J	23 J	45	22
Isopropylbenzene	ug/L	N	700	25 J	20 U	60 J	20 J	55	43 J	0.5 J	2 U	2 U	3 J	0.4 J	0.43 J	0.44 J	0.57 J	0.52 J	0.35 J	0.41 J	0.2 U	0.2 U	6 J	4 J	6.7 J	3.9 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	4 U	20 U	4 U	2 U	2 U	2 U	0.2 J	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Methylcyclohexane	ug/L	N	NA	110	20 U	410	84	800	780	6	5 J	5 J	48 J	0.6 J	0.5 U	0.5 U	0.83 J	0.76 J	0.5 U	0.5 U	0.5 U	0.5 U	49 J	29 J	31 J	17
Methylene chloride (Dichloromethane)	ug/L	N	3	17 UJ	43 UJ	**31**	3 U	3 U	3 U	0.3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	3 U	6 U	0.3 U
Styrene	ug/L	N	100	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Tetrachloroethene	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Toluene	ug/L	N	600	320	510	**1400**	180	**760**	**1000**	6	32	31	3 J	0.2 U	0.33 J	0.33 J	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	24 J	8 J	16 J	6.6
trans-1,2-Dichloroethene	ug/L	N	100	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	2 U	2 U	4 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	4 U	20 U	4 U	2 U	2 U	2 U	0.2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	4 U	0.2 U
Xylene (total)	ug/L	N	1000	**1400**	100 U	**4000**	760	**4000**	**4900**	30	74	76	10 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U	0.4 U	0.4 U	98 J	38 J	81 J	29
Total TIC VOCS	ug/L	N	NA	1800 J	4000 J	4400 J	1500 J	4000 J	3500 J	190 J	230 J	240 J	62 J	71 J	-	-	-	-	-	-	-	-	72 J	0 U	0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-576	MW-576	MW-576	MW-576	MW-576	MW-577	MW-577	MW-577	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578
			Field Sample ID	D0308218	M576A4X	M576A6	M576A7	M576A8	D0820198	M577A1X	M577A2X	M577RA3X	M577RA4X	M577RA5	D0715218	M577RA6	M577RA7	D0128228B	M577RA8	D1121198	M578A1X	M578A2X	M578A3X	D1214208	M578B4X	D0316218
			Sample Date	03/08/2021	03/08/2021	06/01/2021	08/26/2021	12/08/2021	08/20/2019	08/20/2019	09/24/2019	10/19/2020	01/14/2021	04/09/2021	07/15/2021	07/15/2021	10/08/2021	01/28/2022	01/28/2022	11/21/2019	11/21/2019	01/14/2020	03/27/2020	12/14/2020	12/14/2020	03/16/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	3 U	3 U	3 UJ	3.0 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.21 J	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 UJ	3 UJ	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	0.2 UJ	0.2 UJ	0.2 U	2 U	-	-	-
1,1-Dichloroethane	ug/L	N	50	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	3 U	3 U	3 UJ	3.0 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	3 U	3 U	3 UJ	3.0 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	2 U	2 UJ	2.0 U	39 J	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	3 U	3 U	3 UJ	3.0 U	6 U	0.3 U	0.3 U	0.3 U	0.95 J	**7.4J**	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	2 U	2 U	3 UJ	3.0 U	59 J	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	5 UJ	5.0 U	10 U	3 J	3 J	0.3 U	6.9 J	3 U	0.3 U	0.5 UJ	0.5 U	0.5 UJ	5 U	5 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.63 J	0.30 U	0.3 U
2-Hexanone	ug/L	N	40	3 U	3 U	4 UJ	4.0 U	8 U	0.3 U	0.3 U	0.3 U	3.6 J	3 U	0.3 U	0.4 UJ	0.4 U	0.4 UJ	4 U	4 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	5 U	5 U	5 UJ	5.0 U	10 U	0.5 U	0.5 U	0.5 U	1.6 J	5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	5 U	5 U	0.5 UJ	0.5 UJ	0.5 U	5 U	0.50 U	0.50 U	0.5 U
Acetone	ug/L	N	6000	32 J	34 J	7 UJ	7.0 U	14 U	13 J	10 J	8 J	13 J	15 J	0.7 U	2.4 J	4.3 J	6.8 J	7 U	7 U	2 J	2 J	0.7 U	7 U	2.1 J	0.75 J	0.75 J
Benzene	ug/L	N	1	**170**	**180**	**170J**	**250**	**250**	**120**	**120**	**130**	**270**	**370**	**300**	**270J**	**320**	**310J**	**320**	**320**	**2J**	**2J**	**4**	**5J**	0.37 J	0.32 J	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	**1.3**	2 U	0.2 U	0.2 UJ	0.89 J	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Bromoform	ug/L	N	4	10 U	10 U	10 UJ	10 U	20 U	1 U	1 U	1 U	1 U	10 U	1 U	1 UJ	1 U	1 UJ	10 U	10 U	1 UJ	1 UJ	1 U	10 U	1.0 U	1.0 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	3 U	3 UJ	3.0 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	1.4 J	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 J	0.3 J	2 J	2 J	0.20 U	0.20 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 U	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Chlorobenzene	ug/L	N	50	2 U	2 U	3 UJ	3.0 U	23	0.2 U	0.2 U	0.2 U	0.63 J	2 U	0.87 J	0.63 J	0.7 J	0.7 J	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Chloroethane	ug/L	N	NA	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	3.6	2 UJ	2.7	2.2 J	2.3	2 J	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Chloroform	ug/L	N	70	2 U	2 U	3 UJ	3.0 U	6 U	3 J	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.26 J	2 U	0.3 J	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Cyclohexane	ug/L	N	NA	39 J	45 J	10 UJ	10 J	20 U	**120**	**120**	**140**	53	19 J	11	7.9 J	1 U	9 J	12 J	10 U	1 UJ	1 UJ	1 U	10 U	1.0 U	1.0 U	1 U
Dibromochloromethane	ug/L	N	1	2 U	2 U	2 U	2.0 U	4 U	0.4 J	0.4 J	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	43	46	27 J	37	32	20	21	24	21	22	25	19 J	22	21 J	15	15	2 J	2 J	6	10	1.1	0.84 J	0.4 U
Isopropylbenzene	ug/L	N	700	6.6 J	7.1 J	2.4 J	6.1 J	5.2 J	12	12	13	19	13 J	21	17 J	20	21 J	17 J	16 J	0.2 UJ	0.2 UJ	0.5 J	2 U	0.20 U	0.20 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	3 U	3 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Methylcyclohexane	ug/L	N	NA	19 J	21 J	5 UJ	5.0 U	10 U	**130**	**130**	90	20	5 U	5.8	0.5 UJ	0.5 U	0.5 UJ	5 U	5 U	0.6 J	0.6 J	0.7 J	5 U	0.50 U	0.50 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	3 U	3 U	3 UJ	3.0 U	6 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	3 U	0.30 U	0.30 U	0.3 U
Styrene	ug/L	N	100	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	2.2 J	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Tetrachloroethene	ug/L	N	1	2 U	2 U	3 UJ	3.0 U	**11J**	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Toluene	ug/L	N	600	9.7 J	9.9 J	3.1 J	6.6 J	9.2 J	54	56	61	31	11	7.1	4 J	4.5	4.6 J	3.8 J	3.6 J	1 J	1 J	2	28	0.20 U	0.20 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	2 U	2 U	3 UJ	3.0 U	6 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.3 UJ	0.3 U	0.3 UJ	3 U	3 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	0.2 UJ	0.2 U	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	2 U	2 U	2 UJ	2.0 U	4 U	0.2 U	0.2 U	0.2 U	0.22 J	2 U	0.23 J	0.22 J	0.27 J	0.2 UJ	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	2 U	0.20 U	0.20 U	0.2 U
Xylene (total)	ug/L	N	1000	61	66	26 J	33	40	560	580	660	650	490	360	230 J	280	240 J	170	160	3 J	3 J	4 J	25 J	1.4 U	1.4 U	1.4 U
Total TIC VOCS	ug/L	N	NA	-	-	0 UJ	0.0 U	0 U	740 J	760 J	870 J	-	0 U	-	-	-	-	-	-	340 J	320 J	740 J	1000 J	-	0.0 U	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-578	MW-578	MW-578	MW-578	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-579	MW-580	MW-580	MW-580	MW-580	MW-580	MW-580	MW-580
			Field Sample ID	M578A5X	M578A6	M578A7	M578A9	M579A1X	D0214208	M579A2X	D0603208	M579A3X	M579A4X	M579A5X	D0617218	M579A7	M579A8	D0302228B	M579A9	M580A1X	M580A2X	M580A3X	M580A4X	M580A5X	M580A6X	M580A7
			Sample Date	03/16/2021	06/03/2021	08/30/2021	12/10/2021	11/12/2019	02/14/2020	02/14/2020	06/03/2020	06/03/2020	08/06/2020	11/05/2020	06/17/2021	06/17/2021	12/01/2021	03/02/2022	03/02/2022	11/12/2019	02/19/2020	06/02/2020	08/05/2020	11/03/2020	02/15/2021	06/18/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 UJ	0.30 U	0.3 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	1 U	10 U	10 U	-	-	-	-	-	-	-	-	-	1 U	0.2 UJ	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 UJ	0.30 U	0.3 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 UJ	0.30 U	0.3 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 UJ	0.30 U	0.3 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.44 J	0.44 J	0.2 U	0.2 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.5 UJ	0.50 U	0.5 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U
2-Hexanone	ug/L	N	40	0.3 U	0.4 UJ	0.40 U	0.4 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 UJ	0.50 U	0.5 UJ	3 UJ	25 U	25 U	5 UJ	5 U	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 UJ	0.70 U	1.8 UJ	4 U	35 U	35 U	7 UJ	7 U	7 U	7 UJ	2.7 J	2.1 UJ	0.7 U	0.7 U	0.7 U	4 U	0.7 U	0.81 J	2.8 J	0.7 U	0.7 U	0.82 UJ
Benzene	ug/L	N	1	0.2 U	**4.2J**	**4.5**	**3.8J**	**10**	**130J**	**99J**	**290J**	**200J**	**110**	**39J**	**24**	**22**	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 UJ	1.0 U	1 UJ	5 U	50 U	50 U	10 UJ	10 U	10 U	10 UJ	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 UJ	0.30 U	0.3 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 J	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chlorobenzene	ug/L	N	50	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.31 J	0.2 U	0.2 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 UJ	1.0 U	1 UJ	5 U	50 U	50 U	10 UJ	10 U	10 U	10 UJ	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	3.8 J	3.1	2.5 J	2 U	20 U	20 U	4 UJ	4 U	4 U	4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.76 J	0.68 J	0.66 J	1 U	10 U	10 U	2 UJ	2 U	3 J	2 UJ	0.37 J	0.29 J	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 UJ	0.30 U	0.3 UJ	1 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.9 J	1.2	1.5	2	0.2 U	1.4
Methylcyclohexane	ug/L	N	NA	0.5 U	0.53 J	0.60 J	0.5 UJ	3 U	25 U	25 U	5 UJ	5 U	5 U	5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 UJ	0.30 U	0.3 UJ	2 U	15 U	15 U	3 UJ	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Styrene	ug/L	N	100	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Toluene	ug/L	N	600	0.2 U	1.4 J	1.4	1.1 J	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.3 UJ	0.30 U	0.3 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 UJ	0.20 U	0.2 UJ	1 U	10 U	10 U	2 UJ	2 U	2 U	2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	1.4 U	2.1 J	1.8	1.8 J	7 U	70 U	70 U	14 UJ	14 U	14 U	14 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	7 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	-	-	-	0 U	0 U	0 U	0 U	0 U	0 U	0 UJ	0 U	0 U	0 U	0 U	-	0 U	0 U	0 U	0 U	-	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-580	MW-580	MW-580	MW-581	MW-581	MW-581	MW-581	MW-581	MW-581	MW-581	MW-581	MW-581	MW-581	MW-581	MW-582	MW-582	MW-582	MW-582	MW-582	MW-582	MW-582	MW-582	MW-582
			Field Sample ID	M580A8	M580A9	M580B1	D1108198	M581A1X	M581A2X	M581A3X	M581A4X	M581A5X	M581A6X	M581A7	M581A8	M581A9	M581B1	M582A1X	M582A2X	M582A3X	M582A4X	M582A5X	M582A6X	M582A7	M582A8	M582A9
			Sample Date	08/16/2021	12/03/2021	03/02/2022	11/08/2019	11/08/2019	02/13/2020	06/01/2020	08/03/2020	11/02/2020	02/15/2021	06/16/2021	08/17/2021	12/02/2021	03/01/2022	11/12/2019	02/13/2020	06/01/2020	08/03/2020	11/02/2020	02/15/2021	06/16/2021	08/17/2021	12/02/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	0.2 U	0.2 U	0.2 U	-	-	-	-	-	-	-	-	0.2 U	0.2 U	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	6	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.43 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 J	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.35 J	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	4.2 J	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	3.8 J	0.3 U	0.3 U	0.3 UJ	0.5 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	0.4 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	4 U	0.4 U	0.4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.56 J	0.4 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	0.7 U	0.7 U	0.7 U	1 J	0.7 U	0.7 U	2.9 UJ	1.7 J	0.7 U	0.7 U	7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	2.9 UJ	1.8 J	0.7 U	2.2 J	1.4 J	5.7 J	0.7 U
Benzene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.92 J	0.3 U	0.7 J	0.2 U	**1.8**	0.49 J	**5.3**	0.34 J	**5.2**	**1.9**	0.3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	0.3 U	0.3 U	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.3 U	0.3 U	0.3 U	0.3 J	0.2 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	2.6	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	1.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	11	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	9	1 U	1 U	1 U	23 J	6.6	6	1 U
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.7 J	0.93 J	0.48 J	0.32 J	1.2 J	0.59 J	0.23 J	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	1.1 J	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.58 J	0.4 J	0.35 J	0.8 J	0.7 J	0.3 J	0.49 J	0.39 J	0.35 J	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 J	0.2 UJ	0.2 U	0.2 U	0.29 J
Methylcyclohexane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.5 U	0.5 U	0.9 J	0.6 J	1.2 J	1.8 J	2 J	7.5 J	3.6 J	3.9 J	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.67 J	0.3 U	2.6	0.3 U
Styrene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 UJ	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 UJ
Toluene	ug/L	N	600	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.37 J	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.61 J	0.2 U	0.2 U	0.69 J	0.2 U	0.22 J	0.3 J
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	0.3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	3 U	0.3 U	0.59 J	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.3 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	0.28 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	**5**	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	0.4 U	0.4 U	0.4 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	4 U	0.4 U	0.4 U	0.4 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 UJ	0.4 U	0.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	0 U	0 U	0 U	0 U	33 J	25 J	0 U	0 U	-	-	0 U	0 U	-	0 U	430 J	240 J	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-582	MW-583	MW-583	MW-583	MW-583	MW-583	MW-583	MW-584	MW-584	MW-584	MW-584	MW-584	MW-584	MW-584	MW-585	MW-585	MW-585	MW-585	MW-585	MW-585	MW-586	MW-586	MW-586
			Field Sample ID	M582B1	M583A1X	M583A2X	M583A3X	M583A4	M583A5	M583A6	M584A1X	M584A2X	M584A3X	M584A4	M584A5	D1115218	M584A6	M585A1X	M585A2X	M585A3	M585A4	M585A5	M585A6	M586A1X	M586A2X	M586A3
			Sample Date	03/02/2022	04/10/2020	10/09/2020	02/17/2021	05/24/2021	09/03/2021	11/23/2021	04/15/2020	10/05/2020	02/17/2021	05/26/2021	09/01/2021	11/15/2021	11/15/2021	10/16/2020	01/13/2021	04/08/2021	07/16/2021	10/14/2021	01/31/2022	10/14/2020	01/15/2021	04/08/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	15 UJ	3 UJ	0.3 UJ	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 U	15 U	0.3 U	1.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 U	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	10 UJ	-	-	-	-	-	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.3 U	10 UJ	2 UJ	0.52 J	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	15 UJ	3 UJ	0.3 UJ	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 U	15 U	0.3 U	1.5 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	15 UJ	3 UJ	0.3 UJ	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 U	15 U	0.3 U	1.5 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	15 UJ	3 UJ	0.3 J	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 UJ	15 U	0.3 U	1.5 UJ
1,2-Dichloropropane	ug/L	N	1	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	**2.8J**	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	10 UJ	2 UJ	0.2 UJ	1 U	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	300 J	**430J**	**580J**	**790J**	**640**	**470J**	67	17 J	14 J	20 J	2.5 U	5 U	5 U	13 J	0.3 U	0.3 UJ	0.5 U	2.5 U	0.5 U	15 U	23	1.5 U
2-Hexanone	ug/L	N	40	0.4 U	15 UJ	14 J	30 J	13 J	10 J	8 UJ	0.6 U	6 U	0.6 UJ	5.6 J	2 U	4 U	4 U	3 U	0.3 U	0.3 UJ	0.4 U	2 U	0.4 U	15 U	0.3 U	1.5 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	25 UJ	18 J	29 J	24 J	28 J	23 J	1 U	10 U	2.7 UJ	4.2 J	3.5 J	5 U	5 U	5 U	0.67 J	0.64 J	0.5 U	2.5 U	0.5 U	25 U	0.5 U	2.5 U
Acetone	ug/L	N	6000	0.7 U	1800 J	2000 J	3800 J	3400 J	2700	2500 J	370	28 J	41 J	34 J	6.6 UJ	7 U	7 U	7 U	12 J	16 J	6.5 UJ	32 J	0.7 U	35 U	57	15 J
Benzene	ug/L	N	1	0.73 J	**98J**	**110J**	**130J**	**120J**	**81**	**100J**	**1200**	**900**	**850J**	**690J**	**620**	**730**	**710**	**190**	**450**	**500J**	**510**	**550**	**420**	**450**	**260**	**280**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.68 J	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Bromoform	ug/L	N	4	1 U	50 UJ	10 UJ	1 UJ	5 UJ	5 U	20 UJ	2 U	20 U	2 UJ	5 UJ	5 U	10 U	10 U	10 U	1 U	1 UJ	1 U	5 U	1 U	50 U	1 U	5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	15 UJ	3 UJ	0.3 UJ	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 UJ	0.3 UJ	0.3 U	1.5 U	0.3 U	15 U	0.3 U	1.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	95 J	55 J	120 J	170 J	27	130 J	0.8 J	4 J	1.8 J	1.9 J	1.5 J	3 U	3 U	2 U	0.2 U	0.6 J	0.6 J	1.5 U	0.38 J	10 U	0.26 J	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
Chlorobenzene	ug/L	N	50	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.7 J	4 U	0.68 J	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
Chloroethane	ug/L	N	NA	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	10	2 U	2 U	0.2 UJ	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Chloroform	ug/L	N	70	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	10 UJ	2 UJ	0.22 J	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Cyclohexane	ug/L	N	NA	46	50 UJ	10 UJ	13 J	5 UJ	20 J	20 UJ	69	**160**	58 J	42 J	26	35 J	32 J	100	**250**	**330J**	**280**	**310**	**240**	**130J**	85	40
Dibromochloromethane	ug/L	N	1	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	77 J	54 J	54 J	71 J	96	81 J	120	220	130 J	90 J	70	90	78	37	280	300 J	230	160	180	29 J	20	17
Isopropylbenzene	ug/L	N	700	2.5 J	10 UJ	3.4 J	3 J	3.7 J	6.4 J	4 UJ	13	45 J	17 J	9 J	7.3 J	9.1 J	7.6 J	17 J	53	69 J	70	41	68	51 J	45	47
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	15 UJ	3 UJ	0.3 UJ	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 U	15 U	0.3 U	1.5 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Methylcyclohexane	ug/L	N	NA	21	25 UJ	5 UJ	7.2 J	9.7 J	15 J	10 UJ	57	**230**	64 J	37 J	24 J	33 J	26 J	15 J	75	**200J**	**120**	88	**120**	48 J	25	9.9 J
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	15 UJ	3 UJ	0.88 J	1.5 UJ	1.5 U	6 UJ	0.6 U	6 U	0.6 UJ	1.5 UJ	1.5 U	3 U	3 U	3 U	0.3 U	0.3 UJ	0.3 U	1.5 U	0.3 U	15 U	0.3 U	1.5 U
Styrene	ug/L	N	100	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
Toluene	ug/L	N	600	1.2	27 J	18 J	21 J	25 J	21	24 J	23	22	18 J	13 J	11	15	14	16	50	69 J	54	36	31	18 J	6.4	9.5
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1.5 U	6 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1.5 U	3 U	3 U	2 U	0.2 U	0.2 UJ	0.3 U	1.5 U	0.3 U	10 U	0.2 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	10 UJ	2 UJ	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	10 UJ	2 U	0.2 UJ	1 UJ	1 U	4 UJ	0.4 U	4 U	0.4 UJ	1 UJ	1 U	2 U	2 U	2 U	0.2 U	0.2 UJ	0.2 U	1 U	0.2 U	10 U	0.2 U	1 U
Xylene (total)	ug/L	N	1000	3.8	230 J	180 J	180 J	220 J	290	200 J	190	390	170 J	100 J	85	110	98	190	560	750 J	620	490	660	160 J	130	120
Total TIC VOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	620 J	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-586	MW-586	MW-586	MW-587	MW-587	MW-587	MW-588	MW-588	MW-588	MW-589	MW-589	MW-589	MW-598	MW-598R	MW-603	MW-603	MW-603	MW-603	MW-603	MW-603	MW-604	MW-604	MW-604
			Field Sample ID	M586A4	M586A5	M586A6	M587A1X	M587A2X	M587A3	M588A2X	M588A3X	M588A4	M589A1X	M589A2	M589A5	M598A1X	M598A2	D1123208	M603A1X	M603A2X	M603A3	M603A4	M603A5	M604A1X	M604A2X	M604A3
			Sample Date	07/16/2021	10/14/2021	01/31/2022	10/15/2020	01/08/2021	04/12/2021	10/20/2020	01/15/2021	04/09/2021	05/18/2020	06/11/2021	12/14/2021	05/18/2020	06/11/2021	11/23/2020	11/23/2020	02/23/2021	05/04/2021	08/04/2021	11/10/2021	11/19/2020	02/22/2021	05/11/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 UJ	2 U	0.4 U	0.58 J
1,1,1-Trichloroethane	ug/L	N	30	1.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	3 U	0.6 U	0.6 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 UJ
1,1,2-Trichloroethane	ug/L	N	3	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	2.1
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	20 U	-	-	20 UJ	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	2.7	4.4
1,2,4-Trichlorobenzene	ug/L	N	9	1.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	3 U	0.6 U	0.6 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	1.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	3 U	0.6 U	0.6 U
1,2-Dibromoethane	ug/L	N	0.03	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
1,2-Dichloroethane	ug/L	N	2	1.5 U	3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	**5.3J**	**4.4**	**6**
1,2-Dichloropropane	ug/L	N	1	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	**1.3J**
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
1,4-Dichlorobenzene	ug/L	N	75	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	2.5 U	5 U	1.8 J	0.3 U	0.3 U	0.3 U	0.83 J	0.3 U	0.3 U	30 U	250 U	6.3 J	30 UJ	47 J	1.5 UJ	1.5 UJ	1.6 J	5 J	5 UJ	1 U	3 U	0.6 U	13 J
2-Hexanone	ug/L	N	40	2 U	4 U	0.4 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	200 U	0.4 U	30 UJ	4 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	4 UJ	0.8 U	3 U	0.6 U	0.6 U
4-Methyl-2-pentanone	ug/L	N	NA	2.5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	50 U	250 U	1.5 J	50 UJ	5.4 J	2.5 UJ	2.5 UJ	0.5 UJ	1.9 J	5 UJ	1 U	5 U	1.2 J	1.8 J
Acetone	ug/L	N	6000	14 UJ	8.1 J	4.6 J	0.7 U	0.7 U	1.3 J	3.6 UJ	0.7 U	0.7 U	70 U	350 U	10 J	75 J	88 J	14 J	10 J	5.4 J	7 J	7.4 UJ	1.4 U	45 J	5 J	47
Benzene	ug/L	N	1	**400**	**200**	**320**	0.2 U	0.2 U	0.2 U	0.56 UJ	0.2 U	1	20 U	150 U	**3.1**	**1600J**	**1500**	**3100J**	**3200J**	**2400J**	**1500**	**1400J**	**1600**	**720**	**1200**	**1500**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Bromoform	ug/L	N	4	5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	100 U	500 U	1 U	100 UJ	10 U	5 UJ	5 UJ	1 UJ	2 U	10 UJ	2 U	10 U	2 U	2 U
Bromomethane (Methyl bromide)	ug/L	N	10	1.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	3 U	0.6 U	0.6 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.22 J	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	2.5 J	0.4 U	3 UJ	0.6 UJ	16 J	0.81 J	0.4 U
Carbon Tetrachloride	ug/L	N	1	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 U	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
Chlorobenzene	ug/L	N	50	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.41 J	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
Chloroethane	ug/L	N	NA	3.1 J	2 U	1.1	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 U	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	2
Chloroform	ug/L	N	70	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	11	7.8	12
Chloromethane (Methyl chloride)	ug/L	N	NA	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
cis-1,2-Dichloroethene	ug/L	N	70	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.79 J	1.3 J
cis-1,3-Dichloropropene	ug/L	N	1	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Cyclohexane	ug/L	N	NA	47	20 J	30	1 U	1 U	1 U	6.2	9.7	9	100 U	500 U	10	100 UJ	35 J	61 J	65 J	52 J	37	22 J	37	38 J	39	27
Dibromochloromethane	ug/L	N	1	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	20	13	20	0.4 U	0.4 U	0.4 U	0.6 J	1.8	1.9	40 U	200 U	1.5	40 UJ	7.3 J	37 J	24 J	48 J	22	18 J	26	36	60	25
Isopropylbenzene	ug/L	N	700	53	35 J	69	0.2 U	0.2 U	0.2 U	10	22	17	20 U	100 U	1.3 J	20 UJ	3.1 J	3.7 J	1.8 J	7.1 J	0.4 U	2.8 J	5.5 J	3.7 J	8.4 J	3.5 J
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	3 U	0.6 U	0.6 U
Methyl-t-butyl ether	ug/L	N	70	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Methylcyclohexane	ug/L	N	NA	16 J	6.3 J	16	0.5 U	0.5 U	0.5 U	3.4 J	5.1	3.4 J	50 U	250 U	6	50 UJ	32 J	41 J	43 J	34 J	22	22 J	32	33 J	35	18
Methylene chloride (Dichloromethane)	ug/L	N	3	1.5 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	30 U	150 U	0.3 U	30 UJ	3 U	1.5 UJ	1.5 UJ	0.3 UJ	0.6 U	3 UJ	0.6 U	3 U	0.6 U	**6.4**
Styrene	ug/L	N	100	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
Tetrachloroethene	ug/L	N	1	1.5 U	3 U	0.3 U	0.2 UJ	0.2 U	0.2 U	**2.3**	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.36 J	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
Toluene	ug/L	N	600	9.4	11	8.1	0.2 U	0.2 U	0.2 U	3.4 UJ	8	6.5	20 U	100 U	2.1	96 J	6 J	57 J	56 J	22 J	15	11 J	15	15	3.6	10
trans-1,2-Dichloroethene	ug/L	N	100	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
trans-1,3-Dichloropropene	ug/L	N	1	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	1.5 U	3 U	0.3 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	150 U	0.3 U	20 UJ	3 U	1 UJ	1 UJ	0.2 UJ	0.4 U	3 UJ	0.6 U	2 U	0.4 U	0.4 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	2 U	0.4 U	0.4 U
Vinyl chloride (Chloroethene)	ug/L	N	1	1 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	20 U	100 U	0.2 U	20 UJ	2 U	1 UJ	1 UJ	0.2 UJ	0.4 U	2 UJ	0.4 U	**2.3J**	**5.3**	**8.5**
Xylene (total)	ug/L	N	1000	100	68	69	1.4 U	1.4 U	1.4 U	96	210	180	140 U	200 U	5.5	250 J	96	230 J	210 J	260 J	160	130 J	140	170	37	73
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	0 U	0 U	-	0 U	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-604	MW-604	MW-604	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10
			Field Sample ID	M604A4	M604A5	M604A6	NF10112X	NF10212X	NF10312X	NF10412X	NF10113X	NF10213X	NF10313X	NF10A2	NF10413X	NF10114X	NF10214X	NF10314X	NF10A3X	NF10414X	NF10A4X	NF10115X	NF10215X	NF10315X	NF10415X	NF10BT01
			Sample Date	08/06/2021	11/10/2021	02/09/2022	02/02/2012	04/03/2012	07/17/2012	10/11/2012	02/05/2013	04/18/2013	07/25/2013	08/19/2013	10/16/2013	03/27/2014	04/25/2014	07/25/2014	08/18/2014	10/09/2014	12/05/2014	01/15/2015	05/05/2015	07/16/2015	10/08/2015	01/15/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	3 U	3 UJ	0.6 U	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	3 U	3 U	0.6 U	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	3 U	3 U	0.6 U	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	2 U	-	-	-	2 U	-	2 U	-	-	4 U	-	2 U	-	2 U	-	2 U	-	-	2 U
1,1-Dichloroethane	ug/L	N	50	3.2 J	3 J	3	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	3 U	3 U	0.6 U	-	2 U	-	-	-	2 U	-	2 U	-	-	4 U	-	2 U	-	2 U	-	2 U	-	-	2 U
1,2-Dibromoethane	ug/L	N	0.03	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
1,2-Dichloroethane	ug/L	N	2	**6.6J**	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,2-Dichloropropane	ug/L	N	1	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
1,4-Dichlorobenzene	ug/L	N	75	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	5 U	5 U	1 U	-	10	-	-	-	13	-	3 J	-	-	8 J	-	7 J	-	4 J	-	10	-	-	30
2-Hexanone	ug/L	N	40	4 U	4 U	0.8 U	-	3 U	-	-	-	3 U	-	3 U	-	-	6 U	-	3 U	-	3 U	-	3 UJ	-	-	10 J
4-Methyl-2-pentanone	ug/L	N	NA	5 U	5 U	1 U	-	3 U	-	-	-	3 U	-	3 U	-	-	6 U	-	3 U	-	3 U	-	3 UJ	-	-	3 U
Acetone	ug/L	N	6000	9.2 UJ	7 U	1.8 J	-	20 J	-	-	-	31	-	9 J	-	-	17 J	-	19 J	-	6 U	-	26	-	-	710
Benzene	ug/L	N	1	**1300**	**1400**	**1300**	**380**	**360**	**410**	**420**	**320**	**410**	**340**	**270**	**390**	**420**	**430**	**430**	**400**	**360**	**400**	**430**	**560**	**520**	**370**	**28**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Bromoform	ug/L	N	4	10 U	10 U	2 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	3 U	3 UJ	0.72 J	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
Carbon Tetrachloride	ug/L	N	1	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Chlorobenzene	ug/L	N	50	3 U	3 U	0.6 U	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Chloroethane	ug/L	N	NA	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Chloroform	ug/L	N	70	3 U	3 U	1.4 UJ	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 J
cis-1,2-Dichloroethene	ug/L	N	70	3 U	3 U	0.82 J	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Cyclohexane	ug/L	N	NA	12 J	35 J	34	-	**280**	-	-	-	**280**	-	**210**	-	-	**300**	-	**230**	-	**320**	-	**350**	-	-	46
Dibromochloromethane	ug/L	N	1	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	2 U	2 U	0.4 U	-	2 U	-	-	-	2 U	-	2 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	20	30	37	47	45	45	52	43	48	39	15	34	47	47	36	34	25	43	44	50	40	25	45
Isopropylbenzene	ug/L	N	700	2.4 J	4.9 J	4.9 J	-	58	-	-	-	74	-	25	-	-	64	-	49	-	63	-	61	-	-	50
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	7900	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
Methyl-t-butyl ether	ug/L	N	70	2 U	2 U	0.4 U	-	0.5 U	-	-	-	0.5 U	-	0.5 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Methylcyclohexane	ug/L	N	NA	9 J	33 J	20	-	**170**	-	-	-	**240**	-	96	-	-	**190**	-	**140**	-	**240**	-	**220**	-	-	**110**
Methylene chloride (Dichloromethane)	ug/L	N	3	3 U	3 U	1.7 J	-	2 U	-	-	-	2 U	-	2 U	-	-	4 U	-	2 U	-	2 U	-	2 U	-	-	2 U
Styrene	ug/L	N	100	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	2 U	-	1 U	-	1 U	-	1 U	-	-	1 U
Tetrachloroethene	ug/L	N	1	3 U	3 U	0.6 U	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Toluene	ug/L	N	600	2.2 J	3.9 J	12	64	69	74	78	60	72	66	49	66	75	69	65	60	66	66	76	90	83	71	3
trans-1,2-Dichloroethene	ug/L	N	100	3 U	3 U	0.6 U	-	0.8 U	-	-	-	0.8 U	-	0.8 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	2 U	2 U	0.4 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	3 U	3 U	0.6 U	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	2 U	2 U	0.4 U	-	2 U	-	-	-	2 U	-	2 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	**6.3J**	**5.5J**	**4.3**	-	1 U	-	-	-	1 U	-	1 U	-	-	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.5 U
Xylene (total)	ug/L	N	1000	4.4 J	8.7 J	70	**1200**	**1100**	**1100**	1000	**1100**	**1200**	**1100**	780	**1100**	**1300**	**1100**	1000	750	**1100**	**1200**	**1300**	**1300**	**1300**	**1100**	14
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	1300 J	-	-	-	-	2100 J	-	1900 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	NF-10	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13
			Field Sample ID	NF10A5X	NF10RA6X	NF10RA7X	NF10RA8X	NF10RA9X	D0501198	NF10RB1X	NF10RB2X	NF10RB3X	NF10RB4X	NF10RB5X	NF10RB6X	NF10RB7	NF10RB9	NF10RC1	NF13112X	NF13212X	NF13312X	NF13412X	NF13113X	NF13213X	NF13313X	NF13413X
			Sample Date	11/14/2017	04/30/2018	08/09/2018	11/05/2018	02/04/2019	05/01/2019	05/01/2019	07/08/2019	01/15/2020	05/21/2020	10/19/2020	01/12/2021	04/08/2021	10/08/2021	01/26/2022	01/24/2012	04/03/2012	07/11/2012	10/11/2012	01/29/2013	04/18/2013	07/18/2013	10/08/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.3 U	1.5 U	1.5 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	-	-	-	-	-	2 U	-	-	-	2 U	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	0.3 U	0.3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 J	0.3 U	1.5 U	1.5 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	0.6 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	0.3 U	0.3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.3 U	1.5 U	1.5 U	0.3 U	0.3 U	-	2 U	-	-	-	2 U	-	-
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	0.6 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.3 U	1.5 U	1.5 UJ	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	0.6 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	0.6 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	4 J	17	8 J	13	15 J	12 J	12 J	11 J	0.6 U	5 J	1.4 J	1.5 U	1.5 U	11	0.5 U	-	3 U	-	-	-	3 U	-	-
2-Hexanone	ug/L	N	40	3 U	3 U	0.3 U	0.3 U	0.6 U	3 J	3 J	0.6 U	0.6 U	0.6 U	0.3 U	1.5 U	1.5 U	0.4 U	0.4 U	-	3 U	-	-	-	3 U	-	-
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	2 J	1 J	1 U	3 J	3 J	1 J	1 U	2 J	0.5 U	2.5 U	2.5 U	0.5 U	0.5 U	-	3 U	-	-	-	3 U	-	-
Acetone	ug/L	N	6000	11 J	30	19 UJ	27	57 J	41	33 J	28 J	16 J	16 J	4.7 J	39 J	45 J	35	8.6 J	-	6 U	-	-	-	6 U	-	-
Benzene	ug/L	N	1	**330**	**1100**	**240**	**1200**	**1200**	**750**	**710**	**740**	**1100**	**110**	**12**	**340**	**380**	**420**	**270**	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22 U
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 UJ	0.2 U	-	1 U	-	-	-	1 U	-	-
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	2 U	1 U	5 U	5 U	1 U	1 U	-	1 U	-	-	-	1 U	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.3 U	0.3 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.3 U	1.5 UJ	1.5 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.7 J	0.2 U	1 U	1 U	0.82 J	0.39 J	-	1 U	-	-	-	1 J	-	-
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	1 J	0.9 J	0.4 U	0.4 U	1 J	0.2 U	1 UJ	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.7 J	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
Cyclohexane	ug/L	N	NA	**150**	**950**	**440**	**920**	**1000**	**580**	**530**	**750**	**1200**	**330**	6.5	**270**	**360**	**490**	**560**	-	2 U	-	-	-	2 U	-	-
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	2 U	-	-	-	2 U	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	21	210	67	290	290	140	130	270	150	8	2.2	120	300	570	**860**	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	2 U
Isopropylbenzene	ug/L	N	700	33	77	20	94	77	23	22	79	45	0.7 J	1.5 J	26	45	77	140	-	1 U	-	-	-	1 U	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.6 U	0.6 U	0.3 U	1.5 U	1.5 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	19	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	0.5 U	-	-	-	0.5 U	-	-
Methylcyclohexane	ug/L	N	NA	78	**300**	100	**160**	**240**	99	87	**180**	**190**	29	0.81 J	37	74	**130**	**250**	-	1 U	-	-	-	1 U	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.5 U	0.5 U	0.3 U	**61**	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.3 U	1.5 U	1.5 U	0.3 U	0.3 U	-	2 U	-	-	-	2 U	-	-
Styrene	ug/L	N	100	1 U	1 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.6 J	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
Toluene	ug/L	N	600	49	270	66	290	290	210	200	190	240	15	0.73 J	46	87	140	120	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	1 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	0.8 U	-	-	-	0.8 U	-	-
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.3 U	0.3 U	-	1 U	-	-	-	1 U	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	2 U	-	-	-	2 U	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.2 U	0.2 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U	1 U	1 U	0.2 U	0.2 U	-	1 U	-	-	-	1 U	-	-
Xylene (total)	ug/L	N	1000	680	**1900**	370	**1400**	**1400**	**1100**	1000	**1400**	**1400**	110	8.5	490	800	**1100**	**1400**	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	2 U
Total TIC VOCS	ug/L	N	NA	1100 J	3000 J	1400 J	6000 J	4100 J	2400 J	2200 J	4300 J	4400 J	870 J	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1
			Field Sample ID	NF13114X	NF13214X	NF13314X	NF13414X	NF13115X	NF13215X	NF13315X	NF13415X	NF13116X	NF13117X	NF13218X	D0517191	NF13219X	NF13320	NF13221	P001B6X	P001B7X	P001B8X	P001B9X	P001C1X	P001C2X	P001C3X	P001C4X
			Sample Date	02/27/2014	05/02/2014	07/25/2014	10/15/2014	01/23/2015	05/05/2015	08/11/2015	10/08/2015	03/16/2016	03/28/2017	05/02/2018	05/17/2019	05/17/2019	08/05/2020	05/27/2021	03/09/2012	08/09/2012	04/05/2013	09/25/2013	06/24/2014	11/14/2014	06/30/2015	02/17/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 UJ	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	-	-	-	2 UJ	-	-	2 U	2 U	2 UJ	0.2 U	0.2 U	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	-	-	-	2 UJ	-	-	2 U	2 U	2 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	-	-	-	3 UJ	-	-	3 U	3 U	3 UJ	0.3 U	0.4 J	2.2 J	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	-	3 U	-	-	-	3 UJ	-	-	3 U	3 U	3 UJ	0.3 U	0.3 U	0.3 UJ	0.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	-	-	-	3 UJ	-	-	3 U	3 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	-	6 U	-	-	-	6 UJ	-	-	6 U	6 U	6 UJ	1 J	2 J	7.7 J	0.7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 J	0.9 J	0.5 U	0.9 J	0.5 U	0.5 J	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromoform	ug/L	N	4	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 U	-	-	-	2 J	-	-	1 U	1 U	1 UJ	0.3 J	0.4 J	1.4 J	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chlorobenzene	ug/L	N	50	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	ug/L	N	NA	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	ug/L	N	70	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Cyclohexane	ug/L	N	NA	-	2 U	-	-	-	2 UJ	-	-	2 U	2 U	2 UJ	0.2 U	0.2 U	1 U	1 U	4 J	4 J	2 U	3 J	2 U	2 J	2 U	2 U
Dibromochloromethane	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.6 J	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	4 J	3 J	1 U	3 J	1 U	2 J	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.3 U	0.3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.5 U	0.5 U	3 J	3 J	1 U	1 J	1 U	2 J	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	-	-	-	2 UJ	-	-	2 U	2 U	0.5 UJ	0.3 U	0.3 U	0.3 U	0.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	-	1 U	-	-	-	1 UJ	-	-	1 U	1 U	1 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	ug/L	N	600	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	1 J	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	0.5 U	-	-	-	0.5 UJ	-	-	0.5 U	0.5 U	0.5 UJ	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Xylene (total)	ug/L	N	1000	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1 U	1 U	1.4 U	1.4 U	3 J	4 J	0.8 U	3 J	0.5 U	4	0.5 U	0.5 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1
			Field Sample ID	P001C5X	P001C6X	P001C7X	D1017178A	P001C8X	P001C9X	P001D2	P001D3X	P001D4X	D1207181	P001D5X	P001D6X	P001D7X	P001D8X	P001D9X	P001E1X	P001E2X	P001E3X	P001E4X	P001E5X	P001E6	P001E7	D1124211
			Sample Date	08/16/2016	02/08/2017	08/24/2017	10/17/2017	10/17/2017	12/11/2017	06/06/2018	08/23/2018	10/01/2018	12/07/2018	12/07/2018	03/19/2019	06/12/2019	09/06/2019	12/06/2019	03/13/2020	06/12/2020	09/03/2020	12/08/2020	03/25/2021	06/24/2021	09/21/2021	11/24/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38 J	0.2 U	7.5 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 UJ	0.3 U	0.3 U	0.3 J	0.4 J	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2 J	0.3 U	0.3 U	0.3 U	0.3 U	1 J	0.3 U	0.3 U	0.3 U	1.8 J	0.3 U	0.3 UJ	2.5 J	13 U	0.5 U	0.5 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ	1.1 J	10 U	0.4 U	0.4 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	13 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	6 UJ	6 U	6 J	6 U	6 U	6 U	16 J	18 UJ	3 U	2 UJ	3 UJ	2 UJ	16 J	0.7 U	1 J	6 UJ	18 J	4.1 UJ	2.7 UJ	16 J	18 U	2.5 J	1.3 J
Benzene	ug/L	N	1	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	**8**	**8**	**6**	**5**	**14**	**18**	0.4 J	0.3 J	0.2 U	0.2 U	**11**	0.2 U	0.2 U	**15J**	0.3 U	0.3 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Chloroethane	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	2 U	2 J	2 U	2 U	2 U	2 U	4 J	7	13	12	11	13	0.9 J	8	7	4 J	5.6	6.4	1 U	1 J	25 U	1.1 J	1.3 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.4 J	3.3 J	2.9 J
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3	3	0.6 J	0.4 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	10 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	2 J	2 J	1 J	1 J	0.4 J	1 J	1 J	0.5 J	0.48 J	0.96 J	0.51 J	0.2 U	5 U	0.2 U	0.2 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	430	970	700
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 J	2 J	4 J	3 J	3 J	2 J	0.2 U	1 J	0.9 J	0.5 UJ	0.53 J	1.4 J	0.5 U	0.5 U	13 U	0.5 U	0.5 U
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	7.5 U	0.3 U	0.3 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 J	0.6 J	0.2 U	0.2 U	0.2 J	0.2 U	0.2 J	0.2 U	0.2 U	0.2 U	0.21 J	0.2 U	0.2 U	6.5 J	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	7.5 U	0.3 U	0.3 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	5 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	2	0.5 U	0.7 J	0.5 U	0.5 U	1	0.5 U	8	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	1.4 U	1.4 U	10 U	0.4 U	0.4 U
Total TIC VOCS	ug/L	N	NA	-	-	-	18 J	20 J	-	28 J	-	100 J	110 J	96 J	93 J	41 J	120 J	110 J	-	-	-	-	0 U	0 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	P-1	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-10	P-6	P-6	P-6	P-6
			Field Sample ID	P001E8	P010A9X	D0816121	P010B1X	P010B2X	P010B3X	P010B4X	P010B5X	P010B6	P010B7X	P010B8	P010B9	P010C1	P010C2	P010C3	P010C4	P010C5X	P010C6	P010C7X	P006B3X	P006B4X	P006B5X	P006B6X
			Sample Date	11/24/2021	02/28/2012	08/16/2012	08/16/2012	03/19/2013	09/25/2013	05/30/2014	12/12/2014	06/26/2015	03/03/2016	09/08/2016	02/15/2017	08/22/2017	03/01/2018	08/23/2018	03/18/2019	08/26/2019	02/10/2020	08/25/2020	03/28/2012	08/16/2012	02/27/2013	09/26/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Dichloropropane	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
2-Hexanone	ug/L	N	40	0.4 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	2.3 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16 J	6 U	6 U	6 U
Benzene	ug/L	N	1	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Bromoform	ug/L	N	4	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Chlorobenzene	ug/L	N	50	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
Chloroethane	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Chloroform	ug/L	N	70	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Cyclohexane	ug/L	N	NA	1.1 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Dibromochloromethane	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Ethane	ug/L	N	NA	3.1 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methane	ug/L	N	NA	350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
Toluene	ug/L	N	600	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.7 U	0.7 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8 U	0.8 U	0.8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1 U	1 U	1 U
Xylene (total)	ug/L	N	1000	0.4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 UJ	1 U	1 U	1 U	1.4 U	0.8 U	0.8 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	RW-01	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02
			Field Sample ID	P006B8X	P006B9X	P006C1X	P006C2X	P006C3X	P006C4X	P006C5X	P006C6X	P006C7X	P006C8X	P006D1X	P006D2X	P006D3X	P006D4X	P006D5	R002D1X	R002B2X	R002B3X	R002B4X	R002B5X	D0312148	R002B6X	R002B7X
			Sample Date	03/28/2014	11/12/2014	06/26/2015	03/15/2016	09/01/2016	03/28/2017	09/06/2017	03/27/2018	10/16/2018	04/29/2019	09/26/2019	04/28/2020	09/17/2020	03/19/2021	10/05/2021	07/20/2018	03/15/2012	02/26/2013	04/30/2013	06/19/2013	03/12/2014	03/12/2014	06/30/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,1-Trichloroethane	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,1,2-Trichloroethane	ug/L	N	3	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	-	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2,4-Trichlorobenzene	ug/L	N	9	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	N	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Dichloropropane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 U	4 J	8 J	7 J	5 J	9 J	3 U	3 J	3 U
2-Hexanone	ug/L	N	40	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.4 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Acetone	ug/L	N	6000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	8 J	11 J	13 J	9 J	19 J	6 U	6 J	6 U
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	**94J**	**61**	**41**	**89**	**93**	**34**	**33**	**25**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromoform	ug/L	N	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Bromomethane (Methyl bromide)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	0.5 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Chlorobenzene	ug/L	N	50	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloroethane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	0.5 U
Chloroform	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Chloromethane (Methyl chloride)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
cis-1,2-Dichloroethene	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
cis-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Cyclohexane	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.2 U	0.2 U	1 U	1 U	1 U	1 U	1 U	9 J	18	44	30	29	25	24	3 J
Dibromochloromethane	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 J	4 J	6	10	9	2 J	2 J	1
Isopropylbenzene	ug/L	N	700	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	30 J	9	15	16	15	1 U	1 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl-t-butyl ether	ug/L	N	70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	12 J	13	21	26	25	13	13	3 J
Methylene chloride (Dichloromethane)	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Styrene	ug/L	N	100	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	8 J	4 J	6	12	9	2 J	2 J	1
trans-1,2-Dichloroethene	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.5 U
trans-1,3-Dichloropropene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U
Vinyl chloride (Chloroethene)	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.5 UJ	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1.4 U	1.4 U	0.4 U	15 J	4 J	14	16	14	2 J	2 J	0.8 J
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	0 U	-	-	-	0 U	-	0 U	650 J	-	-	1100 J	1400 J	300 J	270 J	29 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-11	RW-11	RW-11	RW-11
			Field Sample ID	R002B8X	R002B9X	R002C1X	R002C2X	R002C3X	R002C4X	R002C5X	R002C7X	R002C8X	R002C9X	R002D2X	R002D3X	D0923208	R002D4X	R002D5X	R002D6X	R002D7	R002D8	R002D9	R011B1X	R011B2X	R011B3X	R011B4
			Sample Date	07/31/2014	09/10/2014	01/19/2015	07/07/2015	12/14/2015	12/29/2015	06/15/2016	12/06/2016	05/18/2017	11/29/2017	01/08/2019	10/09/2019	09/23/2020	09/23/2020	12/04/2020	03/30/2021	06/11/2021	09/09/2021	12/07/2021	02/14/2012	04/09/2013	06/03/2014	06/02/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	20 U	20 U	10 U	2 U	10 UJ	4 U	20 U	2 U	2 U	4 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	10 U	10 U	5 UJ	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	20 U	20 U	10 U	2 U	10 UJ	4 U	20 U	2 U	2 U	4 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	10 U	10 U	5 U	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	10 U	10 U	5 U	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	10 U	10 U	5 U	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	30 U	30 U	17 J	3 U	15 UJ	6 U	30 U	3 U	3 U	6 UJ	-	-	3.2 J	3 UJ	6 U	3 U	2.5 U	0.5 U	5 U	-	-	-	-
2-Hexanone	ug/L	N	40	30 U	30 U	15 U	3 U	15 UJ	6 U	30 U	3 U	3 U	6 UJ	-	-	0.3 U	3 UJ	6 U	3 U	2 U	0.4 U	4 U	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	30 U	30 U	15 U	3 U	15 UJ	6 U	30 U	3 U	3 U	6 UJ	-	-	0.55 J	5 UJ	10 U	5 U	2.5 U	0.5 U	5 U	-	-	-	-
Acetone	ug/L	N	6000	84 J	130 J	83 J	6 U	30 UJ	12 U	60 U	6 U	6 U	12 UJ	-	-	10 J	7 UJ	14 U	7 U	3.5 U	3.7 J	7 U	-	-	-	-
Benzene	ug/L	N	1	**60**	**100**	**68**	**53**	**130J**	**160**	**160**	**16**	**1**	**86J**	**2**	**8**	**3.5J**	**7.8J**	**4.6J**	**16**	**5.9**	**19**	**3.7J**	0.5 U	0.5 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Bromoform	ug/L	N	4	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	1 U	10 UJ	20 U	10 U	5 U	1 U	10 U	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	10 U	17 J	6 J	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
Chlorobenzene	ug/L	N	50	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
Chloroethane	ug/L	N	NA	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Chloroform	ug/L	N	70	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3.5 UJ	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Cyclohexane	ug/L	N	NA	20 U	20 U	11 J	6	17 J	11	20 U	2 U	2 J	10 J	-	-	3.6 J	10 UJ	20 U	10 U	16 J	9.4	10 U	-	-	-	-
Dibromochloromethane	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 UJ	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	1 U	1.5 J	1 U	1 UJ	1.9 J	1 U	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	5 U	7 J	5	1	3 UJ	4	5 U	0.6 J	0.5 U	4 J	0.4 U	0.8 J	0.4 U	4 UJ	8 U	4 U	2 U	0.94 J	4 U	0.8 U	0.8 U	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	10 U	10 U	6 J	5 J	10 J	15	18 J	21	4 J	17 J	-	-	3.3 J	13 J	13 J	25 J	23 J	7.1	16 J	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	400	6700	5900	6000	5100	5900	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	10 U	10 U	5 U	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Methylcyclohexane	ug/L	N	NA	10 U	10 U	6 J	2 J	5 UJ	4 J	10 U	1 U	1 U	8 J	-	-	0.5 U	5 UJ	10 U	5 U	2.5 U	0.5 U	5 U	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	20 U	20 U	10 U	2 U	10 UJ	4 U	20 U	2 U	2 U	1 UJ	-	-	0.3 U	3 UJ	6 U	3 U	1.5 U	0.3 U	3 U	-	-	-	-
Styrene	ug/L	N	100	10 U	10 U	5 U	1 U	5 UJ	2 U	10 U	1 U	1 U	2 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
Tetrachloroethene	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
Toluene	ug/L	N	600	5 U	5 J	3 J	0.5 J	3 J	6	7 J	0.7 J	0.5 U	7 J	0.2 U	5	0.85 J	2 UJ	4 U	2 U	1 U	8	2 U	0.7 U	0.7 U	0.5 U	0.5 U
trans-1,2-Dichloroethene	ug/L	N	100	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1.5 U	0.3 U	3 U	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 UJ	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	5 U	5 U	3 U	0.5 U	3 UJ	1 U	5 U	0.5 U	0.5 U	1 UJ	-	-	0.2 U	2 UJ	4 U	2 U	1 U	0.2 U	2 U	-	-	-	-
Xylene (total)	ug/L	N	1000	5 U	6 J	5 J	0.9 J	7 J	10	9 J	3	0.5 U	14 J	1 U	5 J	1.4 J	14 UJ	28 U	14 U	2 U	4.2	4 U	3 J	0.9 J	2	0.5 U
Total TIC VOCS	ug/L	N	NA	50 J	-	-	170 J	310 J	-	150 J	210 J	44 J	500 J	-	-	-	0 UJ	0 U	-	-	-	0 U	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
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5. J - Estimated value
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			Location ID	RW-11	RW-21	RW-21	RW-21	RW-21	RW-21	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-33	RW-33
			Field Sample ID	R011B5X	R021B3X	R021B4X	R021B6X	R021B7	R021B8	R031B1X	R031B2X	R031B3X	R031B4X	R031B5	R031B6	R031B7	R031B8X	R031B9X	R031C1X	R031C2X	R031C3	R031C4	R031C5	R031C6	R033B1X	R033B2X
			Sample Date	05/10/2017	03/28/2012	04/11/2013	12/10/2015	06/02/2016	06/09/2017	02/29/2012	03/19/2013	09/03/2014	12/30/2015	06/01/2016	05/04/2017	06/01/2018	05/29/2019	05/12/2020	11/20/2020	02/26/2021	05/11/2021	08/05/2021	11/03/2021	02/14/2022	02/29/2012	03/19/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 UJ	0.3 U	3 U	0.3 U	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 UJ	0.3 U	0.3 U	0.3 U	3 U	0.3 U	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	1.9 J	2.5 J	0.5 U	5 U	0.5 U	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.4 U	4 U	0.4 U	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.65 J	0.5 U	0.5 U	5 U	0.5 U	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7 U	4.7 UJ	17 J	4.1 UJ	7 U	0.7 U	-	-
Benzene	ug/L	N	1	0.5 U	**2J**	**5J**	0.9 J	0.9 J	1 J	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 J	0.2 U	2 U	0.4 J	0.2 U	0.45 J	3 U	0.3 U	0.5 U	0.5 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	1 U	10 U	1 U	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.3 U	3 UJ	0.3 U	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 UJ	0.2 U	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 U	1.7 J	3.6 J	1.7 J	10 U	1 U	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	3 J	17	2	9	2	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.8 U	0.8 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4 J	1.1 J	3.9 J	2.7 J	2 U	1.2 J	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	2.8 J	2.5 J	0.5 U	5 U	0.5 U	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	0.3 U	0.3 U	0.3 U	3 U	0.3 U	-	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Toluene	ug/L	N	600	0.5 U	15	21	5	7	8	0.7 J	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.2 U	2 U	0.2 J	0.2 U	0.2 U	2 U	0.2 U	0.7 U	0.7 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.3 U	3 U	0.3 U	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	0.2 U	0.2 U	0.2 U	2 U	0.2 U	-	-
Xylene (total)	ug/L	N	1000	0.5 U	120	290	94	130	45	2 J	2 J	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	14 U	1.4 U	1.4 U	0.4 U	4 U	0.4 U	0.8 U	0.8 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-33	RW-33	RW-33	RW-33	RW-33	RW-33	RW-33	RW-33	RW-34	RW-34	RW-34	RW-34	RW-34	RW-34	RW-34	RW-34	RW-34	RW-34	RW-35	RW-35	RW-35	RW-35	RW-35
			Field Sample ID	R033B3X	R033B4X	R033B5X	R033B6X	R033B7X	R033B9X	R033C1X	R033C2X	R034B1X	R034B2X	R034B3X	R034B4X	R034B5	R034B6	R034B7	R034B8X	R034B9X	R034C1	R035A8X	R035A9X	R035B1X	R035B2	R035B3
			Sample Date	09/03/2014	12/30/2015	06/02/2016	05/04/2017	06/01/2018	07/26/2019	05/11/2020	01/29/2021	02/21/2012	03/19/2013	09/03/2014	12/30/2015	06/01/2016	05/04/2017	06/01/2018	06/06/2019	06/08/2020	06/23/2021	02/21/2012	06/27/2013	09/03/2014	06/16/2016	05/16/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	N	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dibromoethane	ug/L	N	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	N	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	ug/L	N	75	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acetone	ug/L	N	6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.7 J	0.6 J	2 U	**2**	0.4 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.3 U	**13**	**45**	**49**	**24**	**7**
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromoform	ug/L	N	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon Tetrachloride	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	N	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	0.4 U	0.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	3 J	3 J	5	0.5 U	0.5 U
Isopropylbenzene	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methyl-t-butyl ether	ug/L	N	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylcyclohexane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Styrene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	ug/L	N	600	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	0.4 J	0.22 J	0.7 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	11	2 J	10	2	2
trans-1,2-Dichloroethene	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylene (total)	ug/L	N	1000	0.5 U	0.5 U	0.5 U	0.6 J	0.5 J	10 U	1 U	1.4 U	0.8 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1.4 U	0.4 U	64	12	160	15	6
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-35	RW-35	RW-35R	RW-35R	RW-35R	RW-35R	RW-35R	RW-35R	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41
			Field Sample ID	R035B4	R035B5X	R035RB6X	D0223218X	R035RB7X	R035RB8	R035RB9	R035RC1	R041A1	R041A2X	R041A3X	R041A4X	R041A5	R041A6X	R041A7	R041A8	R041A9X	R041B1X	D0114198	R041B2X	R041B3X	R041B4X	R041B5X
			Sample Date	05/03/2018	05/24/2019	11/23/2020	02/23/2021	02/23/2021	05/04/2021	08/04/2021	11/10/2021	08/16/2013	09/11/2014	12/10/2015	12/30/2015	06/01/2016	07/21/2016	05/04/2017	06/01/2018	07/10/2018	10/19/2018	01/14/2019	01/14/2019	06/03/2019	06/03/2020	11/20/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 UJ	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,1-Trichloroethane	ug/L	N	30	-	-	0.3 UJ	6 U	6 U	3 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	-	**6.5J**	4 U	4 U	2 U	3 UJ	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	ug/L	N	3	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-
1,1-Dichloroethane	ug/L	N	50	-	-	0.76 J	4 U	4 U	2 U	3 UJ	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	ug/L	N	9	-	-	0.3 UJ	6 U	6 U	3 U	3 UJ	3 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	-	**2.3J**	6 U	6 U	3 U	3 UJ	3 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,2-Dibromoethane	ug/L	N	0.03	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	ug/L	N	2	-	-	**4J**	6 U	6 U	**12**	**4.5J**	**5.9J**	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 UJ
1,2-Dichloropropane	ug/L	N	1	-	-	**1.9J**	4 U	4 U	2 U	3 UJ	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	ug/L	N	75	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	-	73 J	51 J	6 U	210	5 UJ	5 U	3 U	3 U	3 U	3 U	3 U	3 U	4 J	3 U	3 U	0.3 U	0.3 U	0.3 U	4 J	3.3 J	1.4 J
2-Hexanone	ug/L	N	40	-	-	0.3 UJ	6 U	6 U	3 U	4 UJ	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	-	3.9 J	10 U	10 U	10 J	5 UJ	5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 J	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Acetone	ug/L	N	6000	-	-	460 J	310 J	330 J	1400	47 J	13 J	6 U	6 U	9 J	6 U	6 U	6 U	15 J	6 U	6 UJ	3 J	3 J	0.7 U	14 UJ	20	2.7 UJ
Benzene	ug/L	N	1	**2**	**7J**	**260J**	**200**	**210**	**260**	**150J**	**240**	0.5 U	**2**	0.5 U	0.5 U	0.9 J	0.7 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	ug/L	N	4	-	-	1 UJ	20 U	20 U	10 U	10 UJ	10 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	-	0.3 UJ	6 U	6 U	3 U	3 UJ	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	-	2.1 J	4 U	4 U	2 U	3 UJ	3 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	ug/L	N	50	-	-	0.51 J	4 U	4 U	2 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	ug/L	N	NA	-	-	4.9 J	4.9 J	4 U	7.2 J	3.6 J	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	ug/L	N	70	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	-	0.2 UJ	4 U	5.2 J	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	ug/L	N	70	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	ug/L	N	NA	-	-	**240J**	**260**	**270**	**220**	70 J	**110**	3 J	2 U	4 J	3 J	6	4 J	5 J	7	6 J	4 J	4 J	4 J	2 J	3.1 J	3.6 J
Dibromochloromethane	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.5 U	1 J	16 J	16 J	17 J	20	11 J	20	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	-	-	37 J	31 J	32 J	20 J	15 J	20 J	6	8	7	3 J	5	6	3 J	9	9	5 J	6	6	5	5	6.3
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	12000	-	-	-	-	-	-	-	-	14000	14000	12000	-	-	-
Methyl acetate	ug/L	N	7000	-	-	0.3 UJ	6 U	6 U	3 U	3 UJ	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 U	0.3 U
Methyl-t-butyl ether	ug/L	N	70	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	ug/L	N	NA	-	-	**210J**	**180**	**170**	**110**	37 J	56	29	**200**	64	60	**120**	67	93	100	83	46	35	35	19	36	28 J
Methylene chloride (Dichloromethane)	ug/L	N	3	-	-	2.5 J	6 U	6 U	3 U	3 UJ	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.5 U	0.5 U	0.3 U	0.3 U	0.3 U	0.4 UJ	0.3 U	0.3 U
Styrene	ug/L	N	100	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	ug/L	N	600	0.6 J	19 J	16 J	8.4 J	7.3 J	2.6 J	2.9 J	3.2 J	0.7 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	ug/L	N	100	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,3-Dichloropropene	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	3 UJ	3 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
Vinyl chloride (Chloroethene)	ug/L	N	1	-	-	0.2 UJ	4 U	4 U	2 U	2 UJ	2 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Xylene (total)	ug/L	N	1000	3	31 J	140 J	65 J	66 J	48 J	4.9 J	4 U	2 J	4	4	3	3	3	2	3	3	2 J	2 J	2 J	1 J	1.4 U	1.9 J
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	170 J	-	250 J	-	-	220 J	-	-	260 J	260 J	190 J	190 J	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42
			Field Sample ID	R041B6X	R041B7	D0610211A	R41B8	R041B9	R041C1	R041C2	R041C3	R042B3X	R042B4X	R042B5	R042B6X	D1204158	R042B7X	R042B8X	R042B9X	R042C2X	R042C3X	R042C4X	D1024188	R042C5X	R042C6X	R042C7X
			Sample Date	02/25/2021	05/07/2021	06/10/2021	06/10/2021	08/05/2021	11/11/2021	12/15/2021	02/11/2022	02/28/2012	03/21/2013	08/12/2013	09/04/2014	12/04/2015	12/04/2015	06/10/2016	07/29/2016	05/11/2017	06/07/2018	07/11/2018	10/24/2018	10/24/2018	01/14/2019	06/03/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
1,1,1-Trichloroethane	ug/L	N	30	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.3 U	0.3 U	0.3 U	-
1,1,2,2-Tetrachloroethane	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.39 J	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
1,1,2-Trichloroethane	ug/L	N	3	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2 UJ	-	2 U	2 U	-	2 U	-	-	2 U	0.2 U	0.2 U	0.2 U	-
1,1-Dichloroethane	ug/L	N	50	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
1,2,4-Trichlorobenzene	ug/L	N	9	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	2 UJ	-	2 U	2 U	-	2 U	-	-	2 U	0.3 U	0.3 U	0.3 U	-
1,2-Dibromoethane	ug/L	N	0.03	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	0.2 U	-
1,2-Dichloroethane	ug/L	N	2	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.3 U	0.3 U	0.3 U	-
1,2-Dichloropropane	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	0.2 U	-
1,4-Dichlorobenzene	ug/L	N	75	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	0.2 U	-
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	0.3 U	0.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	3 UJ	-	3 U	3 U	-	3 U	-	-	3 U	0.3 U	0.3 U	0.3 U	-
2-Hexanone	ug/L	N	40	0.51 J	0.3 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	-	3 UJ	-	3 U	3 U	-	3 UJ	-	-	3 U	0.3 U	0.3 U	0.3 U	-
4-Methyl-2-pentanone	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	3 UJ	-	3 U	3 U	-	3 UJ	-	-	3 U	0.5 U	0.5 U	0.5 U	-
Acetone	ug/L	N	6000	1.5 J	0.7 U	4.3 J	3.9 J	2.5 UJ	1.7 J	0.7 U	0.7 U	-	-	6 UJ	-	6 U	6 U	-	6 U	-	-	6 U	10 J	5 J	5 J	-
Benzene	ug/L	N	1	**3.8**	**4.7**	0.3 UJ	0.3 U	0.3 U	0.3 U	0.61 J	0.3 U	**8**	**230**	**38J**	**5**	0.5 U	0.5 U	**1**	0.5 U	**83**	**18**	**8**	0.5 J	0.5 J	0.2 J	0.3 J
Benzidine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.46 J	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Bromoform	ug/L	N	4	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Bromomethane (Methyl bromide)	ug/L	N	10	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.3 U	0.3 U	0.3 U	-
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	0.2 U	-
Carbon Tetrachloride	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Chlorobenzene	ug/L	N	50	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Chloroethane	ug/L	N	NA	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Chloroform	ug/L	N	70	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Chloromethane (Methyl chloride)	ug/L	N	NA	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
cis-1,2-Dichloroethene	ug/L	N	70	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
cis-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Cyclohexane	ug/L	N	NA	1 U	1.6 J	1 UJ	1 U	1 U	1.6 J	1 U	2.8 J	-	-	18 J	-	2 J	2 J	-	2 U	-	-	7	8	9	2 J	-
Dibromochloromethane	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	2 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Ethane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.8 U	2 J	3 J	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 J	0.4 J	0.4 U	0.4 U
Isopropylbenzene	ug/L	N	700	5.7	6.5	3.7 J	4.9 J	5.1	4.7 J	5.5	6.2	-	-	1 J	-	1 U	1 U	-	1 U	-	-	1 U	0.3 J	0.3 J	0.2 U	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	7800 J	-	-	-	-	-	-	-	-	8000	7100	2100	-
Methyl acetate	ug/L	N	7000	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	0.2 U	-
Methyl-t-butyl ether	ug/L	N	70	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	0.5 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Methylcyclohexane	ug/L	N	NA	28	12	4 J	6.7	9.7	8.6	12	11	-	-	10 J	-	1 U	1 U	-	1 U	-	-	4 J	5 J	5 J	1 J	-
Methylene chloride (Dichloromethane)	ug/L	N	3	0.3 U	0.3 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	2 UJ	-	2 U	2 U	-	2 U	-	-	0.5 U	0.3 U	0.3 U	0.3 U	-
Styrene	ug/L	N	100	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	1 U	1 U	-	1 U	-	-	1 U	0.2 U	0.2 U	0.2 U	-
Tetrachloroethene	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Toluene	ug/L	N	600	0.2 U	0.23 J	0.2 UJ	0.2 U	0.2 U	0.2 U	0.22 J	0.2 U	15	23	31 J	34	1	2	2	0.5 U	2	0.8 J	2	4	4	1 J	0.4 J
trans-1,2-Dichloroethene	ug/L	N	100	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	0.8 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
trans-1,3-Dichloropropene	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Trichloroethene (Trichloroethylene)	ug/L	N	1	0.2 U	0.2 U	0.3 UJ	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	2 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Vinyl chloride (Chloroethene)	ug/L	N	1	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	-	-	1 UJ	-	0.5 U	0.5 U	-	0.5 U	-	-	0.5 U	0.2 U	0.2 U	0.2 U	-
Xylene (total)	ug/L	N	1000	1.4 U	1.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.44 J	0.4 U	49	36	72 J	77	12	15	11	0.5 U	4	4	13	18	19	4 J	1 U
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	93 J	-	0 U	0 U	-	0 U	-	-	28 J	10 J	11 J	0 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A5 Main Yard - VOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-42	SP-EW-001	SP-EW-002	SP-EW-003	SP-EW-004	SP-EW-005
			Field Sample ID	R042C8X	E001A1	E002A1	E003A1	E004A1	E005A1
			Sample Date	06/01/2020	03/07/2014	03/07/2014	03/07/2014	03/07/2014	03/07/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
1,1 Dichloroethene	ug/L	N	1	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
1,1,1-Trichloroethane	ug/L	N	30	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
1,1,2-Trichloroethane	ug/L	N	3	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	ug/L	N	NA	-	2 U	2 U	2 U	20 U	2 U
1,1-Dichloroethane	ug/L	N	50	-	1 U	7	1 U	10 U	1 J
1,2,4-Trichlorobenzene	ug/L	N	9	-	1 U	1 U	1 U	10 U	1 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	N	0.02	-	2 U	2 U	2 U	20 U	2 U
1,2-Dibromoethane	ug/L	N	0.03	-	1 U	1 U	1 U	10 U	1 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	ug/L	N	600	-	1 U	1 U	1 U	10 U	1 U
1,2-Dichloroethane	ug/L	N	2	-	1 U	1 U	1 U	10 U	1 U
1,2-Dichloropropane	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
1,2-Diphenylhydrazine	ug/L	N	NA	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	N	600	-	1 U	1 U	1 U	10 U	1 U
1,4-Dichlorobenzene	ug/L	N	75	-	1 U	1 U	1 U	10 U	1 U
2-Butanone (Methyl ethyl ketone)	ug/L	N	300	-	3 U	3 U	3 U	30 U	3 U
2-Hexanone	ug/L	N	40	-	3 U	3 U	3 U	30 U	3 U
4-Methyl-2-pentanone	ug/L	N	NA	-	3 U	3 U	3 U	30 U	3 U
Acetone	ug/L	N	6000	-	6 U	6 U	6 U	60 U	6 U
Benzene	ug/L	N	1	0.2 U	**4J**	**5**	**9**	**88**	**30**
Benzidine	ug/L	N	NA	-	-	-	-	-	-
Bromodichloromethane	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Bromoform	ug/L	N	4	-	1 U	1 U	1 U	10 U	1 U
Bromomethane (Methyl bromide)	ug/L	N	10	-	1 U	1 U	1 U	10 U	1 U
Carbon Dioxide	ug/L	N	NA	-	-	-	-	-	-
Carbon disulfide	ug/L	N	700	-	1 U	1 U	1 U	10 U	1 U
Carbon Tetrachloride	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Chlorobenzene	ug/L	N	50	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
Chloroethane	ug/L	N	NA	-	1 U	6	1 U	10 U	1 U
Chloroform	ug/L	N	70	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
Chloromethane (Methyl chloride)	ug/L	N	NA	-	1 U	1 U	1 U	10 U	1 U
cis-1,2-Dichloroethene	ug/L	N	70	-	0.8 U	0.8 U	0.8 U	8 U	0.9 J
cis-1,3-Dichloropropene	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Cyclohexane	ug/L	N	NA	-	2 U	2 U	2 U	20 U	2 J
Dibromochloromethane	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Dichlorodifluoromethane (Freon 12)	ug/L	N	1000	-	2 U	2 U	2 U	20 U	2 U
Ethane	ug/L	N	NA	-	-	-	-	-	-
Ethene	ug/L	N	NA	-	-	-	-	-	-
Ethylbenzene	ug/L	N	700	0.4 U	2 J	5 J	4 J	8 U	2 J
Isopropylbenzene	ug/L	N	700	-	1 U	1 U	1 U	10 U	1 U
Methane	ug/L	N	NA	-	-	-	-	-	-
Methyl acetate	ug/L	N	7000	-	1 U	1 U	1 U	10 U	1 U
Methyl-t-butyl ether	ug/L	N	70	-	0.5 U	0.5 U	0.5 U	5 U	0.5 U
Methylcyclohexane	ug/L	N	NA	-	1 U	1 U	1 U	10 U	1 U
Methylene chloride (Dichloromethane)	ug/L	N	3	-	2 U	2 U	2 U	20 U	2 U
Styrene	ug/L	N	100	-	1 U	1 U	1 U	10 U	1 U
Tetrachloroethene	ug/L	N	1	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
Toluene	ug/L	N	600	0.83 UJ	0.7 U	0.7 U	6	84	4 J
trans-1,2-Dichloroethene	ug/L	N	100	-	0.8 U	0.8 U	0.8 U	8 U	0.8 U
trans-1,3-Dichloropropene	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Trichloroethene (Trichloroethylene)	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Trichlorofluoromethane (Freon 11)	ug/L	N	2000	-	2 U	2 U	2 U	20 U	2 U
Vinyl chloride (Chloroethene)	ug/L	N	1	-	1 U	1 U	1 U	10 U	1 U
Xylene (total)	ug/L	N	1000	4.2 J	0.8 U	7	8	8 U	10
Total TIC VOCS	ug/L	N	NA	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06R	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029
			Field Sample ID	MP05A1X	MP05A2X	MP05A3X	MP05A4X	MP05A6X	MP05A7X	MP05A8X	MP05B1X	MP05B3X	MP05B7X	MP05B8X	MP06A1X	MP06A2X	MP06A3X	MP06A5X	MP06A6X	MP06A8X	MP06B1X	MP06B3X	MP06RC1X	MP06RB9X	M029A5X	M029A6X	M029A7X	M029A8X	M029A9X	M029B1X
			Sample Date	04/24/2013	06/19/2013	07/26/2013	03/13/2014	07/31/2014	01/06/2015	12/10/2015	12/13/2016	11/27/2017	12/22/2020	03/24/2021	05/07/2013	06/18/2013	03/12/2014	07/29/2014	01/06/2015	12/14/2015	12/14/2016	11/27/2017	03/23/2021	01/06/2021	11/20/2017	02/16/2018	05/22/2018	08/29/2018	11/13/2018	02/22/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	3.1 U	3 U	0.6 U	6 U	-	9	3 U	7	0.5 U	6	3 U	3 U	89	91	76	90	93	61
2,4-Dinitrophenol	ug/L	N	40	11 UJ	13 U	11 U	-	11 U	10 U	10 UJ	10 UJ	11 U	14 U	14 UJ	11 U	120 U	-	12 U	50 U	10 U	10 U	10 U	14 U	14 U	10 U	11 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	12 U	-	1 U	5 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.5 UJ	0.5 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.5 U	5 U	-	0.5 U	2 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	0.1 U	0.1 U	-	0.1 U	0.2 J	0.1 U	0.1 U	0.8	0.1 U	0.1 U	**37**	**53**	-	29	**110**	**69 J**	**33**	**65**	0.1 U	0.1 U	**95 J**	**94**	**110**	**70 J**	**70**	**99 J**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	4	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	50	45	28	55	38	24
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	1 U	2 U	0.5 UJ	0.5 U	2 U	2 UJ	2 U	2 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	3.1 U	1 U	0.6 U	6 U	-	0.6 U	3 U	0.5 U	0.5 U	0.5 U	1 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	3.1 U	4 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	4 U	3 U	2 UJ	2 U	3 U	3 UJ	3 U	3 UJ
3-Nitroaniline	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1 U	2 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	2 U	3 U	0.5 UJ	0.5 U	3 U	3 UJ	3 U	3 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 UJ	6 U	6 U	-	6 U	5 U	5 UJ	5 UJ	5 U	8.1 U	8 U	6 U	58 U	-	6 U	25 U	5 UJ	5 U	5 U	8.1 U	8.1 U	5 U	5 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	2 U	2 U	2 U	4.1 U	4 U	0.6 U	6 U	-	0.6 U	3 U	2 UJ	2 U	2 U	4 U	4 U	2 UJ	2 U	4 U	4 UJ	4 U	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 UJ	2	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	36	27	11	0.5 U	0.5 U	0.5 U	0.5 U	5	5	0.5 U	5	3 J	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.92 U	0.9 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.91 U	0.91 U	0.5 UJ	0.5 U	0.9 U	0.9 UJ	0.9 U	0.9 UJ
4-Nitrophenol	ug/L	N	NA	11 UJ	13 U	11 U	-	11 U	10 U	10 UJ	10 UJ	11 U	10 U	10 U	11 U	120 U	-	12 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.4 J	0.2 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J	0.1 U	0.5 J	1 J	-	0.5 J	2 J	0.1 UJ	1	2	0.1 U	0.1 U	17 J	51	26	17 J	26	56 J
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	-	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	4.1 U	1 U	0.6 U	6 U	-	0.6 UJ	3 U	0.5 UJ	0.5 U	0.5 U	1 U	4 U	0.5 UJ	0.5 U	4 U	4 UJ	4 U	4 UJ
Anthracene	ug/L	N	2000	0.1 UJ	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.3 J	1 U	-	0.4 J	1 J	0.8 J	1	2	0.1 U	0.1 U	5 J	19	9	8 J	6	12 J
Atrazine	ug/L	N	3	2 UJ	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	1 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	1 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 UJ	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	3.1 U	1 U	1 U	12 U	-	1 U	5 U	1 UJ	1 U	1 UJ	1 U	3 U	1 UJ	1 U	3 U	3 UJ	3 U	3 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	**0.4J**	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	**0.5J**	1 U	-	**0.7**	**2J**	**1J**	**2**	**3**	0.1 U	0.1 U	**2J**	**10**	**5**	**3J**	**2**	**5J**
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	**0.4J**	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.5J**	1 U	-	**0.6J**	**2J**	**1J**	**1**	**2**	**0.18J**	0.1 U	**2J**	**8**	**4**	**3J**	**1**	**6J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	**0.5J**	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.6**	1 U	-	**0.7**	**2J**	**1J**	**2**	**3**	**0.23J**	0.1 U	**1J**	**5**	**3**	**2J**	**0.9**	**4J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.2 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	1 U	-	0.6 J	1 J	0.7 J	0.7	1	0.18 J	0.1 U	1 J	7	4	1 J	1	4 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.2 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	1 U	-	0.3 J	**1 J**	**0.6 J**	**0.6**	**1**	0.11 J	0.1 U	0.3 J	**1**	0.3 J	0.4 J	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	3 J	2 U	-	2 U	2 U	2 U	2 U	2 U	5.1 U	2 U	**5J**	23 U	-	3 J	10 U	2 UJ	2 U	2 U	2 U	5 U	**7J**	**27**	5 U	5 UJ	5 U	5 UJ
Butylbenzylphthalate	ug/L	N	100	2 UJ	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 UJ
Caprolactam	ug/L	N	4000	6 UJ	6 U	6 U	-	6 U	5 U	5 U	5 U	5 U	20	5.4 J	6 U	58 U	-	6 U	25 U	5 UJ	5 U	5 U	3 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 UJ
Carbazole	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	1 J	0.5 U	0.5 U	0.5 U	0.5 U	17J	22	14	19J	24	21J
Chrysene	ug/L	N	5	0.1 UJ	0.4 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.7	1 J	-	0.9	3	1 J	2	4	0.11 J	0.1 U	3 J	**19**	**6**	5 J	3	**9J**
Di-n-butylphthalate	ug/L	N	700	2 UJ	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	2 U	2 U	3 J	8	12	7 J	4 J	10 J
Di-n-octylphthalate	ug/L	N	100	2 UJ	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	5.1 U	5 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	5 U	5 U	2 UJ	2 U	5 U	5 UJ	5 U	5 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	-	0.1 U	0.5 U	0.3J	0.1J	0.3J	0.1 U	0.1 U	**0.6J**	**2**	**1**	**0.5J**	**0.4J**	**1J**
Dibenzofuran	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.7 J	0.5 U	0.5 U	13 J	24	15	10 J	17	22 J
Diethylphthalate	ug/L	N	6000	34 J	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 UJ	3 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	23 U	-	2 U	10 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.6 J	0.5 UJ	3 U	2 J	4	3 U	3 UJ	3 U	5 J
Fluoranthene	ug/L	N	300	0.1 UJ	0.5 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	2	3 J	-	2	7	4 J	5	10	0.15 J	0.1 U	5 J	28	11	10 J	6	19 J
Fluorene	ug/L	N	300	0.1 UJ	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.12 U	0.6	1 J	-	0.5 J	2 J	0.9 J	1	2	0.12 U	0.1 U	15 J	33	21	11 J	17	30 J
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	1 U	-	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	6 UJ	6 U	6 U	-	6 U	5 U	5 U	5 U	5 UJ	5.1 U	5 U	6 U	58 U	-	6 U	25 U	5 UJ	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 UJ
Hexachloroethane	ug/L	N	7	1 UJ	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	1 U	12 U	-	1 U	5 U	1 UJ	1 U	1 UJ	0.5 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.2J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.3J**	1 U	-	**0.3J**	**1J**	**0.6J**	**0.5**	**1**	0.19J	0.1 U	**0.4J**	**2**	**0.9**	**0.4J**	**0.4J**	**1J**
Isophorone	ug/L	N	40	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.71 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.71 U	0.5 UJ	0.5 U	0.7 U	0.7 UJ	0.7 U	0.7 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.71 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.71 U	0.5 UJ	0.5 U	0.7 U	0.7 UJ	0.7 U	**15J**
Naphthalene	ug/L	N	300	1 UJ	1 U	0.1 U	1 U	0.1 U	0.8	0.1 U	0.1 U	0.2 J	0.94	0.1 U	130	150	300	170	**530**	**370J**	140	**330**	0.1 U	0.1 U	190 J	220	130	200 J	200	120 J
Nitrobenzene	ug/L	N	6	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	0.6 U	3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	1.6 U	1 U	0.6 U	6 U	-	0.6 U	3 U	0.5 U	0.5 U	0.5 U	1 U	1.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 U	-	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	12 U	-	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 UJ	0.3 J	0.1 U	-	0.1 U	0.1 J	0.1 U	0.1 U	0.7	0.1 U	0.11 U	2	3 J	-	2	7	3 J	4	10	0.11 U	0.19 J	30 J	81	51	42 J	25	63 J
Phenol	ug/L	N	2000	0.6 UJ	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 U	0.5 U	0.6 U	6 U	-	26	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4	0.5 U	0.5 U	0.5 U	4	0.5 U
Pyrene	ug/L	N	200	0.1 UJ	0.5 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	2	3 J	-	2	7	3 J	5	10	0.15 J	0.11 J	6 J	32	16	9 J	6	18 J
Total TIC SVOCS	ug/L	N	NA	690 J	34 J	66 J	-	38 J	-	68 J	22 J	18 J	-	-	660 J	8500 J	-	260 J	-	-	2200 J	1900 J	-	-	-	1700 J	1400 J	610 J	-	1400 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0029	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030
			Field Sample ID	M029B2X	M029RB4X	D0216218	M029RB5X	M029RB6	M029RB7	M029RB8	M030D5X	M030D6X	M030D7X	M030D8X	M030D9X	M030E1X	M030E2X	M030E3X	M030E4X	D0826161	M030E5X	M030E7X	M030E8X	M030E9X	M030F1X	D112119X	M030F2X	M030F5X	M030F7X	M030F8
			Sample Date	09/05/2019	10/07/2020	02/16/2021	02/16/2021	05/21/2021	09/03/2021	11/23/2021	02/14/2012	08/07/2012	03/05/2013	09/24/2013	06/03/2014	11/07/2014	06/30/2015	09/30/2015	03/10/2016	08/26/2016	08/26/2016	09/08/2017	05/01/2018	11/26/2018	04/30/2019	11/21/2019	11/21/2019	05/07/2020	12/30/2020	06/25/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	100	17 U	13	13	15	3 U	22	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	15 U	77 U	14 U	15 U	15 U	14 U	14 UJ	11 U	11 U	11 U	11 U	12 U	12 U	11 U	10 U	10 U	10 U	10 U	10 U	15 U	14 U	14 U	14 U	14 U	16 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	5.5 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	2.2 U	0.4 U	0.41 U	0.44 U	0.4 U	0.41 UJ	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.5 U	0.42 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
2-Methylnaphthalene	ug/L	N	30	**120**	**68 J**	**40 J**	3.4	2.4	**120J**	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	74	21	14	15	9.3	0.5 U	12	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	11 U	1 U	1 U	1.1 U	1 U	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	17 U	1 U	1 U	1.1 U	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	17 U	4 U	4.1 U	4.4 U	4 U	4.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3.1 U	4.1 UJ
3-Nitroaniline	ug/L	N	NA	3 U	17 U	2 U	2.1 U	2.2 U	2 U	2.1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3.1 U	2.1 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	44 U	8 U	8.3 U	8.8 U	8.1 U	8.2 UJ	5 U	5 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	9 U	8.4 U	8.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
4-Chloroaniline	ug/L	N	30	4 U	22 U	4 U	4.1 U	4.4 U	4 U	4.1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 UJ	4 UJ	5 U	4.2 U	4.1 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	10	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
4-Nitroaniline	ug/L	N	NA	1 U	5 U	0.91 U	0.93 U	0.99 U	0.91 U	0.92 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 UJ	0.9 UJ	1 U	0.94 U	0.93 UJ
4-Nitrophenol	ug/L	N	NA	11 U	55 U	10 U	10 U	11 U	10 U	10 UJ	11 U	11 U	11 U	11 U	12 U	12 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	27	7.7	3.2	5.3	1.8	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.55 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	22 U	1 U	1 U	1.1 U	1 U	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 UJ	4 UJ	5 U	4.2 U	1 U
Anthracene	ug/L	N	2000	7	5.2	1.8	3.4	1.9	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	11 U	1 U	1 U	1.1 U	1 U	1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	1 UJ
Benzaldehyde	ug/L	N	NA	3 U	17 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3.1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**3**	**8**	**1.6**	**3.1**	**1.5**	0.1 U	**0.91**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**3**	**8.2**	**1.7**	**3.7**	**2**	0.11 U	**0.98**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	**1**	**5**	**1**	**2.1**	**1.3**	0.1 U	**0.53**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	2	9.7	2	4.7	2.7	0.1 U	1.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 J	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.4 J	0.55 U	0.15 J	0.51 J	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	28 U	2 U	2.1 U	**9.4**	2 U	**11**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5.2 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	11 U	2 U	2.1 U	2.2 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	28 U	3 U	3.1 U	3.3 U	3 U	3.1 UJ	5 U	5 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5.2 U	3.1 U
Carbazole	ug/L	N	NA	24	8.6J	6.6	7.4	4.8	0.5 U	5.7	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 UJ
Chrysene	ug/L	N	5	4	**13**	2.9	**6.2**	2.8	0.1 U	1.4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	5 J	11 U	2 UJ	2.1 UJ	2.2 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 U	28 U	5 U	5.2 U	5.5 U	5 U	5.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5.2 U	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	**0.7**	**2.9**	**0.7**	**1.2**	**0.6**	0.1 U	0.28J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	17	2.8 U	0.5 U	3.3	0.55 U	0.5 U	0.68 J	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
Diethylphthalate	ug/L	N	6000	2 U	11 U	2 U	2.1 U	2.2 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	11 U	2 U	2.1 U	2.2 U	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2.1 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 J	17 U	0.5 U	2.3	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3.1 U	0.51 U
Fluoranthene	ug/L	N	300	9	4.7	1.1	2.7	1.2	0.1 U	0.69	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	18	15	4.5	7.7	3.5	0.12 U	1.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.55 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	28 UJ	5 U	5.2 U	5.5 U	5 U	5.1 UJ	5 U	5 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5.2 U	5.1 U
Hexachloroethane	ug/L	N	7	1 U	5.5 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	0.51 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**0.8**	**3.4**	**0.59**	**1.4**	**0.59**	0.11 U	**0.31J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	3.9 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.8 U	0.73 U	0.51 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	3.9 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.8 U	0.73 U	0.51 U
Naphthalene	ug/L	N	300	230	160 J	62 J	120	51 J	220 J	160 J	0.2 J	0.1 J	0.1 U	0.1 U	0.2 J	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	2.8 U	0.5 U	0.52 U	0.55 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.52 U	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	8.8 U	1 U	1 U	1.1 U	1 U	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	5.5 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	42	43	13	22	11	0.11 U	7.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U
Phenol	ug/L	N	2000	0.5 U	2.8 U	1 J	0.52 U	0.55 U	0.5 U	1.9 J	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.52 U	0.51 U
Pyrene	ug/L	N	200	9	16	4.2	7.4	4.2	0.1 U	2.4	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.11 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0030	MW-0031	MW-0031	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032
			Field Sample ID	M030F9	M031D5X	M031D6X	M031RA1X	M031RA2X	M031RA3X	M031RA4X	M031RA5X	M031RA6X	M031RA7X	M031RA8X	M031RB1X	M031RB2X	M031RB3X	M031RB4X	M031RB5X	D0506201X	M031RB6X	M031RB8X	M031RC1	M031RC2	M032D4X	M032D5X	M032D6X	M032D7X	M032D8X	M032D9X
			Sample Date	12/27/2021	02/14/2012	08/07/2012	04/25/2013	09/24/2013	06/05/2014	11/07/2014	02/13/2015	09/30/2015	03/10/2016	08/26/2016	09/08/2017	05/01/2018	11/26/2018	04/30/2019	11/20/2019	05/06/2020	05/06/2020	12/29/2020	06/25/2021	11/23/2021	03/09/2012	08/07/2012	03/15/2013	09/25/2013	06/05/2014	11/07/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.2 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	14 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	15 U	14 U	14 U	14 U	15 U	16 U	14 U	14 U	15 U	11 U	11 U	11 U	10 U	10 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	0.99 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.099 U	0.2 J	2	0.1 J	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4.1 UJ	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2.1 UJ	2.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	7.9 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	9 U	8 U	8 U	8 U	9 U	9 U	8.1 U	8.3 U	8.5 U	5 U	5 U	6 U	5 U	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.1 UJ	4.2 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.89 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	1 U	1 U	0.91 U	0.93 UJ	0.95 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	9.9 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.099 U	13	25	6	7	10	11	10	13	14	12	15	16	11	11	12	14	13	14	12	12	2	2	2	2	5	2
Acenaphthylene	ug/L	N	NA	0.099 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.099 U	0.2 J	0.5 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 J	0.2 J	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.14 J	0.1 U	0.2 J	0.1 U	0.1 U	0.2 J	0.1 U
Atrazine	ug/L	N	3	0.99 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 UJ	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	0.99 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 J	2 U	5 U	2 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	26	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5 U	3.1 U	3.2 U	5 U	5 U	6 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 UJ	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	4.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.099 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.12 U	3	6	1	1	2	2	2	2	2	1	2	2	1	1	2	2	2	1.8	1.3	1.3	0.1 U	0.2 J	0.1 U	0.1 U	0.3 J	0.1 J
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	4.9 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5.3 U	5 U	5 U	6 U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	0.49 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.7 U	0.52 UJ	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.7 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.099 U	3	23	1	0.3 J	2	1	6	0.8	1	0.4 J	0.1 U	0.6	0.1 U	0.2 J	0.1 U	2	2	0.56	0.54	0.66	0.4 J	0.2 J	0.9	0.2 J	0.2 J	0.1 U
Nitrobenzene	ug/L	N	6	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.6 U	1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	0.99 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.3 J	0.8	0.1 U	0.1 J	0.1 J	0.1 J	0.1 J	0.2 J	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.12 J	0.12 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.53 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.099 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 J	0.2 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	26 J	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033
			Field Sample ID	M032E1X	M032E2X	M032E3X	M032E4X	M032E5X	M032F6X	M032E7X	M032E8X	M032E9X	M032F1X	M032F5X	M0032F7X	M032F9X	M032G2	D0216121	M033C7X	M033C8X	D0605141	M033D2X	M033D3X	M033D4X	M033D5X	M033D7X	M033D9X	M033E2X	M033E3X	M033E4
			Sample Date	02/13/2015	10/01/2015	03/10/2016	08/26/2016	03/22/2017	09/08/2017	05/01/2018	11/27/2018	03/26/2019	11/01/2019	03/24/2020	09/15/2020	03/09/2021	08/26/2021	02/16/2012	02/16/2012	03/19/2013	06/05/2014	06/05/2014	02/13/2015	03/10/2016	03/24/2017	03/30/2018	03/28/2019	11/19/2020	02/25/2021	05/10/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3.1 U	3.1 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	1 J	0.6 J	0.5 U	17 U	3.2 U	3.1 U	16 U
2,4-Dinitrophenol	ug/L	N	40	11 U	10 U	10 U	10 U	10 U	10 U	15 U	15 U	14 U	15 U	15 U	14 U	14 U	14 U	110 U	100 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	77 U	15 U	15 U	73 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	11 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6 U	1.1 U	1 U	5.2 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U	4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	0.42 U	0.42 U	2.1 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.2 J	0.1 U	0.6 U	0.11 U	0.1 U	0.52 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	11 U	2.1 U	1 U	5.2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	1 U	1.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	17 U	3.2 U	1 U	5.2 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	4.1 U	4.1 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	17 U	3.2 U	4.2 U	21 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	2.1 U	2.1 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	17 U	3.2 U	2.1 U	10 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 U	9 U	8 U	8 U	8 U	8 U	8.1 U	8.2 U	8.2 U	53 U	51 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	44 U	8.4 U	8.4 U	42 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4.1 U	4.1 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	22 U	4.2 U	4.2 U	21 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	6	6	17	37	15	0.5 U	3 U	13	3.1	2.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.91 U	0.92 U	0.92 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	0.95 U	0.94 U	4.7 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	110 U	100 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	55 U	11 U	10 U	52 U
Acenaphthene	ug/L	N	400	1	2	2	0.1 U	1	2	2	3	2	3	2	1.9	2.1	0.80	1 U	1 U	0.1 U	0.5 J	0.4 J	0.5 J	0.9	0.7	1	0.6 U	0.59	0.63	0.76 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.11 U	0.1 U	0.52 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	1 U	1.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	22 U	4.2 U	1 U	5.2 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	2	0.6 U	0.11 U	0.1 J	0.52 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1.0 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	11 U	2.1 U	1 U	5.2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	1.0 U	11 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	17 U	3.2 U	1 U	5.2 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	**1J**	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	**0.4J**	0.6 U	0.11 U	0.1 U	0.52 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	**0.8**	0.6 U	**0.12J**	0.12 U	0.58 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	**2J**	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.12J	0.11J	0.52 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	3 J	1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	1	0.6 U	0.16 J	0.1 U	0.52 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.11 U	0.1 U	0.52 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	3 U	0.53 U	0.52 U	2.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 J	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	2.1 U	2.1 U	**34J**	20 U	2 U	2 U	2 U	2 U	2 U	2 U	**4J**	28 U	5.3 U	2.1 U	10 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	11 U	2.1 U	2.1 U	10 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	3.1 U	3.1 U	53 U	51 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	28 U	5.3 U	3.1 U	16 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	3 J	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	2	0.6 U	0.11 U	0.17 J	0.52 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	11 U	2.1 U	2.1 U	10 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	28 U	5.3 U	5.2 U	26 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.11 U	0.1 U	0.52 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	11 U	2.1 U	2.1 U	10 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	21 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	11 U	2.1 U	2.1 U	10 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	17 U	3.2 U	0.52 U	2.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.9	0.6 U	0.11 U	0.1 J	0.52 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 J	0.1 U	0.2 J	0.2 J	0.3 J	0.3 J	0.1 U	0.3 J	0.1 U	0.1 U	0.16 J	0.12 U	1 U	1 U	0.1 U	0.3 J	0.5 J	0.4 J	0.6	0.7	1	0.6 U	0.11 U	0.53	0.63 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.11 U	0.12 U	0.58 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5.1 U	5.1 U	53 U	51 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	28 U	5.3 U	5.2 U	26 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.51 U	11 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6 U	1.1 U	0.52 U	2.6 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.11 U	0.12 U	0.58 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	4 U	0.74 U	0.52 U	2.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	6	4 U	0.74 U	0.52 U	2.6 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.29 J	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.6 U	0.11 U	0.1 U	0.52 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.53 U	0.52 U	2.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U	1 U	1.0 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	1.7 U	1 U	5.2 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	11 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	6 U	1.1 U	**1J**	5.2 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1 U	1 U	0.1 U	0.3 J	0.3 J	0.2 J	0.3 J	0.6	2	0.6 U	0.11 U	0.44 J	0.58 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	5 U	5 U	0.5 U	6	6	3	0.5 U	0.8 J	0.5 U	3 U	0.53 U	0.52 U	2.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 J	0.1 J	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.10 U	1 U	1 U	0.2 J	0.3 J	0.3 J	0.3 J	0.8	0.6	4	3	0.73	0.4 J	2.3 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	44 J	80 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	430 J	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0033	MW-0033	MW-0033	MW-0033	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0035
			Field Sample ID	D0805218	M033E5	M033E6	M033E7	M034D6X	M034D7X	M034D8X	M034D9X	M034E1X	M034E2X	M034E3X	M034E4X	M034E5X	M034E6X	M034E7X	M034E8X	M034E9X	M034F1X	M034F4X	M034F5X	M034F7X	M034F8X	M034F9	M034G1	M034G2	M034G3	D0723198
			Sample Date	08/05/2021	08/05/2021	11/12/2021	02/11/2022	02/16/2012	08/07/2012	03/11/2013	09/25/2013	06/24/2014	11/07/2014	02/19/2015	10/01/2015	02/16/2016	08/17/2016	03/24/2017	09/06/2017	03/30/2018	10/17/2018	03/27/2019	08/26/2019	08/05/2020	03/02/2021	05/28/2021	07/30/2021	12/27/2021	02/01/2022	07/23/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	3 U	3.2 U	3.2 UJ	15 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	3 U	3 U	3.2 U	3 UJ
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	15 U	71 U	10 U	11 U	11 U	510 U	11 U	11 U	100 UJ	10 U	10 U	10 U	10 U	10 U	10 U	15 U	14 U	14 U	14 U	15 U	14 U	14 U	14 U	15 U	14 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 U	1.1 J	5 U	1 U	1 U	1 U	51 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	0.99 U	1.1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.41 U	0.42 U	0.43 U	2 U	0.4 U	0.4 U	0.4 U	21 U	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 UJ	0.41 U	0.4 U	0.4 U	0.43 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
2-Methylnaphthalene	ug/L	N	30	0.26 J	0.21 J	0.11 UJ	0.5 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1.1 U	1.1 U	5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1 UJ	1 U	1 U	0.99 U	1.1 U	2 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1.1 U	1.1 UJ	5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	0.99 U	1.1 U	3 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	4.1 U	4.2 U	4.3 U	20 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	4.2 UJ	4.1 U	4 U	4 U	4.3 U	3 UJ
3-Nitroaniline	ug/L	N	NA	2 U	2.1 U	2.1 U	10 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2.1 UJ	2 U	2 U	2 U	2.1 U	3 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	8.4 U	8.6 U	40 U	5 U	5 U	5 U	260 U	5 U	6 U	50 U	5 U	5 U	5 U	5 UJ	5 U	5 U	9 U	8 U	8 U	8.1 U	8.3 U	8.2 U	8 U	8 U	8.5 U	8 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	4.1 U	4.2 U	4.3 UJ	20 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.2 UJ	4.1 U	4 U	4 U	4.3 U	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	26	26	20 J	8.6 J	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.91 U	0.95 U	0.96 U	4.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.91 U	0.93 UJ	0.92 U	0.91 U	0.89 U	0.96 U	0.9 UJ
4-Nitrophenol	ug/L	N	NA	10 U	11 U	11 U	50 U	10 U	11 U	11 U	510 U	11 U	11 U	100 U	10 U	10 U	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	9.9 U	11 U	10 UJ
Acenaphthene	ug/L	N	400	0.78	0.66	0.76	1.3 J	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 U	0.11 U	0.5 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Acetophenone	ug/L	N	700	1 U	1.1 U	1.1 UJ	5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	1 UJ	1 U	1 U	0.99 U	1.1 U	4 UJ
Anthracene	ug/L	N	2000	0.1 U	0.11 U	0.11 J	0.5 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Atrazine	ug/L	N	3	1 U	1.1 U	1.1 UJ	5 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 UJ	1 U	1 U	0.99 U	1.1 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1.1 U	1.1 UJ	5 U	1 U	1 U	1 U	51 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 UJ	1 U	1 U	0.99 U	1.1 U	3 UJ
Benzo(a)anthracene	ug/L	N	0.1	**0.12J**	**0.13J**	0.11 U	**1.2J**	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.12 U	0.12 U	**1.2J**	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.12J	0.19J	**1J**	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.13 J	0.15 J	0.25 J	1.3 J	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 J	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 U	0.11 U	0.5 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.1 U	2.1 J	10 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	2.1 UJ	2 U	2 U	2 U	2.1 U	5 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 U	2.1 UJ	10 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	11	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 UJ	2 U	2 U	2 U	2.1 U	2 UJ
Caprolactam	ug/L	N	4000	3 U	3.2 U	3.2 UJ	15 U	5 U	5 U	5 U	260 U	5 U	6 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	3.1 UJ	3.1 U	3 U	3 U	3.2 U	5 UJ
Carbazole	ug/L	N	NA	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
Chrysene	ug/L	N	5	0.17 J	0.14 J	0.11 U	3	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 U	2.1 UJ	10 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 UJ	2 U	2 U	2 U	2.1 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.3 U	5.3 J	25 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.2 UJ	5.1 U	5 U	5 U	5.3 U	5 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 U	0.11 U	0.5 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2.1 U	2.1 UJ	10 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 UJ	2 U	2 U	2 U	2.1 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 U	2.1 U	10 U	2 U	2 U	2 U	100 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 UJ	2 U	2 U	2 U	2.1 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.53 U	0.53 U	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	3 UJ
Fluoranthene	ug/L	N	300	0.18 J	0.19 J	0.11 U	1.5 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 J	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Fluorene	ug/L	N	300	1.1	1	0.99	2.6*- *1	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.12 U	0.12 U	0.13 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.12 U	0.12 J	0.55 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.3 U	5.3 U	25 U	5 U	5 U	5 U	260 U	5 U	6 U	50 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.2 UJ	5.1 U	5 U	5 U	5.3 U	5 UJ
Hexachloroethane	ug/L	N	7	0.51 U	0.53 U	0.53 UJ	2.5 U	1 U	1 U	1 U	51 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.12 U	0.12 U	0.55 U	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ
Isophorone	ug/L	N	40	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.71 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.7 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.71 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.7 UJ
Naphthalene	ug/L	N	300	0.1 U	0.11 U	0.11 UJ	0.5 U	0.2 J	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Nitrobenzene	ug/L	N	6	0.51 U	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 UJ	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	1 U	1.1 U	1.1 UJ	5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1 U	1 U	1 U	0.99 U	1.1 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	1.1 U	5 U	1 U	1 U	1 U	51 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.99 U	1.1 U	1 UJ
Phenanthrene	ug/L	N	NA	1.3	1.4	1.1	5.5*- *1	0.1 U	0.1 U	0.1 U	5 U	0.1 U	0.1 U	1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.1 UJ
Phenol	ug/L	N	2000	0.91 J	0.53 U	0.53 UJ	2.5 U	0.5 U	0.5 U	0.5 U	26 U	0.5 U	0.6 U	5 U	0.5 U	0.5 U	13	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.53 U	0.5 UJ
Pyrene	ug/L	N	200	0.79	0.81	1.2	6.9*-	0.1 U	0.1 J	0.1 U	5 U	0.1 U	0.1 U	1 J	0.1 U	0.2 J	0.3 J	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.31 J	0.63 J	0.1 U	0.1 U	0.099 U	0.11 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69 J	320 J	-	-	-	-	-	-	0 U	32 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0035	MW-0035	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057
			Field Sample ID	M035D7X	M035D8X	M057B3X	M057B4	M057B4X	M057B5	M057B5X	D1120121	M057B6	M057B7	M057B8	D0909131	M057B9	M057C1	M057C2	D0805141	M057C4	M057C5	M057C6	M057C7	M057C8	M057C9	M057D1	M057D2	M057D3	M057D4	M057D5
			Sample Date	07/23/2019	08/22/2019	03/13/2012	05/23/2012	05/24/2012	07/25/2012	07/26/2012	11/20/2012	11/20/2012	02/20/2013	06/12/2013	09/09/2013	09/09/2013	11/06/2013	03/05/2014	08/05/2014	08/05/2014	10/23/2014	03/03/2015	05/29/2015	09/16/2015	11/13/2015	01/08/2016	04/12/2016	07/19/2016	10/17/2016	01/11/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 UJ	3 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 UJ	15 U	10 UJ	11 U	11 U	12 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	2 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 UJ	3 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 UJ	9 U	5 UJ	6 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 UJ	4 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.0 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 UJ	1 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 UJ	11 U	10 UJ	11 U	11 U	12 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 UJ	4 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 UJ	3 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 UJ	5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	8 J	8 J	5 U	5 U	5 U	7 J	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 UJ	5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 UJ	0.8 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 UJ	0.8 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 UJ	0.1 U	0.1 UJ	0.1 J	0.1 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.14 J	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	25 J	12 J	77 J	0	20 J	0	10 J	330 J	0	280 J	4 J	68 J	57 J	16 J	22 J	170 J	170 J	13 J	5 J	0 U	6 J	5 J	4 J	14 J	32 J	230 J	27 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058
			Field Sample ID	M057D6	M057D7	M057D8	M057D9	M057E1	M057E2	M057E3	M057E4	M057E5	M057E6	M057E7	M057E8	M057E9	M057F1	M057F2	M057F3	M057F4	M057F5	M057F6	M0057F7	M058A2X	M058A3X	M058A4X	M058A5	M058A6	D1120179	M058A7X
			Sample Date	04/26/2017	07/18/2017	10/09/2017	01/22/2018	04/09/2018	07/12/2018	10/23/2018	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/08/2020	04/08/2020	07/13/2020	10/12/2020	01/12/2021	04/07/2021	07/02/2021	10/06/2021	01/18/2022	03/29/2012	03/27/2013	02/07/2014	06/14/2016	05/12/2017	11/20/2017	11/20/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.3 UJ	3.2 U	3.1 U	3.2 U	3.1 U	3 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	1	1
2,4-Dinitrophenol	ug/L	N	40	10 U	11 U	10 U	10 UJ	10 U	16 U	15 U	14 U	14 U	14 U	15 U	14 U	14 U	15 U	15 UJ	15 U	14 U	15 U	15 U	14 U	11 U	12 U	11 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 J
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.44 U	0.42 U	0.41 U	0.42 U	0.42 U	0.41 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.3 UJ	3.2 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.3 U	3.2 U	4.1 U	4.2 U	4.2 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.3 U	3.2 U	2 U	2.1 U	2.1 U	2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	9 U	9 U	8 U	8 U	8 U	8 U	8 U	8 U	8.5 U	8.8 UJ	8.5 U	8.1 U	8.4 U	8.3 U	8.1 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	4.4 U	4.2 U	4.1 U	4.2 U	4.2 U	4.1 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.7 J	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.96 U	0.99 U	0.96 U	0.92 U	0.95 U	0.93 U	0.91 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	11 UJ	11 U	10 U	11 U	10 U	10 U	11 U	12 U	11 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.7	0.7	0.8	2	0.1 U	2	2
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	4.4 U	4.2 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	6	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.3 J	0.2 J	0.3 J	0.5	0.1 U	2	3
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.3 U	3.2 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	**0.3J**	**0.2J**	**0.2J**	**0.2J**	0.1 U	**3**	**5**
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1J	0.1J	0.1J	0.1J	0.1 U	**3**	**5**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.2J	0.1J	0.1 U	0.1 U	0.1 U	**2**	**4**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.1 U	2	3
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	**0.7**
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	4 UJ	2 U	2 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.5 U	5.3 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 J
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 UJ	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.5 U	5.3 U	3.1 U	3.2 U	3.1 U	3.1 J	5 U	6 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.4 J	0.3 J	0.4 J	0.4 J	0.1 U	**6**	**10**
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.5 U	5.3 U	5.1 U	5.3 U	5.2 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.4J**	**0.7**
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.6 J	0.6 U	0.5 U	1 J	0.5 U	0.7 J	1
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.3 U	3.2 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.6	0.3 J	0.4 J	0.6	0.1 U	3	6
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.13 U	0.12 U	0.12 U	1	1	1	3	0.1 U	2	3
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 UJ	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 UJ	5.5 U	5.3 U	5.1 U	5.3 U	5.2 U	5.1 U	5 U	6 U	5 U	5 U	5 U	5 UJ	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	0.51 U	0.53 U	0.52 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**1**	**1**
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.74 U	0.77 U	0.74 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.74 U	0.77 U	0.74 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.25 UJ	0.1 U	0.1 U	0.6	0.4 J	0.1 U	2	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 U	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.8 UJ	1.7 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 UJ	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	**4J**	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.11 U	0.2 J	0.4 J	0.4 J	0.4 J	0.1 U	0.1 U	0.9
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.55 UJ	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	1	1	1	1	0.8	11	17
Total TIC SVOCS	ug/L	N	NA	23 J	32 J	22 J	82 J	0 U	0 U	42 J	16 J	42 J	33 J	0 U	0 U	10 J	-	-	-	-	-	-	0 U	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0059	MW-0059	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0061	MW-0061
			Field Sample ID	M058A8X	M058A9X	M058B1X	M058B2X	M058B3X	M058B4X	M058B6X	M058B7X	M058B8	D0902218A	M058B9	M058C1	M059A1X	M059A3	M060B4X	M060B5X	M060B6X	M060B7X	M060B8X	M060B9X	M060C1X	M060C2X	M060C4X	M060C6	M061A4X	M061A5X
			Sample Date	02/16/2018	05/22/2018	08/29/2018	11/13/2018	02/22/2019	09/05/2019	10/07/2020	02/16/2021	05/26/2021	09/02/2021	09/02/2021	11/19/2021	04/23/2020	02/03/2022	11/21/2017	02/14/2018	05/22/2018	08/30/2018	11/12/2018	02/27/2019	05/14/2019	09/05/2019	10/08/2020	03/23/2022	11/21/2017	02/14/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3.1 U	3.1 U	3.1 U	3.1 U	3.2 U	3 U	3.2 U	0.5 U	0.5 U	3 U	15 U	3 U	15 U	3 U	3 U	3 UJ	3.3 U	5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	14 U	14 U	14 U	14 U	14 U	15 U	14 U	14 U	14 U	14 U	15 U	14 U	15 U	11 U	10 U	14 U	72 U	14 U	71 U	14 U	14 U	14 UJ	15 U	110 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	1.1 U	11 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.7 J	0.44 U	0.41 U	0.41 U	0.41 U	0.41 U	0.42 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	2 U	0.4 U	0.4 U	0.41 U	0.43 U	4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.7	0.11 U	0.1 U	8.4 J	0.77	0.94	0.11 U	5	0.11 U	0.1 U	0.1 U	0.5 J	0.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.11 U	**57**	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1 U	1 U	1 U	1.1 U	2 U	1.1 U	0.5 U	0.5 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	1.1 U	5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3.3 U	1 U	1 U	1 UJ	1 UJ	1.1 U	3 U	1.1 U	0.5 U	0.5 U	3 U	15 U	3 U	15 U	3 U	3 U	3 UJ	1.1 U	5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3 U	3.3 U	4.1 U	4.1 U	4.1 U	4.1 U	4.2 U	3 U	4.3 U	2 U	2 U	3 U	15 U	3 U	15 U	3 U	3 U	3 U	4.3 U	21 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3.3 U	2.1 U	2 U	2 U	2 U	2.1 U	3 U	2.1 U	0.5 U	0.5 U	3 U	15 U	3 U	15 U	3 U	3 U	3 U	2.2 U	5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8 U	8 U	8 U	8 U	8.8 U	8.3 U	8.2 U	8.1 U	8.2 U	8.4 U	8 U	8.5 U	5 U	5 U	8 U	41 U	8 U	40 U	8 U	8 U	8.1 U	8.7 UJ	53 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 UJ	4 U	4 U	4.4 U	4.1 U	4.1 U	4.1 U	4.1 U	4.2 U	4 U	4.3 U	2 U	2 U	4 U	21 U	4 U	20 U	4 U	4 U	4.1 U	4.3 U	21 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.73 J	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.99 U	0.93 U	0.92 U	0.92 U	0.92 U	0.95 U	0.9 U	0.96 U	0.5 U	0.5 U	0.9 U	5 U	0.9 U	5 U	0.9 U	0.9 U	0.91 U	0.98 U	5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U	10 U	10 U	52 U	10 U	50 U	10 U	10 U	10 UJ	11 U	110 U	10 U
Acenaphthene	ug/L	N	400	0.8	0.9	3	1	0.8	7	1.6	3.1	1.6	1.4	1.4	1.6	2	0.11 U	1	1	1	3	1	2 UJ	0.3 J	0.1 U	1.7	0.84	29	3
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.11 U	1 UJ	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 U	4 U	4 U	4.4 U	1 U	1 U	1 U	1 U	1.1 U	4 U	1.1 U	0.5 U	0.5 U	4 U	21 U	4 U	20 U	4 U	4 U	4.1 U	1.1 U	5 U	0.5 U
Anthracene	ug/L	N	2000	0.6	0.8	3	0.8	3	11	0.62	4.5	1.9	0.41 J	0.49 J	0.64	1	0.11 U	0.7	0.7	0.4 J	0.5 U	0.3 J	2 J	0.1 U	0.1 U	0.1 U	0.11 U	44	2
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1 U	1 U	1 U	1.1 U	2 U	1.1 U	2 U	2 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	1.1 U	21 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 U	3 U	3 U	3.3 U	1 U	1 U	1 U	1 U	1.1 U	3 U	1.1 U	1 U	1 U	3 U	15 U	3 U	15 U	3 U	3 U	3 U	1.1 U	11 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**0.8**	**2**	**4**	**2**	**7**	**18**	**0.55**	**5.4**	**4.4**	**0.25J**	**0.32J**	**0.32J**	**1**	0.11 U	**1**	**0.8**	**0.2J**	**5**	**0.3J**	**3**	0.1 U	0.1 U	**1.6**	0.11 U	**36**	**2**
Benzo(a)pyrene	ug/L	N	0.1	**0.5**	**2**	**3**	**2**	**5**	**15**	**0.46J**	**4.3**	**3.1**	**0.13J**	**0.19J**	**0.22J**	**2**	**0.25J**	**2**	**0.9**	**0.2J**	**7**	**0.4J**	**3**	0.1J	0.1 U	**1.7**	0.12 U	**34**	**2**
Benzo(b)fluoranthene	ug/L	N	0.2	**0.4J**	**1**	**2**	**1**	**4**	**11**	**0.37J**	**3.3**	**2.7**	0.12J	0.1 U	0.17J	**1**	0.16J	**1**	**0.4J**	0.1 U	**4**	**0.3J**	**1J**	0.1 U	0.1 U	**0.88**	0.11 U	**21**	**0.8**
Benzo(g,h,i)perylene	ug/L	N	NA	0.4 J	1	2	0.9	4	10	0.11 U	3.6	2.7	0.2 J	0.28 J	0.16 J	2	0.19 J	2	0.8	0.2 J	7	0.3 J	4	0.1 U	0.1 U	1.4	0.11 U	30	1
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.3 J	0.4 J	0.2 J	**0.8**	**2**	0.11 U	**0.72**	**0.63**	0.1 U	0.1 U	0.11 U	0.2 J	0.11 U	0.2 J	0.1 U	0.1 U	**0.7 J**	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.11 U	**3J**	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	5 U	5 U	5 U	5 U	5.5 U	2.1 U	**13**	2 U	2 U	2.1 U	5 U	2.1 U	2 U	2 U	5 U	26 U	5 U	25 U	5 U	5 U	5.1 U	2.2 U	21 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	2.2 U	21 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	3.1 U	3.1 U	3.1 U	3.1 U	3.2 U	5 U	3.2 U	5 U	5 U	5 U	26 U	5 U	25 U	5 U	5 U	5.1 U	3.3 U	53 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 J	0.52 U	0.51 U	0.73 J	0.65 J	0.68 J	2 J	2.6	1	1	2	3 U	0.8 J	3 U	0.6 J	0.5 U	0.51 U	0.54 U	5 U	0.5 U
Chrysene	ug/L	N	5	1	4	**7**	3	**12**	**30**	0.7	**9.4**	**5.8**	0.39 J	0.46 J	0.51 J	3	0.33 J	3	1	0.3 J	**8**	0.6	4	0.1 U	0.1 U	2.5	0.15 J	**82**	4
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 UJ	2 U	2 U	2 U	2.1 U	3 J	2.1 U	2 U	2 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	2.2 U	21 U	2 J
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5.2 U	5.1 U	5.1 U	5.1 U	5.3 U	5 U	5.3 U	2 U	2 U	5 U	26 U	5 U	25 U	5 U	5 U	5.1 U	5.4 U	21 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1J	0.2J	**0.4J**	0.1 U	**0.7**	**2**	0.11 U	**0.65**	0.1 U	0.1 U	0.1 U	0.11 U	**0.5**	0.11 U	**0.6**	0.2J	0.1 U	**2J**	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.11 U	**11**	**0.5**
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	2 J	0.9 J	0.5 U	5	0.87 J	1.7 J	0.51 U	0.81 J	0.51 U	0.74 J	0.5 U	0.67 J	0.8 J	0.7 J	0.7 J	3 U	0.7 J	3 U	0.5 U	0.5 U	0.79 J	0.54 U	5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 J	2.2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	2.2 U	21 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	10 U	2 U	10 U	2 U	2 U	2 U	2.2 U	21 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 U	3 U	3 U	3.3 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	3 U	0.53 U	0.5 U	0.5 U	3 U	15 U	3 U	15 U	3 U	3 U	3 U	0.54 U	5 U	0.5 U
Fluoranthene	ug/L	N	300	0.9	2	5	2	8	23	0.76	6.3	4.4	0.5 J	0.56	0.63	1	0.11 U	0.6	0.5 J	0.1 J	3	0.3 J	1 J	0.1 J	0.1 U	0.96	0.18 J	25	2
Fluorene	ug/L	N	300	1	2	5	2	2	17	2.6	6.2	3.1	2.5	2.6	2.7	4	2	2	2	2	5	2	4	0.1 U	0.1 U	2.6	1.1	51	5
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.12 U	1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5.5 UJ	5.2 U	5.1 U	5.1 U	5.1 U	5.3 U	5 U	5.3 U	5 UJ	5 U	5 U	26 U	5 U	25 U	5 U	5 U	5.1 U	5.4 U	53 UJ	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	1 U	0.53 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 U	0.54 U	11 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.2J	**0.5**	**0.9**	**0.5**	**2**	**6**	0.11 U	**1.9**	**1.4**	0.11 U	0.11 U	0.12 U	**0.5**	0.12 U	0.2J	0.2J	0.1 U	**2J**	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.12 U	**8**	**0.3J**
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.77 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.7 U	0.53 U	0.5 U	0.5 U	0.7 U	4 U	0.7 U	4 U	0.7 U	0.7 U	0.71 U	0.54 U	5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.77 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.7 U	0.53 U	0.5 U	0.5 U	0.7 U	4 U	0.7 U	5 J	0.7 U	0.7 U	0.71 U	0.54 U	5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	2	0.6	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	1.2	0.1 U	1	0.1 U	5.8	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.53 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 U	0.54 U	5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.8 U	1 U	1 U	1 U	1 U	1.1 U	2 U	1.1 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	1.6 UJ	1.1 U	5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.1 U	1 U	1 U	1 U	5 U	1 U	5 U	1 U	1 U	1 UJ	1.1 U	11 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.2 J	0.7	4	0.11 U	2.2	0.11 U	0.37 J	0.56	0.34 J	8	1.7	0.1 U	0.1 U	0.3 J	6	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.12 U	150	7
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U	0.5 U	0.55 U	0.52 U	0.51 U	0.51 U	0.51 U	0.71 J	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	3 U	0.5 U	3 U	0.5 U	0.5 U	0.51 UJ	0.54 U	5 U	0.5 U
Pyrene	ug/L	N	200	2	7	11	5	19	47	1.9	16	12	1.1	1.2	1.3	3	0.71	3	2	0.5	12	1	5	0.5	1	3.3	0.51 J	100	5
Total TIC SVOCS	ug/L	N	NA	90 J	340 J	360 J	-	590 J	-	-	-	-	-	-	-	-	-	-	56 J	90 J	1100 J	200 J	110 J	49 J	-	-	-	-	620 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0063	MW-0063	MW-0063
			Field Sample ID	M061A6X	M061A7X	D1112189	M061A8X	M061A9X	M061B1X	M061B3X	M061B4X	M061B5	M061B6	M061B7	M062A4X	M062A5X	M062A6X	M062A7X	M062A8X	M062A9X	M062B1X	M062B3X	M062B4X	M062B5	M062B6	M062B7	M062B8	M063A2X	M063A3X	M063A4X
			Sample Date	05/17/2018	08/30/2018	11/12/2018	11/12/2018	02/21/2019	09/09/2019	10/09/2020	02/17/2021	05/19/2021	09/02/2021	11/19/2021	11/22/2017	02/16/2018	05/17/2018	08/31/2018	11/14/2018	02/25/2019	09/09/2019	10/13/2020	02/17/2021	05/25/2021	09/02/2021	11/19/2021	02/25/2022	11/20/2017	02/09/2018	05/17/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3 U	30 U	15 U	16 U	3.2 U	3.1 U	3.1 U	3.2 U	11 UJ	2	30 U	30 U	310 UJ	150 U	15 U	16 U	3.1 U	3.1 U	3.2 U	3.1 U	3 U	5 U	3	31 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	15 U	140 U	70 U	73 U	15 U	14 U	14 U	15 U	220 UJ	11 U	140 U	140 U	1500 UJ	710 U	72 U	74 U	15 U	15 U	15 U	15 U	14 U	100 U	11 U	140 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	10 U	5 U	5.2 U	1.1 U	1 U	1 U	1.1 U	22 UJ	1 U	10 U	10 U	100 UJ	50 U	5 U	5.3 U	1 U	1 U	1.1 U	1 U	1 U	10 U	1 U	10 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	4 U	2 U	2.1 U	0.43 U	0.41 U	0.41 U	0.42 U	9 UJ	0.4 U	4 U	4 U	42 UJ	20 U	2 U	2.1 U	0.42 U	0.42 U	0.43 U	0.42 U	0.4 U	4 U	0.4 U	4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.8	0.3 J	0.1 U	1 U	9	5.9	0.65	0.1 U	**66 J**	**59 J**	**11000J**	**84**	6	**410**	**540J**	**9300J**	**260**	**63 J**	**32 J**	**99 J**	2.4	0.1 U	**78 J**	**2200**	27	9
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	20 U	10 U	10 U	1.1 U	1 U	1 U	1.1 U	11 UJ	0.5 U	20 U	20 U	210 UJ	100 U	10 U	11 U	1 U	1 U	1.1 U	1 U	1 U	5 U	0.5 U	20 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3 U	30 U	15 U	16 U	1.1 U	1 U	1 UJ	1.1 U	11 UJ	0.5 U	30 U	30 U	310 UJ	150 U	15 U	16 U	1 U	1 U	1.1 UJ	1 U	1 U	5 U	0.5 U	31 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	30 U	15 U	16 U	4.3 U	4.1 U	4.1 U	4.2 U	43 UJ	2 U	30 U	30 U	310 UJ	150 U	15 U	16 U	4.2 U	4.2 U	4.3 U	4.2 U	4 U	20 U	2 U	31 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3 U	30 U	15 U	16 U	2.2 U	2 U	2.1 U	2.1 U	11 UJ	0.5 U	30 U	30 U	310 UJ	150 U	15 U	16 U	2.1 U	2.1 U	2.2 U	2.1 U	2 U	5 U	0.5 U	31 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	8 U	81 U	40 U	42 U	8.6 U	8.1 U	8.2 U	8.5 U	110 UJ	5 U	81 U	80 U	840 UJ	400 U	41 U	43 U	8.3 U	8.4 U	8.6 U	8.4 U	8.1 U	50 U	5 U	82 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4 U	40 U	20 U	21 U	4.3 U	4.1 U	4.1 U	4.2 U	43 UJ	2 U	40 U	40 U	420 UJ	200 U	21 U	21 U	4.2 U	4.2 U	4.3 U	4.2 U	4 U	20 U	2 U	41 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.9 U	0.9 U	9 U	5 U	4.7 U	0.97 U	0.92 U	0.93 U	0.95 U	11 UJ	0.5 U	9 U	9 U	94 UJ	45 U	5 U	4.8 U	0.94 U	0.94 U	0.97 U	0.94 U	0.91 U	5 U	0.5 U	9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	100 U	50 U	52 U	11 U	10 U	10 U	11 U	220 UJ	11 U	100 U	100 U	1000 UJ	500 U	51 U	53 U	10 U	10 U	11 U	10 U	10 U	100 U	11 U	100 U
Acenaphthene	ug/L	N	400	3	4	2	2	1 U	7	5.9	1.8	1.7	1.7	0.11 U	**570J**	4	6	16	23 J	**550J**	10	6	1.7	1.4	3	2.2	2.2	84	8	10
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.5 U	0.52 U	0.11 U	0.1 U	0.1 U	0.11 U	2 UJ	0.1 U	1 U	1 U	10 UJ	5 U	0.5 U	0.53 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	1 UJ	0.1 U	1 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	40 U	20 U	21 U	1.1 U	1 U	1 U	1.1 U	11 UJ	0.5 U	40 U	40 U	420 UJ	200 U	21 U	21 U	1 U	1 U	1.1 U	1 U	1 U	5 U	0.5 U	41 U
Anthracene	ug/L	N	2000	0.1 U	3	0.7	0.6	1 U	5	2.8	0.56	0.47 J	0.62	0.11 U	470 J	2	5 J	14	10 UJ	530 J	10	5.4	0.48 J	0.1 U	2.1	0.82	0.79	110	6	7
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	20 U	10 U	10 U	1.1 U	1 U	1 U	1.1 U	43 UJ	2 U	20 U	20 U	210 UJ	100 U	10 U	11 U	1 U	1 U	1.1 U	1 U	1 U	20 U	2 U	20 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 U	30 U	15 U	16 U	1.1 U	1 U	1 U	1.1 U	22 UJ	1 U	30 U	30 U	310 UJ	150 U	15 U	16 U	1 U	1 U	1.1 U	1 U	1 U	10 U	1 U	31 U
Benzo(a)anthracene	ug/L	N	0.1	**0.7**	**4**	**0.3J**	**0.7**	1 U	**6**	**4.4**	**0.21J**	**0.19J**	0.1 U	**0.48J**	**390J**	**2**	**4J**	**17**	**27J**	**580J**	**10**	**6.3**	**0.25J**	**0.67**	**2.4**	**0.41J**	**1.2J**	**130**	0.1 U	**12**
Benzo(a)pyrene	ug/L	N	0.1	**0.6**	**4**	**0.5**	**0.6**	1 U	**7**	**3.6**	**0.26J**	**0.15J**	**0.25J**	**0.41J**	**330J**	**1**	1 U	**13**	**31J**	**430J**	**8**	**5.3**	**0.22J**	**0.63**	**2**	**0.31J**	**0.95J**	**130**	**9**	**11**
Benzo(b)fluoranthene	ug/L	N	0.2	**0.4J**	**2**	**0.3J**	**0.4J**	1 U	**4**	**2.2J**	0.16J	0.1 U	0.1 U	**0.27J**	**150J**	**0.7**	**2J**	**6**	**12J**	**200J**	**4**	**2.6J**	0.13J	**0.25J**	**0.92**	0.16J	**0.49J**	**67**	**4**	**6**
Benzo(g,h,i)perylene	ug/L	N	NA	0.6	3	0.5 J	0.5 J	1 U	7	3.9	0.26 J	0.18 J	0.1 U	0.42 J	200J	0.8	3 J	6	18 J	200J	6	3.9	0.18 J	0.43 J	1.4	0.25 J	0.84 J	56	5	8
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 J	0.4 J	0.1 U	0.1 U	1 U	**0.6 J**	0.52 U	0.11 U	0.1 U	0.1 U	0.11 U	**34J**	0.1 U	1 U	**1 J**	10 UJ	**38J**	**0.7 J**	0.53 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**12**	**0.9**	**2J**
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 UJ	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	5 U	50 U	25 U	26 U	2.2 U	2 U	2.1 U	2.1 U	**130J**	2 U	50 U	50 U	520 UJ	250 U	**76**	27 U	2.1 U	2.1 U	**15**	2.1 U	**4.8J**	**53**	**7**	51 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	20 U	10 U	10 U	2.2 U	2 U	2.1 U	2.1 U	43 UJ	2 U	20 U	20 U	210 UJ	100 U	10 U	11 U	2.1 U	2.1 U	2.2 U	2.1 U	2 U	20 U	2 U	20 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	50 U	25 U	26 U	3.2 U	3.1 U	3.1 U	3.2 U	110 UJ	5 U	50 U	50 U	520 UJ	250 U	26 U	27 U	3.1 U	3.1 U	3.2 U	3.1 U	3 U	50 U	5 U	51 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 J	2.6 U	1.1 J	1.8 J	2.6	2.5	11 UJ	4	5 U	7J	52 UJ	25 U	8J	2.7 U	0.94 J	1.4 J	5	3.5	2.3	5 U	0.5 U	5 U
Chrysene	ug/L	N	5	1	**7**	0.8	1	1 U	**11**	**5.4**	0.43 J	0.32 J	0.1 U	0.66	**850J**	4	**9**	**33**	**61J**	**940J**	**20**	**13**	0.59	1.3	4.8	0.8	2.6 J	**210**	**17**	**23**
Di-n-butylphthalate	ug/L	N	700	2 U	3 J	2 U	2 U	20 U	10 U	10 U	2.2 U	2 U	2.1 U	2.1 U	43 UJ	3 J	20 U	20 U	210 UJ	100 U	10 U	11 U	2.1 U	2.1 U	2.2 U	2.1 U	2 U	20 U	2 U	20 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5 U	50 U	25 U	26 U	5.4 U	5.1 U	5.2 U	5.3 U	43 UJ	2 U	50 U	50 U	520 UJ	250 U	26 U	27 U	5.2 U	5.2 U	5.4 U	5.2 U	5 U	20 U	2 U	51 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	**0.8**	0.1 U	0.1 U	1 U	**2J**	0.52 U	0.11 U	0.1 U	0.1 U	0.11J	**66J**	0.3J	1 U	**2J**	10 UJ	**72J**	**2J**	0.53 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**22**	0.1 U	1 U
Dibenzofuran	ug/L	N	NA	0.7 J	2	1 J	1 J	5 U	3 U	2.6 U	1 J	0.95 J	0.52 U	0.89 J	230J	0.5 U	5 U	11 J	52 UJ	240J	7 J	2.7 U	0.93 J	0.52 U	0.54 U	1.1 J	1.3 J	5 U	3	5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	20 U	10 U	10 U	2.2 U	2 U	2.1 U	2.1 U	43 UJ	2 U	20 U	20 U	210 UJ	100 U	10 U	11 U	2.1 U	2.1 U	2.2 U	2.1 U	2 U	20 U	2 U	20 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	20 U	10 U	10 U	2.2 U	2 U	2.1 U	2.1 U	43 UJ	2 U	20 U	20 U	210 UJ	100 U	10 U	11 U	2.1 U	2.1 UJ	2.2 U	2.1 U	2 U	20 U	2 U	20 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	30 U	15 U	16 U	0.54 U	0.51 U	0.52 U	0.53 U	86 J	0.5 U	30 U	30 U	310 UJ	150 U	15 U	16 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	31 U
Fluoranthene	ug/L	N	300	0.6	3	0.5 J	0.6	1 U	7	3.8	0.37 J	0.29 J	0.48 J	0.11 U	300 J	1	3 J	10	23 J	**390J**	7	3.9	0.26 J	0.1 U	1.7	0.37 J	0.84	67	6	7
Fluorene	ug/L	N	300	0.5	8	3	3	1 U	14	7.5	3.1	2.7	2.4	2.2	**1000J**	6	12	36	45 J	**1100J**	22	13	2.8	1.5	5.5	3.3	3.8	210	0.1 U	14
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.5 U	0.52 U	0.12 U	0.11 U	0.11 U	0.12 U	2 UJ	0.1 U	1 U	1 U	10 UJ	5 U	0.5 U	0.53 U	0.11 U	0.12 U	0.12 U	0.12 U	0.11 U	1 U	0.1 U	1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	50 U	25 U	26 U	5.4 U	5.1 U	5.2 U	5.3 U	110 UJ	5 U	50 U	50 U	520 UJ	250 U	26 U	27 U	5.2 U	5.2 U	5.4 U	5.2 U	5 U	50 UJ	5 U	51 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	10 U	5 U	5.2 U	0.54 U	0.51 U	0.52 U	0.53 U	22 UJ	1 U	10 U	10 U	100 UJ	50 U	5 U	5.3 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	10 U	1 U	10 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	**0.6**	0.1 U	0.1 U	1 U	**2J**	0.52 U	0.12 U	0.11 U	0.11 U	0.12 U	**42J**	0.2J	1 U	1 U	10 UJ	**45J**	0.5 U	0.53 U	0.11 U	0.12 U	0.12 U	0.12 U	**0.34J**	**15**	**1**	**2J**
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	7 U	4 U	3.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	7 U	7 U	73 UJ	35 U	4 U	3.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	7 U	**18**	3.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	7 U	7 U	73 UJ	35 U	4 U	3.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	7 U
Naphthalene	ug/L	N	300	2	0.1 U	0.1 U	0.1 U	1 U	0.5 U	0.52 U	1.4	0.1 U	0.1 U	1.7	**3800J**	45	4 J	130	99 J	**2100J**	65	100 J	20	0.1 U	5.8	2.4	0.1 U	**340**	6	11
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	0.52 U	0.54 U	0.52 U	0.5 U	5 U	0.5 U	5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	8.3 U	1.1 U	1 U	1 U	1.1 U	11 UJ	0.5 U	5 U	5 U	52 UJ	25 U	3 U	8.5 U	1 U	1 U	1.1 U	1 U	1 U	5 U	0.5 U	5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	10 U	5 U	5.2 U	1.1 U	1 U	1 U	1.1 U	22 UJ	1 U	10 U	10 U	100 UJ	50 U	5 U	5.3 U	1 U	1 U	1.1 U	1 U	1 U	10 U	1 U	10 U
Phenanthrene	ug/L	N	NA	0.1 U	9	2	3	1 U	13	6.8	1.2	0.83	1.2	1.7	3500J	14	27	100	180J	3500J	61	30	5	0.12 U	13	3.6	8	630	43	22
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	5 U	3 U	2.6 U	0.54 U	0.51 U	0.52 U	0.53 U	11 UJ	0.5 U	9 J	5 U	52 UJ	25 U	3 U	2.7 U	0.52 U	2.3	0.54 U	2.9	0.5 U	5 U	7	5 U
Pyrene	ug/L	N	200	2	10	2	2	1 U	16	9.6	0.84	0.74	0.95	1.4	**1200J**	5	13	45	83 J	**1300J**	27	17	1.1	2	6.2	1.4	3.1	**310**	19	26
Total TIC SVOCS	ug/L	N	NA	200 J	320 J	270 J	460 J	1300 J	-	-	-	-	-	-	-	990 J	1600 J	3500 J	-	44000 J	-	-	-	-	-	-	-	-	0 U	1900 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR	MW-0072
			Field Sample ID	M063A5X	M063A6X	M063A7X	M063A8X	M063B1X	M063B2X	M063B3	M063B2	M063B5	M063B6	M065B8X	M065B9X	M065C1X	M065C2X	M065C3X	M065C4X	M065C5X	M065C7X	D032220221A	M065C9	M071RRB7X	M071RRB8X	M071RRB9	M071RRC1	M071RRC2	M072B6X
			Sample Date	08/31/2018	11/15/2018	02/25/2019	09/05/2019	10/13/2020	02/17/2021	05/26/2021	09/02/2021	11/19/2021	03/01/2022	11/21/2017	02/12/2018	05/17/2018	08/30/2018	11/19/2018	02/26/2019	09/03/2019	10/06/2020	03/22/2022	03/22/2022	11/23/2020	02/22/2021	05/06/2021	08/04/2021	11/10/2021	08/27/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	51 U	26 U	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	51 U	26 U	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	51 U	26 U	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	300 U	150 U	30 U	8 J	30 U	3.1 U	3 U	3.1 U	3.2 U	3 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2.8 U	3.3 U	3.2 U	5.6 UJ	3.1 U	3.9 J	3.1 U	3 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	1400 U	720 U	140 U	15 U	140 U	14 U	14 U	14 U	15 U	14 U	10 U	10 U	14 U	14 U	14 U	14 U	14 U	13 U	15 U	15 U	15 U	14 U	14 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	100 U	51 UJ	10 U	1 U	10 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.95 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	40 U	21 UJ	4 U	0.4 U	4.1 U	0.41 U	0.4 U	0.41 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.38 U	0.44 U	0.43 U	0.43 U	0.41 U	0.41 U	0.41 U	0.4 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	51 U	26 U	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
2-Methylnaphthalene	ug/L	N	30	**4400J**	**930J**	**110**	**67**	**100 J**	**48 J**	0.1 U	**54 J**	**57 J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.11 U	0.11 U	5.6	8.2	2.5	7.5	2.3	2.3
2-Methylphenol (o-Cresol)	ug/L	N	NA	51 U	26 U	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	9.9 UJ	0.51 U	3.5	1.7 J	0.51 U	0.52 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	200 U	100 UJ	20 U	2 U	20 U	1 U	1 U	1 U	1.1 U	1 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	1.9 U	1.1 U	1.1 U	2.2 U	1 U	1 U	1 U	1 U	2.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	300 U	150 U	30 U	3 U	30 U	1 U	1 U	1 UJ	1.1 U	1 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2.8 U	1.1 U	1.1 U	3.2 U	1 U	1 U	1 U	1 U	3.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	300 U	150 UJ	30 U	3 U	30 U	4.1 U	4 U	4.1 U	4.3 U	4 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	2.8 U	4.4 U	4.3 U	3.2 U	4.1 U	4.1 U	4.1 U	4 U	3.1 U
3-Nitroaniline	ug/L	N	NA	300 U	150 UJ	30 U	3 U	30 U	2 U	2 U	2 U	2.2 U	2 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2.8 U	2.2 U	2.1 U	3.2 U	2.1 U	2 U	2.1 U	2 U	3.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	810 U	410 U	81 U	9 U	81 U	8.2 U	8.1 U	8.2 U	8.6 U	8.1 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	7.6 U	8.7 U	8.6 U	8.6 U	8.2 U	8.2 U	8.3 U	8.1 U	8.3 U
4-Bromophenylphenylether	ug/L	N	NA	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
4-Chloroaniline	ug/L	N	30	400 U	210 UJ	40 U	4 U	41 U	4.1 U	4 U	4.1 U	4.3 U	4 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	3.8 U	4.4 U	4.3 U	4.3 U	4.1 U	4.1 U	4.1 U	4 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	6.1 UJ	1.4 J	1 J	0.52 U	0.51 U	0.52 U
4-Nitroaniline	ug/L	N	NA	91 U	46 UJ	9 U	1 U	9.1 U	0.92 U	0.91 U	0.92 U	0.97 U	0.91 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.85 U	0.98 U	0.96 U	0.97 U	0.93 U	0.92 U	0.93 U	0.91 U	0.93 U
4-Nitrophenol	ug/L	N	NA	1000 U	510 U	100 U	11 U	100 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9.5 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	**700J**	340 J	23	5	10	1.8	1.7	0.1 U	0.11 U	2.2	0.2 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.4 J	0.23 J	0.11 U	0.11 U	0.11 U	0.34 J	0.1 U	0.1 U	0.34 J	4
Acenaphthylene	ug/L	N	NA	10 U	5 UJ	1 U	0.1 U	1 U	0.1 U	0.1 U	0.47 J	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	400 U	210 UJ	40 U	4 U	41 U	1 U	1 U	1 U	1.1 U	1 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	3.8 U	1.1 U	1.1 U	4.3 U	1 U	1 U	1 U	1 U	4.1 U
Anthracene	ug/L	N	2000	640 J	440 J	24	3	8.6	0.77	0.1 U	0.24 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.095 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.72
Atrazine	ug/L	N	3	200 U	100 UJ	20 U	2 U	20 U	1 U	1 U	1 U	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.9 U	1.1 U	1.1 U	2.2 U	1 U	1 U	1 U	1 U	2.1 U
Benzaldehyde	ug/L	N	NA	300 U	150 UJ	30 U	3 U	30 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	2.8 U	1.1 U	1.1 U	3.2 U	1 U	1 U	1 U	1 U	3.1 U
Benzo(a)anthracene	ug/L	N	0.1	**980J**	**500J**	**39**	**5**	**15**	**0.26J**	**2**	**0.33J**	**0.69**	**0.66**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.11J**	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**1000J**	**530J**	**30**	**5**	**15**	**0.26J**	**1.9**	**0.35J**	**0.86**	**0.72**	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	**0.5J**	0.095 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	**0.29J**
Benzo(b)fluoranthene	ug/L	N	0.2	**500J**	**230J**	**14**	**2**	**6.3**	0.1 U	0.92	0.1 U	**0.41J**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	370J	240J	1 U	3	11	0.17 J	1.6	0.32 J	0.57	0.4 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 J	0.3 J	0.095 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	**98J**	**52J**	**4J**	0.5 J	1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 UJ	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	51 U	26 UJ	5 UJ	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**2100J**	**1200J**	50 U	6 U	51 U	2 U	**5.7J**	2 U	2.2 U	2 U	2 U	**4J**	5 U	5 U	5 U	5 U	5 U	4.7 U	2.2 U	2.1 U	5.4 U	2.1 U	2 U	2.1 U	2 U	5.2 U
Butylbenzylphthalate	ug/L	N	100	200 U	100 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.9 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2 U	2.1 U
Caprolactam	ug/L	N	4000	510 U	260 UJ	50 U	6 U	51 U	3.1 U	3 U	3.1 U	3.2 U	3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	4.7 U	3.3 U	3.2 U	5.4 U	3.1 U	3.1 U	3.1 U	3 U	5.2 U
Carbazole	ug/L	N	NA	51 U	26 UJ	14J	9	5.1 U	3.7	4.8	5.8	0.54 U	3.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
Chrysene	ug/L	N	5	**2000J**	**1000J**	**63**	**9**	**26**	0.57	3.5	0.56	0.95	1.3	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.14 J	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.53
Di-n-butylphthalate	ug/L	N	700	**1300J**	360 J	20 U	2 U	20 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.9 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	510 U	260 UJ	50 U	6 U	51 U	5.1 U	5.1 U	5.1 U	5.4 U	5 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	4.7 U	5.5 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	**130J**	**97J**	1 U	**1**	1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	410J	26 UJ	12 J	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	1.8 J
Diethylphthalate	ug/L	N	6000	200 U	100 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2.8 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.9 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	200 U	100 UJ	20 U	2 U	20 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.9 U	2.2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	300 U	150 UJ	30 U	3 U	30 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	2.8 U	0.55 U	0.53 U	3.2 U	0.51 U	0.51 U	0.52 U	0.51 U	3.1 U
Fluoranthene	ug/L	N	300	**630J**	**360J**	22	3	7.8	0.28 J	0.98	0.1 U	0.11 U	0.52	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.095 U	0.11 U	0.11 U	0.11 U	0.15 J	0.1 U	0.15 J	0.1 U	0.62
Fluorene	ug/L	N	300	**1300J**	**740J**	50	7	22	3.2	3.5	0.12 U	0.13 U	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.13 U	0.13 U	0.11 U	0.55	0.12 U	0.54	0.33 J	3.7
Hexachlorobenzene	ug/L	N	0.02	10 U	5 UJ	1 U	0.1 U	1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
Hexachlorocyclopentadiene	ug/L	N	40	510 U	260 UJ	50 U	6 U	51 U	5.1 U	5.1 U	5.1 U	5.4 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	4.7 U	5.5 U	5.3 U	5.4 U	5.1 U	5.1 U	5.2 U	5.1 U	5.2 U
Hexachloroethane	ug/L	N	7	100 U	51 UJ	10 U	1 U	10 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.95 U	0.55 U	0.53 U	1.1 U	0.51 U	0.51 U	0.52 U	0.51 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**160J**	**120J**	1 U	**1**	**3.6J**	0.11 U	0.11 U	0.11 U	0.12 U	0.13J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U
Isophorone	ug/L	N	40	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	71 U	36 UJ	7 U	0.8 U	7.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.66 U	0.55 U	0.53 U	0.76 U	0.51 U	0.51 U	0.52 U	0.51 U	0.72 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	71 U	36 UJ	**73**	0.8 U	7.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.66 U	0.55 U	0.53 U	0.76 U	0.51 U	0.51 U	0.52 U	0.51 U	0.72 U
Naphthalene	ug/L	N	300	**840J**	5 UJ	31	45	29	3.6	4.8	4.8	0.11 U	2.2	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.095 U	0.11 U	0.11 U	6.2	9.3	5	7.3	9	0.1 U
Nitrobenzene	ug/L	N	6	51 U	26 UJ	5 U	0.6 U	5.1 U	0.51 U	0.51 U	0.51 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	0.51 U	0.51 U	0.52 U	0.51 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	51 U	26 U	5 U	0.6 U	16 U	1 U	1 U	1 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.5 U	1.1 U	1.1 U	1.7 U	1 U	1 U	1 U	1 U	1.7 U
Pentachlorophenol	ug/L	N	0.3	100 U	51 U	10 U	1 U	10 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.95 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	3800J	2100J	160	24	65	5.5	7.4	2	0.12 U	3.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.12 U	0.12 U	0.11 U	0.64	0.11 U	0.35 J	0.27 J	2.1
Phenol	ug/L	N	2000	51 U	26 U	5 U	0.6 U	5.1 U	0.51 U	0.51 U	4.7	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.47 U	0.55 U	0.53 U	0.54 U	1.6 J	0.51 U	0.52 U	0.51 U	0.52 U
Pyrene	ug/L	N	200	**2200J**	**1100J**	70	10	27	0.78	4.3	0.78	1.9	1.9	0.2 J	0.2 J	0.1 U	0.2 J	0.1 U	0.3 J	0.5 J	0.19 J	0.11 U	0.11 U	0.11 U	0.3 J	0.1 U	0.1 U	0.1 U	1.2
Total TIC SVOCS	ug/L	N	NA	43000 J	-	7100 J	-	-	-	-	-	-	-	-	12 J	4 J	85 J	-	32 J	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0072	MW-5	MW-5	MW-13	MW-13	MW-13	MW-13	MW-20	MW-20	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112	MW-112
			Field Sample ID	M072B7	M005C6	M005C7	M013C2	M013C3	M013C4	M013C5	M020D7	M020D8	M020D9	D0204221	M020E1	M021B5X	M021B6X	M021D5	M021D6	M021D7	M021D8	M112B5X	M112B6X	M112B7X	M112B8X	M112B9X	M112C4X	M112C8X	M112D3X	M112D4X
			Sample Date	04/23/2021	05/27/2021	12/22/2021	05/28/2021	08/27/2021	12/13/2021	02/11/2022	05/19/2021	09/30/2021	10/27/2021	02/04/2022	02/04/2022	03/16/2012	03/01/2013	06/30/2021	09/29/2021	12/27/2021	02/17/2022	03/22/2012	04/04/2013	09/04/2014	09/03/2015	02/23/2016	01/26/2017	01/30/2018	01/28/2019	01/28/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.84 J	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	1.1 J	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	3 U	3.2 U	3.1 U	3 U	3 U	3.1 U	3.2 U	3.3 U	3.1 U	3 U	3.2 U	0.5 U	0.5 U	3 U	3.2 U	3 U	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	15 U	15 U	14 U	14 U	15 U	15 U	16 U	14 U	14 U	15 U	10 U	11 U	14 U	15 U	14 U	14 U	11 U	10 U	10 U	10 U	10 U	10 UJ	10 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.41 U	0.42 U	0.42 U	0.41 U	0.4 U	0.42 U	0.42 U	0.44 U	0.41 U	0.4 U	0.43 U	0.4 U	0.4 U	0.41 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.22 J	0.21 J	0.31 J	0.23 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	1 J	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 U	4.1 U	4.2 U	4.2 U	4.1 U	4 U	4.2 U	4.2 U	4.4 U	4.1 U	4 U	4.3 U	2 U	2 U	4.1 U	4.3 U	4 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	2.1 U	2 U	2.1 U	2.1 U	2 U	2 UJ	2.1 U	2.1 U	2.2 U	2 U	2 U	2.1 U	0.5 U	0.5 U	2 U	2.1 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.5 U	8.1 U	8.5 U	8.3 U	8.1 U	8.1 U	8.3 U	8.5 U	8.9 U	8.2 U	8 U	8.5 U	5 U	5 U	8.1 U	8.5 U	8 U	8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 U	4.1 U	4.2 U	4.2 U	4.1 U	4 UJ	4.2 U	4.2 U	4.4 U	4.1 U	4 U	4.3 U	0.5 U	0.5 U	4.1 U	4.3 U	4 U	4 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.95 U	0.91 U	0.95 U	0.94 U	0.91 U	0.91 U	0.94 U	0.95 U	1 U	0.92 U	0.9 U	0.96 U	0.5 U	0.5 U	0.91 U	0.96 U	0.9 U	0.9 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	3.2	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.3 J	0.3 J	0.36 J	0.33 J	0.38 J	0.42 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	1.2	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.2 J	0.1 J	0.13 J	0.11 J	0.16 J	0.18 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	2 U	2 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	**1**	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**0.82**	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	**0.56**	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.69	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**4J**	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.2 U	3 U	3.6 J	3.1 U	3 U	3 U	3.1 U	3.2 U	3.3 U	3.1 U	3 U	3.2 U	5 U	5 U	3 U	3.2 U	3 U	9.6	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	2	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.3 U	5.1 U	5.3 U	5.2 U	5.1 U	5 U	5.2 U	5.3 U	5.6 U	5.1 U	5 U	5.3 U	2 U	2 U	5.1 U	5.3 U	5 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.57 J	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 UJ	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2.2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	1.8	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.12 J	0.11 U	0.13 J	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	2.9	0.12 U	0.13 U	0.13 J	0.12 U	0.12 U	0.12 U	0.13 U	0.13 U	0.12 U	0.12 U	0.13 U	0.5	0.6	0.49 J	0.51 J	0.58	0.59	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.53 U	0.51 U	0.53 U	0.52 U	0.51 UJ	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 U	5.1 U	5.3 U	5.2 U	5.1 U	5 U	5.2 U	5.3 U	5.6 U	5.1 U	5 U	5.3 U	5 U	5 U	5.1 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	1 U	1 U	0.51 U	0.53 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.2 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 U	1.1 U	1 U	1 UJ	1.5 J	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1.1 U	1 U	1 U	**8.1**	1 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	3	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.12 U	0.2 J	0.2 J	0.34 J	0.32 J	0.43 J	0.31 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.53 U	0.51 U	0.53 U	0.52 U	0.51 U	0.5 U	0.52 U	0.53 U	0.56 U	0.51 U	0.5 U	0.53 U	0.5 U	0.5 U	0.51 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	3.4	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.2 J	0.2 J	0.2 J	0.17 J	0.3 J	0.28 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-112	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114
			Field Sample ID	M112D5X	M114B6X	M114B7	M114B7X	M114B8	M114B8X	M114B9	M114C1	M114C2	M114C3	M114C4	M114C5	M114C6	M114C7	M114C8	M114C9	M114D1	M114D2	M114D3	M114D4	M114D5	M114D6	M114D7	M114D8	M114D9	M114E1	M114E2
			Sample Date	01/29/2021	03/16/2012	05/14/2012	05/15/2012	07/24/2012	07/25/2012	11/19/2012	02/19/2013	06/10/2013	09/03/2013	11/04/2013	03/05/2014	05/19/2014	08/04/2014	10/22/2014	03/24/2015	05/27/2015	09/14/2015	11/13/2015	01/05/2016	04/06/2016	07/18/2016	10/11/2016	01/11/2017	04/18/2017	07/17/2017	10/09/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2,4-Dinitrophenol	ug/L	N	40	15 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	11 U	11 U	12 UJ	10 UJ	12 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.43 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	4 J
3-Nitroaniline	ug/L	N	NA	2.2 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.3 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.97 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	11 U	11 U	12 U	10 U	12 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.4J**
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.5J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.5J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.5 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.5 J
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 J	3 UJ
Butylbenzylphthalate	ug/L	N	100	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.2 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	11 J	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.5 J
Di-n-butylphthalate	ug/L	N	700	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.5**
Dibenzofuran	ug/L	N	NA	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.6 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.4 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 UJ	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5.4 U	5 U	5 U	5 U	5 UJ
Hexachloroethane	ug/L	N	7	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.6**
Isophorone	ug/L	N	40	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.11 U	0.1 J	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.54 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2 J
Total TIC SVOCS	ug/L	N	NA	-	4 J	21 J	100 J	22 J	23 J	0	0	9 J	42 J	0 U	0 U	5 J	52 J	46 J	0 U	6 J	5 J	12 J	5 J	18 J	30 J	4 J	14 J	18 J	5 J	12 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115
			Field Sample ID	M114E4	M114E5	M114E6	M114E7	M114E8	M114E9	M114F1	M114F2	M114F3	M114F3	M114F4	M114F5	M114F6	D0407211	M114F7	M114F9	M114G1	M115B1X	M115B2	M115B2X	M115B3	M115B3X	M115B4	M115B5	M115B6	M115B7	M115B8
			Sample Date	04/09/2018	07/12/2018	10/18/2018	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/08/2020	04/08/2020	04/08/2020	07/14/2020	10/13/2020	01/05/2021	04/07/2021	04/07/2021	10/06/2021	01/20/2022	03/16/2012	05/14/2012	05/15/2012	07/24/2012	07/25/2012	11/19/2012	02/19/2013	06/12/2013	09/03/2013	11/04/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	3 U	3.3 U	3.3 U	3.2 U	3.4 U	3.1 U	3.2 U	3.4 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	11 U	14 U	16 U	14 U	14 U	14 U	14 U	14 U	11 UJ	14 U	15 U	15 U	15 U	16 U	14 U	15 U	16 U	10 U	11 U	10 U	12 U	10 U	10 U	10 U	11 U	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.44 U	0.42 U	0.45 U	0.41 U	0.43 U	0.46 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	0.6 U	2 U	2.2 U	2.2 U	2.1 U	1.1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	3 U	3.3 U	3.3 U	3.2 U	1.1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	2 U	3 U	3.3 U	3.3 U	3.2 U	4.5 U	4.1 U	4.3 U	4.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	3 U	3.3 U	3.3 U	3.2 U	2.2 U	2 U	2.1 U	2.3 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	9 U	8 U	8 U	8 U	8 U	8 U	6 U	8 U	8.7 U	8.8 U	8.5 U	9 U	8.2 U	8.6 U	9.1 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	6 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	5 U	4 U	4 U	4 U	4 U	4 U	2 U	4 U	4.4 U	4.4 U	4.2 U	4.5 U	4.1 U	4.3 U	4.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.6 U	0.9 U	0.98 U	0.99 U	0.96 U	1 U	0.92 U	0.96 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	11 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	10 U	12 U	10 U	10 U	10 U	11 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	5 U	4 U	4 U	4 U	4 U	4 U	0.6 U	4 U	4.4 U	4.4 U	4.2 U	1.1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	1.1 U	1 U	1.1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	3 U	3.3 U	3.3 U	3.2 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	2 U	5 U	5.5 U	5.5 U	5.3 U	2.2 U	2 U	2.1 UJ	**4.5J**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**45**
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2 U	2.1 UJ	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 UJ	5 U	5.5 U	5.5 U	5.3 U	3.4 U	3.1 U	3.2 U	3.4 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	6 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2 U	2.1 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	2 U	5 U	5.5 U	5.5 U	5.3 U	5.6 U	5.1 U	5.4 U	5.7 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2 U	2.1 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2.1 U	2.2 U	2 U	2.1 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	3 U	3.3 U	3.3 U	3.2 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.35 J	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.13 U	0.12 U	0.13 U	0.14 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.5 UJ	5.5 U	5.3 U	5.6 U	5.1 U	5.4 U	5.7 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	6 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	0.56 U	0.51 U	0.54 U	0.57 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.76 U	0.77 U	0.74 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.76 U	0.77 U	0.74 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Naphthalene	ug/L	N	300	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	1.7 U	1.8 U	1.7 U	1.1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.12 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.55 U	0.55 U	0.53 U	0.56 U	0.51 U	0.54 U	0.57 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.4 J	0.11 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	6 J	0 U	5 J	26 J	17 J	46 J	0 U	5 J	10 J	15 J	0 U	-	0 U	0 U	0 U	-	0 U	99 J	32 J	84 J	11 J	13 J	27 J	0	0 U	6 J	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115
			Field Sample ID	M115B9	M115C1	M115C2	M115C3	M115C4	M115C5	M115C6	M115C7	M115C8	M115C9	M115D1	M115D2	M115D3	M115D4	M115D5	M115D6	M115D7	M115D8	M115D9	M115E1	M115E2	M115E3	M115E4	M115E5	M115E6	M115E7	M115E8
			Sample Date	03/05/2014	05/19/2014	08/04/2014	10/22/2014	03/02/2015	05/27/2015	09/14/2015	11/13/2015	01/05/2016	04/06/2016	07/18/2016	10/11/2016	01/11/2017	04/18/2017	07/17/2017	10/09/2017	01/23/2018	04/09/2018	07/12/2018	10/18/2018	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/09/2020	04/08/2020	07/14/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	12 U	10 U	11 U	11 UJ	11 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 UJ	10 U	15 U	14 U	14 U	15 U	14 U	15 U	15 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	4 J	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5 U	5 U	5 U	5 U	9 U	8 U	8 U	9 U	8 U	9 U	8 U	8 U	8 U	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
4-Chloroaniline	ug/L	N	30	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	1 U	0.9 U	1 U	0.9 U	0.9 U	0.9 U	0.91 U
4-Nitrophenol	ug/L	N	NA	12 U	10 U	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.2J**	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.3J**	**0.5**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.3J**	**0.8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.3 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.4 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	3 UJ	2 U	2 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.3 J	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.4J**	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 UJ	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.5J**	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.71 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.71 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5**	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.9	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	0 U	0 U	11 J	40 J	0 U	15 J	6 J	12 J	5 J	18 J	35 J	0 U	51 J	23 J	5 J	18 J	17 J	9 J	5 J	12 J	6 J	9 J	150 J	0 U	35 J	18 J	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-118	MW-118	MW-118	MW-118	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	M115E9	M115F1	M115F2	M115F3	M115F4	M115F5	M117B5X	D0327131	M117B6X	M117B7X	M117B8X	M117B9X	M117C1X	M118E2X	M118E3	M118E4	M118E5	M120B6X	M120B7	M120B7X	M120B8	M120B8X	M120C2	M120C3	M120C4	M120C5	M120C6
			Sample Date	10/13/2020	01/05/2021	04/07/2021	07/02/2021	10/06/2021	01/20/2022	03/07/2012	03/26/2013	03/27/2013	05/28/2014	08/07/2015	02/18/2016	02/07/2017	02/23/2021	05/04/2021	08/04/2021	11/10/2021	03/14/2012	05/29/2012	05/30/2012	07/31/2012	08/01/2012	09/06/2013	11/11/2013	03/06/2014	05/21/2014	08/06/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3.1 U	3.2 U	3.3 U	3.3 U	3 U	**10000**	**7300J**	**14000J**	**24000**	**12000**	**6800**	20	3.5 U	3.4 U	3.1 U	3 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	15 U	15 U	16 U	14 U	100 U	110 U	110 U	110 U	10 U	11 U	10 U	16 U	16 U	14 U	14 U	10 UJ	10 UJ	11 UJ	10 UJ	10 U	11 UJ	12 U	11 UJ	11 U	11 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	10 U	11 U	11 U	11 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.41 U	0.42 U	0.44 U	0.45 U	0.4 U	4 U	4 U	4 U	4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.46 U	0.41 U	0.4 U	0.4 UJ	0.4 UJ	0.5 UJ	0.4 UJ	0.4 U	0.4 UJ	0.5 U	0.5 UJ	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	27	18 J	**31J**	**51**	19	14	2	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	1300	1000J	1900J	1000	130	580	2	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.1 U	2 U	1.1 U	1.1 U	1.1 U	1 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	1.2 U	1.1 U	1 U	1 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3.1 U	3.1 U	1.1 U	1.1 U	1.1 U	1 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	1.2 U	1.1 U	1 U	1 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	3.1 U	3.1 U	4.2 U	4.4 U	4.5 U	4 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	4.7 U	4.6 U	4.1 U	4 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3.1 U	3.1 U	2.1 U	2.2 U	2.2 U	2 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	2.4 U	2.3 U	2 U	2 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.4 U	8.2 U	8.4 U	8.8 U	8.9 U	8 U	51 U	55 U	53 U	53 U	5 U	5 U	5 U	9.4 U	9.1 U	8.2 U	8 U	5 UJ	5 UJ	6 UJ	5 UJ	5 U	6 UJ	6 U	6 UJ	6 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 U	4.1 U	4.2 U	4.4 U	4.5 U	4 U	5 U	5 U	5 U	5 U	2 U	2 U	2 U	4.7 U	4.6 U	4.1 U	4 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	1200	1000J	1900J	490	0.5 U	460	1	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.94 U	0.92 U	0.95 U	0.99 U	1 U	0.9 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	1.1 U	1 U	0.92 U	0.9 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	11 U	11 U	10 U	100 U	110 U	110 U	110 U	10 U	11 U	10 U	12 U	11 U	10 U	10 U	10 UJ	10 UJ	11 UJ	10 UJ	10 U	11 UJ	12 U	11 UJ	11 U	11 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.66	0.5 J	0.5 J	0.24 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4.2 U	4.1 U	1.1 U	1.1 U	1.1 U	1 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	1.2 U	1.1 U	1 U	1 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	2.1 U	2 U	1.1 U	1.1 U	1.1 U	1 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	1.2 U	1.1 U	1 U	1 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	3.1 U	3.1 U	1.1 U	1.1 U	1.1 U	1 U	33 J	11 U	11 U	11 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.2 U	5.1 U	2.1 U	2.2 U	2.2 UJ	2 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	2.4 U	2.3 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2.1 U	2.2 U	2.2 UJ	2 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	2.4 U	2.3 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	5.2 U	5.1 U	3.2 U	3.3 U	3.3 U	3 U	51 U	55 U	53 U	53 U	5 U	5 U	5 U	3.5 U	3.4 U	3.1 U	3 U	5 UJ	5 UJ	6 UJ	5 UJ	5 U	6 UJ	6 U	6 UJ	6 U	5 U
Carbazole	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2.1 U	2.2 U	2.2 U	2 U	20 U	22 UJ	21 UJ	21 U	2 U	2 U	2 U	2.4 U	2.3 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.2 U	5.1 U	5.3 U	5.5 U	5.6 U	5 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	5.9 U	5.7 U	5.1 U	5 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2.1 U	2.2 U	2.2 U	2 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	2.4 U	2.3 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	2.1 U	2.2 U	2.2 U	2 U	20 U	22 U	21 U	21 U	2 U	2 U	2 U	2.4 U	2.3 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.1 U	3.1 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.13 U	0.13 U	0.13 U	0.12 U	1 U	1 U	1 U	1 U	0.1 U	0.5 J	0.1 U	0.14 U	0.14 U	0.12 U	0.12 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 U	5.1 U	5.3 U	5.5 U	5.6 U	5 U	51 U	55 U	53 U	53 U	5 U	5 U	5 U	5.9 U	5.7 U	5.1 U	5 U	5 UJ	5 UJ	6 UJ	5 UJ	5 U	6 UJ	6 U	6 UJ	6 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	0.53 U	0.55 U	0.56 U	0.5 U	10 U	11 U	11 U	11 U	1 U	1 U	1 U	0.59 U	0.57 U	0.51 U	0.5 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.13 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.73 U	0.72 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.73 U	0.72 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	89	57 J	99 J	1 U	0.1 U	34	4	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.5 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.7 U	1.6 U	1.1 U	1.1 U	1.1 U	1 U	5 U	5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	1.2 U	1.1 U	1 U	1 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	10 U	11 U	11 U	11 U	1 U	1 U	1 U	1.2 U	1.1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.11 U	1 U	1 U	1 U	1 U	0.6	0.4 J	0.1 U	0.13 U	0.13 U	0.11 U	0.11 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.52 U	0.51 U	0.53 U	0.55 U	0.56 U	0.5 U	300	290 J	520 J	100	9	130	1	0.59 U	0.57 U	0.51 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.6 UJ	0.6 U	0.6 UJ	0.6 U	0.5 UJ
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	34 J	21 J	22 J	56 J	85 J	64 J	89 J	61 J	68 J	68 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	M120C7	M120C8	M120C9	M120D1	M120D2	M120D3	M120D4	M120D5	M120D6	M120D7	M120D8	M120E1	M120E2	M120E3	M120E4	M120E5	M120E6	M120E7	M120E8	M120E9	M120F1	M120F3	M120F4	M120F5	M120F6	M120F7	M120F8
			Sample Date	10/23/2014	03/23/2015	06/01/2015	09/15/2015	11/16/2015	01/13/2016	04/08/2016	07/25/2016	10/21/2016	01/20/2017	04/18/2017	08/31/2017	10/12/2017	01/22/2018	04/10/2018	07/16/2018	10/30/2018	01/03/2019	04/03/2019	07/01/2019	09/25/2019	01/03/2020	04/07/2020	07/14/2020	10/12/2020	01/08/2021	04/06/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 U	3.4 UJ	3.2 UJ	3.1 UJ	3.4 U
2,4-Dinitrophenol	ug/L	N	40	10 UJ	11 U	11 UJ	10 UJ	11 U	11 UJ	10 UJ	10 U	10 UJ	10 UJ	10 UJ	10 U	10 U	10 UJ	10 U	14 U	15 U	14 UJ	14 U	14 UJ	15 UJ	15 U	15 U	16 UJ	15 UJ	15 UJ	16 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1.0 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.40 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.45 U	0.43 U	0.42 UJ	0.45 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.1 U	2.1 UJ	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 UJ	3.4 UJ	3.2 UJ	3.1 UJ	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.4 U	3.2 U	3.1 UJ	4.5 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.4 U	3.2 U	3.1 UJ	2.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	6 U	6 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5.1 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	8 U	9 U	8 UJ	8 U	8 UJ	8 UJ	8 U	9 U	9.1 UJ	8.5 UJ	8.4 UJ	8.9 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
4-Chloroaniline	ug/L	N	30	0.5 U	0.6 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 UJ	4 UJ	4 U	4 U	4 U	4.5 U	4.3 U	4.2 UJ	4.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.9 U	0.9 UJ	0.9 UJ	0.9 U	0.9 U	1 U	1 U	0.96 U	0.94 UJ	1 U
4-Nitrophenol	ug/L	N	NA	10 UJ	11 U	11 UJ	10 UJ	11 U	11 UJ	10 UJ	10 U	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 UJ	10 UJ	11 UJ	10 U	11 U	11 UJ	11 UJ	10 UJ	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Acetophenone	ug/L	N	700	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 UJ	4 UJ	4 U	4 U	4 U	4.5 U	4.3 U	4.2 UJ	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.1 U	2.1 UJ	1.1 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1.0 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.4 U	3.2 U	3.1 UJ	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5.7 U	5.3 U	5.2 UJ	2.2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.1 U	2.1 UJ	2.2 U
Caprolactam	ug/L	N	4000	5 U	6 U	6 U	5 UJ	5 U	5 U	5 UJ	5 U	5.1 UJ	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5.7 U	5.3 U	5.2 UJ	3.4 U
Carbazole	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.1 U	2.1 UJ	2.2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5.7 U	5.3 U	5.2 UJ	5.6 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.1 U	2.1 UJ	2.2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2.0 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.1 U	2.1 UJ	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.4 U	3.2 U	3.1 UJ	0.56 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.13 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	6 U	5 UJ	5 U	5 U	5 UJ	5 U	5.1 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5.7 UJ	5.3 U	5.2 UJ	5.6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1.0 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	0.56 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 U	0.8 U	0.8 U	0.75 U	0.73 UJ	0.56 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.7 UJ	0.7 U	0.7 U	0.8 U	0.8 U	0.75 U	0.73 UJ	0.56 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.52 UJ	0.56 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	2 U	1.8 UJ	1.7 UJ	1.7 UJ	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1.0 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1.1 UJ	1.1 UJ	1 UJ	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.12 U
Phenol	ug/L	N	2000	0.5 UJ	0.6 U	0.6 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.57 UJ	0.53 UJ	0.52 UJ	0.56 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U
Total TIC SVOCS	ug/L	N	NA	64 J	43 J	72 J	92 J	92 J	100 J	0 UJ	30 J	0 UJ	0 UJ	6 J	510 J	23 J	56 J	84 J	9 J	23 J	91 J	24 J	-	110 J	32 J	0 U	-	-	0 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-120	MW-120	MW-120	MW-121	MW-121	MW-121	MW-121R	MW-121R	MW-121R	MW-121R	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-123	MW-123	MW-123	MW-123	MW-123	MW-123	MW-123	MW-123	MW-123R	MW-123R	MW-123R
			Field Sample ID	M120F9	M120G1	M120G2	M121B6X	M121B7X	M121B8X	M121RD8	M121RD9	M121RE1	M121RE2	D0309121	M122B6X	D0409131	M122B7X	M122B8X	M122C4X	M122C5X	M123B4X	M123B5X	M123B6	M123B7X	M123B8X	M123C1X	M123C2X	M123RC3X	M123RC5X	D1014208
			Sample Date	07/02/2021	10/07/2021	01/20/2022	03/16/2012	03/01/2013	08/26/2014	05/28/2021	09/24/2021	12/13/2021	03/30/2022	03/09/2012	03/09/2012	04/09/2013	04/09/2013	05/29/2014	04/17/2015	12/18/2019	08/21/2012	04/19/2013	08/19/2013	08/27/2014	09/23/2014	10/13/2015	02/18/2016	11/14/2017	07/10/2019	10/14/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.4 U	3.1 UJ	3.4 UJ	0.5 U	0.5 U	0.5 U	3.1 U	3.3 U	3 U	3 U	1 J	1	0.5 U	0.5 U	0.5 U	0.5U	3 U	44	87	-	0.6 U	3	7	12	1 J	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	16 U	14 UJ	16 UJ	10 U	10 U	11 U	14 U	16 U	14 U	14 U	11 U	10 U	10 U	10 U	11 U	11U	15 U	10 U	10 U	-	11 U	10 U	10 U	11 U	10 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.45 U	0.41 UJ	0.45 U	0.4 U	0.4 U	0.4 U	0.41 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4U	0.4 U	0.4 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.3 J	0.2 J	0.1 J	0.1 U	1	0.1U	6	4	3	-	0.1 U	0.3 J	0.1 U	5	0.1 U	0.2 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	3	2	-	0.8 J	0.5 U	1 J	1	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1 UJ	1.1 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	2 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1 UJ	1.1 UJ	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	3 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.5 U	4.1 UJ	4.5 U	2 U	2 U	2 U	4.1 U	4.5 U	4 U	4 U	2 U	2 U	2 U	2 U	2 U	2U	3 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	2.3 U	2 UJ	2.3 U	0.5 U	0.5 U	0.5 U	2 U	2.2 U	2 U	2 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	3 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	8.2 UJ	9 UJ	5 U	5 U	5 U	8.2 U	8.9 U	8 U	8.1 U	6 U	5 U	5 U	5 U	5 U	5U	8 U	5 U	5 U	-	6 U	5 U	5 U	6 U	5 U	8 U	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.5 U	4.1 UJ	4.5 U	0.6 J	0.5 U	0.5 U	4.1 U	4.5 U	4 U	4 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	4 U	0.5 U	0.5 U	-	0.6 U	0.5 U	2 U	2 U	2 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	2	1	-	0.9 J	1	0.8 J	0.8 J	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	0.92 UJ	1 U	0.5 U	0.5 U	0.5 U	0.92 U	1 U	0.9 U	0.91 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.9 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.9 U	0.91 U
4-Nitrophenol	ug/L	N	NA	11 U	10 UJ	11 UJ	10 U	10 U	11 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11U	11 U	10 U	10 U	-	11 U	10 U	10 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 UJ	0.11 U	1	0.8	0.8	2.2	0.11 U	1.7	1.3	0.5 J	0.5	1	1	2	1	1	0.2 J	0.3 J	-	0.2 J	0.1 U	0.1 U	0.2 J	0.1 J	0.2 J	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 UJ	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.1 U	1 UJ	1.1 U	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	4 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	4 U	4 U
Anthracene	ug/L	N	2000	0.11 U	0.1 UJ	0.11 U	0.3 J	0.1 U	0.2 J	0.1 U	0.11 U	0.31 J	0.5	0.1 U	0.2 J	0.2 J	0.2 J	0.3 J	0.1J	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.1 U	1 UJ	1.1 U	2 U	2 U	2 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	3 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.3 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	5 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2.3 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.4 U	3.1 UJ	3.4 U	5 U	5 U	5 U	3.1 U	3.3 U	3 U	3 U	6 U	5 U	5 U	5 U	5 U	5U	5 U	5 U	5 U	-	6 U	5 U	5 U	6 U	5 U	5 U	9 J
Carbazole	ug/L	N	NA	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.57 J	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1U	0.2 J	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.3 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.6 U	5.1 UJ	5.6 U	2 U	2 U	2 U	5.1 U	5.6 U	5 U	5 U	2 U	2 U	2 U	2 U	2 U	2U	5 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.74 J	0.63 J	0.6 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5U	0.7 J	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.3 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.3 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	3 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 UJ	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.1 J	0.2 J	0.1J	0.2 J	0.1 J	0.1 J	-	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.14 U	0.12 UJ	0.14 U	1	1	1	1.5	1.3	2	1.1	0.4 J	0.4 J	1	1	2	0.8	1	0.3 J	0.3 J	-	0.2 J	0.5 J	0.5 J	0.3 J	0.2 J	0.3 J	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.6 U	5.1 UJ	5.6 U	5 U	5 U	5 U	5.1 U	5.6 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5U	5 U	5 U	5 U	-	6 U	5 U	5 U	6 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	0.56 U	0.51 UJ	0.56 U	1 U	1 U	1 U	0.51 U	0.56 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.7 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U	0.71 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.7 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U	0.71 U
Naphthalene	ug/L	N	300	0.48 UJ	0.1 UJ	0.11 U	0.2 J	0.1 U	0.1 U	0.41 J	0.49 J	0.57	0.4 J	2	2	3	3	3	2	0.1 U	5	19	1 U	2	0.1 U	6	20	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.56 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.56 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 UJ	1.1 UJ	0.5 U	0.5 U	0.5 U	1 U	1.1 U	1 U	1 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	1.6 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 UJ	1.1 UJ	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.9	0.48 J	0.11 U	0.2 J	0.2 J	0.2 J	0.3 J	0.7	0.1U	0.6	0.2 J	0.3 J	-	0.1 J	0.6	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.56 U	0.51 UJ	0.56 UJ	0.5 U	0.5 U	0.5 U	0.51 UJ	0.56 U	0.5 U	0.5 U	1	2	0.8 J	0.8 J	1	2	2 J	0.5 U	3	-	0.6 U	0.5 U	0.6 J	0.6 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.1 UJ	0.11 U	0.2 J	0.1 U	0.2 J	0.1 U	0.62	0.1 U	0.1 U	0.4 J	0.8	0.2 J	0.3 J	0.4 J	0.2J	0.4 J	0.2 J	0.1 U	-	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400 J	-	-	-	340 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-123R	MW-123R	MW-123R	MW-123R	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-126
			Field Sample ID	M123RC6X	M123RC7X	D0412218	M123RC8	M124C1X	M124C2X	M124C3X	M124C4X	M124C5X	M124C6X	M124C8X	M124C9X	M124D1X	M125B6X	M125B7X	M125B8X	M125B9X	M125C1X	M125C5X	M125C9X	M125D4X	M125D5X	M125D8X	M125D9	M125E1	M125E2	M126C2X
			Sample Date	10/14/2020	01/08/2021	04/12/2021	04/12/2021	02/16/2012	03/15/2013	06/05/2014	02/13/2015	02/17/2016	02/16/2017	03/14/2019	02/03/2020	01/26/2021	02/21/2012	03/28/2013	02/12/2014	10/23/2015	02/23/2016	01/25/2017	02/02/2018	01/30/2019	01/28/2020	02/23/2021	05/04/2021	08/04/2021	11/10/2021	02/16/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	6.3 U	3.5 U	3.2 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3.2 U	57	26	**120**	23	65	39	36	45	3 U	69	86	29	87	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	29 U	16 U	15 U	11 U	11 U	10 U	11 U	10 U	10 UJ	14 U	14 U	15 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	14 U	15 U	15 U	15 U	17 U	14 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	2.1 UJ	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.2 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.84 UJ	0.47 U	0.43 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.42 U	0.48 U	0.41 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	3	2	10	0.1 U	7	3	3	2	0.1 U	6.3	0.81	0.12 U	1.1	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	20	7	24	5	11	10	5	10	0.6 U	13	22	6.9	27	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	4.2 UJ	1.2 U	1.1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	1.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.1 U	1 U	1.2 U	1 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	6.3 U	1.2 U	1.1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	1.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	1.1 U	1 U	1.2 U	1 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	6.3 UJ	4.7 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	4.3 U	4.2 U	4.8 U	4.1 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	6.3 UJ	2.3 U	2.1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	2.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	2.2 U	2.1 U	2.4 U	2 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	17 U	9.3 U	8.6 U	5 U	6 U	5 U	6 U	5 U	5 UJ	8 U	8 U	8.5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	8 U	9 U	8.7 U	8.4 U	9.6 U	8.2 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	8.4 UJ	4.7 U	4.3 U	0.5 U	0.6 U	0.5 U	0.6 U	2 U	2 U	4 U	4 U	4.2 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	4 U	4 U	4.3 U	4.2 U	4.8 U	4.1 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	1	1	3	1	0.7 J	18	2	0.5 U	0.6 U	1.8 J	0.52 U	0.6 U	0.51 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.91 U	1.9 UJ	1 U	0.97 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.9 U	0.9 U	0.96 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.97 U	0.94 U	1.1 U	0.92 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	21 U	12 U	11 U	11 U	11 U	10 U	11 U	10 U	10 UJ	10 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	12 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	1	1	1	1	0.2 J	0.7	1.1	0.1 U	0.1 U	0.3 J	0.4 J	0.5	0.3 J	0.1 U	0.1 U	0.3 J	0.38 J	0.1 U	0.12 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	8.4 UJ	1.2 U	1.1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	4 U	4 U	1.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	1.1 U	1 U	1.2 U	1 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.3 J	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	4.2 UJ	1.2 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	1 U	1.2 U	1 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	6.3 UJ	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	1.1 U	1 U	1.2 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.21 UJ	0.13 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.11 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.1 U	11 UJ	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	2.2 U	2.1 U	2.4 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	4.2 UJ	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2.4 U	2 U	2 U
Caprolactam	ug/L	N	4000	11	11 UJ	3.5 U	3.2 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	3.2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	3.2 U	3.1 U	3.6 U	3.1 U	5 U
Carbazole	ug/L	N	NA	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	4.2 UJ	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2.4 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	11 UJ	5.8 U	5.4 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	5.4 U	5.2 U	6 U	5.1 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	4.2 UJ	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2.4 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	4.2 UJ	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 UJ	2.4 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	6.3 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.16 J	0.21 UJ	0.14 U	0.13 U	0.1 U	0.1 U	1	0.7	0.6	0.7	0.1 U	0.1 U	0.44 J	0.3 J	0.1 J	0.1 U	0.1 U	0.8	0.2 J	0.1 U	0.1 U	0.1 J	0.47 J	0.13 U	0.14 U	0.12 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.21 UJ	0.13 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.11 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	11 UJ	5.8 U	5.4 U	5 U	6 U	5 U	6 U	5 U	5 UJ	5 U	5 U	5.3 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.4 U	5.2 U	6 U	5.1 U	5 U
Hexachloroethane	ug/L	N	7	1 U	2.1 UJ	0.58 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.54 U	0.52 U	0.6 U	0.51 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.21 UJ	0.13 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.11 U	0.1 U
Isophorone	ug/L	N	40	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.71 U	1.5 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.71 U	1.5 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.28 J	0.12 U	0.11 U	0.2 J	0.3 J	0.1 U	0.3 J	0.1 U	0.1 J	0.1 U	0.1 U	0.11 U	45	24	110	11	33	37	31	16	0.2 J	170 J	34	2.4	14	0.1 U
Nitrobenzene	ug/L	N	6	0.51 U	1.1 UJ	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.6 U	0.51 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.6 UJ	3.4 U	1.2 U	1.1 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	1.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.1 U	1 U	1.2 U	1 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	2.1 U	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1.2 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.21 UJ	0.13 U	0.12 U	0.1 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.2 J	0.1 U	0.1 U	0.1 U	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.11 U	0.1 U
Phenol	ug/L	N	2000	0.51 U	1.1 U	0.58 U	0.54 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	3	5	5	6	1	14	0.5 U	0.5 U	0.6 U	3	0.52 U	0.6 U	0.51 U	0.5 U
Pyrene	ug/L	N	200	0.1 J	0.21 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	-	-	-	13 J	-	-	-	-	-	-	-	-	-	520 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126	MW-128	MW-128	MW-133	MW-133	MW-133	MW-133	MW-134	MW-134	MW-134	MW-134	MW-135	MW-135	MW-135	MW-135	MW-136	MW-136
			Field Sample ID	M126C3X	M126C4X	M126C5X	M126C6X	M126C7X	M126C9X	M126D2	M126D3X	M126D5X	M126D6	M126D9	M128B9X	M128C2X	M133C1	M133C2	M133C3	M133C4	M134D2	M134D3	M134D4	M134D5	M135D3	M135D4	M135D5	M135D6	M136C1X	M136C2X
			Sample Date	03/15/2013	06/24/2014	02/19/2015	03/15/2016	03/24/2017	05/01/2018	04/24/2019	03/04/2020	01/29/2021	05/07/2021	02/11/2022	12/03/2015	07/20/2016	06/28/2021	10/04/2021	12/22/2021	02/07/2022	05/20/2021	09/17/2021	12/16/2021	03/31/2022	06/16/2021	09/17/2021	12/21/2021	03/25/2022	02/14/2012	03/05/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 UJ	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.5 U	0.5 U	3.5 U	3 U	3.1 U	3 U	3.6 U	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U	3.3 U	3.4 U	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	11 U	11 U	10 UJ	10 U	10 U	14 U	16 U	15 UJ	14 U	14 U	14 U	10 U	10 U	17 U	14 U	14 U	14 U	17 U	15 U	14 U	15 U	14 U	14 U	15 U	16 U	10 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.4 U	0.41 U	0.4 U	0.47 U	0.42 U	0.41 U	0.42 U	0.41 U	0.41 U	0.44 U	0.45 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	22 J	29 J	0.1 U	12 J	0.12 U	0.1 U	7.9 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 UJ	1 U	1 U	1 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	1 U	1 U	1 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 UJ	4 U	4 U	4 U	2 U	2 U	4.7 U	4 U	4.1 U	4 U	4.7 U	4.2 U	4.1 U	4.2 U	4.1 U	4.1 U	4.4 U	4.5 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	2 U	2 U	2 U	0.5 U	0.5 U	2.4 U	2 U	2.1 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2.2 U	2.2 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	6 U	5 U	5 U	5 UJ	8 U	9 U	8 UJ	8 U	8.1 U	8 U	5 U	5 U	9.4 U	8.1 U	8.2 U	8 U	9.5 U	8.4 U	8.2 U	8.4 U	8.2 U	8.2 U	8.8 U	9 U	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	0.6 U	0.6 U	0.5 U	2 U	2 U	4 U	4 U	4 UJ	4 U	4 U	4 U	2 U	2 U	4.7 U	4 U	4.1 U	4 U	4.7 U	4.2 U	4.1 U	4.2 U	4.1 U	4.1 U	4.4 U	4.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.9 UJ	0.9 U	0.91 U	0.9 U	0.5 U	0.5 U	1.1 U	0.91 U	0.92 U	0.9 U	1.1 U	0.94 U	0.92 U	0.94 U	0.92 U	0.93 U	0.99 U	1 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	10 U	10 U	10 UJ	10 U	11 U	10 UJ	10 U	10 U	10 U	10 U	10 U	12 U	10 U	10 U	10 U	12 U	10 U	10 UJ	10 U	10 U	10 U	11 U	11 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 J	0.1 U	0.1 U	40	23	0.12 U	1.1	0.1 U	0.1 U	0.12 U	0.15 J	0.21 J	0.17 J	0.3 J	0.29 J	0.44 J	0.56	1	0.3 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 UJ	1 U	1 U	1 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	2	0.6	0.12 U	0.32 J	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	1 U	1 U	1 U	2 U	2 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**0.5J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**0.6**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	**0.6**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 UJ	0.51 U	0.51 U	0.55 U	0.56 UJ	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**4J**	2 U	2 U	2 U	2 U	5 U	6 U	5 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	**6.5**	2.4 U	2.1 UJ	2 U	2.1 U	2.1 U	2.1 UJ	**59**	2.2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2.4 U	2.1 UJ	2 U	2.1 U	2.1 U	2.1 UJ	2.2 U	2.2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 UJ	3 U	3 U	3 U	5 U	5 U	3.5 U	3 U	3.1 U	3 U	3.6 U	3.1 U	3.1 U	3.1 U	14	3.1 U	4.5 J	3.4 U	5 U	6 U
Carbazole	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	1	0.2 J	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2.2 U	2.2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	5 U	6 U	5 UJ	5 U	5 U	5 U	2 U	2 U	5.9 U	5.1 U	5.1 U	5 U	5.9 U	5.2 U	5.1 U	5.2 U	5.1 U	5.1 U	5.5 U	5.6 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	13	8	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2.2 U	2.2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2.4 U	2.1 U	2 U	2.1 U	2.1 U	2.1 U	2.2 U	2.2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	2	0.4 J	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.12 U	0.12 U	13	6	1.4	1.5	0.12 U	1.4	0.14 U	0.15 J	0.24 J	0.17 J	0.28 J	0.23 J	0.47 J	0.55 J	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	6 U	5 U	5 U	5 U	5 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5.9 U	5.1 U	5.1 U	5 U	5.9 U	5.2 U	5.1 U	5.2 U	5.1 U	5.1 U	5.5 U	5.6 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.5 U	0.5 U	0.5 U	1 U	1 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.7 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.7 UJ	0.5 U	0.5 U	0.5 U	6	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.27 J	0.11 U	0.7	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	2 UJ	1 U	1 U	1 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	**3J**	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	3	1	0.13 U	0.93	0.11 U	0.11 U	0.13 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.6 U	0.6 U	0.5 U	2 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.51 U	0.51 U	0.5 U	0.59 U	0.52 U	0.51 U	0.52 U	0.51 U	0.51 U	0.55 U	0.56 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.39 J	0.1 U	0.1 U	3	0.6	0.12 U	0.1 U	0.46 J	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	620 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-154	MW-158	MW-158	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164
			Field Sample ID	M136C3X	M136C4X	M136C5X	M136C7X	M136C8X	M136C9X	M136D1X	M136D2	M139B5X	M139B6X	M139B7X	M139B8X	M139B9X	M139C1X	M139C2X	M139C3X	M139C4X	M139C5X	M154B7X	M158D6X	M158D7X	M164B8X	M164B9X	M164C1X	M164C2X	M164C3X	M164C4X
			Sample Date	06/03/2014	09/30/2015	02/16/2016	03/30/2018	03/21/2019	02/05/2020	01/27/2021	03/25/2022	03/22/2012	04/03/2013	09/09/2014	04/16/2015	02/09/2016	02/14/2017	02/27/2018	02/15/2019	01/27/2020	01/28/2021	10/29/2013	07/23/2019	08/22/2019	03/20/2012	08/14/2012	02/22/2013	10/29/2013	04/03/2014	12/12/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.5 U	0.5 U	0.5 U	3 U	4 UJ	3.2 U	3.1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	4 U	3.2 U	0.5 U	3 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	12 U	10 U	10 U	10 U	14 U	18 UJ	15 U	14 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U	14 U	17 U	15 U	11 U	14 UJ	16 U	10 U	11 U	11 U	11 U	10 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 UJ	0.43 U	0.41 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.42 U	0.4 U	0.4 UJ	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	2 U	3 UJ	1.1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.1 U	0.5 U	2 UJ	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	3 U	4 UJ	1.1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	4 U	1.1 U	0.5 U	3 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	3 U	4 UJ	4.3 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	4 U	4.2 U	2 U	3 UJ	3 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	3 U	4 UJ	2.1 U	2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	4 U	2.1 U	0.5 U	3 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	5 U	5 U	5 U	8 U	10 UJ	8.6 U	8.1 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	8 U	10 U	8.4 U	5 U	8 UJ	9 U	5 U	5 U	5 U	5 U	5 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 U	2 U	2 U	2 U	4 U	5 UJ	4.3 U	4.1 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	4 U	5 U	4.2 U	0.5 U	4 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.9 U	1 UJ	0.97 U	0.92 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.95 U	0.5 U	0.9 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	12 U	10 U	10 U	10 U	10 U	13 UJ	11 U	10 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U	12 U	11 U	11 U	10 UJ	12 U	10 U	11 U	11 U	11 U	10 U	11 U
Acenaphthene	ug/L	N	400	4	2	0.4 J	0.7	0.1 U	0.2 J	0.2 J	0.1 U	2	0.7	2	1	1	0.8	0.7	0.7	0.9	0.36 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.5 U	4 U	5 UJ	1.1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	5 U	1.1 U	0.5 U	4 UJ	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.2 J	0.1 U	0.2 J	0.5 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	3 UJ	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	3 U	4 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	4 U	1.1 U	1 U	3 UJ	3 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.7 UJ	0.54 U	0.51 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 J	2 U	2 U	5 U	7 UJ	2.1 U	2 U	2 U	2 U	2 U	2 J	2 U	2 U	2 U	5 U	6 U	2.1 U	2 U	5 UJ	6 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	3 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	5 U	5 U	5 U	7 UJ	3.2 U	3.1 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	3.2 U	5 U	5 UJ	6 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	3 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	5 U	7 UJ	5.4 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	5.3 U	2 U	5 UJ	6 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	3 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	3 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.5 U	0.5 U	3 U	4 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	4 U	0.53 U	0.5 U	3 UJ	3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.2 J	0.1 U	0.1 J	0.5	0.2 J	0.1 J	0.1 U	0.1 U	0.2 J	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.13 U	0.12 U	1	0.5 J	1	1	0.8	0.9	0.6	0.5	0.7	0.48 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5 U	5 U	5 U	7 UJ	5.4 U	5.1 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.3 U	5 U	5 UJ	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 UJ	0.54 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.9 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.53 U	0.5 U	0.7 UJ	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.9 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.53 U	0.5 U	0.7 UJ	0.8 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.2 J	2	0.1 U	0.1 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	1.1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.1 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.4 J	0.1 U	0.4 J	0.4 J	0.2 J	0.3 J	0.3 J	0.1 U	0.1 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
Phenol	ug/L	N	2000	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.54 U	0.51 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.53 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.2 J	0.1 U	0.2 J	0.7	0.2 J	0.1 U	0.1 J	0.1 U	0.2 J	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	1700 J	-	-	-	-	-	-	-	-	-	-	76 J	-	-	-	29 J	96 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-165R	MW-165R	MW-165R	MW-165R	MW-166	MW-166	MW-166	MW-166	MW-166
			Field Sample ID	M164C5X	M164C6	M164C7X	M164C9X	M164D1X	M164D4X	M164D6X	M164D8X	D0319201	M164E3X	D0902201X	M164E5X	M164E7X	M164E8	M164E9	M164F1	M164F2	M165RC3	M165RC4	M165RC5	M165RC6	M166B9X	M166C1X	M166C2X	M166C4X	M166C5X
			Sample Date	06/26/2015	03/15/2016	09/01/2016	03/28/2017	09/14/2017	03/30/2018	10/04/2018	03/21/2019	03/19/2020	03/19/2020	09/02/2020	09/02/2020	03/09/2021	05/26/2021	08/27/2021	10/21/2021	02/15/2022	05/26/2021	08/03/2021	10/21/2021	02/15/2022	03/20/2012	08/14/2012	02/22/2013	10/29/2013	04/03/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.5 U	3.9 U	3.1 U	3.4 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	3.1 U	3.3 U	0.5 U	2	0.5 U	1 J	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 U	10 U	10 U	10 UJ	10 U	10 U	15 U	14 U	16 U	15 U	16 U	18 U	14 U	16 U	14 U	14 U	14 U	14 U	14 U	15 U	16 U	9 U	11 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.3 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.47 U	0.52 U	0.41 U	0.45 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.42 U	0.44 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.3 U	2.6 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.5 U	3.9 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.5 U	3.9 U	4.1 U	4.5 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.2 U	4.4 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.5 U	3.9 U	2.1 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	5 U	5 U	5 UJ	5 U	5 U	9 U	8 U	9 U	9 U	9.4 U	10 U	8.2 U	9 U	8.2 U	8.2 U	8.1 U	8.2 U	8.1 U	8.3 U	8.9 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	5 U	4 U	4.7 U	5.2 U	4.1 U	4.5 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.2 U	4.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	4.1	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	1 U	1 U	1.1 U	1.2 U	0.93 U	1 U	0.93 U	0.92 U	0.91 U	0.92 U	0.92 U	0.93 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 UJ	10 U	10 U	11 U	10 U	11 U	11 U	12 U	13 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	9 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	5 U	4 U	4.7 U	5.2 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.6 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.5 U	3.9 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5 U	5.9 U	6.5 U	2.1 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.3 U	2.6 U	2.1 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.9 U	6.5 U	3.1 U	3.4 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	3.1 U	3.3 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.6 U	2.1 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5 U	5.9 U	6.5 U	5.1 U	5.6 U	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.5 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.6 U	2.1 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.3 U	2.6 U	2.1 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.5 U	3.9 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.12 U	0.14 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	0.3 J	0.3 J	0.2 J	0.1 U	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 UJ	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	6 U	5 U	5.9 U	6.5 U	5.1 U	5.6 U	5.2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.2 U	5.5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.3 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.9 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.8 U	0.8 U	0.82 U	0.91 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.8 U	0.8 U	0.82 U	0.91 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 U	0.1 U	0.2 J	0.1 U
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.9 U	2.1 U	1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.3 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.9 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.6 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.59 U	0.65 U	0.51 U	0.56 U	0.52 U	0.51 U	0.51 U	0.51 U	0.51 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	33 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-166	MW-166	MW-166	MW-166	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-179	MW-187	MW-187	MW-187	MW-187	MW-187
			Field Sample ID	M166C6X	M166C7X	M166C8X	M166C9X	M166RD2X	M166RD5X	D1003181	M166RD7X	D0320191	M166RD9X	D0904191X	M166RE2X	M166RE4X	M166RE6X	D0312211	M166RE8X	M166RE9	M166RF1	M166RF2	M166RF3	D1209201	M187B5X	M187B6X	M187C3X	M187C5X	M187C6X
			Sample Date	12/12/2014	07/14/2015	03/16/2016	09/01/2016	09/14/2017	03/30/2018	10/03/2018	10/03/2018	03/20/2019	03/20/2019	09/04/2019	09/04/2019	03/18/2020	09/02/2020	03/12/2021	03/12/2021	05/26/2021	08/03/2021	10/21/2021	02/15/2022	12/09/2020	09/23/2014	12/05/2014	07/10/2019	10/15/2020	01/13/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6J	0.8J	2 J	2 J	1 J	0.9 J	2 J	0.85 J	0.99 J	0.93 J	1.5 J	1 J	1.1 J	1.5 J	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	3U	3U	3 U	3 U	3 U	3 U	3 UJ	3.7 U	3.2 U	3.1 U	3.1 U	3.1 U	3.1 U	3 U	3.4 U	4	47	40	3.1 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	10 U	11 U	10 U	10 U	10 U	11 U	14U	15U	14 U	14 U	14 U	14 U	16 UJ	17 U	15 U	15 U	15 U	14 U	14 U	14 U	16 U	11 U	10 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1U	1U	1 U	1 U	1 U	1 U	1 UJ	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4U	0.4U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 UJ	0.5 U	0.42 U	0.42 U	0.42 U	0.41 U	0.41 U	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.15 J	0.1 U	0.12 J	0.43 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	15	0.51 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2U	2U	2 U	2 U	2 U	2 U	2 UJ	2.5 U	1.1 U	1 U	1 U	1 U	1 U	1 U	2.2 U	0.5 U	0.5 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3U	3 U	3 U	3 U	3 U	3 UJ	3.7 U	1.1 U	1 U	1 U	1 U	1 U	1 U	3.4 U	0.5 U	0.5 U	3 U	3.1 U	3.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	3U	3U	3 U	3 U	3 U	3 U	3 UJ	3.7 U	4.2 U	4.2 U	4.2 U	4.1 U	4.1 U	4 U	3.4 U	2 U	2 U	3 U	3.1 U	3.1 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3U	3 U	3 U	3 U	3 U	3 UJ	3.7 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	3.4 U	0.5 U	0.5 U	3 U	3.1 U	3.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 U	5 U	5 U	5 U	5 U	8U	8U	8 U	8 U	8 U	8 U	9 UJ	10 U	8.5 U	8.4 U	8.4 U	8.1 U	8.2 U	8 U	9 U	5 U	5 U	8 U	8.2 U	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	2 U	2 U	2 U	2 U	4U	4U	4 U	4 U	4 U	4 U	5 UJ	5 U	4.2 U	4.2 U	4.2 U	4.1 U	4.1 U	4 U	4.5 U	0.5 U	0.5 U	4 U	4.1 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.9 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9U	0.9U	0.9 U	0.9 U	0.9 U	0.9 U	1 UJ	1.1 U	0.95 U	0.94 U	0.94 U	0.92 U	0.92 U	0.9 U	1 U	0.5 U	0.5 U	0.9 U	0.92 U	0.92 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	10 U	10 U	10 U	11 U	10U	10U	10 U	10 U	10 U	10 U	11 UJ	12 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 J	0.1 U	0.1 J	0.2 J	2	0.3 J	0.3J	0.5	0.1 U	0.1 U	0.6	0.5 J	0.6 J	0.65	0.34 J	0.38 J	0.33 J	0.41 J	0.5 J	0.39 J	0.65	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4U	4U	4 U	4 U	4 U	4 U	5 UJ	5 U	1.1 U	1 U	1 U	1 U	1 U	1 U	4.5 U	0.5 U	0.5 U	4 U	4.1 U	4.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.1J	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.18 J	0.14 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2U	2U	2 U	2 U	2 U	2 U	2 UJ	2.5 U	1.1 U	1 U	1 U	1 U	1 U	1 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3U	3U	3 U	3 U	3 U	3 U	3 UJ	3.7 U	1.1 U	1 U	1 U	1 U	1 U	1 U	3.4 U	1 U	1 U	3 U	3.1 U	3.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	**0.12J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 UJ	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.2J	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 J	2 U	2 U	2 U	2 U	5U	5U	5 U	5 U	5 U	5 U	6 UJ	6.2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	5.6 U	2 U	2 U	5 U	5.1 U	5.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2U	2U	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5U	5U	5 U	5 U	5 U	5 U	6 UJ	6.2 U	3.2 U	3.1 U	3.1 U	3.1 U	3.1 U	3 U	5.6 U	5 U	5 U	5 U	5.1 U	5.1 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	2	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2U	2U	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	5U	5U	5 U	5 U	5 U	5 U	6 UJ	6.2 U	5.3 U	5.2 U	5.2 U	5.1 U	5.1 U	5 U	5.6 U	2 U	2 U	5 U	5.1 U	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.3J	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2U	2U	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2U	2U	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3U	3 U	3 U	3 U	3 U	3 UJ	3.7 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	3.4 U	0.5 U	0.5 U	3 U	3.1 U	3.1 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.2 J	0.1 U	0.2 J	0.2 J	2	0.4 J	0.6	0.9	0.1 U	0.1 U	0.6	0.6	0.1 UJ	0.73	0.32 J	0.27 J	0.35 J	0.29 J	0.39 J	0.47 J	0.44 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 U	5 U	5 U	5 U	5 U	5U	5U	5 U	5 U	5 U	5 U	6 UJ	6.2 U	5.3 U	5.2 U	5.2 U	5.1 U	5.1 U	5 U	5.6 U	5 U	5 U	5 U	5.1 U	5.1 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1U	1U	1 U	1 U	1 U	1 U	1 UJ	1.2 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	1.1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 UJ	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7U	0.7U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.87 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.79 U	0.5 U	0.5 U	0.7 U	0.72 U	0.71 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7U	0.7U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.87 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	**13**	0.5 U	0.5 U	0.7 U	0.72 U	0.71 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.2J	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 U	0.1 U	0.39 J	0.25 J	0.21 J	0.49 J	0.22 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1.8 U	0.5 U	0.5 U	0.5 U	1.6 U	1.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1U	1U	1 U	1 U	1 U	1 U	1 UJ	1.2 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	1	0.1 U	0.1U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.25 J	0.43 J	0.15 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5U	0.5U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.62 U	0.53 U	0.52 U	0.52 U	0.51 U	0.51 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U
Pyrene	ug/L	N	200	0.1 J	0.1 J	0.1 U	0.1 U	0.9	0.1 J	0.1J	0.2J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.12 U	0.17 J	0.15 J	0.1 U	0.1 U	0.13 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	88 J	67 J	-	-	-	-	-	-	-	-	-	-	-	720 J	380 J	860 J	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-187	MW-192	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-195	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-196	MW-197	MW-197	MW-197	MW-197
			Field Sample ID	M187C7	M192B1X	D0126121	M195D3X	M195D4X	M195D6X	M195D8X	M195E1X	M195E3X	M195E5X	M195E7X	M195E9X	M195F1X	M196D3X	M196D4X	M196D6X	M196D8X	M196E1X	M196E3X	M196E5X	M196E7X	M196E9X	M196F1X	M197D3X	M197D4X	M197D6X	M197D8X
			Sample Date	04/08/2021	03/20/2012	01/26/2012	01/26/2012	04/12/2012	10/09/2012	04/16/2013	10/09/2013	04/24/2014	10/14/2014	05/07/2015	10/13/2015	03/09/2016	01/26/2012	04/12/2012	10/09/2012	04/16/2013	10/09/2013	04/24/2014	10/14/2014	05/07/2015	10/13/2015	03/09/2016	01/26/2012	04/12/2012	10/09/2012	04/16/2013
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.58 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	0.58 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	0.58 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	9.1 J	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	16 U	10 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1.2 U	1 UJ	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.47 U	0.4 UJ	-	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	-	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.58 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.79 J	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.2 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.2 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	4.7 U	2 UJ	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.3 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9.3 U	5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	4.7 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	2 U	2 U	2 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	2 U	2 U	2 U	-	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.58 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	1.1 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	12 U	10 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	ug/L	N	400	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1.2 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1.2 U	2 UJ	-	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.2 U	1 UJ	-	-	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.13 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.3 U	2 UJ	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.3 U	2 UJ	-	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	3.5 U	5 UJ	-	-	5 U	5 U	5 U	-	8 J	5 U	5 U	5 U	5 U	-	5 U	5 U	6 U	-	5 U	6 U	5 U	5 U	5 U	-	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.3 U	2 UJ	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.8 U	2 UJ	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2.3 U	2 UJ	-	-	2 U	2 U	2 U	2 U	5	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.3 U	2 UJ	-	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.14 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.13 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5.8 U	5 UJ	-	-	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	-	5 U	5 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	-	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	0.58 U	1 UJ	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.13 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.12 U	0.1 UJ	1 U	1 U	0.1 J	0.1 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.2 J	0.1 U
Nitrobenzene	ug/L	N	6	0.58 U	0.5 UJ	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	1.2 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	1.2 U	1 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	ug/L	N	NA	0.13 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.58 U	0.5 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	ug/L	N	200	0.12 U	0.1 UJ	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-197	MW-197	MW-197	MW-197	MW-197	MW-197	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-198	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199
			Field Sample ID	M197E1X	M197E3X	M197E5X	M197E7X	M197E9X	M197F1X	M198D3X	M198D4X	M198D6X	M198D8X	M198E1X	D0424141	M198E3X	M198E5X	M198E7X	M198E9X	M198F1X	M198F5X	M199D4X	D1018121	M199D6X	M199D8X	M199E1X	M199E3X	M199E5X	M199E7X	M199E9X
			Sample Date	10/08/2013	04/24/2014	10/14/2014	05/07/2015	10/13/2015	03/09/2016	01/26/2012	04/12/2012	10/09/2012	04/16/2013	10/08/2013	04/24/2014	04/24/2014	10/14/2014	05/07/2015	10/13/2015	03/09/2016	03/27/2020	04/05/2012	10/18/2012	10/18/2012	04/18/2013	10/09/2013	04/25/2014	10/15/2014	04/24/2015	10/15/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	-	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9 U	-	-	-	-	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	-	0.5 U	0.6 U	2 U	2 U	2 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	4 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	1 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11 U	-	-	-	-	-	-	-	-	-
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.2 J	0.1 U	0.1 U	0.4 J	0.1 J	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	4 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	-	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	-	1 U	1 U	1 U	1 U	1 U	-	0.9 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 UJ	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	-	5 U	6 U	5 U	5 U	5 U	-	5 U	5 U	5 U	-	5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	-	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	6 U	5 U	5 U	5 U	-	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	-	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.8 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	2 U	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.8 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 U	-	-	-	-	-	-	-	-	-
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-199	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200
			Field Sample ID	M199F1X	M199F2X	M199F3X	M199F5X	M199F6X	M199F7X	M199F8X	M199F9X	M199G1X	M199G2X	M199G3X	M199G4	M199G5	M200D4X	M200D6X	M200D8X	M200E1X	M200E3X	M200E5X	M200E7X	M200E9X	M200F1X	M200F2X	M200F3X	M200F5X	D0209181	M200F6X
			Sample Date	04/05/2016	09/29/2016	02/01/2017	08/01/2017	02/09/2018	08/01/2018	02/08/2019	07/23/2019	02/07/2020	08/03/2020	03/18/2021	09/09/2021	01/31/2022	04/05/2012	10/18/2012	04/18/2013	10/09/2013	04/25/2014	10/15/2014	04/24/2015	10/15/2015	04/05/2016	09/29/2016	02/01/2017	08/01/2017	02/09/2018	02/09/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 UJ	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 UJ	0.41 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 UJ	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2.1 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 UJ	4.1 U	4.1 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	2 U	2.1 U	2 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2.1 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.1 UJ	4.1 U	4.1 U	4 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.91 UJ	0.92 U	0.93 U	0.91 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	ug/L	N	400	0.1 U	0.34 J	0.1 U	0.1 U	0.3 J	0.5 J	0.4 J	0.1 U	0.1 J	0.1 UJ	0.33 J	0.14 J	0.37 J	2	2	2	0.9	1	0.8	1	0.6	0.5 J	0.18 J	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4.1 UJ	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	1 U	1 U	1 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1.0 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 UJ	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.0 UJ	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 UJ	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.1 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.1 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 UJ	3.1 U	3.1 U	3 U	5 U	5 U	5 U	-	5 U	6 U	6 U	5 U	5 U	5.0 UJ	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2.1 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.1 UJ	5.1 U	5.2 U	5 U	2 U	2 U	2 U	3 J	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2.1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.1 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2.0 UJ	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.20 J	0.1 U	0.1 U	0.1 J	0.1 J	0.2 J	0.1 U	0.1 U	0.1 UJ	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 UJ	5.1 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5.0 UJ	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	0.51 U	0.52 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 UJ	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.71 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.50 UJ	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	ug/L	N	NA	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	ug/L	N	200	0.1 U	0.10 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-200	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201
			Field Sample ID	M200F7X	M200F8X	M200F9X	M200G1X	M200G3X	M200G4X	M200G5X	M200G6	M200G7	D0411121	M201D4X	M201D6X	M201D8X	D1015132	M201E1X	M201E3X	M201E5X	M201E7X	M201E9X	M201F1X	M201F2X	M201F3X	M201F5X	M201F6X	D0731181	M201F7X	M201F8X
			Sample Date	08/01/2018	02/13/2019	07/23/2019	02/06/2020	08/03/2020	10/12/2020	03/18/2021	09/09/2021	01/31/2022	04/11/2012	04/11/2012	10/16/2012	04/23/2013	10/15/2013	10/15/2013	05/15/2014	10/10/2014	04/24/2015	10/14/2015	04/01/2016	09/29/2016	02/02/2017	08/02/2017	02/14/2018	07/31/2018	07/31/2018	02/06/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	-	-	-	-	-	3.1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	-	-	-	-	-	14 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.99 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	1 U	0.99 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	-	-	3.1 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	3 U	3.1 U	4.2 U	4 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3.1 U	2.1 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	-	-	8.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	4 U	4 U	4 U	4.1 U	4.2 U	4 U	4.1 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	2 U	2 U	2.0 U	2 U	2 U	2 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	0.9 U	0.9 U	0.91 U	0.92 U	0.94 U	0.89 U	0.92 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	-	-	-	-	-	10 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 J	0.1 U	0.1 J	0.1 U	0.1 U	0.7
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	4 U	4.1 U	1 U	0.99 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	1 U	0.99 U	1 U	2 U	2 U	2 U	2 U	-	-	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3.1 U	1 U	0.99 U	1 U	1 U	1 U	1 U	1 U	-	-	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	5 U	5.1 U	5.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5.1 U	23	3.1 U	3 U	3.1 U	5 U	5 U	5 U	6 U	-	-	5 U	5 U	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5.2 U	4.9 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	3 U	3.1 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	-	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.51 UJ	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5.1 U	5.1 U	5.2 U	4.9 U	5.1 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U	0.49 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.71 U	0.72 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 UJ	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2 U	2 U	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.7 U	0.71 U	0.72 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	0.52 U	0.49 U	0.51 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	-	-	1.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	-	-	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	-	-	-	-	-	0.51 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.099 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-201	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202	MW-202
			Field Sample ID	M201F9X	M201G1X	M201G2X	M201G3X	M201G4	M201G5	M201G6	D0201221A	M201G7	M202D4X	M202D6X	M202D8X	M202E1X	M202E3X	M202E5X	M202E7X	M202E9X	M202F1X	M202F2X	M202F3X	M202F5X	M202F6X	M202F7X	M202F8X	M202F9X	M202G1X
			Sample Date	07/25/2019	02/04/2020	07/27/2020	03/18/2021	05/21/2021	09/14/2021	11/08/2021	02/01/2022	02/01/2022	04/11/2012	10/16/2012	04/23/2013	10/15/2013	05/15/2014	10/10/2014	04/24/2015	10/14/2015	04/01/2016	09/29/2016	02/02/2017	08/02/2017	02/14/2018	07/31/2018	02/06/2019	07/25/2019	02/12/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	-	-	-	-	3.1 U	3.1 U	3.4 U	3.1 U	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	-	-	-	-	14 U	14 U	16 U	15 U	14 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	10 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	4 UJ	0.42 U	0.41 U	0.41 U	0.46 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 UJ	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	**120**	**87**	**97**	-	**37**	**50**	8	21	0.4 J	0.89	8	6	10	19	26	10	**35**
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 UJ	20 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	-	1 U	1 U	1.1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 UJ	30 UJ	4.2 U	4.1 U	4.1 U	4.6 U	4.2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3 UJ	30 UJ	2.1 U	2.1 U	2 U	2.3 U	2.1 U	2 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	-	8.2 U	8.2 U	9.1 U	8.4 U	8 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 UJ	40 UJ	4.2 U	4.1 U	4.1 U	4.6 U	4.2 U	4 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.6 U	0.5 U	2 U	2 U	2.0 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 UJ	9.1 UJ	0.94 U	0.92 U	0.92 U	1 U	0.94 U	0.9 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	-	-	-	-	10 U	10 U	11 U	10 U	10 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	ug/L	N	400	0.2 J	0.4 J	1 UJ	0.1 U	0.1 U	0.17 J	0.3 U	0.28 J	0.1 U	56	38	44	34	22	25	11	13	3	1.4	6	5	7	12	14	8	19
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.9	0.7	0.6	0.5 J	0.4 J	0.4 J	0.3 J	0.2 J	0.1 U	0.10 U	0.1 U	0.1 U	0.1 J	0.2 J	0.2 J	0.1 J	0.2 J
Acetophenone	ug/L	N	700	4 U	4 UJ	40 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.2 J	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 UJ	20 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 UJ	30 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.2J**	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**0.2J**	1 UJ	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1J	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 J	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 UJ	50 UJ	2.1 U	2.1 U	2 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	**4J**	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	20 UJ	2.1 U	2.1 U	2 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	50 UJ	3.1 U	3.1 U	3.1 U	9	3.1 U	3 U	5 U	6 U	6 U	-	5 U	6 U	5 U	5 U	5 U	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	10	7	8	-	5	5	2	3	0.5 U	0.50 U	1 J	0.7 J	2	3	3	2 J	4
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	20 UJ	2.1 U	2.1 U	2 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 UJ	50 UJ	5.2 U	5.1 U	5.1 U	5.7 U	5.2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	16	11	12	-	6	7	2	3	0.5 U	0.50 U	1	1 J	2	3	4	2 J	5
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	20 UJ	2.1 U	2.1 U	2 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	20 UJ	2.1 U	2.1 U	2 U	2.3 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 UJ	30 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	11	9	9	-	5	5	1	2	0.5 U	0.50 U	0.9 J	0.6 J	1	3 U	3 U	3 U	3 J
Fluoranthene	ug/L	N	300	0.1 U	0.2 J	1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.2 J	0.6 J	1 UJ	0.12 U	0.12 U	0.14 J	0.25 J	0.36 J	0.37 J	13	9	10	8	5	6	1	2	0.1 J	0.21 J	1	0.9	2	2	4	1	5
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	1 UJ	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	50 UJ	5.2 U	5.1 U	5.1 U	5.7 U	5.2 U	5 U	5 U	6 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	10 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	1 UJ	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 UJ	7.1 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 UJ	7.1 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 J	1 UJ	0.1 U	0.11 J	0.26 J	0.11 U	0.1 U	0.1 U	200	160	180	130	71	95	30	47	5	3.7	18	11	16	37	48	27	61
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	5 UJ	0.52 U	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	-	1 U	1 U	1.1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	-	-	-	-	1 U	1 U	1.1 U	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	1 UJ	0.11 U	0.11 U	0.11 U	0.13 U	0.11 U	0.11 U	2	1	1	1	0.6	0.8	0.1 J	0.3 J	0.1 U	0.10 U	0.1 J	0.1 J	0.4 J	0.4 J	0.7	0.3 J	0.9
Phenol	ug/L	N	2000	-	-	-	-	0.51 U	0.51 U	0.57 U	0.52 U	0.5 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	ug/L	N	200	0.1 U	0.6 J	4.8 J	0.12 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-202	MW-202	MW-202	MW-202	MW-202	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203	MW-203
			Field Sample ID	M202G2X	D0319211X	M202G3X	M202G4	M202G5	M203D4X	M203D6X	M203D8X	M203E1X	M203E3X	M203E5X	M203E7X	M203E9X	M203F1X	M203F2X	M203F3X	M203F5X	M203F6X	M203F7X	M203F8X	M203F9X	M203G1X	M203G2X	M203G3X	M203G4	D0915211
			Sample Date	07/27/2020	03/19/2021	03/19/2021	09/14/2021	01/28/2022	04/11/2012	10/16/2012	04/23/2013	10/15/2013	04/22/2014	10/10/2014	04/29/2015	10/14/2015	04/01/2016	09/30/2016	02/02/2017	08/02/2017	02/14/2018	07/27/2018	02/11/2019	07/24/2019	02/05/2020	07/28/2020	03/17/2021	05/24/2021	09/15/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
2,4-Dichlorophenol	ug/L	N	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
2,4-Dimethylphenol	ug/L	N	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1 U	3.4 U
2,4-Dinitrophenol	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14 U	16 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.4 U	0.41 U	0.41 U	0.43 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 UJ	0.4 U	0.4 U	0.41 U	0.45 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
2-Methylnaphthalene	ug/L	N	30	11	1.7	2	8.3 J	0.54	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.1 U	1 UJ	1 UJ	1 U	1.1 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	2 U	1 U	1 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3.1 U	4 U	4.1 U	4.1 U	4.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	3 U	3 U	3 U	3 UJ	3 U	4 U	4.1 U	4.5 U
3-Nitroaniline	ug/L	N	NA	3.1 U	2 U	2 U	2.1 U	2.1 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	2 U	2.1 U	2.3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.3 U	9 U
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
4-Chloroaniline	ug/L	N	30	4.2 U	4 U	4.1 U	4.1 U	4.3 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	2 U	2 U	2.1 U	2 U	2 U	2 U	4 U	4 U	4 U	5 UJ	4 U	4 U	4.1 U	4.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
4-Nitroaniline	ug/L	N	NA	0.94 U	0.91 U	0.92 U	0.92 U	0.96 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 UJ	0.91 U	0.91 U	0.93 U	1 U
4-Nitrophenol	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 U	11 U
Acenaphthene	ug/L	N	400	8.3	2.4	2.4	4.2	3.2	0.2 J	0.3 J	0.3 J	0.2 J	0.4 J	0.2 J	0.1 J	0.3 J	0.4 J	0.17 J	0.3 J	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 J	0.1 U	0.12 J
Acenaphthylene	ug/L	N	NA	0.13 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	4.2 U	1 U	1 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	5 UJ	4 U	1 U	1 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.32 J	0.1 U	0.11 U
Atrazine	ug/L	N	3	2.1 U	1 U	1 U	1 U	1.1 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	1 U	1 U	1.1 U
Benzaldehyde	ug/L	N	NA	3.1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	3 U	3 U	3 U	3 UJ	3 U	1 U	1 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.5J**	**0.13J**	0.1 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	**0.13J**	0.11 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.13 J	0.1 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.5 UJ	0.51 UJ	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	**4J**	5 U	5 U	5 U	6 UJ	5.1 U	2 U	2.1 U	2.3 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2.3 U
Caprolactam	ug/L	N	4000	5.2 U	3 U	3.1 U	3.1 U	3.2 U	5 U	6 U	6 U	-	6 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 UJ	5.1 U	3 U	3.1 U	3.4 U
Carbazole	ug/L	N	NA	1.7 J	0.5 U	0.51 U	1.4 J	0.53 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.2 J	0.2 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.10 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.25 J	0.1 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.1 U	2.3 U
Di-n-octylphthalate	ug/L	N	100	5.2 U	5 U	5.1 U	5.1 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	5 U	5 U	5 U	6 UJ	5.1 U	5.1 U	5.2 U	5.6 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	2.1	0.5 U	0.51 U	0.88 J	0.53 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.1 U	2.3 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 UJ	2 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.1 U	2.3 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.1 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	0.51 U	0.52 U	0.56 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.2 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 J	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 J	0.16 J	0.1 U	0.11 U
Fluorene	ug/L	N	300	1.6	0.34 J	0.33 J	0.8	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 U	0.12 U	0.14 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.52 UJ	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 U	5 U	5.1 U	5.1 U	5.3 U	5 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 UJ	5 U	5 U	6 UJ	5.1 U	5.1 UJ	5.2 U	5.6 U
Hexachloroethane	ug/L	N	7	1 U	0.5 U	0.51 U	0.51 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.51 U	0.52 U	0.56 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.12 U
Isophorone	ug/L	N	40	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.73 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.71 U	0.51 U	0.52 U	0.56 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.73 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.71 U	0.51 U	0.52 U	0.56 U
Naphthalene	ug/L	N	300	26	6.2	6.6	37 J	11	0.2 J	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U
Nitrobenzene	ug/L	N	6	0.52 U	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.51 U	0.51 U	0.52 U	0.56 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.26 J	0.11 U	0.11 U	0.15 J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 U	0.12 U
Phenol	ug/L	N	2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.52 U	0.56 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.6	0.8	0.5 J	0.5	0.6	0.5 J	0.3 J	0.5 J	0.5 J	0.33 J	0.3 J	0.5 J	0.6	0.3 J	0.1 U	0.2 J	0.3 J	0.41 J	0.53	0.28 J	0.25 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-203	MW-203	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204	MW-204
			Field Sample ID	M203G5	M203G6	M204D4X	M204D6X	M204D8X	M204E1X	M204E3X	M204E5X	D0429151	M204E7X	M204E9X	M204F1X	M204F2X	D0202171	M204F3X	M204F5X	M204F6X	M204F7X	D0211191	M204F8X	D0724191	M204F9X	M204G1X	M204G2X	M204G3X	M204G4	M204G5
			Sample Date	09/15/2021	01/28/2022	04/11/2012	10/16/2012	04/23/2013	10/15/2013	04/22/2014	10/10/2014	04/29/2015	04/29/2015	10/14/2015	04/01/2016	09/30/2016	02/02/2017	02/02/2017	08/02/2017	02/14/2018	07/27/2018	02/11/2019	02/11/2019	07/24/2019	07/24/2019	02/05/2020	07/28/2020	03/16/2021	09/09/2021	01/31/2022
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3.1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1.3 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
2-Chloronaphthalene	ug/L	N	600	0.41 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.41 UJ	0.51 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	1 U	1 UJ	1.3 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	4.1 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	4 U	4.1 UJ	5.1 U
3-Nitroaniline	ug/L	N	NA	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	2 U	2 UJ	2.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.2 U	8.2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
4-Chloroaniline	ug/L	N	30	4.1 U	4.1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4.1 UJ	5.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	0.93 U	0.93 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 UJ	0.91 U	0.91 U	0.91 UJ	1.2 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Acetophenone	ug/L	N	700	1 U	1 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	1 U	1 UJ	1.3 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Atrazine	ug/L	N	3	1 UJ	1 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	1 U	1 UJ	1.3 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	1 U	1 UJ	1.3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.14 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 J	2.0 U	2 U	2 U	2 U	2 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 U	**4.9J**	2 UJ	2.6 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.6 U
Caprolactam	ug/L	N	4000	3.1 U	3.1 U	5 U	5 U	5 U	-	5 U	5 U	6 U	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 U	3 U	3 UJ	3.9 U
Carbazole	ug/L	N	NA	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.6 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 UJ	6.4 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Dibenzofuran	ug/L	N	NA	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
Diethylphthalate	ug/L	N	6000	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.6 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.6 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	0.5 U	0.51 UJ	0.64 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Fluorene	ug/L	N	300	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.12 U	0.12 UJ	0.15 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.14 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5.1 U	5 U	5 U	5 U	5 U	6 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 UJ	6.4 U
Hexachloroethane	ug/L	N	7	0.51 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.51 UJ	0.64 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.14 U
Isophorone	ug/L	N	40	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.71 U	0.5 U	0.51 UJ	0.64 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.71 U	0.5 U	0.51 UJ	0.64 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Nitrobenzene	ug/L	N	6	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 UJ	0.64 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenanthrene	ug/L	N	NA	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.14 U
Phenol	ug/L	N	2000	0.51 U	0.52 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pyrene	ug/L	N	200	0.23 J	0.15 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.13 U
Total TIC SVOCS	ug/L	N	NA	-	0 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-205	MW-206	MW-206	MW-206	MW-206
			Field Sample ID	M205D4X	M205D6X	M205D8X	M205E1X	D0502141	M205E3X	D1001141	M205E5X	M205E7X	M205E9X	M205F1X	M205F2X	M205F3X	M205F5X	M205F6X	M205F7X	M205F8X	M205F9X	M205G1X	M205G2X	M205G3X	M205G4	M205G5	M206D4X	M206D6X	M206D8X	D1016131
			Sample Date	04/05/2012	10/11/2012	05/08/2013	10/16/2013	05/02/2014	05/02/2014	10/01/2014	10/01/2014	04/29/2015	10/15/2015	03/31/2016	09/30/2016	02/01/2017	08/03/2017	02/08/2018	07/27/2018	02/07/2019	07/22/2019	02/06/2020	07/29/2020	03/16/2021	09/09/2021	01/31/2022	04/05/2012	10/11/2012	05/08/2013	10/16/2013
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
2,4-Dichlorophenol	ug/L	N	20	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
2,4-Dimethylphenol	ug/L	N	100	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
2,4-Dinitrophenol	ug/L	N	40	-	-	-	11 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.44 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.43 U	0.43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.6	0.1 J	0.1 U	2 J	1 J	0.1 U	0.1 U	0.2 J	0.97	0.3 J	1	0.1 U	0.9	0.1 U	3	2	0.1 U	0.11 U	18 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	1.1 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.1 U	4.3 U	4.3 U	4 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	2.1 U	2.1 U	2 U	0.5 U	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	2 U	2 U	2.2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.2 U	4.3 U	4.3 U	4 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.94 U	0.96 U	0.96 U	0.91 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	-	-	-	11 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12 U
Acenaphthene	ug/L	N	400	2	2	2	2	2	2	3	2	1	1	1	2.3	2	2	0.6	2	0.3 J	1	0.1 U	2.1	0.77	1.4	0.1 U	0.4 J	0.3 J	0.3 J	0.3 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4.2 U	1.1 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.6	0.1 U	0.7	0.2 J	0.2 J	0.7	0.5 J	0.1 U	0.1 U	0.2 J	0.49 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.35 J	0.32 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1.1 U	1.1 U	1 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.2J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.39J**	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1J	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	**0.5J**	0.12 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**110J**	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	9 J	5 U	5 U	6 U	5 U	6 U	6 U	6 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	3.2 U	3.2 U	3 U	5 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	3	3	2	3	1 J	2 J	3	3	0.5 U	2	1	2.6	1	2	0.5 U	1 J	0.5 U	1 J	0.5 U	0.52 U	0.53 U	0.59 J	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	0.3 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.82	0.3 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	5.3 U	5.3 U	5 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	1 J	1 J	1 J	1	0.8 J	0.8 J	1	1 J	0.5 U	0.5 J	0.6 J	1.1	0.6 J	0.9 J	0.5 U	0.8 J	0.5 U	0.7 J	0.5 U	0.92 J	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4.0 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.3 J	0.1 U	0.4 J	0.1 J	0.2 J	0.3 J	0.2 J	0.1 U	0.1 U	0.1 J	0.18 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	2	2	2	3	2	2	2	2	0.1 U	0.7	1	2.4	1	2	0.1 J	1	0.1 U	1	0.1 U	2.2	0.83	1.4	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	6 U	5 U	6 U	6 U	6 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5.2 U	5.3 U	5.3 U	5 U	5 U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.53 U	0.53 U	0.5 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.1 U	2	0.2 J	3	1 J	0.6 J	5	4	0.1 U	0.1 U	0.5	2.9	0.7	2	0.1 U	2	0.1 U	2	1	0.1 U	0.11 U	0.11 U	0.1 U	2	2	2	1
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.53 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
Pentachlorophenol	ug/L	N	0.3	-	-	-	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.5	0.1 U	0.4 J	0.2 J	0.1 U	0.6	0.6	0.1 U	0.1 U	0.2 J	0.54 J	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.12 U	0.92	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	-	-	-	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.7	0.3 J	0.5 J	0.4 J	0.7 J	0.6	0.5 J	0.2 J	0.3 J	0.2 J	0.39 J	0.2 J	0.3 J	0.2 U	0.4 J	0.6	0.1 U	0.1 U	1.6	0.63	0.26 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-206	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-211	MW-211
			Field Sample ID	M206E1X	M206E3X	M206E5X	M206E7X	M206E9X	M206F1X	M206F2X	M206F3X	D0801171	M206F5X	M206F6X	M206F7X	M206F8X	M206F9X	M206G1X	M206G2X	M206G3X	M206G4	M206G5	M207A2X	M207A3X	M207A4X	M207A5	M207A6	M207A7	M211B7X	M211B8
			Sample Date	10/16/2013	05/02/2014	10/01/2014	04/29/2015	10/15/2015	03/31/2016	09/30/2016	02/01/2017	08/01/2017	08/01/2017	02/08/2018	07/31/2018	02/07/2019	07/26/2019	02/06/2020	07/29/2020	03/16/2021	09/09/2021	01/31/2022	11/20/2017	02/12/2018	05/23/2018	05/24/2021	08/18/2021	10/27/2021	06/26/2013	05/22/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	2	3 U	74 U	3.1 U	3 U	0.6 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	11 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100 U	10 U	14 U	350 U	14 U	14 U	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	10 U	8	1 U	25 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.41 U	0.45 U	4 U	0.4 U	0.4 U	9.9 U	0.41 U	0.4 U	0.5 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 J	0.11 U	**430**	**68**	**64**	**55**	**33 J**	1.5	1	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	1 U	1 U	1.1 U	5 U	0.5 U	2 U	25 U	1 U	1 U	0.6 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	3 U	25 U	1 U	1 U	0.6 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.1 U	4 U	4.1 U	4.5 U	20 U	2 U	3 U	99 U	4.1 U	4 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	2 U	2 U	2.3 U	5 U	0.5 U	3 U	49 U	2 U	2 U	0.6 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50 U	5 U	8 U	200 U	8.2 U	8.1 U	6 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
4-Chloroaniline	ug/L	N	30	0.6 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.2 U	4 U	4.1 U	4.5 U	20 U	2 U	4 U	99 U	4.1 U	4 U	0.6 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 J	12 U	0.51 U	0.51 U	0.6 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.94 U	0.9 U	0.91 U	1 U	5 U	0.5 U	0.9 U	22 U	0.92 U	0.91 U	0.6 U	0.6 U
4-Nitrophenol	ug/L	N	NA	11 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100 U	10 U	10 U	250 U	10 U	10 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.3 J	0.3 J	0.3 J	0.2 J	0.3 J	0.2 J	0.24 J	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	0.1 U	0.2 J	0.1 U	0.15 J	0.15 J	0.15 J	0.11 U	14	6	4	24	2.1	1.1	50	23
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 UJ	0.1 U	0.1 U	2.5 U	0.1 U	0.1 U	0.3 J	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4.2 U	1 U	1 U	1.1 U	5 U	2	4 U	25 U	1 U	1 U	0.6 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	21	4	4	21	0.1 U	0.1 U	6	2
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	1 U	1.1 U	20 U	2 U	2 U	25 U	1 U	1 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.1 U	1 U	1 U	1.1 U	10 U	1 U	3 U	25 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**26**	**6**	**4**	**37**	**1**	**0.49J**	**0.5J**	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	**27**	**6**	**3**	**40**	**0.78**	**0.39J**	**0.3J**	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**16**	**3**	**2**	**18**	**0.48J**	**0.3J**	**0.3J**	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	19	5	3	32	0.83	0.41 J	0.1 UJ	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**3J**	**0.6**	0.1 U	**3.2J**	0.1 U	0.1 U	0.2 J	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	**22**	2 U	2.1 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	2 U	2 U	2.3 U	20 U	**6**	5 U	49 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2.3 U	20 U	2 U	2 U	49 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	6 U	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	3 U	3 U	6.4 J	50 U	5 U	5 U	74 U	3.1 U	3 U	6 U	6 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 J	3	0.5 U	12 U	1.3 J	1.1 J	16	5
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**51**	**12**	**8**	**43**	1.2	0.1 U	0.5 J	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2.3 U	20 U	2 U	2 U	49 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5.1 U	5.7 U	20 U	8	5 U	120 U	5.1 U	5.1 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**7**	**1**	**0.9**	**9.7J**	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	15	2	0.5 U	12 U	0.51 U	0.51 U	21	9
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2.1 U	2 U	2 U	2.3 U	20 U	2 U	2 U	49 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2.3 U	20 U	2 U	2 U	49 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	3 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	14	4	2	26	0.69	0.1 U	4	1
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.14 U	35	10	7	45	2	1.5	27	12
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	1 U	0.1 U	0.1 U	2.7 U	0.11 U	0.11 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	6 U	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5.1 U	5.7 U	50 UJ	5 U	5 U	120 U	5.1 U	5.1 U	6 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.51 U	0.57 U	10 U	1 U	1 U	12 U	0.51 U	0.51 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	**4J**	**1**	**0.6**	**7.1J**	0.11 U	0.11 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.73 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.7 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.73 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.7 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
Naphthalene	ug/L	N	300	1	1	2	1	1	1	0.47 J	0.9	0.8	0.9	0.7	0.7	0.1 U	0.4 J	0.2 J	0.45 J	0.5	0.38 J	0.16 J	170	58	82	2.5 U	0.1 U	2.8	1 J	0.7
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.51 U	0.57 U	5 U	0.5 U	0.5 U	12 U	0.51 U	0.51 U	0.6 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	0.5 U	0.5 U	25 U	1 U	1 U	0.6 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10 U	1 U	1 U	25 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	140	27	22	46	1.6	1.4	14	0.5 J
Phenol	ug/L	N	2000	0.6 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5 U	6	0.5 U	12 U	0.51 U	1.7 J	0.6 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	81	14	10	110	2.5	1.2	3	1
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	900 J	400 J	-	-	-	280 J	360 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
			Field Sample ID	M211C1X	M211C2	M211C3	M211C4X	M211C5	M211C6	M211C7	M211C8	M211C9X	M211D1	M211D2	M211D3	M211D4	M211D5	M211D6	M212B1X	M212B2X	M212B3X	M212B4X	M212B5X	M212B6X	M212B8X	M212B9X	M212C1X	M212C2X	M212C3X
			Sample Date	08/05/2014	09/26/2014	10/30/2014	03/12/2015	03/24/2015	06/08/2015	09/16/2015	11/16/2015	12/17/2015	01/14/2016	04/08/2016	07/22/2016	12/08/2016	01/19/2017	04/18/2017	03/20/2012	08/14/2012	02/27/2013	05/07/2013	06/18/2013	04/01/2014	07/29/2014	01/20/2015	08/07/2015	12/15/2015	02/17/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 U	11 U	10 U	10 U	11 UJ	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	9 U	11 UJ	10 U	10 U	12 U	11 U	11 U	13 U	11 U	11 U	11 U	10 U	10 UJ	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 UJ	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	9 U	11 UJ	10 U	10 U	12 U	11 U	11 U	13 U	11 U	11 U	11 U	10 U	10 UJ	10 U
Acenaphthene	ug/L	N	400	81	32	23	31	27	30	33	29	56	36	33 J	44	47	52	59	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	1	0.2 J	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.2 J	0.3 J	0.2 J	0.2 J	0.1 U	0.4 J	0.4 J	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.8 J	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	54	5	4	4	3	3	3	3	5	3	3 J	3	4	5	5	0.1 U	0.1 U	0.1 U	4	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**80**	0.1 J	0.1 J	0.1 J	0.1 U	0.1 U	0.1 J	**0.2J**	**0.3J**	0.1 U	**0.2J**	0.1 U	0.1 J	**0.2J**	0.1 J	0.1 U	0.1 U	0.1 U	**9**	**0.2J**	0.1 U	0.1 U	**1**	0.1 U	0.2 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**55**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**9**	0.1J	0.1 U	0.1 U	**1**	0.1 U	0.2 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	**58**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**10**	0.2J	0.1 U	0.1 U	**2**	0.1 U	0.2 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	25	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	4	0.1 U	0.1 U	0.1 U	0.9	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	**25**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**4**	0.1 U	0.1 U	0.1 U	**0.6**	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**12**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**4J**	2 U	2 U	2 U	2 U	2 U	2 U	2 U	**5J**	3 U	2 U	2 U	**4J**	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	5 U	9 J	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	9	7	2	3	4	7	8	10	9	6	12 J	16	0.5 U	11	10	0.5 U	0.6 U	0.5 U	0.7 J	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	**72**	0.1 J	0.1 J	0.1 J	0.1 U	0.1 U	0.2 J	0.2 J	0.3 J	0.1 U	0.2 J	0.1 U	0.09 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	**10**	0.2 J	0.1 U	0.1 U	2	0.1 U	0.2 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 J	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	**9**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**1**	0.1 U	0.1 U	0.1 U	0.3J	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	39	13	9	12	11	13	14	12	21	15	14 J	19	19	19	25	0.5 U	0.6 U	0.5 U	1 J	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	190	4	3	3	2	2	2	3	4	2	3 J	3	4	4	3	0.1 J	0.2 J	0.1 U	16	0.3 J	0.1 U	0.1 J	2	0.1 U	0.4 U	0.1 U
Fluorene	ug/L	N	300	55	18	14	17	15	17	17	15	29	19	19 J	23	24	29	34	0.1 U	0.1 U	0.1 U	1	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**25**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**4**	0.1 U	0.1 U	0.1 U	**0.8**	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	1	0.1 U	0.1 U	0.4 J	1	0.5 J	0.3 J	0.3 J	2	0.2 J	0.3 J	0.6	0.09 U	1	1	0.1 U	0.2 J	0.1 U	1 U	1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U
Phenanthrene	ug/L	N	NA	74	0.1 U	0.1 U	0.5	0.6 J	4	3	0.9	8	3	1 J	0.5 J	0.8	0.9	4	0.1 U	0.1 U	0.1 U	13	0.2 J	0.1 U	0.1 U	2	0.1 U	0.3 U	0.1 U
Phenol	ug/L	N	2000	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	130	2	2	2	1	1	1	2	2	1	2 J	2	2	2	2	0.1 J	0.2 J	0.1 U	15	0.4 J	0.1 U	0.1 J	2	0.1 U	0.4 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	260 J	220 J	58 J	-	330 J	340 J	110 J	100 J	-	160 J	140 J	170 JB	140 JB	200 J	320 J	-	-	-	240 J	77 J	-	29 J	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	D1213168BX	M212C4X	M212C5X	M212C6X	M212C7X	M212D1X	M212D3X	M212D4X	M212D7X	M212D8X	M233B3X	M233B4	M233B4X	M233B5	M233B5X	M233B6X	M233B7	M233B8X	M233B9	M233C1	M233C2	M233C5X	M233C6	M233C7	M233C8X	M233C9
			Sample Date	12/13/2016	12/13/2016	02/16/2017	11/27/2017	03/06/2018	03/07/2019	12/17/2019	03/05/2020	12/04/2020	03/24/2021	03/21/2012	05/24/2012	05/25/2012	07/25/2012	07/26/2012	04/25/2013	06/17/2013	06/25/2013	09/10/2013	11/12/2013	03/14/2014	08/04/2014	08/08/2014	10/31/2014	01/16/2015	03/11/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	3 U	0.5 U	0.6 UJ	33	1	5 U	0.5 U	0.6 U	4	1 J	2	0.6 U	4	0.6 U	5 U	5	5
2,4-Dinitrophenol	ug/L	N	40	11 UJ	11 UJ	10 UJ	10 U	10 U	14 U	16 U	16 U	14 U	14 U	9 U	11 UJ	9 U	10 U	110 U	10 U	11 U	11 U	11 U	12 U	13 U	12 U	11 U	100 U	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 UJ	0.9 U	1 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.41 U	0.41 U	0.4 U	0.4 UJ	0.4 U	0.4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 UJ	0.5 U	4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	12	10 J	20	0.1 U	2 J	0.1 U	0.1 U	0.1 U	6	4	6	1 J	0.1 U	1 J	0.9	1
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	4	3	0.6 U	5 U	4	5
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	1 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	1 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3.1 U	4.1 U	2 U	2 UJ	2 U	2 U	21 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	2 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 UJ	5 UJ	5 U	5 U	8 U	9 U	9 U	8.2 U	8.1 U	5 U	6 UJ	5 U	5 U	53 U	5 U	6 U	5 U	5 U	6 U	6 U	6 U	6 U	50 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	4 U	5 U	5 U	4.1 U	4.1 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	4	10	23	0.6 U	27	5	2
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	1 U	0.92 U	0.91 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 UJ	11 UJ	10 UJ	10 U	10 U	10 U	11 U	11 U	10 U	10 U	9 U	11 UJ	9 U	10 U	110 U	10 U	11 U	11 U	11 U	12 U	13 U	12 U	11 U	100 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2	2 J	3	0.9	3 J	0.9	0.7	0.5 J	4	2	1	0.8 J	0.1 U	1 U	2	1
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	5 U	5 U	4.1 U	1 U	0.5 U	0.6 UJ	2	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	18	0.6 U	14 J	0.6 U	5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 UJ	0.4 J	0.1 U	1 U	0.1 U	0.1 U	0.1 U	1	0.1 J	0.2 J	0.2 J	0.1 U	1 U	0.2 J	0.2 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	2 U	2 UJ	2 U	2 U	21 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 UJ	1 U	3 U	3 U	3 U	3.1 U	1 U	0.9 U	4 J	0.9 U	1 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.26J**	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.31J**	0.09 U	0.1 UJ	0.1J	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.17 J	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	5 U	6 U	6 U	5.1 U	2 U	2 U	2 UJ	2 U	2 U	21 U	**9**	2 U	**5**	2 U	2 U	**4J**	3 J	2 U	20 U	3 J	3 J
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	21 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5.1 U	3 U	5 U	6 UJ	5 U	5 U	53 U	5 U	6 U	5 U	5 U	6 U	6 U	6 UJ	6 U	50 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.23 J	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	21 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	5 U	6 U	6 U	5.1 U	5.1 U	2 U	2 UJ	2 U	2 U	21 U	2 U	2 U	2 U	2 U	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 J	0.9 J	0.5 U	5 U	0.5 U	0.6 U	0.5 U	1 J	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 J	2 U	2 U	21 U	2 U	2 U	2 U	2 UJ	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	21 U	2 U	2 U	2 U	2 UJ	2 U	3 U	2 UJ	2 U	20 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	0.51 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43 J	0.1 J	0.1 UJ	0.3 J	0.1 U	1 J	0.1 J	0.1 U	0.2 J	1	0.2 J	0.1 J	0.1 UJ	0.1 U	1 U	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	1	1 J	2	0.6	3 J	0.4 J	0.5 J	0.2 J	3	1	0.5 J	0.4 J	0.1 U	1 U	1	0.9
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 UJ	5 UJ	5 U	5 U	6 U	6 U	5.1 U	5.1 U	5 U	6 UJ	5 U	5 U	53 U	5 U	6 U	5 U	5 U	6 U	6 U	6 UJ	6 U	50 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	0.51 U	0.9 U	1 UJ	0.9 U	1 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	10 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15J	0.09 U	0.1 UJ	0.09 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.8 U	0.71 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.8 U	0.71 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	16	10 J	17	0.1 U	1 U	6	0.1 U	4 J	31	13	15	4 J	0.1 U	4 J	12	10
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 UJ	0.6 U	5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	1.6 U	1 U	0.5 U	0.6 UJ	0.5 U	0.5 U	5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 UJ	0.9 U	1 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.28 J	1	1 J	2	0.1 U	4 J	0.1 U	0.1 U	0.1 U	3	0.7	0.4 J	0.6 J	0.1 U	2 J	1	0.6
Phenol	ug/L	N	2000	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.51 U	0.51 U	0.5 U	13 J	28	6	7 J	11	0.6 U	3	3	0.6 U	11	130	0.6 U	55	9	4
Pyrene	ug/L	N	200	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.36 J	0.09 U	0.1 UJ	0.3 J	0.1 J	2 J	0.2 J	0.1 U	0.3 J	1	0.2 J	0.1 J	0.1 UJ	0.1 U	1 U	0.2 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	13 J	15 J	-	52 J	-	0 U	-	-	-	-	160 J	130 J	450 J	890 J	1100 J	820 J	1100 J	610 J	960 J	1400 J	1900 J	1500 J	1300 J	930 J	-	810 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	M233D1	M233D3	M233D4	M233D5X	M233D6	M233D7	M233D8	M233D9	M233E1	M233E2	M233E5	M233E6	M233E7	M233E8	M233E9	M233F1	M233F2	M233F3	M233F4	M233F5	M233F6	M233F7	M233F8	M233G1	M233G2X	M233G3	D0322218
			Sample Date	06/09/2015	09/21/2015	11/19/2015	12/11/2015	01/14/2016	04/14/2016	07/26/2016	12/08/2016	01/23/2017	04/28/2017	07/24/2017	10/16/2017	01/26/2018	04/16/2018	07/19/2018	10/24/2018	01/07/2019	04/04/2019	07/03/2019	10/08/2019	01/07/2020	04/02/2020	07/07/2020	10/12/2020	12/03/2020	01/05/2021	03/22/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	2	0.8 J	2	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.6 J	1	0.5 U	5 UJ	0.5 J	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	3.2 U	3 U	3.3 U	3 UJ
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	11 U	10 U	10 U	10 U	100 U	94 U	10 U	10 U	11 U	10 U	100 UJ	10 U	14 UJ	14 U	14 U	15 U	14 U	14 U	15 U	15 U	16 U	15 U	14 U	16 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	10 U	9 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1.1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.45 U	0.42 U	0.4 U	0.45 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
2-Methylnaphthalene	ug/L	N	30	0.2 J	0.1 U	2	2	0.5	0.2 J	1 U	3 J	0.3 J	0.4 J	0.1 U	0.1 U	**45 J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.23 J	0.11 U	0.1 U	0.11 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	1 J	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.9 J	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.2 U	1 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	3.2 U	3 U	3.3 U	1 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	3.2 U	3 UJ	3.3 U	4 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	3.2 U	3 U	3.3 U	2 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	6 U	5 U	5 U	5 U	51 U	47 U	5 U	5 U	6 U	5 U	50 UJ	5 U	8 UJ	8 U	8 U	8 U	8 U	8 U	9 U	8 U	9.1 U	8.4 U	8 UJ	8.9 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 UJ	0.56 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.5 U	4.2 U	4 U	4.5 U	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.8 J	0.6 J	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	1.4 J	0.53 U	0.5 U	0.56 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.9 UJ	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	1 U	1 U	0.95 U	0.9 U	1 U	0.9 UJ
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	10 U	10 U	10 U	100 U	94 U	10 U	10 U	11 U	10 U	100 UJ	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	2	3	2	3	2	2	3 J	2 J	2	3	1	4	2 J	2	2 J	1	1	1	1	2	1	2	1.5	1.6	2.3	1.7	1.6 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 UJ
Acetophenone	ug/L	N	700	0.5 U	0.5 U	38	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	4 UJ	4 U	4 U	4 U	4 U	4 U	21	4 U	4.5 U	4.2 U	4 U	4.5 U	1 UJ
Anthracene	ug/L	N	2000	0.1 J	0.3 J	0.3 J	0.3 J	0.1 U	0.2 J	1 U	0.9 U	0.1 U	0.4 J	0.3 J	1	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U	0.16 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 UJ	2.2 U	1 UJ
Benzaldehyde	ug/L	N	NA	1 U	3 J	3 J	1 U	1 U	1 U	10 U	9 U	1 U	1 U	1 U	1 U	10 UJ	1 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	3.2 U	3 U	3.3 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1J	0.1 U	**0.3J**	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1J	0.1 U	**0.2J**	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1J	0.1 U	0.2J	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1 U	0.1 U	0.1 J	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 J	**6**	2 U	**5J**	20 U	19 U	2 U	**20**	**9**	**15**	**24J**	2 U	5 UJ	5 U	5 U	5 U	5 U	**6J**	5 U	5 U	5.7 U	5.3 U	5 UJ	5.6 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 UJ	2.2 U	2 UJ
Caprolactam	ug/L	N	4000	5 U	5 U	6 U	5 U	5 U	5 U	51 U	47 U	5 U	5 UJ	6 U	5 U	50 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.7 U	5.3 U	5 U	5.6 U	3 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 UJ	0.56 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.2 J	0.1 U	0.4 J	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 UJ	2.2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.7 U	5.3 U	5 U	5.6 U	5 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.6 J	0.7 J	0.5 U	0.5 U	5 U	5 U	0.5 U	0.7 J	0.6 U	1	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	20 U	19 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.1 U	2 U	2.2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	3.2 U	3 U	3.3 U	0.5 UJ
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.4 J	0.1 J	0.1 U	1 U	0.9 U	0.2 J	0.6	0.4 J	2	2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.3 J	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U	0.13 J
Fluorene	ug/L	N	300	1	2	2	2	2	1	2 J	0.9 U	1	2	0.9	3	3 J	0.9	1 J	0.7	0.7	0.7	0.8	2	0.8	0.5	0.93	0.95	1.5	1.1	1 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.11 U	0.11 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	6 U	5 U	5 U	5 U	51 U	47 U	5 U	5 U	6 U	5 UJ	50 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5.7 U	5.3 U	5 U	5.6 U	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	10 U	9 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1.1 U	0.5 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.9 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.11 UJ
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.74 U	0.7 U	0.78 U	0.5 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.7 UJ	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.74 U	0.7 UJ	0.78 U	0.5 UJ
Naphthalene	ug/L	N	300	11	7	13	21	19	8	19	18	6	0.1 U	1	0.1 U	28 J	2	3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	2.6 J
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.6 U	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.53 U	0.5 U	0.56 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	1	0.5 U	5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.8 U	1.7 U	1.6 U	1.8 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	10 U	9 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	1.1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.8	1	1	0.1 U	0.1 U	0.5	2 J	1 J	0.7	1	0.7	5	4 J	0.5	0.1 UJ	0.7	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.8	0.11 U	0.11 U	1.3 J	0.71	0.66 J
Phenol	ug/L	N	2000	4	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	2	0.5 U	5 UJ	0.5 U	0.5 UJ	1 J	0.5 U	0.5 U	0.5 U	0.5 U	7	0.5 U	20	0.53 U	0.5 U	0.56 U	0.82 J
Pyrene	ug/L	N	200	0.1 J	0.2 J	0.3 J	0.4 J	0.2 J	0.2 J	1 U	0.9 U	0.1 J	0.8	0.4 J	2	4 J	0.3 J	0.1 UJ	0.3 J	0.1 U	0.1 U	0.1 U	0.8	0.3 J	0.1 U	0.21 J	0.11 U	0.1 UJ	0.11 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	2800 J	3200 J	2600 J	1500 J	1900 J	2900 J	3000 J	2600 J	2400 J	1200 J	660 J	1300 J	2200 J	2200 J	3100 J	820 J	920 J	1200 J	1900 J	1600 J	650 J	2200 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR
			Field Sample ID	M233G4X	M233G5	M233G6	M233G7	M233G9	M234RA1X	M234RA3X	M234RA5X	M234RA6	M234RA7	M234RA8X	M234RA9	M234RB1	M234RB2	M234RB3	M234RB4	M234RB6X	M234RB7	M234RB8X	M234RRC1	D1016171	M234RRC2	M234RRC3	M234RRC4	M234RRC5	M234RRC6	D0107191
			Sample Date	03/22/2021	04/02/2021	07/09/2021	10/07/2021	01/21/2022	07/26/2013	08/01/2014	01/16/2015	09/18/2015	11/19/2015	12/15/2015	01/13/2016	04/14/2016	07/25/2016	12/06/2016	01/23/2017	03/22/2017	04/28/2017	05/17/2017	08/31/2017	10/16/2017	10/16/2017	01/26/2018	04/16/2018	07/19/2018	10/23/2018	01/07/2019
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.52 U	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.52 U	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.52 U	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.1 UJ	3.1 U	3.4 U	3.1 U	3.1 U	2	2	2	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	16 U	14 U	15 U	11 U	13 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 UJ	10 UJ	-	11 U	-	10 U	10 U	10 U	10 U	10 U	14 UJ	14 UJ	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 UJ	0.41 U	0.46 U	0.41 U	0.42 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	-	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 U	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	0.1 U	0.34 J	0.7	0.1 U	10	0.8	0.4 J	0.1 J	0.1 U	0.1 U	0.1 U	0.3 J	1	0.2 J	0.1 J	-	0.5 J	-	0.1 U	0.4 J	0.4 J	0.1 J	0.1 U	0.2 J	0.4 J	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 U	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.7 J	0.6 J	0.5 U	0.5 U	0.5 U	1	0.5 J	0.9 J	2 J	-	0.8 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 UJ	1 U	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 U	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 UJ	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.2 UJ	4.1 U	4.6 U	4.1 U	4.2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	3 UJ	3 U	3 U
3-Nitroaniline	ug/L	N	NA	2.1 UJ	2 U	2.3 U	2.1 U	2.1 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.3 U	8.2 U	9.1 U	8.3 U	8.4 U	6 U	7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	-	5 U	-	5 U	5 U	5 U	5 U	5 U	8 UJ	8 UJ	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 UJ	4.1 U	4.6 U	4.1 U	4.2 U	0.6 U	0.7 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	4 UJ	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	2	0.7 U	0.8 J	0.7 J	0.8 J	0.5 U	0.5 U	2	0.8 J	0.5 UJ	5 J	-	2	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 J	0.5 UJ	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.93 UJ	0.92 U	1 U	0.93 U	0.94 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 UJ	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	10 U	10 U	11 U	13 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 UJ	10 UJ	-	11 U	-	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U
Acenaphthene	ug/L	N	400	1.9 J	1.7	1.6	2.1	1.7	0.5 J	0.6 J	0.5 J	0.3 J	0.4 J	0.6	0.5 J	0.5 J	0.6	0.5 J	0.3 J	-	0.4 J	-	0.3 J	0.5 J	0.4 J	0.5	0.4 J	0.7 J	0.5	0.5
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 UJ	1 U	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	1	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 UJ	4 U	4 U
Anthracene	ug/L	N	2000	0.32 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 J	0.2 J	0.3 J	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	0.2 J	0.1 J	0.1 J	-	0.1 J	-	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.2 J	0.2 J	0.1 J
Atrazine	ug/L	N	3	1 UJ	1 U	1.1 U	1 U	1 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	5	13	1 U	1 U	1 U	1 U	1 UJ	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	3 UJ	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 UJ	0.11 U	0.13 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**4.6J**	2 U	2.3 U	2.1 U	**54**	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2.1 UJ	2 U	2.3 U	2.1 U	4.2 J	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	3.1 UJ	3.1 U	3.4 U	3.1 U	3.1 U	6 U	7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	-	5 UJ	-	5 UJ	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U
Carbazole	ug/L	N	NA	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.7 J	1 J	0.8 J	0.8 J	0.8 J	0.9 J	0.8 J	0.8 J	1	0.7 J	0.5 UJ	-	0.6 J	-	0.5 U	0.6 J	0.7 J	0.5 U	0.5 U	0.5 J	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 UJ	2 U	2.3 U	2.1 U	4.5 J	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.2 UJ	5.1 U	5.7 U	5.2 U	5.2 U	2 U	3 U	2 U	3 J	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	5 UJ	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.52 J	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 UJ	2 U	2.3 U	2.1 U	2.1 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 UJ	2 U	2.3 U	2.1 U	2.1 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	1.3 J	0.99	1.1	1.5	1.1	0.4 J	0.5 J	0.4 J	0.4 J	0.3 J	0.6	0.3 J	0.3 J	0.5 J	0.3 J	0.2 J	-	0.3 J	-	0.1 U	0.3 J	0.3 J	0.3 J	0.3 J	0.4 J	0.5 J	0.3 J
Hexachlorobenzene	ug/L	N	0.02	0.11 UJ	0.11 U	0.13 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 UJ	5.1 U	5.7 U	5.2 U	5.2 U	6 U	7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	-	5 U	-	5 UJ	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 UJ	0.11 U	0.13 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 UJ	0.7 U	0.7 U
Naphthalene	ug/L	N	300	3.9 J	0.1 U	4.4	2.6	0.1 U	54	3	0.1 U	1	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	2 J	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2 J	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.52 UJ	0.51 U	0.57 U	0.52 U	0.52 U	0.6 U	0.7 U	0.5 U	4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 U	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	-	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U
Phenanthrene	ug/L	N	NA	0.91 J	0.11 U	0.13 U	0.71	0.12 U	0.3 J	0.3 J	0.4 J	0.1 J	0.1 J	0.6	0.2 J	0.2 J	0.2 J	0.1 UJ	0.1 UJ	-	0.2 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.3 J	0.1 J
Phenol	ug/L	N	2000	3.8 J	0.51 U	2.3	0.52 U	0.52 U	0.6 U	1 J	1	1	0.5 U	0.7 J	0.5 U	0.5 U	1	0.5 UJ	6 J	-	3	-	0.5 U	3 J	2 J	2	0.5 U	0.5 UJ	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.18 J	0.1 U	0.11 U	0.1 U	0.89	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	1000 J	440 J	-	610 J	780 J	-	740 J	1200 J	1300 J	680 J	720 J	-	600 J	-	450 J	640 J	590 J	620 J	280 J	260 J	330 J	270 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237
			Field Sample ID	M234RRC7	M234RRC8	M234RRC9	M234RRD1X	M234RRD2	M234RRD3	M234RRD4	M234RRD6	M234RRD7X	M234RRD8	M234RRD9X	M234RRE1	M234RRE2	M234RRE3	M234RRE5	M237B3X	M237B4X	M237B5X	M237B6X	M237B7X	M237B8X	M237B9X	M237C1X	D0624201	M237C2X	M237C3
			Sample Date	01/07/2019	04/04/2019	07/03/2019	10/01/2019	01/07/2020	04/02/2020	07/07/2020	10/13/2020	12/03/2020	01/06/2021	03/25/2021	04/02/2021	07/09/2021	10/07/2021	01/18/2022	02/14/2012	03/05/2013	06/03/2014	09/30/2015	02/16/2016	03/24/2017	03/30/2018	03/22/2019	06/24/2020	06/24/2020	06/25/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3.2 U	3.1 U	3.5 U	3 U	3 U	3 U	3.1 U	3.4 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.5 U	3.6 U	3.2 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	14 U	15 U	15 U	14 U	14 UJ	15 U	14 U	16 U	14 U	14 U	14 U	15 U	16 U	11 U	11 U	12 U	10 U	10 U	10 U	10 U	14 U	16 U	17 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.42 U	0.41 U	0.47 U	0.41 U	0.4 U	0.4 U	0.42 U	0.45 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.49 U	0.43 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.3 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2.3 U	2.4 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3.2 U	3.1 U	3.5 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.5 U	3.6 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3.2 U	3.1 U	3.5 U	4.1 U	4 U	4 U	4.2 U	4.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3.5 U	3.6 U	4.3 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3 U	3 U	3 U	3 U	3 U	3 UJ	3.2 U	3.1 U	3.5 U	2 U	2 U	2 U	2.1 U	2.2 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.5 U	3.6 U	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	8 U	9 U	8 U	8 U	8.1 UJ	8.4 U	8.2 U	9.4 U	8.1 U	8.1 U	8.1 U	8.3 U	9 U	5 U	6 U	6 U	5 U	5 U	5 UJ	5 U	8 U	9.4 U	9.7 U	8.5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
4-Chloroaniline	ug/L	N	30	4 UJ	4 U	4 U	4 U	4 U	4 U	4 UJ	4.2 U	4.1 U	4.7 U	4.1 U	4 U	4 U	4.2 U	4.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	2 U	4 U	4.7 U	4.9 U	4.3 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
4-Nitroaniline	ug/L	N	NA	0.9 UJ	0.9 U	0.9 U	1 U	0.9 U	0.9 U	0.91 UJ	0.95 U	0.93 U	1.1 U	0.91 U	0.91 U	0.91 U	0.94 U	1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1.1 U	1.1 U	0.96 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	11 U	11 U	10 U	10 UJ	11 U	10 U	12 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	12 U	10 U	10 U	10 UJ	10 U	10 U	12 U	12 U	11 U
Acenaphthene	ug/L	N	400	0.5	0.5	0.5 J	0.4 J	0.4 J	0.4 J	0.49 J	0.53	0.7	0.49 J	0.54	0.38 J	0.49 J	0.46 J	0.45 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Acetophenone	ug/L	N	700	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4.2 U	4.1 U	4.7 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4.7 U	4.9 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.11 U	0.19 J	0.12 U	0.2 J	0.1 U	0.19 J	0.16 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.3 U	1 U	1 U	1 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.4 U	1.1 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3.2 U	3.1 U	3.5 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3.5 U	3.6 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.59 U	0.61 U	0.53 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5.3 U	5.2 U	5.9 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	**4J**	2 U	2 U	2 U	2 U	5 U	5.9 U	6.1 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.4 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5.3 U	5.2 U	5.9 U	3 U	3 U	3 U	3.1 U	3.4 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5.9 U	6.1 U	3.2 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.4 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5.3 U	5.2 U	5.9 U	5.1 U	5 U	5 U	5.2 U	5.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5.9 U	6.1 U	5.3 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 J	2.3 U	2.4 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	2.1 U	2.3 U	2 U	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2.4 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3.2 U	3.1 U	3.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3.5 U	3.6 U	0.53 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Fluorene	ug/L	N	300	0.3 J	0.3 J	0.3 J	0.3 J	0.2 J	0.3 J	0.32 J	0.33 J	0.31 J	0.16 J	0.41 J	0.16 J	0.33 J	0.23 J	0.23 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.3 U	5.2 U	5.9 U	5.1 U	5 U	5 U	5.2 U	5.6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5.9 U	6.1 U	5.3 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1.2 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	0.53 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.71 UJ	0.74 U	0.72 U	0.82 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.82 U	0.85 U	0.53 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.71 UJ	0.74 U	0.72 U	0.82 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.82 U	0.85 U	0.53 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.1 U	1.1	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 UJ	1.7 U	1.6 U	1.9 U	1 U	1 U	1 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9 U	1.9 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 UJ	0.11 U	0.21 J	0.12 U	0.27 J	0.11 U	0.16 J	0.2 J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.12 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.59 U	0.51 U	0.5 U	0.5 U	0.52 U	0.56 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.61 U	0.53 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.1 U	0.13 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U
Total TIC SVOCS	ug/L	N	NA	180 J	180 J	350 J	86 J	220 J	450 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120 J	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-238	MW-238	MW-238	MW-238	MW-238	MW-239	MW-239	MW-239	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241
			Field Sample ID	M238B1X	M238B2X	M238B3X	M238B4X	M238B5X	M239B6X	M239B8X	M239C7	M240B2X	M240B3X	M240B4X	M240B6X	M240B8X	M240B9X	M240C2X	M240C3X	D1204208	M240C7X	M240C8X	M241B3X	M241B4X	M241B5X	M241B6X	M241B7X	M241B8X	M241B9X	M241C1X
			Sample Date	03/07/2012	04/25/2013	05/29/2014	02/18/2016	02/07/2017	12/10/2015	07/28/2016	06/07/2021	04/30/2013	06/19/2013	03/13/2014	07/30/2014	01/19/2015	12/14/2015	12/06/2016	11/29/2017	12/04/2020	12/04/2020	03/24/2021	03/27/2012	08/09/2012	04/04/2013	09/26/2013	06/19/2014	11/12/2014	06/30/2015	02/18/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 UJ	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 U	10 U	10 U	11 U	11 U	10 U	10 U	15 U	11 U	11 U	-	11 U	11 UJ	11 U	10 U	11 U	14 U	14 U	14 UJ	99 U	11 U	10 U	11 U	11 U	11 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	-	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2 U	2 U	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4.2 U	2 U	2 U	-	2 U	2 UJ	2 U	2 U	2 U	3 U	3 U	4 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.1 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3 U	2 U	5 U	1 J	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8.4 U	6 U	5 U	-	5 U	5 UJ	5 U	5 U	5 U	8 U	8.1 U	8.1 U	49 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	4.2 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	2 U	2 U	2 U	4 U	4 U	4 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.94 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.91 U	0.91 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	11 U	11 U	-	11 U	11 UJ	11 U	10 U	11 U	10 U	10 U	10 U	99 U	11 U	10 U	11 U	11 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	1	0.5 J	0.7	0.6	0.7	0.5 J	0.6
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	3 U	3 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	**0.3J**	**0.14J**	**0.24J**	0.1 U	1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	**0.2J**	**0.14J**	**0.29J**	0.11 U	1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2J	0.17J	**0.33J**	0.1 U	1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.14 J	0.24 J	0.1 U	1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.16 J	0.1 U	1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	-	3 J	2 UJ	2 U	2 U	2 U	5 U	5.1 U	**3.1J**	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.1 U	6 U	5 U	-	15 J	5 U	5 U	5 U	5 U	5 U	5.1 U	3 U	49 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2 J	0.19 J	0.26 J	0.1 U	1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5.2 U	2 U	2 U	-	2 U	2 UJ	2 U	2 U	2 U	5 U	5.1 U	5 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 UJ	2 U	-	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.3 J	0.23 J	0.42 J	0.1 U	1 U	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	6 U	5 U	-	5 U	5 UJ	5 U	5 U	5 U	5 U	5.1 U	5 U	49 U	6 U	5 U	5 U	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.12 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.14J	0.17J	0.11 U	1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.71 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.71 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.6 U	1 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	-	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2 J	0.13 J	0.27 J	0.11 U	1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.6 U	0.5 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 J	0.1 J	0.1 J	0.1 U	0.3 J	0.26 J	0.54	0.1 U	1 J	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	37 J	8 J	-	6 J	-	-	16 J	27 J	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R
			Field Sample ID	M241C2X	M241C3X	M241C4X	M241C5X	M241C6X	M241C7X	M241C8X	M241C9X	M241D2X	M241D3X	M242B1X	M242B2X	M242B3X	M242B4X	M242B5X	M242B8X	M242C2X	M243RB6X	M243RB5X	M243RC2X	M243RC6X	D0206201X	M243RC7X	M243RD1X	M243RD2	M243RD4
			Sample Date	08/16/2016	02/15/2017	08/22/2017	03/01/2018	08/09/2018	03/08/2019	08/22/2019	02/07/2020	08/28/2020	01/29/2021	03/14/2012	09/26/2013	08/29/2014	09/23/2016	02/16/2017	03/19/2019	06/25/2020	08/23/2016	01/26/2017	02/02/2018	01/30/2019	02/06/2020	02/06/2020	02/24/2021	05/10/2021	11/09/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3.3 UJ	3.3 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3.4 U	12	0.8 J	0.5 U	3 U	3 U	3 U	3 U	3.2 U	31 U
2,4-Dinitrophenol	ug/L	N	40	10 UJ	10 UJ	10 U	10 U	14U	14 U	14 U	14 U	15 U	15 U	10 U	10 UJ	11 U	10 U	10 U	14 U	16 U	10 U	10 UJ	10 U	14 U	15 U	15 U	14 U	15 U	140 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1 U	1 U	1U	1 U	1 U	1 U	1.1 UJ	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	10 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4U	0.4 U	0.4 U	0.4 U	0.44 UJ	0.44 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	4.1 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	5	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**46 J**	22 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	2U	2 U	2 U	2 U	2.2 UJ	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	2 U	2.2 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	1 U	1.1 U	10 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3.3 UJ	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3.4 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	1 U	1.1 U	10 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	2 U	2 U	2 U	3U	3 U	3 U	3 U	3.3 U	4.4 U	2 U	2 UJ	2 U	2 U	2 U	3 U	3.4 U	2 U	2 U	2 U	3 U	3 U	3 U	4.1 U	4.2 U	41 U
3-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3.3 UJ	2.2 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3.4 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	2 U	2.1 U	20 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 UJ	5 U	5 U	8U	8 U	8 U	8 U	8.8 UJ	8.8 U	5 U	5 UJ	5 U	5 U	5 U	8 U	9 U	5 U	5 U	5 U	8 U	9 U	9 U	8.1 U	8.5 U	81 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 UJ
4-Chloroaniline	ug/L	N	30	2 UJ	2 U	2 U	2 U	4U	4 U	4 U	4 U	4.4 UJ	4.4 U	0.5 U	0.5 UJ	0.5 U	2 U	2 U	4 U	4.5 U	2 U	2 U	2 U	4 U	4 U	4 U	4.1 U	4.2 U	41 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.9U	0.9 U	0.9 U	0.9 U	0.99 UJ	0.99 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	1 U	0.91 U	0.95 U	9.2 U
4-Nitrophenol	ug/L	N	NA	10 UJ	10 UJ	10 UJ	10 U	10U	10 U	10 U	10 U	11 U	11 U	10 U	10 UJ	11 U	10 U	10 UJ	10 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	11 U	100 U
Acenaphthene	ug/L	N	400	0.8 J	0.8	0.6	0.8	0.8	0.1 U	0.9	0.7	0.87 J	0.83	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.8	2	0.8	0.1 U	0.1 U	0.1 U	0.1 U	1.1	2.4 J
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Acetophenone	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 U	4U	4 U	4 U	4 U	4.4 UJ	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	4 U	4.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	1 U	1.1 U	10 U
Anthracene	ug/L	N	2000	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	2	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Atrazine	ug/L	N	3	2 UJ	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 UJ	1.1 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	1.1 U	10 U
Benzaldehyde	ug/L	N	NA	1 UJ	1 U	1 U	1 U	3U	3 U	3 U	3 U	3.3 UJ	1.1 U	1 U	1 UJ	1 U	1 U	1 U	3 U	3.4 U	1 U	1 U	1 U	3 U	3 U	3 U	1 U	1.1 U	10 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 U	0.1 U	0.1J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**2**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.1 U	0.1 U	**0.2J**	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**1**	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	1.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 U	0.1 U	0.1J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 U	0.1 U	0.2 J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	2 U	2 U	2 U	5U	5 U	5 U	**11**	5.5 UJ	2.2 U	2 U	2 UJ	2 U	2 U	2 U	5 U	5.6 U	2 U	2 U	2 U	5 U	5 U	5 U	2 U	**4.2J**	20 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 UJ	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	20 U
Caprolactam	ug/L	N	4000	5 UJ	5 U	5 U	5 U	5U	5 U	5 U	5 U	5.5 U	3.3 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5.6 U	5 U	5 U	5 U	5 U	5 U	5 U	3 U	3.2 UJ	31 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
Chrysene	ug/L	N	5	0.1 UJ	0.1 U	0.1 U	0.2 J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 UJ	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	20 U
Di-n-octylphthalate	ug/L	N	100	2 UJ	2 U	2 U	2 U	5U	5 U	5 U	5 U	5.5 UJ	5.5 U	2 U	2 UJ	2 U	2 U	2 U	5 U	5.6 U	2 U	2 U	2 U	5 U	5 U	5 U	5.1 U	5.3 U	51 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.1 U	0.2J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.3J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.7 J	1	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	1.2 J	5.1 U
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 UJ	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	20 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	20 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 UJ	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3.3 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	3 U	3.4 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	0.51 U	0.53 U	5.1 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.2 J	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	1	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Fluorene	ug/L	N	300	0.1 UJ	0.1 J	0.2 J	0.2 J	0.1U	0.1 U	0.1 U	0.2 J	0.11 UJ	0.13 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1	3	2	4	0.1 U	0.1 U	0.12 U	2.8	3.6 J
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	1.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 UJ	5 UJ	5 U	5U	5 U	5 U	5 U	5.5 UJ	5.5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5.6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.3 U	51 U
Hexachloroethane	ug/L	N	7	1 UJ	1 U	1 U	1 U	1U	1 U	1 U	1 U	1.1 U	0.55 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.53 U	5.1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 U	0.1 U	0.1J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	1.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7U	0.7 U	0.7 U	0.7 U	0.77 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.78 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.8 U	0.51 U	0.53 U	5.1 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7U	0.7 U	0.7 U	0.7 U	0.77 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.7 U	0.78 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.8 U	0.51 U	0.53 U	5.1 U
Naphthalene	ug/L	N	300	0.1 UJ	0.1 U	0.1 U	0.5 J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.11 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	8	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	2 U	1.8 UJ	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	1.8 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1 U	1.1 U	10 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 U	1 U	1U	1 U	1 U	1 U	1.1 UJ	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	10 U
Phenanthrene	ug/L	N	NA	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.4 J	14	0.7	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	1.1 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.5 U	0.55 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.56 U	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5.1 U
Pyrene	ug/L	N	200	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1U	0.1 U	0.1 U	0.3 J	0.11 UJ	0.11 U	0.3 J	0.1 J	0.1 U	0.1 U	0.2 J	0.1 U	0.13 J	0.1 U	6	0.1 U	2	0.1 U	0.1 U	1.4	0.43 J	1.8 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13 J	-	-	-	-	880 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-243R	MW-258	MW-258	MW-258	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-259	MW-259	MW-259	MW-259	MW-259	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260RR	MW-260RR
			Field Sample ID	M243RD5	M258B6	M258B9X	M258C1X	D0708198	M258RD1X	M258RD4X	M258RD5X	M258RD6	M259B6	M259B9X	M259C1X	M259C3X	M059A2X	M260RC1X	M260RC2X	D0521191	M260RC3X	M260RC4X	D1104191	M260RC5X	D0228201X	M260RC6X	M260RC7X	X	D0331218
			Sample Date	02/14/2022	08/19/2013	09/12/2014	12/05/2014	07/08/2019	07/08/2019	10/15/2020	01/12/2021	04/08/2021	08/19/2013	08/18/2014	12/05/2014	09/15/2015	03/29/2021	11/26/2018	02/05/2019	05/21/2019	05/21/2019	08/23/2019	11/04/2019	11/04/2019	02/28/2020	02/28/2020	05/19/2020	01/06/2021	03/31/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	3 U	-	0.5 U	25	3 U	3 U	3 U	3.1 U	5.5 J	-	0.6 U	19	7	3.1 U	**1200**	**140J**	**880**	**740**	**610**	**1600**	**1700**	**310J**	**570J**	**240**	**2400**	**1100**
2,4-Dinitrophenol	ug/L	N	40	14 U	-	10 U	11 U	14 U	14 U	14 U	14 U	15 U	-	11 U	10 U	10 U	15 U	14 U	14 U	14 U	14 U	14 U	18 U	16 U	15 U	18 U	16 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.42 U	-	0.5 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	3.8
2-Methylnaphthalene	ug/L	N	30	0.1 U	-	0.1 U	**46**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	10	11	5	39	3	0.5 J	0.4 J	0.5 J	0.8	3	3	0.6 J	0.9 J	0.3 J	1.2	1.2
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.6 J	-	0.6 U	0.5 U	0.8 J	0.52 U	47	3	5	0.5 U	33	290	380	51 J	130J	37	1700	750
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	-	0.5 U	0.5 U	2 U	2 U	2 U	2.1 U	1 U	-	0.6 U	0.5 U	0.5 U	1 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 UJ	3 UJ	2 U	2 U	1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	-	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	1 U	-	0.6 U	0.5 U	0.5 U	1 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 UJ	4 UJ	3 U	3 U	1 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	-	2 U	2 U	3 U	3 U	3 U	3.1 U	4.2 U	-	2 U	2 U	2 U	4.2 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	4 U	3 U	3 U	4.1 U
3-Nitroaniline	ug/L	N	NA	2 U	-	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	2.1 U	-	0.6 U	0.5 U	0.5 U	2.1 UJ	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	4 U	3 U	3 U	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	-	5 U	5 U	8 U	8 U	8.1 U	8.2 U	8.3 U	-	6 U	5 U	5 U	8.3 U	8 U	8 U	8 U	8 U	8 U	10 UJ	9 UJ	9 UJ	10 UJ	9 U	8 U	8.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
4-Chloroaniline	ug/L	N	30	4 U	-	0.5 U	0.5 U	4 U	4 U	4 U	4.1 U	4.2 U	-	0.6 U	0.5 U	2 U	4.2 UJ	4 U	4 U	4 U	4 U	4 U	5 U	4 U	4 U	5 U	5 U	4 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 U	-	0.5 U	5	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	2	1	0.9 J	0.52 U	2 J	0.5 U	0.5 U	0.5 U	3	24	30	5 J	13 J	3	1500	560
4-Nitroaniline	ug/L	N	NA	0.91 U	-	0.5 U	0.5 U	0.9 U	0.9 U	0.91 U	0.93 U	0.94 U	-	0.6 U	0.5 U	0.5 U	0.94 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	1 U	1 UJ	1 UJ	1 U	0.9 U	0.93 U
4-Nitrophenol	ug/L	N	NA	10 U	-	10 U	11 U	10 U	10 U	10 U	10 U	10 U	-	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	13 U	11 U	11 U	13 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.99	-	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.2 J	0.2 J	3.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	-	0.5 U	0.5 U	4 U	4 U	4 U	4.1 U	1 U	-	0.6 U	0.5 U	0.5 U	1 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	4 UJ	5 UJ	5 U	4 U	1 U
Anthracene	ug/L	N	2000	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 J	0.1 J	0.1 U	5.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	-	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	2 U	2 U	1 U
Benzaldehyde	ug/L	N	NA	1 U	-	1 U	1 U	3 U	3 U	3 U	3.1 U	1 U	-	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	4 U	3 U	3 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**6.3**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	**8.9**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.4J**	0.1 UJ	0.1 UJ	**0.3J**	0.1 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**5.2**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	**0.3J**	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	8.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**3.5J**	-	2 U	2 U	5 U	5 U	5.1 U	5.2 U	2.1 U	-	2 U	2 U	2 U	**10**	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	6 U	6 U	5 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	2 U	2 U	2.1 U
Caprolactam	ug/L	N	4000	3 U	-	5 U	5 U	5 U	5 U	5.1 U	5.2 U	3.1 U	-	6 U	5 U	5 U	3.1 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	6 U	6 U	5 U	3.1 U
Carbazole	ug/L	N	NA	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	1 J	0.9 J	0.9 J	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
Chrysene	ug/L	N	5	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**12**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	-	2 U	2 U	2 U	3 J	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	2 U	2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	-	2 U	2 U	5 U	5 U	5.1 U	5.2 U	5.2 U	-	2 U	2 U	2 U	5.2 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	6 U	6 U	5 U	5.2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	**2.6**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3J	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.96 J	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
Diethylphthalate	ug/L	N	6000	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	2 U	2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	3 U	2 U	2 U	3 U	2 U	2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	-	0.5 U	0.5 U	3 U	3 U	3 U	3.1 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 UJ	4 UJ	3 U	3 U	0.52 U
Fluoranthene	ug/L	N	300	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.2 J	0.1 U	5.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	2.3	-	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	-	0.4 J	0.3 J	0.2 J	9	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	-	5 U	5 U	5 U	5 U	5.1 U	5.2 U	5.2 U	-	6 U	5 U	5 U	5.2 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	6 U	6 U	5 U	5.2 U
Hexachloroethane	ug/L	N	7	0.51 U	-	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U	-	1 U	1 U	1 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.52 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.1 U	0.1 U	0.1 U	**1.9**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.11 U
Isophorone	ug/L	N	40	0.51 U	-	0.5 U	0.8 J	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.6 UJ	0.6 U	0.5 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	-	0.5 U	0.5 U	0.7 U	0.7 U	0.71 U	0.72 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.9 U	0.8 U	0.8 U	0.9 U	0.8 U	0.7 U	0.52 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	-	0.5 U	0.5 U	0.7 U	0.7 U	0.71 U	0.72 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.9 U	0.8 U	0.8 U	0.9 U	0.8 U	0.7 U	0.52 U
Naphthalene	ug/L	N	300	0.1 U	4 J	4	180	0.1 U	0.1 U	0.1 U	0.1 U	0.53	130	49	50	35	20	8	3	4	4	6	12	11	5 J	8 J	4	5.2	4.5
Nitrobenzene	ug/L	N	6	0.51 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	-	0.5 U	0.5 U	0.5 U	0.5 U	1.6 U	1.6 U	1 U	-	0.6 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	1.6 U	1 U
Pentachlorophenol	ug/L	N	0.3	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	-	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	-	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.2 J	0.3 J	0.1 U	31	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	1 J	0.2 J	0.3 J	0.1 U	0.1 U	0.11 U
Phenol	ug/L	N	2000	0.51 U	-	0.5 U	6	0.5 U	0.5 U	0.51 U	0.52 U	0.52 U	-	0.6 U	0.5 U	1 J	0.52 U	17	12	11	8	41	140 J	88 J	28	24	12	**2100**	960
Pyrene	ug/L	N	200	0.47 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.2 J	0.1 J	14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 J	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	680 J	3900 J	270 J	360 J	-	0 U	-	-	2000 J	3900 J	-	-	-	-	370 J	330 J	370 J	1300 J	1300 J	440 J	500 J	260 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262
			Field Sample ID	X	M260RRD2	M260RRD3	M260RRD4	M261RC4X	M261RA5X	M261RA6X	D0729198	M261RA7X	M261RA8X	M261RA9X	M261RB1X	D0827208	M261RB2X	D0107218	M261RB3X	M261RB4X	M261RB5	M261RB6	M262B3X	M262B4X	M262B4X	M262B7X	M262B9X	M262C1X	M262C2X
			Sample Date	03/31/2021	07/12/2021	10/07/2021	01/21/2022	11/27/2018	02/05/2019	05/01/2019	07/29/2019	07/29/2019	11/06/2019	02/19/2020	05/19/2020	08/27/2020	08/27/2020	01/07/2021	01/07/2021	03/31/2021	07/12/2021	10/07/2021	05/06/2013	06/20/2013	06/20/2013	07/31/2014	01/16/2015	12/15/2015	12/06/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	**1300**	**1300J**	**1200**	**690**	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	3.1 U	3.4 U	3.1 U	0.5 U	-	1	2	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	13 U	14 U	14 U	14 U	14 U	15 U	14 U	14 U	16 U	14 U	14 U	14 U	14 U	14 U	14 U	16 U	15 U	11 U	-	12 U	11 U	11 U	10 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.1 U	0.96 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.41 U	0.43 U	0.38 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.41 U	0.41 U	0.41 U	0.41 U	0.41 U	0.45 U	0.42 U	0.4 U	-	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	5.7	16	12	9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	2.1	3.3	1.8	1.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	11 J	0.1 U	0.1 U	-	0.1 U	1	0.2 J	0.1 J	0.2 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	960	1200	960	550	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	1 J	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1.1 U	0.96 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1.1 U	0.96 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.1 U	4.3 U	3.8 U	4 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	4.1 U	4.5 U	4.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2 U	2.2 U	1.9 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	2 U	2.2 U	2.1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	8.6 U	7.7 U	8.1 U	8 U	8 U	8 U	8 U	8 U	8 U	9 U	8 U	8.2 U	8.1 U	8.2 U	8.2 U	8.1 U	9 U	8.4 U	5 U	-	6 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.1 U	4.3 U	3.8 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	4.1 U	4.1 U	4.1 U	4.1 U	4.1 U	4.5 U	4.2 U	0.5 U	-	0.6 U	0.5 U	0.5 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	730	670	430	150	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.91 U	0.97 U	0.86 U	0.91 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.9 U	0.92 U	0.91 U	0.93 U	0.92 U	0.92 U	1 U	0.94 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	9.6 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	-	12 U	11 U	11 U	10 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.5 J	0.1 U	0.5 J	0.1 U	0.5 J	0.1 U	0.5 J	0.1 U	0.1 U	0.68	0.1 U	0.37 J	0.41 J	0.1 U	0.1 U	-	0.1 U	0.2 J	0.1 U	0.2 J	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	1.1 U	0.96 U	1 U	4 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	4.1 U	4.1 U	4.1 U	4.1 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	-	0.1 U	0.3 J	0.2 J	0.2 J	0.1 U
Atrazine	ug/L	N	3	1 U	1.1 U	0.96 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	1 U	1.1 U	1 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1.1 U	0.96 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	1 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**3.9J**	2.2 U	1.9 U	**5.1**	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.1 U	5.1 U	5.2 U	5.1 U	2 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3 U	3.2 U	2.9 U	3 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	12	13	5.2 U	5.1 U	3.1 U	3.4 U	3.1 U	5 U	-	6 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.9 J	2	0.5 J	2	2
Chrysene	ug/L	N	5	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.1 U	5.4 U	4.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.1 U	5.1 U	5.2 U	5.1 U	5.1 U	5.6 U	5.2 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	1.1 J	0.6 J	0.68 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.2 U	1.9 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2.2 U	2.1 U	2 U	-	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 U	0.54 U	0.48 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3 U	3.1 U	3.1 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.12 U	1.1	0.12 U	0.12 U	0.7	0.6	0.3 J	0.8 J	0.1 U	0.7	0.1 U	0.6	0.1 U	0.1 U	0.94	0.1 U	0.44 J	0.48 J	0.49 J	0.1 J	-	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 UJ	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 U	5.4 U	4.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5.1 U	5.1 U	5.2 U	5.1 U	5.1 U	5.6 U	5.2 U	5 U	-	6 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.51 U	0.54 U	0.48 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	0.56 U	0.52 U	1 U	-	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 U	0.54 U	0.48 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.71 U	0.71 U	0.72 U	0.72 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 U	0.54 U	0.48 U	0.5 U	0.7 U	0.7 U	0.7 U	1 J	0.7 U	0.7 U	0.8 U	0.7 U	0.71 U	0.71 U	0.72 U	0.72 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	5.4	0.11 U	4.2	4.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.9	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	1 U	1 J	0.1 U	5	1	1	3
Nitrobenzene	ug/L	N	6	0.51 U	0.54 U	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	1.1 U	0.96 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1.6 U	1.6 U	1.6 U	1.6 U	1 U	1.1 U	1 U	0.5 U	-	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	0.96 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.32 J	0.12 U	0.11 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	-	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	1300	67	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.51 U	0.51 U	0.52 U	0.51 U	0.51 U	0.56 U	0.52 U	0.5 U	-	0.6 U	0.5 U	2	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.11 U	0.096 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.33 J	0.1 U	0.1 U	0.11 U	0.1 U	0.1 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	410 J	250 J	240 J	440 J	360 J	360 J	-	-	-	-	-	-	-	210 J	-	16 J	21 J	-	-	140 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-262	MW-262	MW-262	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-264	MW-264	MW-264	MW-264	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265
			Field Sample ID	M262C3X	M262C7X	M262C9X	M263B7X	M263B8X	M263B9X	M263C1X	M263C2X	M263C3X	M263C4X	M263C5X	M263C7	M263C8	M263C9	M264B5X	M264B7X	M264C7	M264C8	M265B3X	M265B4X	M265B5X	M265B6	D0927131	M265B7X	M265B8X	M265B9X	M265C1X
			Sample Date	11/28/2017	12/02/2020	03/18/2021	10/18/2018	01/18/2019	04/08/2019	07/11/2019	10/01/2019	01/14/2020	03/25/2020	12/15/2020	06/03/2021	08/30/2021	12/10/2021	12/04/2015	07/22/2016	06/07/2021	12/10/2021	02/28/2012	08/21/2012	03/28/2013	08/16/2013	09/27/2013	09/27/2013	02/07/2014	11/13/2014	07/02/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 UJ	4 J	3 U	3 U	4 J	4 J	3 U	3 U	3 U	3.1 U	-	3 U	0.5 U	8	3.2 U	3.2 U	**660**	**550**	58	-	**710**	**690**	**710**	**480**	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	14 U	14 UJ	14 U	14 U	14 U	15 U	15 U	15 U	15 U	14 U	14 U	-	14 U	10 U	11 U	15 U	15 UJ	95 U	100 U	12 U	-	210 U	220 U	11 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	0.99 U	1 U	1 U	1.1 U	1.1 U	9 U	10 U	1 U	-	21 U	22 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	**17**	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	-	0.4 U	0.4 U	0.4 U	0.43 U	0.42 U	4 U	4 U	0.5 U	-	8 U	9 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.4 J	0.1 U	0.1 U	5	0.9	0.5 J	9	6	7	0.5 J	0.83	17 J	**40**	8.8 J	0.1 U	0.1 U	0.11 U	0.11 U	8	8	0.1 U	-	9 J	8 J	13	9	2
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	340	220	25	-	360	340	390	370	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	-	0.99 U	0.5 U	0.5 U	1.1 U	1.1 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	1 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	-	0.99 U	0.5 U	0.5 U	1.1 U	1.1 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	4 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	4.1 U	-	4 U	2 U	2 U	4.3 U	4.2 U	19 U	20 U	2 U	-	42 U	44 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	2 U	3 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	2.1 U	-	2 U	0.5 U	0.5 U	2.1 U	2.1 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8.1 UJ	8 U	8 U	8 U	9 U	8 U	9 U	9 U	8.1 U	8.2 U	-	7.9 U	5 U	5 U	8.6 U	8.5 U	440	50 U	6 U	-	110 U	110 U	38	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 U	4 UJ	4 U	4 U	4 U	4 U	4 U	4 U	4.1 U	-	4 U	2 U	2 U	4.3 U	4.2 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	2	0.5 U	0.54 U	0.53 U	5 U	57	11	-	150	130	120	180	2
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.9 U	0.91 U	0.9 U	0.9 U	0.9 U	1 U	0.9 U	1 U	1 U	0.91 U	0.93 U	-	0.89 U	0.5 U	0.5 U	0.97 U	0.95 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 UJ	10 U	10 U	10 U	11 U	10 U	11 U	11 U	10 U	10 U	-	9.9 U	10 U	11 U	11 U	11 U	95 U	100 U	12 U	-	210 U	220 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1	0.1 U	1	0.1 U	0.38 J	0.76	-	0.099 U	0.9	0.1 U	0.11 U	0.8	2 J	1 J	0.4 J	-	2 U	2 U	0.1 U	1	0.8
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.099 U	0.1 U	0.1 U	0.11 U	0.11 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	1 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	1 U	-	0.99 U	0.5 U	0.5 U	1.1 U	1.1 U	5 U	7 J	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.3 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.32 J	-	0.18 J	0.3 J	0.1 U	0.11 U	0.11 U	1 J	1 U	0.1 U	-	2 U	2 U	0.1 U	0.4 J	0.2 J
Atrazine	ug/L	N	3	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	1 U	-	0.99 U	2 U	2 U	1.1 U	1.1 U	19 U	20 U	2 U	-	42 U	44 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	1 U	-	0.99 U	1 U	1 U	1.1 U	1.1 U	9 U	10 U	1 U	-	21 U	22 U	39	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	**0.2J**	**0.4J**	0.1 U	0.1 U	0.1 U	-	**0.16J**	0.1J	0.1 U	0.11 U	0.11 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	**0.2J**	**0.2J**	0.1 U	**0.4J**	**0.2J**	**0.5J**	0.1 U	0.1 U	0.11 U	-	0.27 UJ	**0.2J**	0.1 U	0.12 U	0.12 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	-	0.099 U	0.1 U	0.1 U	0.11 U	0.11 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.3 J	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	-	0.13 J	0.1 J	0.1 U	0.11 U	0.92	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.099 U	0.1 U	0.1 U	0.11 U	0.11 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2.1 U	19 U	20 U	2 U	-	42 U	44 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2.1 U	19 U	75	2 U	-	42 U	44 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	3.1 U	-	3 U	5 U	5 U	3.2 U	3.2 U	47 U	50 U	6 U	-	110 U	110 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	0.6 J	0.7 J	0.5 U	0.51 U	1.2 J	-	0.76 J	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.7	0.1 U	0.1 U	0.1 U	-	0.4 J	0.2 J	0.1 U	0.11 U	0.11 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.2 J	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2.1 U	19 U	20 U	2 UJ	-	42 U	44 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	-	5 U	2 U	2 U	5.4 U	5.3 U	19 U	20 U	2 U	-	42 U	44 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.099 U	0.1 U	0.1 U	0.11 U	0.14J	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2.1 U	19 U	20 U	2 U	-	42 U	44 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	-	2 U	2 U	2 U	2.1 U	2.1 U	19 U	20 U	2 U	-	42 U	44 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 U	-	0.099 U	0.4 J	0.2 J	0.11 U	0.11 U	1 J	1 U	0.2 J	-	2 U	2 U	0.4 J	0.4 J	0.2 J
Fluorene	ug/L	N	300	0.3 J	0.1 U	0.12 U	0.4 J	0.1 U	0.3 J	1	0.8	1	0.2 J	0.42 J	0.6	-	0.78	0.7	0.1 U	0.13 U	0.13 U	3 J	2 J	0.2 J	-	2 U	2 U	0.9	1	1
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.11 U	0.1 U	0.1 U	0.12 U	0.12 U	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5.1 U	-	5 U	5 U	5 U	5.4 U	5.3 U	47 U	50 U	6 U	-	110 U	110 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.51 U	-	0.5 U	1 U	1 U	0.54 U	0.53 U	9 U	10 U	1 U	-	21 U	22 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	-	0.11 U	0.1 U	0.1 U	0.12 U	0.34 UJ	0.9 U	1 U	0.1 U	-	2 U	2 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.7 U	0.71 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.7 U	0.71 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	3	0.26 J	0.1 U	13	3	0.8	25	17	10	1	6.8 J	26 J	39	14 J	0.1 U	0.1 U	0.11 U	0.11 U	82	54	1	79 J	76	74	97	32	2
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.51 U	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	1.6 U	1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U	1 U	-	0.99 U	0.5 U	0.5 U	1.1 U	1.1 U	5 U	5 U	0.6 U	-	11 U	11 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	-	0.99 U	1 U	1 U	1.1 U	1.1 U	9 U	10 U	1 U	-	21 U	22 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.2 J	0.1 U	0.11 U	1	0.7	0.8	3	1	2	0.7	0.76 UJ	1.4	-	1.5	0.5 J	0.1 U	0.12 U	0.12 U	5	2 J	0.1 U	-	2 U	2 U	1	2	0.6
Phenol	ug/L	N	2000	2	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	5.1	-	0.5 U	0.5 U	0.5 U	0.54 U	0.53 U	890	170	26	-	180	140	660	190	12
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.6	0.4 J	0.8	0.3 J	0.24 UJ	0.1 U	-	0.51	0.4 J	0.4 J	0.11 U	0.11 U	1 J	1 U	0.1 J	-	2 U	2 U	0.3 J	0.5 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	220 J	-	-	730 J	230 J	380 J	880 J	380 J	230 J	34 J	-	-	-	-	580 J	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265R	MW-265R	MW-265R	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R
			Field Sample ID	M265C2X	M265C3X	M265C4X	M265C5	M265C6	M265C7	M265D3	M265RD5X	M265RD6	M265RD7	M266B5	D0814148	D1204148	M266B8X	M266D3X	M266D5X	D0111218	M266D6X	M266D7	M267RC4X	M267RC6X	M267RC7X	M267RC8X	D110619	M267RC9X	D0302201	M267RD2X
			Sample Date	12/10/2015	02/09/2016	08/01/2016	08/16/2016	05/11/2017	11/01/2017	07/25/2019	05/18/2020	06/07/2021	12/14/2021	08/20/2013	08/15/2014	12/04/2014	12/04/2014	07/10/2019	10/21/2020	01/11/2021	01/11/2021	04/12/2021	10/22/2018	02/05/2019	05/02/2019	07/30/2019	11/06/2019	11/06/2019	03/02/2020	03/02/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 U	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 U	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 U	5 UJ	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	87 J	43	60	20	20	**520**	-	**3300**	**430**	**410**	-	11	21	23	3 U	3.1 U	3 U	3.6 UJ	3.3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	10 UJ	10 U	100 UJ	11 U	10 U	10 U	-	150 U	140 U	82 U	-	11 U	10 U	11 U	15 U	14 U	14 U	17 UJ	16 U	14 U	14 U	15 U	15 U	14 U	14 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	10 U	1 U	1 U	1 U	-	11 UJ	10 U	5.8 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1.2 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	4 U	0.4 U	0.4 U	0.4 U	-	4 UJ	4 U	2.3 U	-	0.5 U	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.48 UJ	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 U	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	1 J	4	1 U	0.1 U	0.1 U	0.1 U	-	16 J	1 U	0.58 U	-	3	10	10	4	0.1 U	0.1 U	0.12 UJ	0.11 U	0.3 J	0.2 J	0.1 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	45 J	26	37	4	0.5 U	320	-	4000	210	32	-	2	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	21 UJ	10 U	5.8 U	-	0.6 U	0.5 U	0.5 U	2 U	2.1 U	2 U	2.4 UJ	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	32 U	10 U	5.8 U	-	0.6 U	0.5 U	0.5 U	3 U	3.1 U	3 U	3.6 UJ	1.1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	2 U	20 U	2 U	2 U	2 U	-	32 UJ	40 U	23 U	-	2 U	2 U	2 U	3 U	3.1 U	3 U	3.6 UJ	4.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	32 UJ	20 U	12 U	-	0.6 U	0.5 U	0.5 U	3 U	3.1 U	3 U	3.6 UJ	2.2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 U	51 U	5 U	22	5 U	-	85 U	81 U	47 U	-	6 U	5 U	5 U	9 U	8.3 U	8 U	9.7 UJ	8.9 U	8 U	8 U	9 U	8 U	8 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 UJ	2 U	20 U	2 U	2 U	2 U	-	43 UJ	40 U	23 U	-	0.6 U	0.5 U	0.5 U	4 U	4.1 U	4 U	4.8 UJ	4.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	25 J	12	8 J	1	0.5 U	120	-	2700	5 U	2.9 U	-	1 J	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	10 UJ	9.1 U	5.3 U	-	0.6 U	0.5 U	0.5 U	1 U	0.93 U	0.91 U	1.1 UJ	1 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 UJ	10 U	100 U	11 U	10 U	10 U	-	110 U	100 U	58 U	-	11 U	10 U	11 U	11 U	10 U	10 U	12 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.3 J	0.9	1 U	0.1 U	0.1 U	1	-	1 UJ	1 U	0.58 U	-	12	16	18	7	5.1	2.9	1.1 J	3.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1 U	0.58 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	43 UJ	10 U	5.8 U	-	0.6 U	0.5 U	0.5 U	4 U	4.1 U	4 U	4.8 UJ	1.1 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.1 UJ	0.3 J	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1 U	0.58 U	-	0.3 J	0.3 J	0.4 J	0.1 U	0.1 U	0.24 J	0.12 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2 U	20 U	2 U	2 U	2 U	-	21 UJ	10 U	5.8 U	-	2 U	2 U	2 U	2 U	2.1 U	2 U	2.4 UJ	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 UJ	1 U	10 U	1 U	1 U	1 U	-	32 UJ	10 U	5.8 U	-	1 U	1 U	1 U	3 U	3.1 U	3 U	3.6 UJ	1.1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.1 U	1 U	0.1 U	0.1J	0.1 U	-	1 UJ	1 U	0.58 U	-	**0.4J**	0.1J	**0.3J**	**0.3J**	0.1 U	0.1 U	0.12 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1.1 U	0.64 U	-	**0.3J**	0.1 U	**0.3J**	**0.4J**	0.1 U	**0.42J**	**0.35J**	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1 U	0.58 U	-	**0.3J**	0.1 U	**0.3J**	**0.4J**	0.1 U	**0.39J**	**0.41J**	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1 U	0.58 U	-	0.3 J	0.1 U	0.3 J	0.4 J	0.1 U	0.4 J	0.39 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1 U	0.58 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J	0.17 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	2 U	20 U	2 U	2 U	2 U	-	53 UJ	20 U	12 U	-	2 U	2 U	2 U	6 U	5.2 U	5 U	6.1 UJ	2.2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	20 U	2 U	2 U	2 U	-	21 UJ	20 U	12 U	-	2 U	2 U	2 U	2 U	2.1 U	2 U	2.4 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 UJ	5 U	51 U	5 U	5 UJ	5 UJ	-	53 UJ	30 U	18 U	-	6 U	5 U	5 U	6 U	5.2 U	5 U	6.1 UJ	3.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.6 J	-	5 UJ	5 U	2.9 U	-	3	3	3	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 UJ	0.1 J	1 U	0.1 U	0.1 J	0.1 U	-	1 UJ	1 U	0.58 U	-	0.9	0.4 J	0.7	1	0.1 U	1.1	0.12 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 U	20 U	2 U	2 U	2 U	-	21 UJ	20 U	12 U	-	2 U	2 U	2 U	2 U	2.1 U	2 U	2.4 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 UJ	2 U	20 U	2 U	2 U	2 U	-	53 UJ	50 U	29 U	-	2 U	2 U	2 U	6 U	5.2 U	5 U	6.1 UJ	5.6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1 U	0.58 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	5	7	8	2	1.8 J	0.9 J	0.61 UJ	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	20 U	2 U	2 U	2 U	-	21 UJ	20 U	12 U	-	2 U	2 U	2 U	2 U	2.1 U	2 U	2.4 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	20 U	2 U	2 U	2 U	-	21 UJ	20 U	12 U	-	2 U	2 U	2 U	2 U	2.1 U	2 U	2.4 UJ	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	32 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	3 U	3.1 U	3 U	3.6 UJ	0.56 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.3 J	0.3 J	1 U	0.1 U	0.2 J	0.1 U	-	3 J	1 U	0.58 U	-	0.9	0.4 J	0.8	0.6	0.1 U	0.7	0.49 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.5 J	1	2 J	0.1 U	0.1 U	1	-	3 J	1.2 U	0.7 U	-	4	6	7	3	2.3	1.2	0.55 J	0.84	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1.1 U	0.64 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 U	51 U	5 U	5 U	5 U	-	53 UJ	50 U	29 U	-	6 U	5 U	5 U	6 U	5.2 U	5 U	6.1 UJ	5.6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 UJ	1 U	10 U	1 U	1 U	1 U	11000 U	11 UJ	5 U	2.9 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1.2 UJ	0.56 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.1 U	1 U	0.1 U	0.1 U	0.1 U	-	1 UJ	1.1 U	0.64 U	-	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	7 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.8 U	0.72 U	0.7 U	0.85 UJ	0.56 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	7 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.8 U	0.72 U	0.7 U	0.85 UJ	0.56 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	6 J	7	3 J	0.1 U	0.1 U	22	-	58 J	29	24	16	18	30	30	0.1 U	0.1 U	0.1 U	0.12 UJ	0.11 U	0.1 U	0.3 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	5 UJ	5 U	2.9 U	-	0.6 U	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	5 U	0.5 U	0.5 U	0.5 U	-	17 U	10 U	5.8 U	-	0.6 U	0.5 U	0.5 U	0.6 U	1.7 UJ	1.6 U	1.9 UJ	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	10 U	**4J**	1 U	1 U	-	11 U	10 U	5.8 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1.2 UJ	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.8 J	1	1 U	0.1 U	0.4 J	1	-	7 J	1.1 U	0.71 J	-	1	2	2	0.1 U	0.1 U	0.24 J	0.12 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	32 J	55	51	22	30	61	-	1200	160	75	-	1	0.5 U	0.5 U	0.6 U	0.52 U	0.5 U	0.61 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 UJ	0.3 J	1 U	0.3 J	0.3 J	0.1 U	-	3 J	1 U	0.58 U	-	2	0.7	2	2	0.58	1.6	1.2 J	0.23 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	7900 J	-	-	-	1200 J	-	-	410 J	-	-	-	-	-	-	20 J	47 J	63 J	93 J	0 U	43 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-268	MW-268	MW-268R	MW-268R	MW-273	MW-273	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-274	MW-274	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281
			Field Sample ID	M267RD3X	M267RD4X	M267RD5X	M267RD6X	M267RD7X	M267RD9	M267RE1	M268B6X	M268B8X	M268RC5X	M268RC6	M273C2X	M273C3X	M273RC4X	M273RC5X	M273RC7X	M273RC8X	M273RC8X	M273RD1X	M274A1X	M274A2X	M281A3X	M281A4X	M281A5X	M281A6X	M281A7X	M281A8X
			Sample Date	05/20/2020	09/14/2020	12/15/2020	01/07/2021	03/31/2021	07/12/2021	10/07/2021	08/15/2014	12/10/2014	09/08/2020	05/20/2021	11/27/2018	02/05/2019	07/30/2019	11/07/2019	02/26/2020	05/18/2020	05/18/2020	11/11/2020	07/19/2016	10/11/2016	03/09/2012	08/09/2012	03/21/2013	09/26/2013	05/30/2014	01/14/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.1 UJ	3.2 U	3.1 U	3 U	3.4 U	3 U	0.5 U	1	3.3 U	3.2 U	97	**260J**	**1400**	34	**1400**	**1700**	3 U	22	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2,4-Dinitrophenol	ug/L	N	40	15 U	15 UJ	15 U	14 U	14 U	16 U	14 U	10 U	11 U	15 U	15 U	14 U	15 U	15 U	14 U	14 U	14 U	15 U	16 U	10 UJ	10 U	11 U	10 U	11 U	10 U	11 U	10U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 UJ	0.43 U	0.41 U	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U	0.43 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.46 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	29	**35**	18	6	2	2	0.1 U	1.4	6 J	19	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	16	57	2400	48	690	860	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2.1 UJ	2.2 U	2.1 U	1 U	1.1 U	1 U	0.5 U	0.6 U	2.2 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3.1 UJ	3.2 U	3.1 U	1 U	1.1 U	1 U	0.5 U	0.6 U	3.3 U	1.1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3.1 UJ	3.2 U	3.1 U	4 U	4.5 U	4 U	2 U	2 U	3.3 U	4.2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
3-Nitroaniline	ug/L	N	NA	3 U	3.1 UJ	3.2 U	3.1 U	2 U	2.2 U	2 U	0.5 U	0.6 U	3.3 U	2.1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8.3 UJ	8.6 U	8.3 U	8 U	8.9 U	8.1 U	5 U	6 U	8.7 U	8.5 U	8 U	9 U	8 U	8 U	8 U	8 U	9 U	9.1 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
4-Chloroaniline	ug/L	N	30	4 U	4.1 UJ	4.3 U	4.1 U	4 U	4.5 U	4 U	0.5 U	0.6 U	4.3 U	4.2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.6 U	2 UJ	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	7.1	0.53 U	4	20	890	12	560	1300	0.6 U	0.57 U	2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.93 UJ	0.97 U	0.93 U	0.9 U	1 U	0.91 U	0.5 U	0.6 U	0.98 U	0.95 U	0.9 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	1 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
4-Nitrophenol	ug/L	N	NA	10 U	10 UJ	11 U	10 U	10 U	11 U	10 U	10 U	11 U	11 U	11 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	10 UJ	10 U	11 U	10 U	11 U	10 U	11 U	10U
Acenaphthene	ug/L	N	400	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.13 J	0.11 U	0.6	0.7	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.26 J	3 J	10	0.2 J	0.2 J	0.2 J	0.3 J	0.1 U	0.6
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1J
Acetophenone	ug/L	N	700	4 U	4.1 UJ	4.3 U	4.1 U	1 U	1.1 U	1 U	0.5 U	0.6 U	4.3 U	1.1 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.6 J	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Atrazine	ug/L	N	3	2 U	2.1 UJ	2.2 U	2.1 U	1 U	1.1 U	1 U	2 U	2 U	2.2 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
Benzaldehyde	ug/L	N	NA	3 U	3.1 UJ	3.2 U	3.1 U	1 U	1.1 U	1 U	1 U	1 U	3.3 U	1.1 U	3 U	3 U	12	3 U	3 U	3 U	3 U	3.4 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.11J**	0.1 UJ	**2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	**0.2J**	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.11J**	0.1 UJ	**0.9**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.2J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11J	0.1 UJ	**0.8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 J	0.1 UJ	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5.2 UJ	5.4 U	5.2 U	2 U	2.2 U	2 U	2 U	2 U	5.4 U	2.1 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.7 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 UJ	2.2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
Caprolactam	ug/L	N	4000	5 U	5.2 UJ	5.4 U	5.2 U	3 U	3.4 U	3 U	5 U	6 U	5.4 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.7 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5U
Carbazole	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.2 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15 J	0.1 J	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 UJ	2.2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
Di-n-octylphthalate	ug/L	N	100	5 U	5.2 UJ	5.4 U	5.2 U	5 U	5.6 U	5 U	2 U	2 U	5.4 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.7 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Dibenzofuran	ug/L	N	NA	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Diethylphthalate	ug/L	N	6000	2 U	2.1 UJ	2.2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2U
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 UJ	2.2 U	2.1 U	2 U	2.2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3.1 UJ	3.2 U	3.1 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	3.3 U	0.53 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.4 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Fluoranthene	ug/L	N	300	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.3 J	0.4 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 J	0.2 J	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Fluorene	ug/L	N	300	0.1 U	0.1 UJ	0.11 U	0.1 U	0.12 U	0.13 U	0.12 U	0.2 J	0.1 U	0.11 U	0.13 U	0.1 U	0.8	0.1 U	0.4 J	0.3 J	0.3 J	0.1 U	0.28 J	4 J	17	0.4 J	0.4 J	0.3 J	0.3 J	0.1 U	0.8
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 UJ	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.2 UJ	5.4 U	5.2 U	5 U	5.6 U	5 U	5 U	6 U	5.4 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.7 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1.1 U	1 U	0.5 U	0.56 U	0.5 U	1 U	1 U	1.1 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11J	0.1 UJ	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Isophorone	ug/L	N	40	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.73 UJ	0.75 U	0.72 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.76 U	0.53 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.73 UJ	0.75 U	0.72 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.76 U	0.53 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Naphthalene	ug/L	N	300	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.2 J	0.1 U	0.11 U	0.11 U	89	110	31	15	0.1 U	0.1 U	0.1 U	2.9	0.1 UJ	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.4J
Nitrobenzene	ug/L	N	6	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.57 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
p-Chloro-m-cresol	ug/L	N	NA	2 U	1.7 UJ	1.7 U	1.7 U	1 U	1.1 U	1 U	0.5 U	0.6 U	1.7 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	1.8 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Pentachlorophenol	ug/L	N	0.3	1 U	1 UJ	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	0.11 U	0.1 U	0.11 U	0.12 U	0.11 U	0.3 J	0.3 J	0.11 U	0.12 U	0.6	0.6	1	0.5	0.5 J	0.2 J	0.1 U	0.32 J	4 J	27	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U
Phenol	ug/L	N	2000	0.5 U	0.52 UJ	0.54 U	0.52 U	0.5 U	0.56 U	0.5 U	0.5 U	0.6 U	1.9 J	0.53 U	2	6	160	4	210	400	0.6 U	2.9	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5U
Pyrene	ug/L	N	200	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.4 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.5 J	6	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1U
Total TIC SVOCS	ug/L	N	NA	140 J	-	-	-	-	-	-	190 J	-	-	-	-	-	540 J	830 J	7700 J	200 J	69 J	-	-	1100 J	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-281	MW-310	MW-310	MW-310	MW-312	MW-312	MW-312	MW-315	MW-314	MW-314	MW-314	MW-314	MW-314
			Field Sample ID	M281A9X	M281B1X	M281B2	M281B3	M281B4	M281B5	M281B6	M281B7X	M281B8X	M281B9X	M281C1X	M281C2	M281C3	M281C3	M281C4	M281C5	M310A2X	M310A3X	M310A4X	M312A2X	M312A3X	M312A4X	M315A3X	M314A3X	M314A5X	M314A6X	M314A7X	M314B2X
			Sample Date	03/22/2016	09/08/2016	05/03/2017	11/01/2017	05/16/2018	11/28/2018	04/24/2019	11/18/2019	03/04/2020	08/26/2020	03/12/2021	05/04/2021	09/17/2021	10/20/2021	03/24/2022	03/29/2012	04/01/2013	02/07/2014	04/26/2012	10/01/2013	08/27/2014	03/21/2012	03/28/2012	04/11/2013	03/28/2014	02/24/2016	01/26/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.6 U	3 U	3.1 UJ	3.1 U	3.2 U	3.1 U	0.5 U	1	0.5 U	0.6 U	0.5 U	0.6 U	39	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 UJ	11 U	10 U	14 U	14 U	14 U	14 U	16 UJ	17 U	14 U	15 UJ	14 U	15 U	15 U	11 U	10 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.2 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.48 UJ	0.4 U	0.42 U	0.41 U	0.43 U	0.42 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.3 J	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.7 J	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2.4 UJ	1 U	1 U	1 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.6 UJ	1 U	1 UJ	1 UJ	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 UJ	2 U	2 U	3 U	3 U	3 U	3 U	3 UJ	3.6 UJ	4 U	4.2 U	4.1 U	4.3 U	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.6 UJ	2 U	2.1 U	2.1 U	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 UJ	5 U	5 U	8 U	8 U	8 U	8 U	9 UJ	9.6 U	8 U	8.3 UJ	8.2 U	8.6 U	8.3 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 UJ	2 U	2 U	4 U	4 U	4 U	4 U	4 UJ	4.8 UJ	4 U	4.2 U	4.1 U	4.3 U	4.2 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	1 UJ	1.1 UJ	0.9 U	0.93 U	0.92 U	0.96 U	0.94 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	11 UJ	12 U	10 U	10 UJ	10 U	11 U	10 U	11 U	10 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.6	0.6 J	0.2 J	0.6	0.1 U	0.1 U	0.5	0.4 J	0.2 J	0.4 J	0.39 J	0.69	0.21 J	0.31 U	0.48 J	0.3 J	0.2 J	0.1 J	2	1	1	0.3 J	0.5	0.9	0.7	0.6	0.9
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J
Acetophenone	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 UJ	4.8 UJ	1 U	1 U	1 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.3 J	0.3 J	0.2 J	0.2 J	0.2 J	0.2 J	0.2 J	0.3 J
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 UJ	1 U	1 U	1 U	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 UJ	1 U	1 U	3 U	3 U	3 U	3 U	3 UJ	3.6 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 J	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U	6 UJ	6 UJ	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.4 UJ	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	5 UJ	5 UJ	5 U	5 U	5 U	5 U	6 UJ	6 UJ	3 U	3.1 U	3.1 U	3.2 U	3.1 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	3	2	2	0.6 J	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.4 UJ	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	5 U	5 U	5 U	5 U	6 UJ	6 UJ	5 U	5.2 U	5.1 UJ	5.4 U	5.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.7 J	0.8 J	0.8 J	0.6 J	0.5 U	0.7 J	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.4 UJ	2 U	2.1 U	2.1 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.4 UJ	2 U	2.1 UJ	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.2 J	0.3 J	0.6	0.2 J	0.2 J	0.2 J	0.3 J
Fluorene	ug/L	N	300	0.6	0.6 J	0.1 U	0.5 J	0.1 U	0.1 U	0.6	0.4 J	0.1 UJ	0.42 J	0.44 J	0.69	0.22 J	0.13 U	0.33 J	0.3 J	0.2 J	0.1 U	2	2	2	0.6	0.5	1	0.8	0.8	1
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	6 UJ	6 UJ	5 U	5.2 U	5.1 U	5.4 U	5.2 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.2 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.84 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 UJ	0.84 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	2	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	3	2	4	0.4 J	0.2 J	0.8	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 UJ	0.5 U	0.52 U	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	1.9 U	1 U	1 UJ	1 U	1.1 U	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	**8**	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.2 U	1 U	1 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.11 U	0.11 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	1	0.8	2	0.2 J	0.1 U	0.1 U	0.2 J	0.1 J	0.2 J
Phenol	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.52 UJ	0.51 U	0.54 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	1	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 U	0.3 J	0.3 J	0.3 J	0.6	0.7	0.1 U	0.1 J	0.2 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	37 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-314	MW-314	MW-314	MW-314	MW-314	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	M314B6X	M314C1	M314C2	M314C3	M314C4	M322A1X	M322A2	M322A2X	M322A3	M322A3X	M322A4	M322A5	M322A6	M322A7	M322A9	M322B1	M322B2	M322B3	M322B4	M322B5	M322B6	M322B7	M322B8	M322B9	M322C1	M322C2	M322C3
			Sample Date	01/30/2018	05/04/2021	09/21/2021	10/27/2021	03/24/2022	03/15/2012	05/16/2012	05/17/2012	07/30/2012	07/31/2012	11/19/2012	02/19/2013	06/12/2013	09/05/2013	11/07/2013	03/12/2014	05/19/2014	08/04/2014	10/29/2014	03/03/2015	06/08/2015	09/14/2015	11/18/2015	01/07/2016	04/06/2016	07/20/2016	10/13/2016
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3.1 U	3.2 U	3 U	3.2 U	5 U	5 U	0.5 U	5 U	5 U	1	1	1	1	2	0.6 U	0.7 J	0.8 J	1 J	0.5 U	0.5 U	0.6 J	0.5 U	0.5 J	0.5 U	0.5 U	0.5 J
2,4-Dinitrophenol	ug/L	N	40	11 U	14 U	15 U	14 U	15 U	100 U	100 U	10 U	100 U	98 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.1 U	1 U	1.1 U	10 U	10 U	1 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.43 U	0.4 U	0.42 U	4 U	4 U	0.4 U	4 U	4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	1 U	1.1 U	1 U	1.1 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	1 U	1.1 U	1 U	1.1 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	4.1 U	4.3 U	4 U	4.2 U	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	2.1 U	2.1 U	2 U	2.1 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8.2 U	8.5 U	8.1 U	8.4 U	51 U	50 U	5 U	50 U	49 U	5 U	5 U	5 U	5 U	6 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	4.1 U	4.3 U	4 U	4.2 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.7 J	0.5 U	0.6 U	0.6 U	0.6 U	3	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5	3 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.92 U	0.96 U	0.91 U	0.95 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	11 U	10 U	11 U	100 U	100 U	10 U	100 U	98 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.6	0.9	0.9	0.91	1	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.2 J	0.2 J	0.1 J	0.1 J	0.2 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	1 U	1.1 U	1 U	1.1 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.2 J	0.36 J	0.35 J	0.31 J	0.33 J	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	1 U	1.1 U	1 U	1.1 U	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1.1 U	1 U	1.1 U	10 U	10 U	1 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	**0.13J**	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2.1 U	2.1 U	2 U	**3.8J**	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 U	2.1 U	2 U	2.1 U	20 U	49 J	2 U	33 J	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	3.1 U	42	3 U	3.2 U	51 U	50 U	5 U	50 U	49 U	5 U	5 U	5 U	5 U	6 U	6 U	6 U	80	30	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 U	2.1 U	2 U	2.1 U	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5.1 U	5.3 U	5 U	5.3 U	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.1 U	2.1 U	2 U	2.1 U	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 UJ	2.1 U	2 U	2.1 U	20 U	20 U	2 U	20 U	20 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.4 J	0.53	0.87	0.43 J	0.52 J	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.9	1.2	1.3	1.2	1.2	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.3 J	0.2 J	0.1 U	0.2 J	0.1 J	0.2 J	0.2 J	0.1 J	0.3 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.1 U	5.3 U	5 U	5.3 U	51 U	50 U	5 U	50 U	49 U	5 U	5 U	5 U	5 U	6 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	0.51 U	0.53 U	0.5 U	0.53 U	10 U	10 U	1 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.19 J	0.1 U	0.11 U	1 U	2 J	0.1 U	1 U	1 U	0.1 U	0.1 J	0.2 J	0.3 J	0.3 J	0.2 J	0.1 J	0.1 U	0.8	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.5 J
Nitrobenzene	ug/L	N	6	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	1 U	1.1 U	1 U	1.1 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 U	1 U	1.1 U	10 U	10 U	1 U	10 U	10 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.2 J	0.22 J	0.39 J	0.2 J	0.4 J	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.51 U	0.53 U	0.5 U	0.53 U	5 U	5 U	0.5 U	5 U	5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.3 J	0.36 J	0.58	0.33 J	0.35 J	1 U	1 U	0.1 U	1 U	1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	160 J	320 J	220 J	290 J	500 J	640 J	95 J	67 J	200 J	190 J	280 J	100 J	110 J	310 J	120 J	5 J	73 J	44 J	170 J	11 J	20 J	74 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	M322C4	M322C6	M322C7	M322C9	M322D2	M322D3	M322D6	M322D7	M322D8	D0402191	M322D9	D0702191	M322E1	D1002191	M322E2	D0102201	M322E3	M322E4	D0706201	M322E5	D1013201	M322E6	M322E7	M322E8	M322E9	M322F2	M322F3
			Sample Date	01/17/2017	04/27/2017	07/18/2017	10/13/2017	01/19/2018	04/13/2018	07/13/2018	10/25/2018	01/02/2019	04/02/2019	04/02/2019	07/02/2019	07/02/2019	10/02/2019	10/02/2019	01/02/2020	01/02/2020	04/01/2020	07/06/2020	07/06/2020	10/13/2020	10/13/2020	01/06/2021	04/01/2021	07/09/2021	10/07/2021	01/19/2022
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 J	0.5 J	0.6 J	0.5 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	4 U	4 U	3 U	3.2 U	3.2 U	3.5 U	3.1 U	3.3 U	3.1 U	3.7 U	3.2 U	3.2 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	10 U	10 U	10 U	15 U	16 U	14 U	14 U	14 U	15 U	15 U	16 U	15 U	17 U	17 U	16 U	15 U	15 U	16 U	15 U	15 U	15 U	17 U	15 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.2 U	1 U	1.1 U	1 U	1.2 U	1.1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.5 U	0.4 U	0.43 U	0.42 U	0.46 U	0.42 U	0.43 U	0.42 U	0.5 U	0.42 U	0.42 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.2 U	1 U	1.2 U	1.1 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	4 U	4 U	3 U	3.2 U	3.2 U	3.5 U	3.1 U	3.3 U	1 U	1.2 U	1.1 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	4 U	4 U	3 U	3.2 U	3.2 U	3.5 U	3.1 U	3.3 U	4.2 U	5 U	4.2 U	4.2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	4 U	4 U	3 U	3.2 U	3.2 U	3.5 U	3.1 U	3.3 U	2.1 U	2.5 U	2.1 U	2.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 U	8 U	9 U	8 U	8 U	8 U	8 U	8 U	9 U	8 U	9 U	10 U	9 U	8.5 U	8.4 U	9.3 U	8.4 U	8.7 U	8.4 U	10 U	8.5 U	8.5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	5 U	5 U	4 U	4.3 U	4.2 U	4.6 U	4.2 U	4.3 U	4.2 U	5 U	4.2 U	4.2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	2	2	0.5 U	0.5 U	0.5 U	0.5 J	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	1 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.9 U	1 U	1 U	1 U	0.96 U	0.95 U	1 U	0.94 U	0.98 U	0.94 U	1.1 U	0.96 U	0.96 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U	12 U	12 U	11 U	11 U	11 U	12 U	10 U	11 U	10 U	12 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	5 U	5 U	4 U	4.3 U	4.2 U	4.6 U	4.2 U	4.3 U	1 U	1.2 U	1.1 U	1.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.2 U	1 U	1.2 U	1.1 U	1.1 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	4 U	4 U	3 U	3.2 U	3.2 U	3.5 U	3.1 U	3.3 U	1 U	1.2 U	1.1 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.14 U	0.12 U	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	**12**	2 U	**5J**	2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	6 U	5.3 U	5.3 U	5.8 U	5.2 U	5.4 U	2.1 U	2.5 U	2.1 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.2 U	2.1 U	2.5 U	2.1 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	6 U	5.3 U	5.3 U	5.8 U	5.2 U	5.4 U	3.1 U	3.7 U	3.2 U	3.2 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.2 U	2.1 U	2.5 U	2.1 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	6 U	5.3 U	5.3 U	5.8 U	5.2 U	5.4 U	5.2 U	6.2 U	5.3 U	5.3 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.2 U	2.1 U	2.5 U	2.1 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2.3 U	2.1 U	2.2 U	2.1 U	2.5 U	2.1 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	4 U	4 U	3 U	3.2 U	3.2 U	3.5 U	3.1 U	3.3 U	0.52 U	0.62 U	0.53 U	0.53 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Fluorene	ug/L	N	300	0.1 U	0.2 J	0.2 J	0.4 J	0.2 J	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.13 U	0.15 U	0.13 U	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.14 U	0.12 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	6 U	6 U	5.3 U	5.3 U	5.8 U	5.2 U	5.4 U	5.2 U	6.2 U	5.3 U	5.3 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.2 U	1 U	1.1 U	0.52 U	0.62 U	0.53 U	0.53 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.14 U	0.12 U	0.12 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.9 U	0.8 U	0.74 U	0.74 U	0.81 U	0.73 U	0.76 U	0.52 U	0.62 U	0.53 U	0.53 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 U	0.8 U	0.9 U	0.8 U	0.74 U	0.74 U	0.81 U	0.73 U	0.76 U	0.52 U	0.62 U	0.53 U	0.53 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.2 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.22 J	0.12 U	0.11 U	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	2 U	1.7 U	1.7 U	1.9 U	1.7 U	1.7 U	1 U	1.2 U	1.1 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1.2 U	1 U	1.1 U	1 U	1.2 U	1.1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.11 U	0.14 U	0.12 U	0.12 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 U	0.53 U	0.53 U	0.58 U	0.52 U	0.54 U	0.52 U	0.62 U	0.53 U	0.53 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.1 U	0.11 U	0.1 U	0.12 U	0.11 U	0.11 U
Total TIC SVOCS	ug/L	N	NA	300 J	100 J	58 J	190 J	270 J	120 J	410 J	230 J	140 J	400 J	550 J	410 J	320 J	310 J	310 J	290 J	330 J	560 J	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323
			Field Sample ID	M323A1X	M323A2	M323A2X	M323A3	M323A3X	M323A4	M323A5	M323A6	M323A7	M323A9	M323B1	M323B3	M323B4	M323B5	M323B6	D0915151	M323B7	M323B8	M323B9	M323C2	M323C3	M323C4	M323C6	M323C7	M323D1	M323D3	D0413181
			Sample Date	03/15/2012	05/16/2012	05/17/2012	07/30/2012	07/31/2012	11/20/2012	02/20/2013	06/12/2013	09/05/2013	11/05/2013	03/12/2014	08/05/2014	10/29/2014	03/03/2015	06/08/2015	09/15/2015	09/15/2015	11/18/2015	01/07/2016	07/22/2016	10/13/2016	01/17/2017	04/27/2017	07/18/2017	12/01/2017	01/19/2018	04/13/2018
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	11 UJ	10 UJ	15 U	10 U	10 UJ	10 UJ	11 UJ	11 UJ	11 UJ	11 U	11 UJ	11 UJ	11 U	10 U	10 UJ	10 UJ	11 U	10 U	11 UJ	10 U	10 U	10 U	10 UJ	10 UJ	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 UJ	2 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 UJ	0.4 UJ	0.6 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	6 UJ	5 UJ	8 U	5 U	5 UJ	5 UJ	6 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	3 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	11 UJ	10 UJ	15 U	10 U	10 UJ	10 UJ	11 UJ	11 UJ	11 UJ	11 U	11 UJ	11 UJ	11 U	10 U	10 UJ	10 UJ	11 U	10 U	11 UJ	10 U	10 U	10 U	10 UJ	10 UJ	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 J	0.6 UJ	0.5 UJ	0.8 U	0.7 J	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 UJ	2 J	2 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	**0.2J**	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1J	0.1J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.2J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	3 J	2 U	2 U	2 UJ	2 U	2 U	2 UJ	3 J	2 U	2 U	2 U	2 UJ	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	6 UJ	5 UJ	8 U	5 U	5 UJ	5 UJ	6 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.3 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	6	2 U	2 UJ	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 UJ	3 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.2 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.3 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 UJ	5 UJ	8 U	5 U	5 UJ	5 UJ	6 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 UJ	2 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 UJ	0.3 J	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 UJ	1 UJ	2 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.6 UJ	0.5 UJ	0.8 U	0.5 U	0.5 UJ	0.5 UJ	0.6 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 UJ	0.1 UJ	0.2 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 J	0.1 U	0.3 J	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.4 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	79 J	51 J	93 J	59 J	89 J	51 UJ	20 J	47 J	98 J	87 J	88 J	10 J	8 J	69 J	36 J	38 J	18 J	40 J	34 J	18 J	31 J	19 J	0 U	62 J	-	46 J	12 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324
			Field Sample ID	M323D4	M323D6	M323D7	M323D8	M323D9	M323E1	M323E2	M323E3	D0401201	M323E4	M323E6	M323E7	M323E8	M323E9	M323F1	M323F2	M323F3	M324A1X	M324A2	M324A2X	M324A3	M324A3X	M324A4	M324A5	M324A6	M324A7	M324A8
			Sample Date	04/13/2018	07/13/2018	10/26/2018	01/02/2019	04/09/2019	07/09/2019	10/07/2019	01/02/2020	04/01/2020	04/01/2020	07/06/2020	10/13/2020	01/06/2021	04/01/2021	07/14/2021	10/07/2021	01/19/2022	03/13/2012	05/17/2012	05/18/2012	07/30/2012	07/31/2012	11/21/2012	02/21/2013	06/17/2013	09/09/2013	11/05/2013
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.5 UJ	3.4 UJ	3.3 U	3 U	3 U	3.2 UJ	3.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	11 U	15 U	14 U	14 UJ	15 U	14 UJ	15 UJ	16 U	15 U	15 U	16 UJ	16 UJ	15 U	14 U	14 U	15 UJ	16 U	10 U	11 U	10 U	11 U	10 U	10 U	11 U	11 U	10 U	12 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.2 U	1.1 UJ	1.1 U	1 U	1 U	1.1 UJ	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.5 U	0.4 U	0.4 U	0.47 U	0.45 UJ	0.44 U	0.4 U	0.4 U	0.43 UJ	0.46 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.3 UJ	2.2 U	1 U	1 U	1.1 UJ	1.2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.5 UJ	3.4 UJ	3.3 U	1 U	1 U	1.1 UJ	1.2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.5 U	3.4 UJ	3.3 U	4 U	4 U	4.3 UJ	4.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.5 U	3.4 UJ	3.3 U	2 U	2 U	2.2 UJ	2.3 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8 U	8 UJ	9 U	8 UJ	8 UJ	9 U	8 U	8 U	9.4 U	9.1 UJ	8.8 U	8 U	8.1 UJ	8.7 UJ	9.2 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 U	4 U	4 UJ	4 UJ	5 U	4 U	4 U	4.7 U	4.5 UJ	4.4 U	4 U	4 U	4.3 UJ	4.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.9 UJ	0.9 UJ	1 U	1 U	0.9 U	1.1 U	1 UJ	0.99 U	0.9 U	0.91 U	0.97 UJ	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 UJ	11 U	10 UJ	11 UJ	11 U	11 U	10 U	12 UJ	11 UJ	11 U	10 U	10 U	11 UJ	12 U	10 U	11 U	10 U	11 U	10 U	10 U	11 U	11 U	10 U	12 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.3 J	0.6	0.5 J	0.4 J	0.6	0.1 U	0.3 J	0.3 J	0.2 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 U	4 U	4 UJ	4 UJ	5 U	4 U	4 U	4.7 U	4.5 UJ	4.4 U	1 U	1 U	1.1 UJ	1.2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.3 UJ	2.2 U	1 U	1 U	1.1 UJ	1.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.5 U	3.4 UJ	3.3 U	1 U	1 U	1.1 UJ	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 UJ	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 UJ	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5 U	5 U	5.9 U	5.7 UJ	5.5 U	2 U	2 U	2.2 UJ	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.3 UJ	2.2 U	2 U	2 U	2.2 UJ	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5 U	5 U	5.9 U	5.7 UJ	5.5 U	3 U	3 U	3.2 UJ	3.5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.3 UJ	2.2 U	2 U	2 U	2.2 UJ	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5 U	5 U	5.9 U	5.7 UJ	5.5 U	5 U	5 U	5.4 UJ	5.8 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.3 UJ	2.2 U	2 U	2 U	2.2 UJ	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2.3 U	2.3 UJ	2.2 U	2 U	2 U	2.2 UJ	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3.5 U	3.4 UJ	3.3 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.12 U	0.12 U	0.13 UJ	0.14 U	0.1 U	0.2 J	0.3 J	0.3 J	0.3 J	0.3 J	0.1 U	0.2 J	0.2 J	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 UJ	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	6 U	5 U	5 U	5.9 U	5.7 UJ	5.5 U	5 U	5 U	5.4 UJ	5.8 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.2 U	1.1 UJ	1.1 U	0.5 U	0.5 U	0.54 UJ	0.58 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 UJ	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 UJ	0.7 UJ	0.8 U	0.7 U	0.7 U	0.82 U	0.8 UJ	0.77 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 UJ	0.7 UJ	0.8 U	0.7 U	0.7 U	0.82 U	0.8 UJ	0.77 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.2 J	0.1 U	0.3 J	0.2 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 U	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	2 U	2 U	1.9 UJ	1.8 UJ	1.8 U	1 U	1 U	1.1 UJ	1.2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1.2 UJ	1.1 UJ	1.1 U	1 U	1 U	1.1 UJ	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.12 UJ	0.13 U	0.1 U	0.1 U	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 U	0.1 J	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 U	0.59 UJ	0.57 UJ	0.55 U	0.5 U	0.5 U	0.54 UJ	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.2 J	0.1 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	0 U	13 J	59 J	91 J	12 J	67 J	0 UJ	0 U	0 U	0 U	-	-	-	-	-	0 U	0 U	8 J	23 J	300 J	12 J	21 J	5 J	0	0 U	0 U	7 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324
			Field Sample ID	M324A9	M324B1	M324B2	M324B3	D0310151	M324B4	M324B5	M324B6	D1117151	M324B7	M324B8	M324B9	M324C1	M324C4	M324C5	M324C7	M324C8	M324C9	M324D1	M324D2	M324D3	M324D4	M324D5	M324D6	M324D7	M324D8	M324D9
			Sample Date	03/11/2014	05/21/2014	08/07/2014	10/28/2014	03/10/2015	03/10/2015	05/28/2015	09/17/2015	11/17/2015	11/17/2015	01/12/2016	04/07/2016	07/21/2016	01/18/2017	04/26/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/24/2018	01/04/2019	04/09/2019	07/09/2019	10/07/2019	01/06/2020	04/03/2020	07/08/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	15 U	3 UJ	3 U	3 U	3 UJ
2,4-Dinitrophenol	ug/L	N	40	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ	11 U	11 U	11 U	10 U	10 UJ	10 U	10 UJ	10 U	10 U	11 U	10 U	14 U	15 U	14 U	14 U	71 U	15 UJ	16 U	14 U	14 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	5 U	1 UJ	1 U	1 UJ	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	2 U	0.4 UJ	0.4 U	0.4 UJ	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 UJ	2 U	2 U	10 U	2 UJ	2 U	2 UJ	2 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	15 U	3 UJ	3 U	3 UJ	3 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	3 UJ	3 U	3 U	15 U	3 UJ	3 U	3 UJ	3 UJ
3-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	3 U	15 U	3 UJ	3 U	3 UJ	3 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	5 U	6 U	5 U	6 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	6 U	5 U	8 U	9 U	8 U	8 U	40 U	9 UJ	9 U	8 U	8 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
4-Chloroaniline	ug/L	N	30	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	4 U	4 UJ	4 U	4 U	20 U	4 UJ	4 U	4 UJ	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.9 U	1 UJ	0.9 U	0.9 U	5 U	1 UJ	1 U	0.9 UJ	0.9 UJ
4-Nitrophenol	ug/L	N	NA	11 U	11 U	11 U	11 U	11 U	11 U	11 UJ	11 U	11 U	11 U	10 U	10 UJ	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	51 U	11 UJ	11 U	10 U	10 UJ
Acenaphthene	ug/L	N	400	0.2 J	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 UJ	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Acetophenone	ug/L	N	700	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	4 U	4 UJ	4 U	4 U	20 U	4 UJ	4 U	4 UJ	4 UJ
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	10 U	2 UJ	2 U	2 UJ	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	3 UJ	3 UJ	3 U	3 U	15 U	3 UJ	3 U	3 UJ	3 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.2J**	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.3 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	**5J**	2 U	5 U	5 UJ	5 U	5 U	25 U	5 UJ	6 U	5 UJ	5 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	10 U	2 UJ	2 U	2 UJ	2 UJ
Caprolactam	ug/L	N	4000	6 U	71	25	12 J	6 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	6 U	5 UJ	5 U	5 UJ	5 U	5 U	25 U	22 J	6 U	5 UJ	5 UJ
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.3 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	10 U	2 UJ	2 U	2 UJ	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 UJ	5 U	5 U	25 U	5 UJ	6 U	5 UJ	5 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	10 U	2 UJ	2 U	2 UJ	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	10 U	2 UJ	2 U	2 UJ	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	3 U	3 UJ	3 U	3 U	15 U	3 UJ	3 U	3 UJ	3 UJ
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 J	0.1 U	0.2 J	0.2 J	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 J	0.5 U	0.1 UJ	0.1 U	0.2 J	0.1 UJ
Fluorene	ug/L	N	300	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	6 U	5 U	5 UJ	5 UJ	5 U	5 U	25 U	5 UJ	6 U	5 UJ	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	5 U	1 UJ	1 U	1 UJ	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U	0.8 UJ	0.7 U	0.7 U	4 U	0.7 UJ	0.8 U	0.7 UJ	0.7 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.7 U	0.8 UJ	0.7 U	0.7 U	4 U	0.7 UJ	0.8 U	0.7 UJ	0.7 UJ
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.5 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 UJ	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	2 U	1.6 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	1 UJ	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.3 J	0.1 U	0.5 U	0.1 UJ	0.1 U	0.2 J	0.1 UJ
Phenol	ug/L	N	2000	0.6 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.2 J	0.1 J	0.1 U	0.1 J	0.1 J	0.1 U	0.1 UJ	0.3 J	0.1 J	0.5 U	0.1 UJ	0.1 U	0.2 J	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	0 U	0 U	5 J	0 U	0 U	37 J	49 J	10 J	8 J	15 J	0 UJ	40 J	20 J	84 J	0 U	0 U	0 U	40 J	5 J	110 UJ	26 J	58 J	60 J	9 J	5 J	23 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325
			Field Sample ID	M324E1	D0107211	M324E2	M324E3	D0714211	M324E4	M324E5	M324E6	D0313121	M325A1X	M325A2	M325A2X	M325A3	M325A3X	M325A4	M325A5	M325A6	M325A7	D1105131	M325A8	M325A9	M325B1	M325B2	M325B3	M325B4	M325B5	M325B6
			Sample Date	10/12/2020	01/07/2021	01/07/2021	04/12/2021	07/14/2021	07/14/2021	10/07/2021	01/17/2022	03/13/2012	03/13/2012	05/17/2012	05/18/2012	07/26/2012	07/27/2012	11/21/2012	02/21/2013	06/14/2013	09/09/2013	11/05/2013	11/05/2013	03/11/2014	05/21/2014	08/07/2014	10/28/2014	03/10/2015	05/28/2015	09/17/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.2 U	3.7 U	3.6 U	3.3 U	3.1 U	3 U	3.1 UJ	3 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	17 U	17 U	15 U	14 U	14 U	14 UJ	14 U	10 U	10 U	12 U	9 U	11 U	10 U	10 U	12 U	10 U	11 U	12 U	11 U	11 U	11 U	12 U	10 U	11 U	10 UJ	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 UJ	1.2 U	1.2 U	1.1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 UJ	0.49 U	0.48 U	0.44 UJ	0.41 UJ	0.4 UJ	0.41 UJ	0.4 UJ	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.2 J	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2.1 UJ	2.4 U	2.4 U	1.1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3.2 U	3.7 U	3.6 U	1.1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3.2 UJ	3.7 U	3.6 U	4.4 UJ	4.1 UJ	4 UJ	4.1 UJ	4 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3.2 UJ	3.7 U	3.6 U	2.2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.4 U	9.7 U	9.6 U	8.8 U	8.2 UJ	8.1 UJ	8.2 UJ	8.1 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.2 UJ	4.9 U	4.8 U	4.4 UJ	4.1 UJ	4 UJ	4.1 UJ	4 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.95 UJ	1.1 U	1.1 U	0.99 UJ	0.92 UJ	0.91 UJ	0.92 UJ	0.91 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	12 U	12 U	11 U	10 U	10 U	10 UJ	10 U	10 U	10 U	12 U	9 U	11 U	10 U	10 U	12 U	10 U	11 U	12 U	11 U	11 U	11 U	12 U	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.6	0.6	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4.2 UJ	4.9 U	4.8 U	1.1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 J	0.2 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2.1 UJ	2.4 U	2.4 U	1.1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3.2 UJ	3.7 U	3.6 U	1.1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1J	0.1J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 UJ	0.12 U	0.12 U	0.12 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.12J	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.11J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5.3 UJ	6.1 U	6 U	2.2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 UJ	2.4 U	2.4 U	2.2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5.3 UJ	6.1 U	6 U	3.3 UJ	3.1 UJ	3 UJ	3.1 UJ	18 J	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 J	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.12 J	0.1 UJ	0.1 UJ	0.1 J	0.2 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 UJ	2.4 U	2.4 U	2.2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U
Di-n-octylphthalate	ug/L	N	100	5.3 UJ	6.1 U	6 U	5.5 UJ	5.1 UJ	5 UJ	5.1 UJ	5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 UJ	2.4 U	3.1 J	2.2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 J	2 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 UJ	2.4 U	2.4 U	2.2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3.2 UJ	3.7 U	3.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.12 J	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.15 J	0.1 UJ	0.1 UJ	0.3 J	0.4 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.11 UJ	0.12 U	0.12 U	0.13 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.5 J	0.4 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.11 UJ	0.12 U	0.12 U	0.12 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 UJ	6.1 U	6 U	5.5 UJ	5.1 UJ	5 UJ	5.1 UJ	5 UJ	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1.1 UJ	1.2 U	1.2 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 UJ	0.12 U	0.12 U	0.12 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.74 UJ	0.85 U	0.84 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.74 UJ	0.85 U	0.84 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.4 J	0.4 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.53 UJ	0.61 U	0.6 U	0.55 UJ	0.51 UJ	0.5 UJ	0.51 UJ	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.7 U	1.9 U	1.9 U	1.1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1.2 U	1.2 U	1.1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	**4J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 J	0.12 U	0.12 U	0.12 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.11 UJ	0.4 J	0.4 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.53 U	0.61 U	0.6 U	0.55 U	0.51 U	0.5 U	0.51 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 UJ	0.12 U	0.12 U	0.11 UJ	0.1 UJ	0.18 J	0.1 UJ	0.1 UJ	0.4 J	0.4 J	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	0 U	0 U	-	-	-	0 U	-	29 J	13 J	19 J	10 J	7 J	56 J	0	8 J	0 U	0 U	0 U	5 J	0 U	0 U	0 U	6 J	20 J	6 J	750 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-326	MW-326	MW-326
			Field Sample ID	M325B7	M325B8	M325B9	M325C1	M325C3	M325C4	M325C6	M325C7	M325C8	M325C9	M325D1	M325D2	M325D3	M325D4	M325D5	M325D6	M325D7	M325D8	M325D9	M325E1	M325E2	M325E5	M325E4	M325E6	M326A1X	M326A2	M326A2X
			Sample Date	11/17/2015	01/12/2016	04/07/2016	07/21/2016	01/18/2017	04/26/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/24/2018	01/04/2019	04/09/2019	07/09/2019	10/07/2019	01/06/2020	04/03/2020	07/08/2020	10/12/2020	01/07/2021	04/12/2021	07/14/2021	10/08/2021	01/14/2022	03/13/2012	05/23/2012	05/24/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.5 U	3.5 U	3 U	3 U	3 U	3 UJ	0.5 U	0.6 U	5 UJ
2,4-Dinitrophenol	ug/L	N	40	10 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	14 U	14 U	14 U	13 U	14 U	14 U	15 U	15 U	15 U	17 U	16 U	14 U	14 U	14 U	14 U	10 U	11 U	100 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1.1 U	1.2 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.47 U	0.46 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.3 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.5 U	3.5 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.5 U	3.5 U	4.1 U	4 U	4 U	4 U	2 U	2 U	20 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.5 U	3.5 U	2 U	2 U	2 U	2 U	0.5 U	0.6 U	5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	7 U	8 U	8 U	9 U	8 U	8.4 U	9.4 U	9.3 U	8.1 U	8.1 UJ	8.1 U	8.1 U	5 U	6 U	50 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.2 U	4.7 U	4.6 U	4.1 U	4 U	4 U	4 U	0.5 U	0.6 U	5 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	4.6	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.8 U	0.9 U	0.9 U	1 U	0.9 U	0.95 U	1.1 U	1 U	0.91 U	0.91 U	0.91 U	0.91 U	0.5 U	0.6 U	5 UJ
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	9 U	10 U	10 U	11 U	11 U	11 U	12 U	12 U	10 U	10 U	10 U	10 U	10 U	11 U	100 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.2 U	4.7 U	4.6 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	5 UJ
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.3 U	1 U	1 U	1 U	1 U	2 U	2 U	20 UJ
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.5 U	3.5 U	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.12J**	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1J	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.13J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.13 J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 J	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.9 U	5.8 U	2 U	2 U	2 UJ	2 U	2 U	2 U	20 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.9 U	5.8 U	3 U	3 U	3 U	3 U	5 U	6 U	50 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
Chrysene	ug/L	N	5	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5.9 U	5.8 U	5.1 U	5 U	5 U	5 U	2 U	2 U	20 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	3.5 U	3.5 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
Fluoranthene	ug/L	N	300	0.8	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5.3 UJ	5.9 U	5.8 U	5.1 U	5 U	5 U	5 U	5 U	6 U	50 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1.1 U	1.2 U	1.2 U	0.51 U	0.5 U	0.5 U	0.5 U	1 U	1 U	10 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	1 UJ
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.7 U	0.8 U	0.7 U	0.74 U	0.83 U	0.81 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.7 U	0.8 U	0.7 U	0.74 U	0.83 U	0.81 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
Naphthalene	ug/L	N	300	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5	0.2 J	1 UJ
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.9 U	1.9 U	1 U	1 U	1 U	1 UJ	0.5 U	0.6 U	5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1.1 U	1.2 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ
Phenanthrene	ug/L	N	NA	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	1 UJ
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.59 U	0.58 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	5 UJ
Pyrene	ug/L	N	200	0.5 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ
Total TIC SVOCS	ug/L	N	NA	5 J	6 J	13 J	21 J	190 J	11 J	5 J	0 U	0 U	26 J	97 J	16 J	2300 J	140 J	0 U	10 J	25 J	-	-	0 U	-	-	-	-	100 J	180 J	160 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326
			Field Sample ID	M326A3	M326A3X	M326A4	M326A5	M326A6	M326A7	M326A9	M326B1	M326B3	M326B5	D0529151	M326B6	M326B7	M326B8	M326B9	M326C1	M326C2	M326C3	M326C4	M326C5	M326C7	M326C8	M326C9	M326D1	M326D2	M326D3	M326D4
			Sample Date	07/26/2012	07/27/2012	11/20/2012	02/20/2013	06/13/2013	09/05/2013	11/06/2013	03/10/2014	08/05/2014	03/23/2015	05/29/2015	05/29/2015	09/18/2015	11/18/2015	01/11/2016	04/12/2016	07/19/2016	10/13/2016	01/17/2017	04/21/2017	08/31/2017	10/10/2017	01/23/2018	04/10/2018	07/16/2018	10/29/2018	01/03/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 U	100 UJ	10 U	11 UJ	11 U	11 U	11 U	11 U	11 UJ	11 U	10 UJ	11 UJ	10 U	10 U	10 U	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	11 UJ	10 U	14 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	4 UJ	0.4 U	0.4 UJ	0.5 U	0.4 U	0.5 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.5 UJ	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	50 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	6 UJ	5 U	5 UJ	6 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ
4-Chloroaniline	ug/L	N	30	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	4 U	4 U	4 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 UJ
4-Nitrophenol	ug/L	N	NA	11 U	100 UJ	10 U	11 UJ	11 U	11 U	11 U	11 U	11 UJ	11 U	10 UJ	11 UJ	10 U	10 U	10 U	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 UJ
Acenaphthene	ug/L	N	400	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Acetophenone	ug/L	N	700	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 UJ
Anthracene	ug/L	N	2000	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Atrazine	ug/L	N	3	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	**6**	**13J**	2 UJ	2 J	2 U	2 UJ	2 U	2 U	**7**	2 U	5 U	5 U	5 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	88 J	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	5 U	50 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	6 UJ	5 U	5 UJ	6 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	5 U	5 U	5 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	20 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 UJ
Fluoranthene	ug/L	N	300	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	50 UJ	5 U	5 UJ	6 U	5 U	6 U	5 U	6 UJ	5 U	5 UJ	6 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ
Hexachloroethane	ug/L	N	7	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ
Naphthalene	ug/L	N	300	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ
Nitrobenzene	ug/L	N	6	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	10 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	**4J**	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Phenol	ug/L	N	2000	0.5 U	5 UJ	0.5 U	0.5 UJ	0.6 U	0.5 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	85 J	1300 J	4 J	110 J	24 J	20 J	45 J	30 J	18 J	6 J	74 J	34 J	32 J	55 J	67 J	14 J	240 J	270 UJ	39 J	29 UJ	24 J	58 J	20 J	15 J	38 J	12 J	34 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327
			Field Sample ID	M326D5	M326D6	M326D7	M326D8	M326D9	M326E1	M326E2	M326E3	M326E4	M326E5	M326E6	M326E7	M327A1X	M327A2	M327A2X	M327A3	M327A3X	M327A5	M327A9	M327B1	M327B3	M327B4	M327B5	M327B6	M327B7	M327B8	M327B9
			Sample Date	04/03/2019	07/02/2019	10/02/2019	01/03/2020	04/07/2020	07/13/2020	10/14/2020	01/12/2021	04/13/2021	07/13/2021	10/06/2021	01/18/2022	03/14/2012	05/18/2012	05/18/2012	07/31/2012	08/01/2012	09/06/2013	11/11/2013	03/11/2014	08/07/2014	10/23/2014	03/23/2015	06/01/2015	09/15/2015	11/16/2015	01/11/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 UJ	3 U	3 U	3 U	3.7 UJ	3.6 U	3 U	3 U	3.3 UJ	3.3 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	15 U	16 UJ	15 U	15 U	14 U	17 UJ	17 U	14 U	14 U	15 UJ	15 U	10 U	10 UJ	10 U	11 UJ	9 U	10 UJ	11 U	11 U	12 U	12 U	11 U	10 UJ	10 UJ	10 UJ	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 UJ	1 U	1 U	1 U	1.2 UJ	1.2 U	1 U	1 UJ	1.1 U	1.1 U	1 U	1 UJ	1 U	1 UJ	0.9 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	0.5 UJ	0.4 U	0.4 U	0.4 U	0.49 UJ	0.47 U	0.4 U	0.4 UJ	0.43 U	0.44 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 UJ	2 U	2 U	2 U	2.4 UJ	2.4 U	1 U	1 UJ	1.1 U	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3.7 UJ	3.6 U	1 U	1 U	1.1 UJ	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 UJ	3 U	3 U	3 U	3.7 UJ	3.6 U	4 U	4 UJ	4.3 U	4.4 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 UJ	3 U	3 U	3 U	3.7 UJ	3.6 U	2 U	2 UJ	2.2 U	2.2 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	9 UJ	8 U	9 U	8 U	9.8 UJ	9.5 U	8 U	8.1 U	8.7 UJ	8.8 U	5 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 U	6 U	6 U	6 U	5 UJ	5 UJ	5 UJ	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	5 UJ	4 U	4 U	4 U	4.9 UJ	4.7 U	4 U	4 UJ	4.3 U	4.4 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	2 U	2 UJ	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	1 UJ	0.9 U	1 U	0.9 U	1.1 UJ	1.1 U	0.9 U	0.91 UJ	0.98 U	0.99 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	12 UJ	11 U	11 U	10 U	12 UJ	12 U	10 U	10 U	11 UJ	11 U	10 U	10 UJ	10 U	11 UJ	9 U	10 UJ	11 U	11 U	12 U	12 U	11 U	10 UJ	10 UJ	10 UJ	10 U
Acenaphthene	ug/L	N	400	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 U	5 UJ	4 U	4 U	4 U	4.9 UJ	4.7 U	1 U	1 UJ	1.1 U	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 UJ	2 U	2 U	2 U	2.4 UJ	2.4 U	1 U	1 UJ	1.1 U	1.1 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 UJ	3 U	3 U	3 U	3.7 UJ	3.6 U	1 U	1 UJ	1.1 U	1.1 U	1 U	1 UJ	1 U	1 UJ	0.9 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.11 U	0.11 UJ	0.12 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	6 UJ	5 U	5 U	5 U	6.1 UJ	5.9 U	2 U	2 UJ	2.2 U	2.2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 U	2 U	2 U	2.4 UJ	2.4 U	2 U	2 UJ	2.2 U	2.2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	6 UJ	5 U	5 U	5 U	6.1 UJ	5.9 U	3 U	3 UJ	3.3 U	21	5 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 U	6 U	6 U	6 U	5 U	5 UJ	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 UJ	2 U	2 U	2 U	2.4 UJ	2.4 U	2 U	2 UJ	2.2 U	2.2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	6 UJ	5 U	5 U	5 U	6.1 UJ	5.9 U	5 U	5.1 UJ	5.4 U	5.5 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 U	2 U	2 U	2.4 UJ	2.4 U	2 U	2 UJ	2.2 U	2.2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 U	2 U	2 U	2.4 UJ	2.4 U	2 U	2 UJ	2.2 U	2.2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3 U	3 UJ	3 U	3 U	3 U	3.7 UJ	3.6 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.12 U	0.12 UJ	0.13 U	0.13 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.11 U	0.11 UJ	0.12 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	6 UJ	5 U	5 U	5 UJ	6.1 UJ	5.9 U	5 U	5.1 UJ	5.4 U	5.5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 U	5 U	6 U	6 U	6 U	5 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 UJ	1 U	1 U	1 U	1.2 UJ	1.2 U	0.5 U	0.51 UJ	0.54 U	0.55 U	1 U	1 UJ	1 U	1 UJ	0.9 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.11 U	0.11 UJ	0.12 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	0.8 UJ	0.7 U	0.7 U	0.7 U	0.85 UJ	0.83 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	0.8 UJ	0.7 U	0.7 U	0.7 U	0.85 UJ	0.83 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.15 J	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 UJ	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 UJ	0.54 U	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.6 UJ	0.5 U	2 U	1.6 U	2 UJ	1.9 U	1 U	1 U	1.1 UJ	1.1 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 UJ	1 U	1 U	1 U	1.2 UJ	1.2 U	1 U	1 U	1.1 UJ	1.1 U	1 U	1 UJ	1 U	1 UJ	0.9 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	**5J**
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.11 U	0.11 UJ	0.12 U	0.12 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.09 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.61 UJ	0.59 U	0.5 U	0.51 U	0.54 UJ	0.55 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.12 UJ	0.12 U	0.1 U	0.1 UJ	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	52 J	190 J	0 UJ	0 U	16 J	-	-	-	-	-	-	0 U	10 J	41 J	48 J	83 J	9 J	57 J	90 J	26 J	56 J	79 J	29 J	58 J	74 J	83 J	25 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-328	MW-328
			Field Sample ID	M327C1	M327C3	M327C4	D0418171	M327C5	M327C7	M327C8	M327C9	M327D1	D0716181	M327D2	M327D3	M327D4	M327D5	M327D6	M327D7	M327D8	M327D9	M327E1	M327F2	M327E3	M327E4	M327E5	M327E7	M327E8	M328A1X	M328A2
			Sample Date	04/12/2016	10/21/2016	01/20/2017	04/18/2017	04/18/2017	08/31/2017	10/12/2017	01/22/2018	04/10/2018	07/16/2018	07/16/2018	10/29/2018	01/03/2019	04/03/2019	07/02/2019	10/02/2019	01/03/2020	04/07/2020	07/10/2020	10/12/2020	01/08/2021	04/06/2021	07/13/2021	10/06/2021	01/14/2022	03/21/2012	05/23/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	4 U	3 UJ	3.3 UJ	3.3 UJ	3 U	3.4 UJ	3.3 UJ	3 UJ	0.5 U	0.6 UJ
2,4-Dinitrophenol	ug/L	N	40	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	11 UJ	10 U	14 U	15 U	15 U	14 U	14 U	15 U	14 UJ	15 U	17 U	14 UJ	15 UJ	15 UJ	14 U	16 UJ	16 UJ	14 U	10 U	11 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.0 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1.1 U	1.1 UJ	1 U	1.1 U	1.1 UJ	1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.52 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.5 U	0.4 UJ	0.44 U	0.44 UJ	0.4 U	0.45 U	0.44 UJ	0.41 U	0.4 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.2 U	2.2 UJ	1 U	1.1 U	1.1 UJ	1 U	0.5 U	0.6 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	4 UJ	3 UJ	3.3 UJ	3.3 UJ	1 U	1.1 U	1.1 UJ	1 U	0.5 U	0.6 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	4 U	3 UJ	3.3 U	3.3 UJ	4 U	4.5 U	4.4 UJ	4.1 U	2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	4 U	3 UJ	3.3 U	3.3 UJ	2 U	2.2 U	2.2 UJ	2 U	0.5 U	0.6 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5.2 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	9 U	8 UJ	8 U	10 U	8 UJ	8.7 UJ	8.7 UJ	8 U	9 UJ	8.9 UJ	8.1 U	5 U	6 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
4-Chloroaniline	ug/L	N	30	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	5 U	4 UJ	4.4 U	4.4 U	4 U	4.5 U	4.4 UJ	4.1 U	0.5 U	0.6 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.52 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
4-Nitroaniline	ug/L	N	NA	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.9 UJ	0.9 U	1 U	0.9 UJ	0.98 U	0.98 UJ	0.9 U	1 U	1 UJ	0.91 U	0.5 U	0.6 UJ
4-Nitrophenol	ug/L	N	NA	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U	12 U	10 UJ	11 UJ	11 UJ	10 U	11 UJ	11 UJ	10 U	10 U	11 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	1 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	5 U	4 UJ	4.4 U	4.4 UJ	1 U	1.1 U	1.1 UJ	1 U	0.5 U	0.6 UJ
Anthracene	ug/L	N	2000	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.2 U	2.2 UJ	1 U	1.1 U	1.1 UJ	1 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1.0 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	4 U	3 UJ	3.3 U	3.3 UJ	1 U	1.1 U	1.1 UJ	1 U	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.11 U	0.12 U	0.12 UJ	0.11 U	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.10 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 U	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 U	0.5 UJ	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 J	2.1 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 UJ	5.5 U	5.4 UJ	2 U	2.2 U	2.2 UJ	2 U	2 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.2 U	2.2 UJ	2 U	2.2 U	2.2 UJ	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	5 U	5.2 UJ	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 UJ	5.5 U	5.4 UJ	3 U	3.4 U	3.3 UJ	3 U	5 U	6 UJ
Carbazole	ug/L	N	NA	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
Chrysene	ug/L	N	5	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.2 U	2.2 UJ	2 U	2.2 U	2.2 UJ	2 U	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2.1 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 UJ	5.5 U	5.4 UJ	5 U	5.6 U	5.5 UJ	5.1 U	2 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.52 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
Diethylphthalate	ug/L	N	6000	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.2 U	2.2 UJ	2 U	2.2 U	2.2 UJ	2 U	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2.2 U	2.2 UJ	2 U	2.2 U	2.2 UJ	2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 UJ	3 U	3 UJ	3 U	3 UJ	3 U	4 U	3 UJ	3.3 U	3.3 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
Fluoranthene	ug/L	N	300	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Fluorene	ug/L	N	300	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.12 U	0.13 U	0.13 UJ	0.12 U	0.1 U	0.2 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.11 U	0.12 U	0.12 UJ	0.11 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.2 UJ	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 UJ	5 U	6 U	5.3 UJ	5.5 U	5.4 UJ	5 U	5.6 U	5.5 UJ	5.1 U	5 U	6 UJ
Hexachloroethane	ug/L	N	7	1 U	1.0 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1.1 U	1.1 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.11 U	0.12 U	0.12 UJ	0.11 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 UJ	0.7 U	0.9 U	0.7 UJ	0.76 U	0.76 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.7 UJ	0.7 U	0.9 U	0.7 UJ	0.76 U	0.76 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
Naphthalene	ug/L	N	300	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.5	0.9 J
Nitrobenzene	ug/L	N	6	0.5 U	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 U	0.54 UJ	0.5 U	0.56 U	0.55 UJ	0.51 U	0.5 U	0.6 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	2 U	1.6 UJ	1.7 UJ	1.7 UJ	1 U	1.1 U	1.1 UJ	1 UJ	0.5 U	0.6 UJ
Pentachlorophenol	ug/L	N	0.3	1 UJ	1.0 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1.1 UJ	1.1 UJ	1 U	1.1 UJ	1.1 UJ	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.1 U	0.10 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.11 U	0.12 U	0.12 UJ	0.11 U	0.1 U	0.1 UJ
Phenol	ug/L	N	2000	0.5 UJ	0.52 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.55 UJ	0.54 UJ	0.5 U	0.56 UJ	0.55 UJ	0.51 U	0.5 U	0.6 UJ
Pyrene	ug/L	N	200	0.1 U	0.10 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.11 U	0.11 UJ	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 UJ
Total TIC SVOCS	ug/L	N	NA	94 J	0 UJ	480 J	57 J	77 J	120 J	280 J	62 J	45 J	18 J	14 J	22 J	24 J	38 J	7 J	0 UJ	0 U	0 U	-	-	-	-	-	-	0 U	15 J	230 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	M328A2X	M328A3	M328A3X	M328A4X	M328A5	M328A5X	M328A6	M328A7	M328A8	M328B2X	M328B3	M328B4	M328B5X	M328B6	M328B7	M328B8	M328B9	M328C1X	M328C2	M328C3	M328C4	M328C5	M328C6	M328C7	M328C9	M328D1	M328D2
			Sample Date	05/24/2012	07/25/2012	07/26/2012	04/25/2013	06/17/2013	06/25/2013	09/10/2013	11/12/2013	03/14/2014	08/01/2014	08/08/2014	10/29/2014	01/16/2015	03/02/2015	06/01/2015	09/16/2015	11/19/2015	12/15/2015	01/13/2016	04/14/2016	07/25/2016	12/06/2016	01/23/2017	04/27/2017	07/24/2017	10/12/2017	01/25/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U
2,4-Dinitrophenol	ug/L	N	40	9 UJ	11 U	10 U	11 UJ	11 U	12 U	11 UJ	11 U	12 U	13 U	11 UJ	10 U	10 U	11 UJ	10 UJ	12 U	11 U	10 UJ	10 UJ	10 UJ	10 U	10 UJ	11 UJ	10 U	10 U	10 U	10 UJ
2,4-Dinitrotoluene	ug/L	N	10	0.9 UJ	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.4 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 U	5 U	5 UJ	5 U	6 U	5 UJ	6 U	6 U	6 U	6 UJ	5 U	5 U	5 UJ	5 UJ	6 U	6 U	5 UJ	5 U	5 UJ	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	9 UJ	11 U	10 U	11 UJ	11 U	12 U	11 UJ	11 U	12 U	13 U	11 UJ	10 U	10 U	11 UJ	10 UJ	12 U	11 U	10 UJ	10 U	10 UJ	10 U	10 UJ	11 UJ	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.09 UJ	1	0.9	0.1 UJ	0.4 J	0.2 J	0.4 J	0.5 J	0.1 U	0.1 U	0.5 J	0.1 U	0.4 J	0.1 UJ	0.3 J	0.6	0.7	1 U	1	0.3 J	0.6	0.6 J	0.9 J	0.2 J	0.4 J	0.1 U	0.3 J
Acenaphthylene	ug/L	N	NA	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	0.9 UJ	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 UJ	5 U	5 U	5 UJ	5 U	6 U	5 UJ	6 U	6 U	6 U	6 UJ	5 U	5 U	5 UJ	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2 U	3 U	2 UJ	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.09 UJ	0.1 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5 U	5 U	5 UJ	5 U	6 U	5 UJ	6 U	6 U	6 U	6 UJ	5 U	5 U	5 UJ	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 U
Hexachloroethane	ug/L	N	7	0.9 UJ	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.09 UJ	0.4 J	0.2 J	1 U	0.1 U	1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.6	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	0.9 UJ	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.09 UJ	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 UJ	0.6 U	0.6 U	0.6 U	0.6 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.09 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	130 J	110 J	15 J	200 J	14 J	7 J	120 J	59 J	40 J	35 J	160 J	64 J	-	76 J	77 J	74 J	77 J	-	82 J	99 J	42 J	52 J	33 J	0 U	57 J	87 J	100 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333
			Field Sample ID	M328D3	M328D4	M328D5	M328D6	M328D7	M328D8	D1003191	M328D9	M328E1	M328E2	M328E4	M328E6	M328E7X	M328E8	M328E9X	M328F1	M328F2	M328F3	M328F4	M333A1	M333A1X	M333A2	M333A2X	M333A3	M333A4	M333A5	M333A6
			Sample Date	04/12/2018	07/18/2018	10/29/2018	01/09/2019	04/05/2019	07/05/2019	10/03/2019	10/03/2019	01/09/2020	04/06/2020	07/09/2020	10/12/2020	12/02/2020	01/05/2021	03/18/2021	04/13/2021	07/13/2021	10/06/2021	01/17/2022	05/16/2012	05/17/2012	07/24/2012	07/25/2012	03/10/2014	05/22/2014	08/06/2014	10/30/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3.5 U	3.9 UJ	3 U	3.4 U	3.1 U	3.1 U	3 U	3 U	3.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	10 U	14 U	15 U	15 UJ	16 U	14 U	15 UJ	15 UJ	15 UJ	15 U	16 U	18 UJ	14 U	16 U	15 U	15 U	14 U	14 U	15 U	11 U	10 U	11 U	10 U	12 U	11 U	10 U	12 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1.2 U	1.3 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 U	0.47 U	0.52 U	0.4 U	0.45 U	0.42 U	0.41 U	0.4 U	0.41 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1	0.6	0.1 U	0.1 U	0.1 U	0.2 J	0.5	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2.3 U	2.6 U	2 U	2.3 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3.5 U	3.9 UJ	3 U	3.4 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3.5 U	3.9 U	3 U	3.4 U	4.2 U	4.1 U	4 U	4.1 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3.5 U	3.9 U	3 U	3.4 U	2.1 U	2.1 U	2 U	2 U	2.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	9 U	8 UJ	9 U	8 U	8 UJ	8 UJ	8 UJ	8 U	9.4 U	10 UJ	8.1 U	9.1 U	8.3 U	8.3 U	8.1 U	8.1 U	8.3 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 U	5 U	4 U	4 UJ	4 UJ	4 UJ	4 U	4.7 U	5.2 U	4 U	4.5 U	4.2 U	4.1 U	4 U	4.1 U	4.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	1 U	0.9 U	1 U	0.9 U	0.9 UJ	0.9 UJ	0.9 UJ	0.9 U	1.1 U	1.2 U	0.91 U	1 U	0.94 U	0.93 U	0.91 U	0.91 U	0.93 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	11 UJ	12 U	10 U	11 UJ	10 UJ	10 UJ	11 U	12 U	13 UJ	10 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	11 U	10 U	12 U	11 U	10 U	12 U
Acenaphthene	ug/L	N	400	0.1 U	0.3 J	0.2 J	0.4 J	0.3 J	0.8	0.3 J	0.2 J	0.3 J	0.1 U	0.12 U	0.46 J	0.16 J	0.11 U	0.15 J	0.8	0.37 J	0.27 J	0.7 U	2	3	0.1 U	3	2	2	4	0.3 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 U	5 U	4 U	4 UJ	4 UJ	4 UJ	4 U	4.7 U	5.2 U	4 U	4.5 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.8	0.7	0.9	1	0.4 J	0.3 J	0.6	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2.3 U	2.6 U	2 U	2.3 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 UJ	3 U	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3.5 U	3.9 U	3 U	3.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.6 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	5 U	5 U	6 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5.9 U	6.5 U	5 U	5.7 U	2.1 U	2.1 U	2 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2.3 U	2.6 U	2 U	2.3 U	2.1 U	2.1 U	2 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	6 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5.9 U	6.5 U	5 U	5.7 U	3.1 U	3.1 U	3 U	3 U	3.1 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.6 J	0.5 U	0.6 U	0.6 J	0.6 U	0.9 J	2	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2.3 U	2.6 U	2 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	6 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5.9 U	6.5 U	5 U	5.7 U	5.2 U	5.2 U	5 U	5.1 U	5.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.7 J	0.5 U	0.6 U	0.6 J	0.6 U	0.8 J	1	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2.3 U	2.6 U	2 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	2.3 U	2.6 U	2 U	2.3 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 UJ	3 U	3 U	3 U	3 UJ	3 UJ	3 UJ	3 U	3.5 U	3.9 U	3 U	3.4 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.2 J	0.3 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	1	1	0.1 U	1	0.8	2	2	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 UJ	5 U	6 U	5 U	5 UJ	5 UJ	5 UJ	5 U	5.9 U	6.5 U	5 U	5.7 U	5.2 U	5.2 U	5 U	5.1 U	5.2 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1.2 U	1.3 U	1 U	1.1 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.8 U	0.7 U	0.8 U	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 U	0.82 U	0.92 U	0.71 U	0.8 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.8 U	0.7 U	0.8 U	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 U	0.82 U	0.92 U	0.71 U	0.8 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.26 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.8	0.1 U	0.1 U	0.1 U	0.2 J	0.5	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 U	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	2 U	1.9 U	2.1 UJ	1.6 U	1.8 U	1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 UJ	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1.2 U	1.3 UJ	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.9	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	1	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	0.59 U	0.65 UJ	0.5 U	0.57 U	0.52 U	0.52 U	0.5 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.12 U	0.13 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	0.2 J
Total TIC SVOCS	ug/L	N	NA	19 J	73 J	10 J	160 J	99 J	180 J	44 J	20 J	64 J	4 J	-	-	-	0 U	-	-	-	-	0 U	40 J	160 J	1500 J	540 J	220 J	370 J	190 J	280 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs

Historical Groundwater VOC Concentration Data

Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-333	MW-333	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R
			Field Sample ID	M333A7	M333A8	M334A1	M334A1X	M334A2	M334A2X	M334A3	M334A4	M334A5	M334A6	M334B7	M334B8	M334RB1	M334RB3	M334RB4	M334RB5	M334RB6	D0719171	M334RB7	M334RB8	D0125181	M334RB9	M334RC1	M334RC2	M334RC3	M334RC4	M334RC5
			Sample Date	03/09/2015	06/03/2015	05/17/2012	05/18/2012	07/31/2012	08/01/2012	03/10/2014	05/22/2014	08/06/2014	10/30/2014	03/09/2015	05/29/2015	01/15/2016	07/20/2016	10/17/2016	01/19/2017	04/21/2017	07/19/2017	07/19/2017	10/10/2017	01/25/2018	01/25/2018	04/12/2018	07/18/2018	10/26/2018	01/09/2019	04/05/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	39	51	4	4	1 J	4	0.5 U	0.6 U	3	2	2	1 J	0.55 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 UJ	10 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	11 U	12 UJ	11 U	10 U	10 UJ	10 U	10 UJ	11 U	10 U	10 U	10 U	10 UJ	10 UJ	10 U	14 U	15 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 UJ	0.4 UJ	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	6 J	6 J	0.5	5 J	0.5 J	0.9	0.1 U	0.1 U	0.5 J	0.5 J	3 UJ	1 J	1.1	0.2 J	0.3 J	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	2	1	0.7	0.7	0.5 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	6 U	5 U	5 U	5 UJ	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	9 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	2	0.6 J	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	3.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.9 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	11 U	12 U	11 U	10 U	10 UJ	10 U	10 UJ	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.7	0.4 J	0.6	1	0.1 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.7	3 UJ	4 J	3.6	0.7	0.9	0.4 J	0.4 J	0.4 J	0.7	0.6	5	4	5	5	7
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 J	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	0.2 J	0.1 J	0.1 U	0.2 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.2 J	0.36 J	0.2 J	0.2 J	0.1 J	0.1 J	0.2 J	0.2 J	0.2 J	0.2 J	0.3 J	0.4 J	0.3 J	0.4 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 J	2.0 U	2 U	2 U	**4J**	**5J**	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	6 U	5 U	5 UJ	5 UJ	5.0 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	2 UJ	4 J	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	3	3	2	3
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	2 UJ	2 J	1.7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2	2	2	3	4
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 J	0.2 J	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.3 J	0.25 J	0.2 J	0.2 J	0.2 J	0.1 U	0.2 J	0.1 J	0.1 J	0.1 U	0.2 J	0.4 J	0.4 J	0.3 J
Fluorene	ug/L	N	300	0.3 J	0.2 J	0.6	0.9	0.1 J	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.3 J	2 UJ	3 J	2.3	0.5 J	0.6	0.2 J	0.2 J	0.3 J	0.5 J	0.1 U	2	2	2	3	4
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	6 U	6 U	5 U	5 UJ	5 UJ	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	2	2	0.5	1	0.3 J	0.1 U	0.1 U	0.1 U	0.3 J	0.5 J	2 UJ	2 J	1.7	0.1 J	0.2 J	0.1 J	0.1 J	0.1 U	0.1 J	0.1 U	1	0.5	0.4 J	0.4 J	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1.0 U	1 U	1 U	**6J**	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.7	0.4 J	0.5	0.1 U	0.1 U	0.1 U	0.2 J	0.3 J	0.3 J	2 UJ	2 J	2.2	0.7	0.7	0.3 J	0.4 J	0.5	0.5 J	0.6	1	2	2	2	3
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	1 J	0.5 U	0.5 U	0.5 UJ	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.2 J	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.3 J	0.19 J	0.2 J	0.2 J	0.1 J	0.1 J	0.2 J	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.3 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	170 J	660 J	110 J	310 J	410 J	310 J	370 J	320 J	150 J	120 J	340 J	63 J	200 J	170 J	88 J	480 J	240 J	180 J	220 J	200 J	170 J	240 J	110 J	240 J	170 J	250 J	260 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337
			Field Sample ID	M334RC6	M334RC7	M334RC8	M334RC9	M334RD1	M334RD2	M334RD3	M334RD4	M334RD5	M334RD6	M334RD7	M336A1X	M336A2X	M336A3X	M336A5X	M336A6X	M336A8X	M336B1X	M336B3X	M336B8X	M336B9X	M337A1X	M337A2X	M337A3X	M337A5X	M337A6X	M337A8X
			Sample Date	07/05/2019	10/03/2019	01/09/2020	04/06/2020	07/09/2020	10/14/2020	01/12/2021	04/13/2021	07/15/2021	10/08/2021	01/17/2022	04/17/2013	06/19/2013	03/14/2014	07/29/2014	01/20/2015	12/14/2015	12/12/2016	11/27/2017	12/02/2020	03/17/2021	04/16/2013	06/24/2013	03/13/2014	07/30/2014	03/11/2015	12/11/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 UJ	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 UJ	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 UJ	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 UJ	3 U	3 UJ	3.2 U	3.1 UJ	3.6 U	3 U	3.1 U	4.6 U	3.3 U	0.6 U	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3.2 U	3.1 U	2	0.6 U	-	0.5 U	0.8 J	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	15 UJ	15 U	15 UJ	15 U	15 UJ	17 U	14 U	15 U	22 U	15 U	11 U	11 UJ	-	12 U	11 U	10 U	10 U	11 U	15 U	15 U	11 U	12 U	-	11 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 U	1 UJ	1.1 U	1 UJ	1.2 U	1 U	1.0 U	1.5 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.43 U	0.42 UJ	0.48 U	0.41 U	0.42 U	0.62 U	0.43 U	0.5 U	0.4 U	-	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.42 U	0.5 U	0.5 U	-	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 UJ	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.8	0.2 J	0.1 U	0.8 J	0.62	0.37 J	0.44 J	5.6 J	0.10 U	0.15 U	0.11 U	2	7	-	2	1	0.1 U	0.2 J	0.1 U	0.11 U	0.1 U	**56 J**	**47**	-	2	5	0.4 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 UJ	-	0.6 U	0.8 J	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.7 J	0.6 U	-	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 UJ	2 U	2 UJ	2.1 U	2.1 UJ	2.4 U	1 U	1.0 U	1.5 U	1.1 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	2.1 U	1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 UJ	3 U	3 UJ	3.2 U	3.1 UJ	3.6 U	1 U	1.0 U	1.5 U	1.1 U	0.6 UJ	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3.2 U	1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 UJ	3 U	3 UJ	3.2 U	3.1 UJ	3.6 U	4.1 U	4.2 U	6.2 U	4.3 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	3.2 U	4.2 U	2 U	2 U	-	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	3 UJ	3 U	3 UJ	3.2 U	3.1 UJ	3.6 U	2 U	2.1 U	3.1 U	2.2 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3.2 U	2.1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 UJ	8 U	8 UJ	8.5 U	8.3 UJ	9.7 U	8.1 U	8.4 U	12 U	8.7 U	6 U	5 UJ	-	6 U	6 U	5 U	5 U	5 U	8.4 U	8.4 U	6 U	6 U	-	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4 UJ	4 U	4 UJ	4.3 U	4.2 UJ	4.8 U	4.1 U	4.2 U	6.2 U	4.3 U	0.6 U	0.5 U	-	0.6 U	0.6 U	2 U	2 U	2 U	4.2 U	4.2 U	0.6 U	0.6 U	-	0.5 U	0.5 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 UJ	-	35	29	5	0.5 U	0.5 U	0.53 U	0.52 U	2	0.6 U	-	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 UJ	0.9 U	0.9 UJ	0.96 U	0.94 UJ	1.1 U	0.91 U	0.94 U	1.4 U	0.98 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.95 U	0.94 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 UJ	11 U	10 U	11 U	10 UJ	12 U	10 U	10 U	15 U	11 U	11 U	11 UJ	-	12 U	11 U	10 U	10 U	11 U	11 U	10 U	11 U	12 U	-	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	5	6 J	7	8 J	5.9	5.2 J	6.5	7.9	0.10 U	3.7	6.8	0.1 J	0.9	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.7	0.7	-	0.3 J	0.3 J	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4 UJ	4 U	4 UJ	4.3 U	4.2 UJ	4.8 U	1 U	1.0 U	1.5 U	1.1 U	0.6 U	0.5 U	-	0.6 UJ	0.6 U	0.5 U	0.5 U	0.5 U	4.2 U	1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.4 J	0.4 J	0.5 J	0.6 J	0.47 J	0.65 J	0.41 J	0.8	0.10 U	0.31 J	0.43 J	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.2 J	-	0.5 J	0.1 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	2 UJ	2.1 U	2.1 UJ	2.4 U	1 U	1.0 U	1.5 U	1.1 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	1 U	2 U	2 U	-	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3 UJ	3 U	3 UJ	3.2 U	3.1 UJ	3.6 U	1 U	1.0 U	1.5 U	1.1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	3.2 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	**0.2J**	0.1J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	**0.5**	**0.2J**	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.17 U	0.12 U	**0.3J**	0.1J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	-	**0.4J**	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	**0.4J**	0.1J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	**0.5J**	0.1J	0.1J
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	0.2 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	0.3 J	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	0.2 J	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 UJ	5 U	5 UJ	5.3 U	5.2 UJ	6.1 U	2 U	2.1 U	3.1 UJ	2.2 U	**6**	2 U	-	2 U	2 U	2 U	2 U	3 J	5.3 U	2.1 U	2 U	3 J	-	3 J	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2.1 U	2.1 UJ	2.4 U	2 U	2.1 U	3.1 U	2.2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 UJ	2 U	-	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	5 U	5 U	5.3 U	5.2 UJ	6.1 U	3 U	3.1 U	4.6 U	3.3 U	6 U	5 U	-	6 U	6 U	5 U	5 U	5 U	5.3 U	3.1 U	6 U	6 U	-	5 U	5 U	5 U
Carbazole	ug/L	N	NA	2 J	2 J	3	2 J	0.73 J	0.52 UJ	1.8 J	2.6	0.52 U	0.77 U	1.6 J	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	0.3 J	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	0.6	0.2 J	0.1 J
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 U	2 UJ	2.1 U	2.1 UJ	2.4 U	2 U	2.1 U	3.1 U	2.2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	-	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 UJ	5 U	5 UJ	5.3 U	5.2 UJ	6.1 U	5.1 U	5.2 U	7.7 U	5.4 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	5.3 U	5.2 U	2 U	2 U	-	4 J	3 J	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	3	3 J	4	4 J	3.3	2.9 J	3.6	4.2	0.52 U	1.8 J	3.3	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2 U	2.1 U	2.1 UJ	30	2 U	2.1 U	3.1 U	2.2 U	2 J	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 UJ	15 J	2 U	-	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2.1 U	2.1 UJ	2.4 U	2 U	2.1 U	3.1 U	2.2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.1 U	2.1 UJ	2 UJ	2 U	-	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 UJ	3 U	3 UJ	3.2 U	3.1 UJ	3.6 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3.2 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.4 J	0.4 J	0.1 U	0.4 J	0.3 J	0.38 J	0.37 J	0.31 J	0.10 U	0.15 U	0.39 J	0.5 J	0.2 J	-	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.4 J	-	2	0.5 J	0.3 J
Fluorene	ug/L	N	300	3	4 J	4	5 J	4.1	3.4 J	4.4	4.9	0.13 U	2.1	3	0.1 U	0.1 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.13 U	0.6	0.6 J	-	0.4 J	0.3 J	0.3 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.17 U	0.12 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 U	5 U	5.3 U	5.2 UJ	6.1 U	5.1 U	5.2 U	7.7 U	5.4 U	6 U	5 U	-	6 U	6 U	5 U	5 U	5 UJ	5.3 U	5.2 UJ	6 U	6 U	-	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 U	1 U	1.1 U	1 UJ	1.2 U	0.51 U	0.52 U	0.77 U	0.54 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 UJ	1.1 U	0.52 U	1 U	1 U	-	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.11 U	0.12 U	0.17 U	0.12 U	0.2J	0.1J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	-	**0.3J**	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.6 J	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 UJ	0.7 U	0.7 UJ	0.74 U	0.73 UJ	0.85 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.74 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 UJ	0.7 U	0.7 UJ	0.74 U	0.73 UJ	0.85 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.74 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.11 U	0.1 UJ	0.12 U	0.1 U	0.10 U	0.15 U	0.11 U	7	11	20 U	13	9	3	3	0.7	0.11 U	0.1 U	280	**350**	**330**	45	96	40
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 U	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.53 U	0.52 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	2 UJ	1.7 U	1.7 UJ	1.9 U	1 U	1.0 U	1.5 U	1.1 U	0.6 UJ	0.5 UJ	-	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	1.7 U	1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 UJ	1 U	1 UJ	1.1 U	1 UJ	1.2 U	1 U	1.0 UJ	1.5 U	1.1 U	1 U	1 UJ	-	1 U	1 UJ	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	-	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	3	3 J	3	4 J	3.9	3.4 J	3	4.6	0.12 U	1.8	2.8	0.3 J	0.2 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.9	0.9	-	0.9	0.3 J	0.2 J
Phenol	ug/L	N	2000	0.5 U	0.5 UJ	0.5 U	0.5 U	0.53 U	0.52 UJ	0.61 U	0.51 U	0.52 U	0.77 U	0.54 U	0.6 U	0.5 UJ	-	140	110	20	0.5 U	0.5 U	0.53 U	0.52 U	4	0.6 U	-	0.5 U	2	7
Pyrene	ug/L	N	200	0.3 J	0.3 J	0.1 U	0.2 J	0.19 J	0.3 J	0.26 J	0.1 U	0.10 U	0.15 U	0.11 U	0.4 J	0.2 J	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.3 J	-	2	0.5 J	0.3 J
Total TIC SVOCS	ug/L	N	NA	310 J	340 J	260 J	400 J	-	-	-	-	-	-	-	910 J	550 J	-	600 J	-	-	1500 J	2200 J	-	-	2200 J	1000 J	-	2000 J	-	920 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339
			Field Sample ID	M337B1X	M337B3X	M337B8X	M337B9X	M337C1	M337C2	M337C3	M338A1X	D0620138	D0620138	M338A2X	M338A2X	M338A3X	M338A5X	M338A6X	M338A8X	M338B1X	M338B3X	M338B8X	M338B9X	M339A1X	M339A2X	M339A2X	M339A4X	M339A5X	M339A7X	M339B3X
			Sample Date	12/14/2016	11/28/2017	12/04/2020	03/30/2021	06/04/2021	09/03/2021	12/08/2021	05/06/2013	06/20/2013	06/20/2013	06/20/2013	06/20/2013	03/11/2014	07/31/2014	01/15/2015	12/14/2015	12/13/2016	11/28/2017	12/01/2020	03/23/2021	04/29/2013	06/20/2013	06/20/2013	08/01/2014	01/16/2015	12/11/2015	12/07/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	3.1 U	3.1 UJ	3.1 U	3.3 U	3 U	28 U	-	5	-	5	-	0.6 U	3	3	5 U	0.5 U	3.1 U	3 U	26 U	-	16	0.5 U	25 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	15 U	14 UJ	14 U	15 U	14 U	560 U	-	11 U	-	12 U	-	12 U	12 U	10 U	100 U	10 U	14 U	14 U	530 U	-	15 U	10 U	500 U	50 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	56 U	-	1 U	-	1 U	-	1 U	1 U	1 U	10 U	1 U	1 U	1 U	53 U	-	1 U	1 U	50 U	5 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.42 U	0.41 U	0.41 U	0.44 U	0.4 U	22 U	-	0.4 U	-	0.5 U	-	0.5 U	0.5 U	0.4 U	4 U	0.4 U	0.41 U	0.4 U	21 U	-	0.6 U	0.4 U	20 U	2 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.3 J	0.4 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**670**	-	18	-	17	-	21	6	3	1 U	0.1 U	0.1 U	0.1 U	**330**	-	2	**33**	**2100**	**81**	4
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	0.7 J	-	0.6 U	-	0.6 U	2	2	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.8 J	0.5 U	25 U	3 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	2.1 U	1 U	1 U	1.1 U	1 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	2 U	1 U	26 U	-	0.7 U	0.5 U	25 U	3 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	3.1 U	1 UJ	1 U	1.1 U	1 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	3.1 U	1 U	26 U	-	0.7 U	0.5 U	25 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	3.1 U	4.1 U	4.1 U	4.4 U	4 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	3.1 U	4 U	110 U	-	3 U	2 U	100 U	10 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	3.1 U	2 U	2.1 U	2.2 U	2 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	3.1 U	2 U	26 U	-	0.7 U	0.5 U	25 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	8.3 U	8.1 UJ	8.3 U	8.8 U	8.1 U	280 U	-	5 U	-	6 U	-	6 U	6 U	5 U	50 U	5 U	8.1 U	8 U	260 U	-	7 U	5 U	250 U	25 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	4.2 U	4.1 U	4.1 U	4.4 U	4 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	2 U	20 U	2 U	4.1 U	4 U	26 U	-	0.7 U	0.5 U	25 U	10 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	3	-	4	-	3	2	3	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.94 U	0.92 U	0.93 U	0.99 U	0.91 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 UJ	0.92 U	0.9 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 UJ	10 U	11 U	10 U	560 U	-	11 U	-	12 U	-	12 U	12 U	10 U	100 U	10 U	10 U	10 U	530 U	-	15 U	10 U	500 U	50 U	10 U
Acenaphthene	ug/L	N	400	0.2 J	0.3 J	0.1 U	0.1 U	0.15 J	0.11 U	0.19 J	64	-	2	-	2	-	4	3	3	2 J	1	0.75	0.51	25 J	-	2	6	160	5	2.7
Acenaphthylene	ug/L	N	NA	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	6 U	-	0.2 J	-	0.2 J	-	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.1 U	5 U	-	0.1 U	0.1 U	27	0.5 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	4.2 U	1 U	1 U	1.1 U	1 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	4.1 U	1 U	26 U	-	0.7 U	0.5 U	25 U	3 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.5 J	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	60	-	0.6	-	0.8	-	3	2	0.9	1 U	0.4 J	0.24 J	0.1 U	10 J	-	0.2 J	2	60	1 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2.1 U	1 U	1 U	1.1 U	1 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	2 U	1 U	110 U	-	3 U	2 U	100 U	10 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	3.1 U	1 U	1 U	1.1 U	1 U	56 U	-	1 U	-	1 U	-	1 U	1 U	1 U	10 U	1 U	3.1 U	1 U	53 U	-	1 U	1 U	50 U	5 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**1**	**0.23J**	0.1 U	0.1 U	0.11 U	0.1 U	**40**	-	**0.2J**	-	**0.2J**	-	**2**	**1**	**0.6**	1 U	**0.3J**	0.1 U	**0.19J**	5 U	-	0.1 U	**0.4J**	**13J**	0.5 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**0.9**	**0.25J**	0.11 U	0.11 U	0.12 U	0.11 U	**31**	-	0.1J	-	0.1 U	-	**1**	**0.8**	**0.5J**	1 U	**0.3J**	0.1 U	0.11 U	5 U	-	0.1 U	**0.2J**	**7J**	0.5 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	**1**	**0.32J**	0.1 U	0.1 U	0.11 U	0.1 U	**32**	-	0.2J	-	0.1J	-	**1**	**0.9**	**0.5**	1 U	**0.3J**	0.1 U	0.14J	5 U	-	0.1 U	**0.3J**	**9J**	0.5 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.7	0.22 J	0.1 U	0.1 U	0.11 U	0.1 U	14 J	-	0.1 J	-	0.1 U	-	0.7	0.3 J	0.2 J	1 U	0.3 J	0.1 U	0.1 U	5 U	-	0.1 U	0.1 U	5 U	0.5 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.5	0.15 J	0.1 U	0.1 U	0.11 U	0.1 U	**10J**	-	0.1 U	-	0.1 U	-	**0.6**	0.3 J	0.3 J	1 U	0.1 U	0.1 U	0.1 U	5 U	-	0.1 U	0.1 J	5 U	0.5 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	**15**	5.2 U	2 U	2.1 U	2.2 U	2 U	110 U	-	2 U	-	2 U	-	2 U	3 J	2 U	20 U	2 U	5.1 U	2 U	110 U	-	3 U	2 U	100 U	10 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.1 U	2 U	2.1 U	2.2 U	2 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	2 U	2 U	110 U	-	3 U	2 U	100 U	10 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5.2 U	3.1 U	3.1 U	3.3 U	3 U	280 U	-	5 U	-	6 U	-	6 U	6 U	5 U	50 U	5 U	5.1 U	3 U	260 U	-	7 U	5 U	250 U	25 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	2	-	2	-	0.6 U	1 J	1	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.64 J
Chrysene	ug/L	N	5	0.1 U	1	0.25 J	0.1 U	0.1 U	0.11 U	0.1 U	**57**	-	0.3 J	-	0.3 J	-	2	2	0.7	1 U	0.4 J	0.1 U	0.19 J	5 U	-	0.1 U	0.4 J	**21J**	0.5 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.1 U	2 U	2.1 U	2.2 U	2 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	2 U	2 U	110 U	-	3 U	2 U	100 U	10 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	5.2 U	5.1 U	5.2 U	5.5 U	5.1 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	5.1 U	5 U	110 U	-	3 U	2 U	100 U	10 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	6 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1J	1 U	0.1 U	0.1 U	0.1 U	5 U	-	0.1 U	0.1 U	5 U	0.5 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	43 J	-	0.9 J	-	1 J	-	0.6 U	1	0.5 U	5 U	0.6 J	0.51 U	0.5 U	26 U	-	0.7 U	2	66	3 U	0.89 J
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.1 U	2 U	2.1 U	2.2 U	2 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	2 U	2 U	110 UJ	-	3 U	2 U	100 U	10 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.1 U	2 U	2.1 U	2.2 U	2 U	110 U	-	2 U	-	2 U	-	2 U	2 U	2 U	20 U	2 U	2 U	2 U	110 UJ	-	3 U	2 U	100 U	10 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	3.1 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	3.1 U	0.5 UJ	26 U	-	0.7 U	0.5 U	25 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.2 J	2	0.44 J	0.17 UJ	0.1 U	0.11 U	0.1 U	100	-	0.6	-	0.6	-	6	3	2	2 J	0.5 J	0.39 J	0.39 J	10 J	-	0.3 J	2	64	1 J	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.3 J	0.1 U	0.12 U	0.12 U	0.13 U	0.12 U	96	-	2	-	2	-	4	3	2	2 J	1	0.73	0.45 J	26 J	-	1	4	170	5	1.9
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.11 U	6 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.1 U	0.11 U	5 U	-	0.1 U	0.1 U	5 U	0.5 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5.2 U	5.1 U	5.2 U	5.5 U	5.1 U	280 U	-	5 U	-	6 U	-	6 U	6 U	5 U	50 U	5 U	5.1 U	5 U	260 U	-	7 U	5 U	250 U	25 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	0.51 U	0.52 U	0.55 U	0.51 U	56 U	-	1 U	-	1 U	-	1 U	1 U	1 U	10 U	1 U	1 U	0.5 U	53 U	-	1 U	1 U	50 U	5 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	**0.7**	0.15J	0.11 U	0.11 U	0.12 U	0.11 U	**14J**	-	0.1 U	-	0.1 U	-	**0.3J**	0.2J	0.2J	1 U	0.2J	0.1 U	0.11 U	5 U	-	0.1 U	0.1 U	5 U	0.5 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.73 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.71 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.73 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.71 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.7 U
Naphthalene	ug/L	N	300	12	0.1 U	0.1 U	8.7 J	0.56	2.5	2	22	12	15	18	15	10 U	0.1 U	3	0.1 U	1 U	0.1 U	0.1 U	0.58	120 J	90	9	42	**1500**	94	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.55 U	0.51 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	0.5 U	25 U	3 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	1.7 U	1 UJ	1 U	1.1 U	1 U	28 U	-	0.5 U	-	0.6 U	-	0.6 U	0.6 U	0.5 U	5 U	0.5 U	1.6 U	1 U	26 U	-	0.7 U	0.5 U	25 U	3 U	1.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 UJ	1 U	1.1 U	1 U	56 U	-	1 U	-	1 U	-	1 U	1 U	1 U	10 U	1 U	1 U	1 U	53 U	-	1 U	1 U	50 U	5 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.8	0.16 J	0.11 U	0.11 U	0.12 U	0.11 U	250	-	2	-	2	-	8	4	3	2 J	0.1 U	0.1 U	0.11 U	60	-	0.2 J	9	410	10	2.1
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.52 U	0.51 UJ	0.52 U	0.55 U	0.51 U	28 U	-	13	-	13	-	0.6 U	3	0.5 U	5 U	0.5 U	0.51 U	0.5 U	26 U	-	0.7 U	5	25 U	11	0.5 U
Pyrene	ug/L	N	200	0.2 J	3	0.6	0.27 UJ	0.1 U	0.11 U	0.1 U	130	-	0.8	-	0.8	-	5	4	2	3 J	1	0.6	0.54	13 J	-	0.4 J	2	85	2 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	670 J	350 J	-	-	-	-	-	16000 J	-	370 J	-	870 J	-	820 J	-	-	200 J	560 J	-	-	11000 J	-	700 J	940 J	-	3300 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-339	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351
			Field Sample ID	M339B4X	M340A1X	M340A2X	M340A4X	M340A5X	M340A7X	M340B5X	M340B6X	M350A1X	M350A2X	M350A3X	M350A5X	M350A6X	M350A8X	M350B1X	M350B3X	M350B9X	M350C1X	D0430138	M351A1X	M351A2X	M351A3X	D0804148	M351A5X	D0115158A	M351A6X
			Sample Date	03/30/2021	04/29/2013	06/25/2013	08/05/2014	01/16/2015	12/11/2015	12/07/2020	03/25/2021	04/17/2013	06/24/2013	03/11/2014	07/30/2014	01/15/2015	12/11/2015	12/12/2016	11/28/2017	12/02/2020	03/17/2021	04/30/2013	04/30/2013	06/25/2013	03/11/2014	08/04/2014	08/04/2014	01/15/2015	01/15/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.6 U	5 U	6 U	0.5 U	3 U	0.5 U	0.5 U	0.6 UJ	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.6 U	5 U	6 U	0.5 U	3 U	0.5 U	0.5 U	0.6 UJ	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.6 U	5 U	6 U	0.5 U	3 U	0.5 U	0.5 U	0.6 UJ	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	27	46	21	13	3 U	3 U	3 U	0.6 U	1	-	0.5 U	1	0.5 U	0.5 U	0.5 U	3.5 U	3.3 U	29 UJ	27 UJ	0.6 U	-	5	5	5 J	3 J
2,4-Dinitrophenol	ug/L	N	40	14 U	12 U	100 U	120 U	11 U	52 U	14 U	14 U	12 U	12 U	-	11 U	10 U	10 U	10 U	10 U	16 U	15 U	580 UJ	530 UJ	11 U	-	11 U	11 U	11 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	10 U	12 UJ	1 U	5 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	58 UJ	53 UJ	1 U	-	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	4 U	5 UJ	0.4 U	2 U	0.4 U	0.4 U	0.5 U	0.5 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.43 U	23 UJ	21 UJ	0.5 U	-	0.4 U	0.5 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 UJ	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	7	**44**	**37**	**61 J**	11	24	0.1 U	0.1 U	8	2	-	2	1	0.1 U	0.4 J	0.1 U	0.12 U	0.11 U	**190J**	**240J**	20	-	3	3	0.8 J	0.4 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.6 U	5 U	6 U	11	7	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	2	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	4	4	3	3
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	0.6 U	5 U	6 UJ	0.5 U	3 U	2 U	1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.3 U	1.1 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	0.6 U	5 U	6 U	0.5 U	3 U	3 U	1 U	0.6 UJ	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5 U	1.1 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	2 U	20 U	25 UJ	2 UJ	10 U	3 U	4 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	3.5 U	4.3 U	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2 U	0.6 U	5 U	6 UJ	0.5 U	3 U	3 U	2 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5 U	2.2 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.1 U	6 U	51 U	62 U	5 U	26 U	8 U	8 U	6 U	6 U	-	5 U	5 U	5 U	5 U	5 U	9.3 U	8.7 U	290 UJ	270 UJ	6 U	-	5 U	6 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	0.6 U	5 U	6 UJ	0.5 U	10 U	4 U	4 U	0.6 U	0.6 U	-	0.5 U	0.5 U	2 U	2 U	2 U	4.7 U	4.3 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	10	22	15	33	3 J	0.5 U	0.5 U	0.6 U	4	-	6	4	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	2	-	5	5	1 J	2 J
4-Nitroaniline	ug/L	N	NA	0.91 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.9 U	0.9 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	1.1 U	0.98 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	12 U	100 U	120 U	11 U	52 U	10 U	10 U	12 U	12 U	-	11 U	10 U	10 U	10 U	10 U	12 U	11 U	580 UJ	530 UJ	11 U	-	11 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	2.2	2	3 J	7 J	0.1 U	2 J	1.5	1.4	1	0.5 J	-	0.1 U	0.2 J	0.1 U	0.2 J	0.3 J	0.12 U	0.11 U	6 UJ	27 J	3	-	2	2	4	3
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	1 U	1 UJ	0.1 U	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	6 UJ	5 UJ	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	0.6 U	5 U	6 UJ	0.5 U	3 U	4 U	1 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4.7 U	1.1 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	8	11	62 J	2	11	6.6	5.9	0.3 J	0.1 U	-	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	7 J	8 J	0.3 J	-	0.1 U	0.1 U	0.4 J	0.3 J
Atrazine	ug/L	N	3	1 U	2 U	20 U	25 UJ	2 U	10 U	2 U	1 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.3 U	1.1 U	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	10 U	12 UJ	1 U	5 U	3 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	3.5 U	1.1 U	58 UJ	53 UJ	1 U	-	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.5J**	1 U	**2J**	0.1 U	0.5 U	0.1 U	0.1 U	**0.2J**	0.1 U	-	**0.2J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	6 UJ	**7J**	**0.2J**	-	0.1 U	0.1 U	**0.5J**	**0.3J**
Benzo(a)pyrene	ug/L	N	0.1	**0.13J**	**0.3J**	1 U	1 UJ	0.1 UJ	0.5 U	0.1 U	0.11 U	**0.2J**	0.1 U	-	**0.2J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	6 UJ	**6J**	0.1J	-	0.1 U	0.1 U	**0.3J**	**0.2J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	**0.3J**	1 U	1 UJ	0.1 UJ	0.5 U	0.1 U	0.1 U	**0.3J**	0.1 U	-	**0.3J**	**0.3J**	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	6 UJ	**7J**	0.2J	-	0.1 U	0.1 U	**0.5J**	0.2J
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	1 U	1 UJ	0.1 UJ	0.5 U	0.1 U	0.1 U	0.1 J	0.1 U	-	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	6 UJ	5 UJ	0.1 U	-	0.1 U	0.1 U	0.2 J	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	1 U	1 UJ	0.1 UJ	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	6 UJ	5 UJ	0.1 U	-	0.1 U	0.1 U	0.2 J	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	5 U	6 U	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	**4J**	20 U	25 UJ	2 UJ	10 U	5 U	2 U	**7**	2 U	-	2 U	2 U	2 U	2 U	2 U	5.8 U	2.2 U	120 UJ	110 UJ	3 J	-	2 U	2 U	3 J	2 J
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	20 U	25 UJ	2 UJ	10 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.3 U	2.2 U	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3 U	6 U	51 U	62 UJ	5 U	26 U	5 U	3 U	6 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5.8 U	3.3 U	290 UJ	270 UJ	6 U	-	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.65 J	17	63	61J	22	35	42	37	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.6	1 U	3 J	0.1 UJ	0.5 U	0.1 U	0.1 U	0.4 J	0.1 U	-	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	**8J**	**8J**	0.2 J	-	0.1 U	0.1 U	0.6 J	0.4 J
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	20 U	25 UJ	2 U	10 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.3 U	2.2 U	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	2 U	20 U	25 UJ	2 UJ	10 U	5 U	5 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	5.8 U	5.4 U	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	1 U	1 UJ	0.1 UJ	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	6 UJ	5 UJ	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.82 J	2	5 U	8 J	0.5 U	3 U	1.4 J	1.3 J	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	1	-	0.8 J	0.9 J	1	1 J
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	20 U	25 UJ	2 U	10 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.3 U	2.2 UJ	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	20 U	25 UJ	2 U	10 U	2 U	2 U	2 U	2 U	-	2 U	2 U	2 U	2 U	2 U	2.3 U	2.2 UJ	120 UJ	110 UJ	2 U	-	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.6 U	5 U	6 U	0.5 U	3 U	3 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3.5 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	1	1 J	6 J	0.1 U	1 J	0.1 U	0.1 U	0.7	0.1 U	-	0.5 J	0.4 J	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	17 J	21 J	0.7	-	0.3 J	0.3 J	2 J	0.9 J
Fluorene	ug/L	N	300	1.3	4	5 J	16 J	0.9	4	3.3	2.6	0.8	0.3 J	-	0.1 U	0.2 J	0.1 U	0.2 J	0.1 U	0.12 U	0.13 U	15 J	18 J	2	-	0.8	1	2 J	1 J
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.1 U	1 U	1 UJ	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	6 UJ	5 UJ	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	51 U	62 UJ	5 U	26 U	5 U	5 U	6 U	6 U	-	5 U	5 U	5 U	5 U	5 U	5.8 U	5.4 UJ	290 UJ	270 UJ	6 U	-	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.5 U	1 U	10 U	12 UJ	1 U	5 U	1 U	0.5 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.2 U	0.54 U	58 UJ	53 UJ	1 U	-	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.1 U	1 U	1 UJ	0.1 UJ	0.5 U	0.1 U	0.11 U	0.1 U	0.1 U	-	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	6 UJ	5 UJ	0.1 U	-	0.1 U	0.1 U	0.1J	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.7 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.82 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.7 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.82 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	7.4	120 J	160	160 UJ	51	100	11	13	10 J	9 J	19	11	16	4	4	0.1 U	0.12 U	0.11 U	49	54	71	49 J	58	62	14	12
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	5 U	6 UJ	0.5 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	0.6 U	5 U	6 U	0.5 U	3 U	1.6 U	1 U	0.6 UJ	0.6 U	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9 U	1.1 U	29 UJ	27 UJ	0.6 U	-	0.5 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	10 U	12 U	1 U	5 U	1 U	1 U	1 U	1 U	-	1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	58 UJ	53 UJ	1 U	-	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	2.1	7	6	26 UJ	1	6	2.9	3	1	0.2 J	-	0.3 J	0.4 J	0.1 U	0.1 J	0.1 U	0.12 U	0.12 U	35 J	42 J	2	-	1	1	3 J	2 J
Phenol	ug/L	N	2000	0.5 U	9	5 U	6 U	22	3 U	1.2 J	0.5 U	0.6 U	2	-	0.5 U	4	0.5 U	1	0.5 U	0.58 U	0.54 U	29 UJ	27 UJ	4	-	13	15	6 J	4 J
Pyrene	ug/L	N	200	0.1 U	2	1 J	5 UJ	0.1 UJ	0.9 J	0.1 U	0.42 J	0.8	0.1 J	-	0.4 J	0.5 J	0.1 U	0.1 J	0.1 J	0.12 U	0.11 U	16 J	21 J	0.6	-	0.2 J	0.2 J	1	0.8
Total TIC SVOCS	ug/L	N	NA	-	3000 J	3900 J	7900 J	-	3400 J	-	-	770 J	1400 J	-	1000 J	-	2600 J	1900 J	2100 J	-	-	15000 J	17000 J	970 J	-	1600 J	2000 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-353	MW-353	MW-353
			Field Sample ID	D121115A8	M351A8X	M351B1X	D1129178	M351B3X	M351B8X	M351B9X	M352A1X	M352A2X	M352A3X	M352A4X	M352A5X	M352RA6X	D0117198	M352RA7X	M352RA8X	M352RA9X	M352B1X	M352RB2X	M352RB3X	M352RB4X	M352RB6	M352RB8	M353A1X	M353A2X	M353A3X
			Sample Date	12/11/2015	12/11/2015	12/09/2016	11/29/2017	11/29/2017	12/01/2020	03/25/2021	11/08/2013	03/17/2014	06/05/2014	10/16/2017	12/08/2017	10/18/2018	01/17/2019	01/17/2019	04/08/2019	07/12/2019	09/30/2019	01/22/2020	03/26/2020	12/10/2020	06/02/2021	12/10/2021	06/05/2013	09/12/2013	11/15/2013
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	4 J	2	2	3 U	3 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	3.4 U	3 U	0.5 U	0.6 U	0.5 UJ
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 UJ	10 U	10 U	14 U	14 U	57 U	11 U	10 U	10 U	11 U	14 UJ	14 U	14 U	14 U	15 U	16 U	16 U	14 U	15 U	16 U	14 U	10 U	12 U	11 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	6 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.41 U	2 U	0.5 U	0.4 U	0.4 U	0.6 J	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	0.46 U	0.4 U	0.4 U	0.5 U	0.4 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	**300**	**180**	23	**69**	25	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	1	0.5 U	0.8 J	0.5 U	0.5 U	0.5 U	0.51 U	3 U	3	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	2 U	1 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1.1 U	1 U	0.5 U	0.6 U	0.5 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	1 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	1.1 U	1 U	0.5 U	0.6 U	0.5 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 UJ	2 U	2 U	3 U	4.1 U	11 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	4.6 U	4 U	2 U	2 U	2 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	2 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	2.3 U	2 U	0.5 U	0.6 U	0.5 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 UJ	5 U	5 U	8.1 U	8.1 U	28 U	6 U	5 U	5 U	6 U	8 UJ	8 U	8 U	8 U	9 U	9 U	9 U	8 U	8.7 U	9.2 U	8.1 U	5 U	6 U	5 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 UJ	2 U	2 U	4 U	4.1 U	3 U	0.6 U	0.5 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	4.6 U	4 U	0.5 U	0.6 U	0.5 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.52 J	0.51 U	3 U	2 J	3	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.91 U	0.91 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	1 U	1 U	0.9 U	0.98 U	1 U	0.91 U	0.5 U	0.6 U	0.5 UJ
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U	57 U	11 U	10 U	10 U	11 U	10 UJ	10 U	10 U	10 U	11 U	11 U	11 U	10 U	11 U	11 U	10 U	10 U	12 U	11 UJ
Acenaphthene	ug/L	N	400	1 J	2 J	2 J	2	2	2	1.4	6	4	2	2	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	3	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	4 U	1 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	1.1 U	1 U	0.5 U	0.6 U	0.5 UJ
Anthracene	ug/L	N	2000	0.2 J	0.3 J	0.1 J	0.3 J	0.1 U	0.1 U	0.1 U	7	5	1	1	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Atrazine	ug/L	N	3	2 U	2 U	2 UJ	2 U	2 U	2 U	1 U	11 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1.1 U	1 U	2 U	2 U	2 UJ
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 UJ	1 U	1 U	3 U	1 U	6 U	1 U	1 U	1 U	4 J	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	1.1 U	1 U	1 U	1 U	1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.3J**	0.1 UJ	0.1 U	**0.3J**	0.1 U	0.1 U	**2J**	**1**	**0.4J**	**0.4J**	**1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**0.2J**	0.1 UJ	**0.3J**	**0.3J**	0.1 U	0.11 U	**2J**	**1**	**0.3J**	**0.4J**	**0.8**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.11 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	**0.3J**	0.1 UJ	0.2J	0.1 U	0.1 U	0.1 U	**2J**	**1J**	0.2J	**0.4J**	**0.7**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 J	0.1 UJ	0.1 U	0.2 J	0.1 U	0.1 U	3 J	1	0.3 J	0.3 J	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 J	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.6 U	0.3 J	0.1 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 UJ	2 U	2 U	5 U	2 U	11 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	6 U	6 U	6 U	5 U	5.4 U	2.3 U	2 U	2 U	2 U	2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2 U	2 U	2 U	2 UJ
Caprolactam	ug/L	N	4000	5 U	5 U	5 UJ	5 U	5 U	5 U	3 U	28 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 U	6 U	6 U	5 U	5.4 U	10	3 U	5 U	6 U	5 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 J	0.5 J	0.5 U	0.51 U	3 U	1	0.7 J	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
Chrysene	ug/L	N	5	0.1 U	0.4 J	0.1 UJ	0.3 J	0.2 J	0.1 U	0.1 U	**6**	4	0.5	0.9	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2 U	2 U	2 U	2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 UJ	2 U	2 U	5 U	5.1 U	11 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	6 U	6 U	6 U	5 U	5.4 U	5.7 U	5.1 U	2 U	2 U	2 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.6 U	0.3J	0.1 U	0.1 U	0.3J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.8 J	0.5 UJ	0.6 J	0.7 J	0.71 J	0.51 U	3 U	2	1 J	1	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.7 J	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2 U	2 U	2 U	2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	11 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.3 U	2 U	2 U	2 U	2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	3 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.3 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
Fluoranthene	ug/L	N	300	0.4 J	0.8 J	0.4 J	0.1 U	0.1 U	0.1 U	0.16 J	4	2	0.5	0.8	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.8	0.1 U	0.11 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 J
Fluorene	ug/L	N	300	0.5 J	0.7	0.1 UJ	0.6	0.7	0.54	0.45 J	11	6	2	3	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2	0.1 U	0.11 U	0.14 U	0.12 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.11 U	0.6 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 UJ	5 U	5 U	5 U	5.1 U	28 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	6 UJ	6 U	6 U	5 U	5.4 U	5.7 U	5.1 U	5 U	6 U	5 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 UJ	1 U	1 U	1 U	0.51 U	6 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.57 U	0.51 U	1 U	1 U	1 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 UJ	0.1 U	0.2J	0.1 U	0.11 U	**0.9J**	**0.4J**	0.1J	0.2J	**0.5J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.11 U	0.13 U	0.11 U	0.1 U	0.1 U	0.1 UJ
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.7 U	0.76 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.7 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.7 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.7 U	0.76 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 UJ	1	2	0.1 U	0.75	85	67	47	8	14	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 UJ
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1.6 U	1 U	3 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U	1.7 U	1.1 U	1 U	0.5 U	0.6 U	0.5 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	6 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 UJ
Phenanthrene	ug/L	N	NA	0.3 J	0.1 U	0.6 J	0.8	1	0.1 U	0.11 U	26	15	4	6	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.11 U	0.13 U	0.11 U	0.4 J	0.1 J	0.2 J
Phenol	ug/L	N	2000	19 J	10 J	0.5 UJ	0.5 U	3	0.5 U	2.7	3 U	10	2	2	4	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U	0.54 U	0.57 U	0.51 U	0.5 U	0.6 U	0.5 UJ
Pyrene	ug/L	N	200	0.3 J	0.7 J	0.4 J	0.4 J	0.6	0.1 U	0.1 U	11	6	1	2	4	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.8	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J
Total TIC SVOCS	ug/L	N	NA	2500 J	2900 J	3000 J	1800 J	2100 J	-	-	4000 J	-	2100 J	1400 J	-	1300 UJ	580 J	790 J	100 J	260 J	140 J	-	79 J	0 U	-	0 U	220 J	1200 J	180 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354
			Field Sample ID	M353A4X	M353A5X	M353A6X	M353A7X	D0211151	M353A8X	M353B1X	M353B2X	M353B3X	M353B4X	M353B5X	M353B7X	M353B8X	M353B9X	M353C1X	M353C2X	M353C3X	M353C4X	M353C5X	M353C6	M354A1X	M354A2X	M354A3X	M354A4X	M354A5X	M354A6X	M354A7X
			Sample Date	01/16/2014	04/08/2014	07/03/2014	11/20/2014	02/11/2015	02/11/2015	08/11/2015	10/16/2015	05/05/2016	10/27/2016	04/04/2017	09/15/2017	04/18/2018	09/05/2018	05/01/2019	08/27/2019	05/05/2020	09/09/2020	03/03/2021	09/30/2021	06/05/2013	09/12/2013	11/15/2013	01/16/2014	04/08/2014	07/03/2014	11/20/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	3 U	3 U	3 UJ	3 U	3.4 U	3 UJ	3.1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2,4-Dinitrophenol	ug/L	N	40	11 U	11 U	11 U	11 U	10 U	10 U	10 U	11 U	10 UJ	10 U	10 UJ	10 U	10 UJ	15 U	15 U	15 UJ	16 U	16 U	14 UJ	14 UJ	11 U	11 U	13 U	10 U	11 U	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1.1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 UJ	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 U	0.45 U	0.4 UJ	0.41 UJ	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	2 U	2 U	2 UJ	2 U	2.3 U	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	3 U	3 U	3 UJ	3 U	3.4 U	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	3 U	3 U	3 UJ	3 U	3.4 U	4 UJ	4.1 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	3 U	3 U	3 UJ	3 U	3.4 U	2 UJ	2 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 UJ	5 U	5 UJ	8 U	8 U	8 UJ	9 U	9 U	8.1 UJ	8.2 UJ	5 U	5 U	6 U	5 U	5 U	5 U	6 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	4 U	4 U	4 UJ	4 U	4.5 U	4 UJ	4.1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.9 U	0.9 U	0.9 UJ	1 U	1 U	0.91 UJ	0.92 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	11 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 UJ	10 U	10 U	11 UJ	11 U	11 U	10 UJ	10 UJ	11 U	11 U	13 U	10 U	11 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.2 J	0.1 U	0.1 J	0.10 U	0.1 UJ	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 J	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	4 U	4 U	4 UJ	4 U	4.5 U	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.3 U	1 UJ	1 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 UJ	1 U	1 UJ	3 U	3 U	3 UJ	3 U	3.4 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	5 U	5 U	5 UJ	6 U	5.6 U	2 UJ	2 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.3 U	2 UJ	2 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.0 U	5 UJ	5 U	5 UJ	5 U	5 U	5 UJ	6 U	5.6 U	3 UJ	3.1 UJ	5 U	5 U	6 U	5 U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.3 U	2 UJ	2 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	5 U	5 U	5 UJ	6 U	5.6 U	5.1 UJ	5.1 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.3 U	2 UJ	2 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.0 U	2 UJ	2 U	2 UJ	2 U	2 U	2 UJ	2 U	2.3 U	2 UJ	2 UJ	2 U	2 U	3 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	3 U	3 U	3 UJ	3 U	3.4 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 J	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.12 UJ	0.12 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	6 UJ	5 U	5 U	5 U	5 U	5 U	5 UJ	5.0 U	5 UJ	5 UJ	5 UJ	5 U	5 U	5 UJ	6 U	5.6 U	5.1 UJ	5.1 UJ	5 U	5 U	6 U	5 U	5 U	5 UJ	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1.1 U	0.51 UJ	0.51 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 UJ	0.8 U	0.79 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.7 U	0.7 U	0.7 UJ	0.8 U	0.79 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	2 U	1.8 U	1 UJ	1 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 UJ	1 U	1 UJ	1 U	1 U	1 UJ	1 U	1.1 U	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.3 J	0.2 J	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.11 UJ	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 UJ	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.6 U	0.56 U	0.51 UJ	0.51 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.3 J	0.1 U	0.1 U	0.1 U	0.10 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	170 J	690 J	120 J	6 J	58 J	46 J	150 J	49 J	23 J	79 J	100 J	42 J	0 UJ	8 J	14 J	0 UJ	16 J	0 U	-	-	30 J	21 J	14 J	0 U	0 U	0 U	9 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355
			Field Sample ID	M354A8X	M354B1X	M354B2X	M354B3X	M354B4X	M354B5X	D0915171	M354B6X	M354B7X	M354B8X	M354B9X	M354C1X	M354C2X	M354C3X	M354C4X	M354C5	M354C6	M354C7	M354C8	M355A1X	M355A2X	D1115131	M355A3X	M355A4X	M355A6X	M355A7X	M355A8X
			Sample Date	02/11/2015	08/11/2015	10/16/2015	05/05/2016	10/27/2016	04/04/2017	09/15/2017	09/15/2017	04/18/2018	09/05/2018	05/01/2019	08/27/2019	05/05/2020	09/09/2020	03/03/2021	04/30/2021	09/01/2021	10/27/2021	03/23/2022	06/05/2013	09/12/2013	11/15/2013	11/15/2013	01/16/2014	04/10/2014	07/03/2014	11/20/2014
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.7 U	3.1 U	3.2 U	3.1 U	3.1 U	3 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	15 U	14 U	14 U	15 U	17 U	15 U	15 U	14 U	15 U	14 U	10 U	11 U	11 U	11 U	11 U	10 U	11 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.49 U	0.41 U	0.43 U	0.41 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.5 U	1 U	1.1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.7 U	1 U	1.1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.7 U	4.1 U	4.3 U	4.1 U	4.2 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.7 U	2.1 U	2.2 U	2.1 U	2.1 U	2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	9.8 U	8.3 U	8.6 U	8.3 U	8.4 U	8 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 UJ	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.9 U	4.1 U	4.3 U	4.1 U	4.2 U	4 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	1.1 U	0.93 U	0.97 U	0.93 U	0.94 U	0.91 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	12 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	11 U	10 U	11 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4.9 U	1 U	1.1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5 U	1 U	1.1 U	1 U	1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.7 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	**0.7J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	0.7 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	**0.7 J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	6.1 U	2.1 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5.0 U	5 U	5 U	5 U	5 Uj	5 U	5 U	5 U	5 U	6.1 U	3.1 U	3.2 UJ	3.5 J	3.1 U	3 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	6.1 U	5.2 U	5.4 U	5.2 U	5.2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	**1J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.5 U	2.1 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.7 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.13 U	0.12 U	0.13 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5.0 U	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U	5 U	6.1 U	5.2 U	5.4 U	5.2 U	5.2 U	5 U	5 U	6 U	5 U	5 U	6 U	5 U	5 UJ	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	**0.8J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.86 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.86 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	1 U	1.1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.15 J	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.52 U	0.54 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	5 J	54 J	34 J	-	-	-	-	-	-	-	-	-	15 J	-	-	-	-	-	-	0 U	12 J	29 J	27 J	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356
			Field Sample ID	M355A9X	M355B2X	M355B3X	M355B4X	M355B5X	D0404171	M355B6X	M355B7X	D0418181	M355B8X	M355B9X	M355C1X	M355C2X	M355C3X	M355C4X	M355C5X	M355C6	M355C7	M356A1X	M356A2X	M356A3X	M356A4X	M356A5X	M356A6X	M356A7X	M356A8X	M356B1X
			Sample Date	02/11/2015	08/13/2015	10/16/2015	05/05/2016	10/27/2016	04/04/2017	04/04/2017	09/15/2017	04/18/2018	04/18/2018	09/05/2018	03/27/2019	09/03/2019	02/21/2020	08/31/2020	02/08/2021	07/29/2021	02/14/2022	06/05/2013	09/12/2013	11/15/2013	01/17/2014	04/10/2014	07/01/2014	11/20/2014	02/11/2015	08/13/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.2 U	3.1 U	3.1 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	10 U	11 U	10 UJ	10 U	10 U	10 U	10 U	10 U	14 U	14 U	14 U	16 U	15 U	15 U	14 U	14 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.43 U	0.42 U	0.41 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.2 U	4.2 U	4.1 U	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.2 U	2.1 U	2 U	2 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	9 U	8.6 U	8.3 U	8.2 U	8.1 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	5 U	4.3 U	4.2 U	4.1 U	4.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.97 U	0.94 U	0.92 U	0.91 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	11 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	5 U	4.3 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 UJ	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5.4 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 Uj	5 Uj	5 U	5 U	5 U	6 U	5.4 U	3.1 U	3.1 U	3 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5.4 U	5.2 U	5.1 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.2 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	6 U	5.4 U	5.2 U	5.1 U	5.1 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	0.52 U	0.51 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.75 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.75 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.54 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	120 J	0 U	22 J	-	-	-	-	-	-	-	-	5 J	0 U	-	-	-	0 U	-	12 J	0 U	0 U	0 U	0 U	0 U	0 U	0 U	15 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357
			Field Sample ID	M356B2X	M356B3X	M356B4X	M356B5X	M356B6X	M356B7X	M356B8X	M356B9X	M356C1X	M356C2X	M356C3X	M356C4X	M356C5	M356C6	M357A1X	M357A2X	M357A3X	M357A4X	M357A5X	M357A6X	M357A7X	M357A8X	M357A9X	M357B1X	M357B2X	M357B3X	D1028161
			Sample Date	10/16/2015	05/05/2016	10/28/2016	04/04/2017	09/19/2017	04/18/2018	09/05/2018	03/27/2019	09/03/2019	02/21/2020	08/31/2020	02/08/2021	07/29/2021	02/14/2022	06/06/2013	09/13/2013	11/19/2013	01/17/2014	05/06/2014	07/01/2014	11/25/2014	02/12/2015	05/13/2015	08/13/2015	10/27/2015	05/06/2016	10/28/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	3.5 U	3.1 U	3 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.6 J	0.5 U	0.5 U	0.52 U
2,4-Dinitrophenol	ug/L	N	40	11 U	10 U	10 U	10 U	11 U	10 U	14 U	14 U	14 U	15 U	14 U	16 U	15 U	14 U	11 U	11 U	12 U	12 U	12 U	12 U	11 U	11 U	11 U	10 U	11 U	10 UJ	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.47 U	0.41 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	1.2 U	1 U	1 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	1.2 U	1 U	1 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2.0 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.1 U	4.7 U	4.1 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.1 U	2.4 U	2.1 U	2 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5.0 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	8.3 U	9.4 U	8.3 U	8.1 U	5 U	6 U	6 U	6 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5.2 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2.0 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4.1 U	4.7 U	4.1 U	4 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	2 U	2 U	2 U	2 U	2.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.93 U	1.1 U	0.93 U	0.91 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	12 U	10 U	10 U	11 U	11 U	12 U	12 U	12 U	12 U	11 U	11 U	11 U	10 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 J	0.10 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	4 U	4 U	4 U	4 U	4.1 U	1.2 U	1 U	1 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.2 J	0.3 J	0.1 J	0.1 U	0.1 J	0.1 J	0.1 J	0.2 J	0.13 J
Atrazine	ug/L	N	3	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1.2 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1.0 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.21J**	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 UJ	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2.0 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	2.4 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U	2 U	2.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	5 U	5.0 U	5 U	5 U	5 Uj	5 U	5 U	5 U	5 U	5.2 U	3.5 U	3.1 U	3 U	5 U	6 U	6 U	6 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5.2 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.25 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2.0 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5.2 U	5.9 U	5.2 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.4 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3.1 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.27 J	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J	0.1 J	0.2 J	0.2 J	0.2 J	0.1 J	0.2 J	0.3 J	0.2 J	0.1 J	0.30 J
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14 U	0.12 U	0.12 U	0.4 J	0.6 J	0.3 J	0.4 J	0.5 J	0.6 J	0.5 J	0.4 J	0.3 J	0.4 J	0.7	0.4 J	0.39 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5.9 U	5.2 U	5.1 U	5 UJ	6 U	6 U	6 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5.2 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.59 U	0.52 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.72 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.72 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	2	0.1 U	0.1 U	0.1 U	0.1 U	0.7	0.1 U	0.3 J	0.10 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.50 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.2 U	1 U	1 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U
Phenanthrene	ug/L	N	NA	0.1 J	0.1 U	0.10 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.77	0.11 U	0.11 U	0.6	0.8	0.2 J	0.5 J	0.7	0.9	0.7	0.7	0.6	0.1 U	0.6	0.4 J	0.30 J
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.59 U	0.52 U	0.51 U	0.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.53 J	0.1 U	0.1 U	0.4 J	0.6 J	0.5 J	0.4 J	0.7	0.8	0.5 J	0.4 J	0.6	0.9	0.7	0.4 J	1.2 J
Total TIC SVOCS	ug/L	N	NA	10 J	-	-	-	-	-	-	0 U	7 J	-	-	-	0 U	-	0 U	17 J	38 J	0 U	340 J	14 J	0 U	0 U	12 J	10 J	92 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358
			Field Sample ID	M357B4X	M357B5X	M357B6X	M357B7X	M357B8X	M357B9X	M357C1X	M357C2X	M357C3X	M357C4	M357C5	M358A1X	M358A2X	M358A3X	M358A4X	M358A5X	M358A6X	M358A9X	M358B1X	M358B2X	M358B3X	M358B4X	M358B5X	M358B6X	M358B7X	M358B8X	M358B9X
			Sample Date	10/28/2016	04/05/2017	09/19/2017	04/25/2018	10/03/2018	05/03/2019	08/29/2019	05/01/2020	11/24/2020	06/25/2021	12/27/2021	06/27/2013	09/13/2013	11/19/2013	01/29/2014	05/06/2014	07/03/2014	11/25/2014	02/12/2015	05/13/2015	08/13/2015	10/27/2015	05/06/2016	10/28/2016	04/05/2017	09/19/2017	04/25/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.53 U	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	4 U	3.2 U	3.2 U	3.3 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 U	10 U	10 U	10 U	15U	14 U	15 U	17 U	15 U	15 U	15 U	11 U	10 U	12 U	12 U	11 U	12 U	11 U	11 U	10 U	11 U	11 U	10 UJ	10 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.42 U	0.4 U	0.4 U	0.4 U	0.4U	0.4 U	0.4 U	0.5 U	0.43 U	0.42 U	0.44 U	0.4 U	0.4 U	0.5 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.2 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	2U	2 U	2 U	2 U	2.2 U	1.1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	4 U	3.2 U	1.1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2.1 U	2 U	2 U	2 U	3U	3 U	3 U	4 U	3.2 U	4.2 UJ	4.4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	3U	3 U	3 U	4 U	3.2 U	2.1 UJ	2.2 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5.3 U	5 U	5 U	5 U	9U	8 U	9 U	10 U	8.6 U	8.4 U	8.8 U	5 U	5 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
4-Chloroaniline	ug/L	N	30	2.1 U	2 U	2 U	2 U	4U	4 U	4 U	5 U	4.3 U	4.2 UJ	4.4 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	98	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	1U	0.9 U	1 U	1 U	0.97 U	0.95 UJ	0.99 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	10 U	11U	10 U	11 U	12 U	11 U	11 U	11 U	11 U	10 U	12 U	12 U	11 U	12 U	11 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.1 U	0.1 J	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.11 U	0.14 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.53 U	0.5 U	0.5 UJ	0.5 U	4U	4 U	4 U	5 U	4.3 U	1.1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
Anthracene	ug/L	N	2000	0.11 U	0.1 J	0.2 J	0.2 J	0.2J	0.1 U	0.2 J	0.1 U	0.21 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2.1 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 U	1.1 UJ	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 U	3U	3 U	3 U	4 U	3.2 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2 U	2 U	2 U	5U	5 U	5 U	6 U	5.4 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5.3 U	5 U	5 U	5 UJ	5U	5 U	5 U	6 U	5.4 U	3.2 U	3.3 U	5 U	5 U	6 U	6 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 UJ	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2.1 U	2 U	2 U	2 U	5U	5 U	5 U	6 U	5.4 U	5.3 U	5.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	2 U	2 U	2U	2 U	2 U	2 U	2.2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.53 U	0.5 U	0.5 UJ	0.5 U	3U	3 U	3 U	4 U	3.2 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
Fluoranthene	ug/L	N	300	0.21 J	0.1 J	0.2 J	0.2 J	0.3J	0.1 J	0.6	0.2 J	0.23 J	0.15 J	0.21 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.38 J	0.4 J	0.5 J	0.5 J	0.5J	0.3 J	0.6	0.1 U	0.55	0.39 J	0.24 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 UJ	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.3 U	5 U	5 U	5 U	5U	5 U	5 U	6 U	5.4 U	5.3 U	5.5 U	5 U	5 U	6 U	6 U	5 U	6 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5.2 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1.1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1.1 U	0.53 U	0.55 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.53 U	0.5 U	0.5 UJ	0.5 U	0.8U	0.7 U	0.7 U	0.8 U	0.75 U	0.53 UJ	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.53 U	0.5 U	0.5 UJ	0.5 U	0.8U	0.7 U	0.7 U	0.8 U	0.75 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.3 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.11 J	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	0.55 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.53 U	0.5 U	0.5 UJ	0.5 U	0.5U	0.5 U	0.5 U	2 U	1.7 U	1.1 U	1.1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 UJ	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1U	1 U	1 U	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.31 J	0.6	0.3 JJ	0.5	0.5	0.3 J	0.3 J	0.7	0.97	0.79	0.51 J	0.1 J	0.2 J	0.6 J	0.1 J	1	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.20 J	0.1 U	0.1 UJ	0.1 J
Phenol	ug/L	N	2000	0.53 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U	0.54 U	0.53 U	4.2	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.81 J	0.3 J	0.8	0.5 J	1	0.4 J	2	0.5 J	0.65	0.52 J	0.84	0.1 U	0.1 J	0.2 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 J	0.1 U	0.1 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	20 J	16 J	17 J	11 J	240 J	0 U	0 U	0 U	0 U	0 U	95 J	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373
			Field Sample ID	M358C1X	M358C2X	M358C3X	M358C4X	M358C5X	M358C6X	M358C7	M358C8	M373A1X	M373A2X	M373A3X	M373A4X	M373A6X	M373A7X	M373A8X	M373A9X	M373B2X	M373B3X	M373B4X	M373B5X	M373B6X	M373B7X	D0820191B	M373B8X	M373B9X	M373C1X
			Sample Date	10/02/2018	04/25/2019	08/29/2019	04/28/2020	11/24/2020	03/05/2021	05/04/2021	10/27/2021	01/09/2014	04/15/2014	07/10/2014	11/25/2014	04/10/2015	06/12/2015	08/25/2015	10/29/2015	11/11/2016	03/21/2017	09/20/2017	03/27/2018	08/09/2018	03/25/2019	08/20/2019	08/20/2019	03/26/2020	08/11/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	16 U	3 U	3.2 U	3.1 U	3.2 U	3.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3 U	30 U	30 U	4 U	3.2 U
2,4-Dinitrophenol	ug/L	N	40	15 U	14 U	73 U	15 U	15 U	15 U	15 U	15 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	14U	15 U	140 U	140 U	17 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	5 U	1 U	1.1 UJ	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	10 U	10 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	2 U	0.4 U	0.42 U	0.41 U	0.43 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4U	0.4 U	4 U	4 U	0.5 U	0.42 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	6	0.1 U	1.1	0.31 J	0.2 J	0.16 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	10 U	2 U	2.1 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2U	2 U	20 U	20 U	2 U	2.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	16 U	3 U	3.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3 U	30 U	30 U	4 U	3.2 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	16 U	3 U	3.2 U	4.1 U	4.3 U	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3U	3 U	30 U	30 U	4 U	3.2 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	16 U	3 U	3.2 U	2.1 U	2.1 U	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3 U	30 U	30 U	4 U	3.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8 U	42 U	8 U	8.4 U	8.3 U	8.6 U	8.4 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8U	8 U	80 U	80 U	10 U	8.4 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
4-Chloroaniline	ug/L	N	30	4 U	4 U	21 U	4 U	4.2 U	4.1 U	4.3 U	4.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4U	4 U	40 U	40 U	5 U	4.2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.9 U	5 U	0.9 U	0.95 U	0.93 U	0.96 U	0.95 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9U	0.9 U	9 U	9 U	1 U	0.95 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	52 U	10 U	11 U	10 U	11 U	11 U	10 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10U	10 U	100 U	100 U	12 U	11 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3J	0.1 U	1 U	1 J	0.1 U	0.21 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	4 U	4 U	21 U	4 U	4.2 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4U	4 U	40 U	40 U	5 U	4.2 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.9 J	0.1 U	0.17 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Atrazine	ug/L	N	3	2 U	2 U	10 U	2 U	2.1 U	1 U	1.1 U	1.1 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	20 U	20 U	2 U	2.1 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	16 U	3 U	3.2 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3U	3 U	30 U	30 U	4 U	3.2 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	**2J**	0.1 U	**0.41J**	**0.12J**	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	**1J**	0.1 U	**0.15J**	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.5 U	0.1 U	0.17J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.2J	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.5 U	0.1 U	0.17 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5 U	26 U	5 U	5.3 U	2.1 U	2.1 U	2.1 U	2 U	2 J	3 J	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5U	5 U	50 U	50 U	6 U	5.3 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	10 U	2 U	2.1 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	20 U	20 U	2 U	2.1 U
Caprolactam	ug/L	N	4000	5 U	5 U	26 U	5 U	5.3 U	3.1 U	3.2 U	3.2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5U	5 U	50 U	50 U	6 U	5.3 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	3	0.1 U	0.58	0.19 J	0.15 J	0.14 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.2 J	0.11 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	10 U	2 U	2.1 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	20 U	20 U	2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 U	5 U	26 U	5 U	5.3 U	5.2 U	5.4 U	5.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5U	5 U	50 U	50 U	6 U	5.3 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	10 U	2 U	2.1 U	2.1 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	20 U	20 U	2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	10 U	2 U	2.1 U	2.1 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2U	2 U	20 U	20 U	2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	16 U	3 U	3.2 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3U	3 U	30 U	30 U	4 U	3.2 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	2 J	0.1 U	0.36 J	0.13 J	0.13 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 J	0.2 J	0.11 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	1 J	0.1 U	0.32 J	0.12 U	0.13 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	26 U	5 U	5.3 U	5.2 UJ	5.4 U	5.3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5U	5 U	50 U	50 U	6 U	5.3 U
Hexachloroethane	ug/L	N	7	1 U	1 U	5 U	1 U	1.1 U	0.52 U	0.54 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	10 U	10 U	1 U	1.1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.5 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.7 U	4 U	0.7 U	0.74 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7U	0.7 U	7 U	7 U	0.8 U	0.74 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.7 U	4 U	0.7 U	0.74 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7U	0.7 U	7 U	7 U	0.8 U	0.74 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	3	0.1 U	0.57	0.17 J	0.11 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	1 U	1 U	0.1 U	0.11 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	3 U	2 U	1.7 U	1 U	1.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	2 U	1.7 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	5 U	1 U	1.1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1U	1 U	10 U	10 U	1 U	1.1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	17	0.1 U	4.2	1.1	0.6	0.52 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 U	1 U	0.1 U	0.11 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	3 U	0.5 U	0.53 U	0.52 U	0.54 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5U	0.5 U	5 U	5 U	0.6 U	0.53 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	7	0.1 U	1.5	0.48 J	0.31 J	0.36 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1U	0.1 U	1 J	1 J	0.2 J	0.11 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	0 U	0 U	26 J	10 J	5 J	4 J	5 J	4 J	16 J	110 J	-	-	-	-	-	0 U	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-373	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375
			Field Sample ID	M373C2X	M374A1X	D0710141	M374A2X	M374A3X	M374A5X	M374A4X	M374A6X	M374A7X	M374A8X	M374A9X	M374B1X	M374B2X	D0131171	M374B3X	M374B5X	M374B7X	M374C2	M374C3	M374C4	M374C5	M375A1X	M375A2X	M375A3X	D1118141	M375A4X	M375A5X
			Sample Date	03/05/2021	04/10/2014	07/10/2014	07/10/2014	08/15/2014	11/18/2014	12/04/2014	04/10/2015	06/12/2015	08/25/2015	10/30/2015	05/11/2016	11/04/2016	01/31/2017	01/31/2017	07/27/2017	02/06/2018	05/03/2021	09/28/2021	11/02/2021	03/18/2022	01/10/2014	04/10/2014	07/10/2014	11/18/2014	11/18/2014	04/15/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.1 U	3	8	7	0.6 U	0.7 J	3	11	0.5 U	0.5 U	2	0.5 U	0.53 U	0.7 J	0.5 U	0.5 U	0.5 U	3.7 U	3 U	3.1 U	3 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	10 U	10 U	10 U	11 U	12 U	11 U	11 U	10 U	10 U	10 U	11 U	11 U	10 UJ	10 UJ	10 U	10 U	17 U	14 U	14 U	14 U	10 U	10 U	11 U	12 U	12 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.49 U	0.41 U	0.41 U	0.4 U	0.4 U	0.4 U	0.5 U	0.5 U	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	1	1	2	2	2	0.6	0.1 U	2	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.2 J	0.1 U	0.12 U	0.1 U	0.1 U	0.36 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	1	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	1	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.7 J	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	4.9 U	4.1 U	4.1 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	2.4 U	2 U	2.1 U	2 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.3 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	9.8 U	8.1 U	8.2 U	8.1 U	5 U	5 U	6 U	6 U	6 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	4.9 U	4.1 U	4.1 U	4 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	2	0.6 U	0.5 U	1	0.9 J	0.5 U	2	1	0.53 U	0.5 U	0.5 U	0.5 U	0.8 J	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.93 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	1.1 U	0.91 U	0.93 U	0.91 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	11 U	12 U	11 U	11 U	10 U	10 U	10 U	11 U	11 U	10 UJ	10 UJ	10 U	10 U	12 U	10 U	10 U	10 U	10 U	10 U	11 U	12 U	12 U	11 U
Acenaphthene	ug/L	N	400	0.21 J	0.2 J	2 J	1 J	2	1	2	2	2	3	3	2	0.11 U	0.7	0.6	0.8	0.3 J	0.41 J	0.28 J	0.46 J	0.55	0.4 J	0.2 J	0.1 U	0.5 J	0.5 J	0.4 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	9	8	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 J	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	1.2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	16	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2.4 U	2 U	**18**	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.1 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	3.7 U	3 U	3.1 U	3.6 J	5 U	5 U	6 U	6 U	6 U	5 U
Carbazole	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	0.8 J	0.6 U	0.6 J	0.5 U	0.7 J	0.8 J	0.7 J	0.6 J	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	6.1 U	5.1 U	5.2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J
Dibenzofuran	ug/L	N	NA	0.52 U	0.5 U	0.5 U	0.5 U	0.6 J	0.6 U	0.5 U	0.5 U	0.6 J	0.6 J	0.6 J	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2.4 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.3 J	0.1 U	0.5 J	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.12 U	0.1 U	0.6	0.6	0.8	0.6 J	0.7	0.5 J	0.7	0.8	0.7	0.5 J	0.11 U	0.3 J	0.3 J	0.5	0.2 J	0.25 J	0.12 J	0.13 J	0.12 U	0.7	0.2 J	0.1 U	0.7	0.7	0.4 J
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.2 UJ	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.3 U	5 U	5 U	5 U	5 U	6.1 U	5.1 U	5.2 U	5 U	5 U	5 U	6 U	6 U	6 U	5 U
Hexachloroethane	ug/L	N	7	0.52 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	0.61 U	0.51 U	0.52 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J
Isophorone	ug/L	N	40	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	11	12	7	3	6	2	4	4	2	0.1 U	0.11 U	1	1	0.7	0.1 U	0.12 U	0.1 U	0.51 J	1.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.7
Nitrobenzene	ug/L	N	6	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	1.2 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.11 U	0.1 U	0.7	0.5	0.9	0.4 J	0.8	0.1 J	0.4 J	0.5 J	0.3 J	0.1 U	0.11 U	0.1 U	0.1 J	0.2 J	0.1 U	0.13 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.52 U	0.5 U	0.5 U	0.5 U	0.9 J	0.6 U	0.5 U	1	0.5 U	0.5 U	2	0.6 J	0.53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.61 U	0.51 U	0.52 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.6 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.6	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	230 J	1500 J	1700 J	1400 J	1600 J	-	730 J	860 J	1700 J	1300 J	610 J	12 J	760 J	780 J	540 J	290 J	-	-	-	-	420 J	120 J	260 J	560 J	420 J	340 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376
			Field Sample ID	M375A6X	M375A7X	M375A8X	M375A9X	M375B1X	D0609171	M375B2X	M375B3X	M376A1X	M376A2X	D0717141	M376A3X	M376A5X	M376A4X	M376A6X	M376A7X	M376A8X	M376A9X	M376B1X	M376B3X	M376B4X	M376B5X	M376B7X	M376B8X	M376B9X	D0214201X
			Sample Date	06/12/2015	08/25/2015	10/30/2015	05/11/2016	11/04/2016	06/09/2017	06/09/2017	12/06/2017	01/15/2014	04/17/2014	07/17/2014	07/17/2014	11/19/2014	12/08/2014	04/14/2015	05/15/2015	09/01/2015	10/14/2015	11/03/2015	11/03/2016	03/21/2017	08/25/2017	08/09/2018	03/15/2019	08/27/2019	02/14/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 UJ	0.5 UJ	0.5 U	8	20	7 J	4 J	5	22	10	8	0.5 U	8	4	4.6	13	16	9J	15	5 J	7 J
2,4-Dinitrophenol	ug/L	N	40	10 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 UJ	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	15U	14 U	14 U	16 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.46 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.41 U	0.4 U	0.4 U	0.4U	0.4 U	0.4 U	0.5 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.2 J	0.1 U	0.2 J	0.7	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.17 J	1	0.6	0.1U	2	0.1 U	1
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.7 J	0.6 J	0.5 U	0.5 U	0.5 U	0.6 U	0.6 J	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	1J	0.5 U	0.5 U	0.6 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	2U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	3U	3 U	3 U	4 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	3U	3 U	3 U	4 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	3U	3 U	3 U	4 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5 U	5 U	8U	8 U	8 U	9 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	4U	4 U	4 U	5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.8 J	0.5 U	0.6 U	0.5 U	0.52 U	0.7 J	0.5 U	0.5U	0.5 J	0.5 UJ	0.6 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.9U	0.9 U	0.9 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	10 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10U	10 U	10 U	12 U
Acenaphthene	ug/L	N	400	0.6	0.9	0.6	0.6	0.11 U	0.8	0.8	0.9	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.2 J	0.4 J	0.1U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	4U	4 U	4 U	5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	3U	3 U	3 U	4 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	5U	5 U	5 U	6 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5 U	5 U	5U	5 U	5 U	6 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 J	0.5 J	0.5 U	0.5 U	0.9 J	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	1	2	1J	1 J	0.5 U	0.6 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	5U	5 U	5 U	6 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2 U	2 U	2U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	3U	3 U	3 U	4 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.7	0.8	0.7	0.7	0.11 U	0.7	0.8	0.8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.10 U	0.3 J	0.2 J	0.2J	0.3 J	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	6 U	5 U	5.2 U	5 U	5 U	5U	5 U	5 U	6 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.7U	0.7 U	0.7 U	0.8 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.7U	0.7 U	0.7 U	0.8 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.6 J	0.1 UJ	0.1 U	0.1 U	3	2 J	0.9 J	0.4 J	3	0.6	0.4 J	0.1 U	0.1 U	0.4 J	0.10 U	1	0.1 U	0.6	1	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	0.6 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.52 U	0.5 U	0.5 U	0.5U	0.5 U	0.5 U	2 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	4	0.5 U	0.5 UJ	2 J	0.5 U	2	5	4	0.5 U	4	5	0.52 U	2	0.5 U	4	0.5 U	0.5 U	0.6 U
Pyrene	ug/L	N	200	0.1 U	0.1 J	0.1 J	0.1 U	0.11 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	180 J	400 J	310 J	260 J	10 J	210 J	190 J	120 J	830 J	750 J	760 J	550 J	600 J	1100 J	800 J	560 J	96 J	-	560 J	360 J	630 J	810 J	550J	610 J	390 J	640 J

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377
			Field Sample ID	M376C1X	M376C2X	M376C3X	M376M4	M376C5	D1102211	M376C6	M376C7	M377A1X	M377A2X	M377A3X	M377A4X	M377A5X	M377A6X	M377A7X	M377A9X	M377B1X	M377B2X	M377B4X	M377B5X	M377B6X	M377B8X	M377B9X	M377C1X	M377C2X	M377C3X	M377C4X
			Sample Date	02/14/2020	08/21/2020	03/29/2021	05/25/2021	09/23/2021	11/02/2021	11/02/2021	03/18/2022	01/15/2014	04/17/2014	07/17/2014	09/12/2014	11/19/2014	04/09/2015	05/15/2015	09/01/2015	10/14/2015	11/03/2015	11/03/2016	03/21/2017	08/25/2017	08/09/2018	03/15/2019	07/11/2019	08/27/2019	03/06/2020	08/21/2020
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
2,4-Dimethylphenol	ug/L	N	100	7 J	3.3 U	10 J	6.7 J	3.1 U	3.1 U	3 U	16	4	25	8	0.5 U	1	91	34	0.5 UJ	0.5 U	2	0.55 U	53	16	3U	3 U	3 U	3 U	3 U	3.1 U
2,4-Dinitrophenol	ug/L	N	40	15 U	15 U	16 U	16 U	14 U	15 U	14 U	14 U	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 UJ	10 U	10 U	11 U	10 UJ	10 U	14U	14 U	16 U	14 U	15 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
2-Chloronaphthalene	ug/L	N	600	0.4 UJ	0.44 U	0.44 U	0.45 U	0.41 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.44 U	0.4 U	0.4 U	0.4U	0.4 U	0.4 U	0.4 U	0.4 U	0.42 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
2-Methylnaphthalene	ug/L	N	30	1 J	0.11 U	3.4	0.11 U	0.1 U	0.1 U	0.1 U	3.3	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 J	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	2	18	8	0.5 U	2	87	18	0.5 UJ	0.5 U	2	0.55 U	74	0.5 U	0.5U	0.6 J	0.6 U	0.5 U	0.5 U	0.52 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 UJ	2.2 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	2U	2 U	2 U	2 U	2 U	2.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3.3 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3 U	3.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 UJ	3.3 U	4.4 U	4.5 U	4.1 U	4.2 U	4.1 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	3U	3 U	3 U	3 U	3 U	3.1 U
3-Nitroaniline	ug/L	N	NA	3 UJ	3.3 U	2.2 UJ	2.2 U	2.1 U	2.1 U	2 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3 U	3.1 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 UJ	8.8 U	8.9 U	8.9 U	8.2 U	8.3 U	8.1 U	8.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.5 U	5 U	5 U	8U	8 U	9 U	8 U	9 U	8.4 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
4-Chloroaniline	ug/L	N	30	4 UJ	4.4 U	4.4 UJ	4.5 U	4.1 U	4.2 U	4.1 U	4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	4U	4 U	4 U	4 U	4 U	4.2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	6	3	0.5 U	0.9 J	34	7	0.5 UJ	0.5 U	0.8 J	0.55 U	5	0.5 U	0.5U	0.6 J	0.6 U	0.5 UJ	0.5 U	0.52 U
4-Nitroaniline	ug/L	N	NA	1 UJ	0.99 U	1 U	1 U	0.92 U	0.94 U	0.91 U	0.91 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.9U	0.9 U	1 U	0.9 U	1 U	0.94 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	11 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10U	10 U	11 U	10 U	11 U	10 U
Acenaphthene	ug/L	N	400	0.1 UJ	0.11 U	0.61	0.57	0.1 U	0.1 U	0.1 U	0.73	0.1 U	0.1 U	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.2 J	0.3 J	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 UJ	4.4 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	4U	4 U	4 U	4 U	4 U	4.2 U
Anthracene	ug/L	N	2000	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 UJ	2.2 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2.1 U
Benzaldehyde	ug/L	N	NA	3 UJ	3.3 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	3U	3 U	3 U	3 U	3 U	3.1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 UJ	5.5 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	5U	5 U	6 U	5 U	5 U	5.2 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	2.2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2.1 U
Caprolactam	ug/L	N	4000	5 UJ	5.5 U	3.3 U	3.4 U	3.1 U	3.1 U	3 U	3 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5U	5 U	6 U	5 U	5 U	5.2 U
Carbazole	ug/L	N	NA	0.5 UJ	0.55 U	1.7 J	0.84 J	0.51 U	0.52 U	0.51 U	1.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
Chrysene	ug/L	N	5	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	2.2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2.1 U
Di-n-octylphthalate	ug/L	N	100	5 UJ	5.5 U	5.5 U	5.6 U	5.1 U	5.2 U	5.1 U	5.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	5U	5 U	6 U	5 U	5 U	5.2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
Diethylphthalate	ug/L	N	6000	2 UJ	2.2 U	2.2 U	2.2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2.1 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2.2 U	2.2 U	2.2 UJ	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2 U	2 U	2U	2 U	2 U	2 U	2 U	2.1 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 UJ	3.3 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	3U	3 U	3 U	3 U	3 U	3.1 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 UJ	0.11 U	0.38 J	0.29 J	0.12 U	0.12 U	0.12 U	0.36 J	0.1 U	0.3 J	0.3 J	0.1 U	0.2 J	0.3 J	0.3 J	0.1 U	0.2 J	0.1 J	0.11 U	0.3 J	0.1 U	0.2J	0.2 J	0.2 J	0.1 U	0.1 J	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 UJ	0.55 UJ	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 UJ	0.52 U
Hexachlorocyclopentadiene	ug/L	N	40	5 UJ	5.5 U	5.5 U	5.6 U	5.1 U	5.2 U	5.1 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.5 U	5 U	5 U	5U	5 U	6 U	5 U	5 U	5.2 U
Hexachloroethane	ug/L	N	7	1 UJ	1.1 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.8 UJ	0.77 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.7U	0.7 U	0.8 U	0.7 U	0.8 U	0.73 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.8 UJ	0.77 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.7U	0.7 U	0.8 U	0.7 U	0.8 U	0.73 U
Naphthalene	ug/L	N	300	0.1 UJ	0.24 J	1.6	0.11 U	0.1 U	0.18 J	0.12 J	1	5	5	3	0.1 U	2	4	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	3	2	0.1U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 UJ	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	0.5 U	0.52 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	1.8 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.55 U	0.5 U	0.5 U	0.5U	0.5 U	0.6 U	0.5 U	2 U	1.7 U
Pentachlorophenol	ug/L	N	0.3	1 U	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.1 U	1 U	1 U	1U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 UJ	0.11 U	0.12 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 J	0.2 J	0.2 J	0.1 U	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.55 U	0.55 U	0.56 U	0.51 U	0.52 U	0.51 U	0.51 U	0.5 U	2	1	0.5 U	0.5 U	10	5	0.5 UJ	0.5 U	6	0.55 U	5	4	0.7J	1 J	0.6 U	0.5 U	0.5 U	0.52 U
Pyrene	ug/L	N	200	0.1 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	520 J	-	-	-	-	-	-	-	970 J	860 J	1100 J	180 J	1200 J	920 J	780 J	130 J	-	600 J	91 J	980 J	1200 J	440J	930 J	1100 J	130 J	780 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-377	MW-377	MW-377	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379
			Field Sample ID	M377C5X	M377C6X	M377C7	M378A1X	M378A2X	M378A3X	M378A4X	M378A5X	M378A6X	M378A7X	M378A8X	M378B1X	M378B2X	M378B4X	M378B8	M378B9	M378C1	M378C2	M379A1X	M379A2X	M379A3X	M379A4X	M379A5X	M379A6X	M379A7X	M379A9X	M379B1X
			Sample Date	10/16/2020	01/11/2021	04/08/2021	01/09/2014	05/06/2014	07/11/2014	11/25/2014	04/14/2015	06/10/2015	09/03/2015	11/05/2015	11/03/2016	06/14/2017	12/06/2017	05/21/2021	09/23/2021	12/13/2021	03/23/2022	01/15/2014	04/15/2014	07/11/2014	04/14/2015	06/16/2015	08/27/2015	10/29/2015	11/09/2016	03/22/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.7 J	0.5 U	2	0.8 J	0.5 J	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.1 U	3.9 J	4	0.5 U	0.7 J	0.5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	3.1 U	3 U	3.1 U	3 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	14 U	15 U	15 U	11 U	10 U	11 U	11 U	10 UJ	10 U	10 U	11 U	10 U	10 U	11 U	15 U	14 U	14 U	14 U	10 U	12 U	10 U	10 UJ	10 U	11 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.42 U	0.44 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.41 U	0.4 U	0.4 U	0.42 U	0.41 U	0.41 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.11 U	0.1 U	1	0.7	2	0.1 U	0.5 J	2	0.3 J	0.89	0.1 U	0.3 J	0.34 J	0.22 J	0.15 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.52 U	1.2 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3.1 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3.1 U	4.4 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	4.2 U	4.1 U	4.1 U	4 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	3 U	3.1 U	2.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	2.1 U	2 U	2.1 U	2 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8.4 U	8.8 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.1 U	5 U	5 U	8.4 U	8.1 U	8.3 U	8 UJ	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4.2 U	4.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	4.2 U	4.1 U	4.1 U	4 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.52 U	1 J	0.5 U	0.5 U	2	9	0.5 U	150	33	1	4.5	0.5 U	0.5 U	0.52 U	0.84 J	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.94 U	0.99 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.94 U	0.91 U	0.93 U	0.9 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	12 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4.2 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	2 J	0.5 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2.1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	3 J	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5.2 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5.2 U	3.3 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	5 U	5 U	3.1 U	3 U	3.1 U	3 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ
Carbazole	ug/L	N	NA	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5.2 U	5.5 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	5.2 U	5.1 U	5.2 U	5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2.0 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3.1 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.13 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.13 U	0.12 U	0.12 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.2 U	5.5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5.1 U	5 U	5 U	5.2 U	5.1 U	5.2 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	0.55 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1.0 U	1 U	1 U	0.52 U	0.51 U	0.52 U	0.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.73 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.73 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.11 U	3	8	4	16	0.6	5 J	12	5	4.4	1 J	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.52 U	0.55 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.6 UJ	1.7 U	1.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	1.3 J	0.55 U	7	1	6	0.5 U	4	91	37	11	0.51 U	7	0.5 U	0.52 U	0.51 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	590 J	480 J	390 J	820 J	580 J	520 J	650 J	400 J	390 J	380 J	330 J	-	-	-	-	5 J	0 U	9 J	22 J	0 U	0 U	82 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-383	MW-383	MW-383	MW-383
			Field Sample ID	M379B2X	M379B3X	M379B4X	M379B5X	M379B6X	M379B7X	M380A1X	M380A2X	M380A3X	M380A4X	D0610151	M380A5X	M380A6X	M380A7X	M380A9X	M380B1X	M380B2X	M380B3X	M380B4X	M380B5X	M380B6X	M380B7X	M380B8X	M383A1X	M383A2X	D0409151	M383A3X
			Sample Date	08/24/2017	05/02/2018	08/16/2018	05/29/2019	10/22/2019	06/23/2020	01/15/2014	04/15/2014	07/11/2014	04/14/2015	06/10/2015	06/10/2015	08/27/2015	10/29/2015	11/08/2016	03/22/2017	08/30/2017	05/02/2018	08/16/2018	05/29/2019	10/22/2019	06/25/2020	10/30/2020	04/15/2014	07/11/2014	04/09/2015	04/09/2015
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 UJ	3 U	3 U	3.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 U	3 U	3.3 U	3.3 UJ	0.6 U	0.5 U	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	10 U	15 U	14 U	14 U	14 U	16 U	11 U	11 U	11 U	10 UJ	11 U	10 U	11 U	10 U	10 U	10 U	10 U	14 U	14 U	14 U	16 U	15 U	15 UJ	11 U	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.46 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.44 U	0.44 U	0.5 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	6	6	0.6	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.3 J	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	15 J	5 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 U	2 U	2.3 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	0.6 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	3.3 UJ	0.6 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 U	3 U	3.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3.3 U	3.3 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	3.3 U	0.6 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8 U	8 U	8 U	9.3 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	9 U	8.8 U	8.8 UJ	6 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 U	4 U	4.6 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	5 U	4.4 U	4.4 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	8 J	3 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	1 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	0.99 U	0.99 U	0.6 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	12 U	11 U	11 U	11 U	10 U	11 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	11 UJ	11 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.3 J	0.3 J	0.4 J	0.3 J	0.3 J	0.4 J	0.3 J	0.1 U	0.2 J	0.3 J	0.2 J	0.2 J	0.2 J	0.3 J	0.1 U	0.11 U	0.11 U	0.3 J	0.1 U	0.3 J	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 U	4 U	4.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	5 U	4.4 U	4.4 U	0.6 J	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 J	0.1 U	0.1 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 U	3 U	3.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3.3 U	3.3 U	1 U	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	**0.15J**	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	5 U	5 U	5 U	5 U	5.8 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5.5 U	5.5 UJ	2 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 U	5.8 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	6 U	5.5 U	5.5 U	6 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.22 J	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 U	5 U	5.8 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5.5 U	5.5 UJ	2 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.2 U	2.2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 U	3 U	3.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3.3 U	3.3 U	0.6 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.2 J	0.2 J	0.2 J	0.1 J	0.2 J	0.3 J	0.2 J	0.1 J	0.2 J	0.1 U	0.2 J	0.2 J	0.1 J	0.1 J	0.1 U	0.11 U	0.39 J	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.8	0.8	0.9	0.8	0.7	0.9	0.7	0.1 U	0.3 J	0.9	0.7	0.5 J	0.3 J	0.8	0.1 U	0.11 U	1	0.5 J	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5.8 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5.5 U	5.5 U	6 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 UJ	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.81 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.77 U	0.77 U	0.6 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.81 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.77 U	0.77 U	0.6 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	3	3	2	0.8	1	0.9	0.1 U	0.7	0.1 U	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	6	0.1 U	1 J	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 U	0.6 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.9 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	1.8 U	1.8 UJ	0.6 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1.2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 UJ	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.4 J	0.3 J	0.3 J	0.3 J	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.5	0.4 J	0.1 U	0.1 U	0.1 J	0.1 U	0.11 U	0.27 J	0.2 J	0.1 U	0.3 J	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.58 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.55 U	0.55 UJ	23	15	7 J	1 J
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.2 J	0.2 J	0.3 J	0.1 J	0.3 J	0.4 J	0.3 J	0.2 J	0.2 J	0.2 J	0.3 J	0.2 J	0.2 J	0.2 J	0.1 U	0.11 U	0.6	0.1 U	0.1 U	0.1 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	270 J	280 J	240 J	220 J	120 J	180 J	85 J	190 J	52 J	170 J	68 J	48 J	76 J	69 J	19 J	-	-	440 J	510 J	420 J	290 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391R	MW-391R	MW-391R	MW-391R	MW-392	MW-392
			Field Sample ID	M383A4X	M383A5X	M383A6X	M383A8X	M383B9X	M383B1X	M383B2X	D0816181	M383B3X	M383B4X	M383B5X	M383B7X	M383B8X	M391A1X	M391A2X	M391A3X	D0430188	M391A5X	D0809188	M391A6X	M391B1X	M391RB2X	M391RB3X	M391RB4	M391RB6	M392A1X	M392A2X
			Sample Date	06/16/2015	08/27/2015	10/29/2015	11/08/2016	03/22/2017	08/24/2017	05/02/2018	08/16/2018	08/16/2018	05/17/2019	10/21/2019	05/15/2020	11/13/2020	06/25/2014	08/19/2014	12/11/2014	04/30/2018	04/30/2018	08/09/2018	08/09/2018	07/10/2019	10/20/2020	01/14/2021	04/09/2021	10/08/2021	08/19/2014	12/11/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 U	0.53 U	-	0.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 U	0.53 U	-	0.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 U	0.53 U	-	0.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 UJ	3 UJ	3 U	3 U	3 U	3 U	**120**	62	**150**	0.5 U	1	4 J	4 J	**140**	3 U	2.9 U	3.2 U	-	1 J	0.6 J
2,4-Dinitrophenol	ug/L	N	40	11 U	11 U	10 U	10 U	10 U	10 U	15 U	15 U	14 U	14 U	15 U	16 U	14 U	11 U	11 U	11 U	10 U	11 U	14 U	15 U	16 U	14 U	14 U	15 U	-	12 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.98 UJ	1.1 U	-	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.39 UJ	0.43 U	-	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 U	0.53 U	-	0.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	2	0.1 U	3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2.7	0.67 J	1.4	-	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	190	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	1 J	0.6 U	0.5 U	0.5 U	0.5 U	0.9 J	0.6 J	2	0.51 U	0.64 J	2.6	-	0.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 UJ	1.1 U	-	0.6 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2.9 U	1.1 U	-	0.6 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	2.9 UJ	4.3 U	-	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2.9 UJ	2.1 U	-	0.6 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	8 U	8 U	9 U	9 U	8 U	6 U	6 U	5 U	5 U	5 U	8 U	8 U	9 U	8.1 U	7.8 UJ	8.5 U	-	6 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 UJ	4 U	5 U	4 U	0.6 U	0.6 U	0.5 U	2 U	2 U	4 U	4 U	4 U	4.1 U	3.9 UJ	4.3 U	-	1	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	900	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	1 J	0.5 U	0.6 U	3.9	0.82 J	2.2	-	0.6 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 UJ	1 U	1 U	0.91 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.91 U	0.88 UJ	0.96 U	-	0.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U	10 U	11 U	11 U	11 U	10 U	11 U	10 U	11 U	11 U	10 U	9.8 U	11 U	-	12 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.2 J	0.1 J	0.2 J	0.3 J	0.2 J	0.2 J	0.3 J	0.3 J	0.2 J	0.1 U	0.1 U	0.32 J	0.1 U	0.1 U	0.1 J	0.3 J	0.2 J	0.1 J	0.1 U	0.1 U	0.45 J	0.24 J	0.41 J	-	1	0.6
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.3 J	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	4 U	4 U	4 U	4 UJ	4 U	5 U	4 U	0.6 U	4	0.5 U	0.5 U	0.5 U	4 U	4 U	9 J	4.1 U	3.9 UJ	1.1 U	-	9	0.5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.1 U	0.1 J	0.1 U	0.13 J	0.11 U	-	0.2 J	0.1 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	1.1 U	-	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	1 U	3 J	1 U	1 U	1 U	3 U	3 U	3 U	3 U	2.9 UJ	1.1 U	-	2 J	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.13J**	0.098 UJ	0.11 U	-	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.12 U	-	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5.1 U	4.9 UJ	2.1 U	-	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	-	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5.1 U	4.9 UJ	3.2 U	-	6 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	1 J	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	-	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	6 U	5.1 U	4.9 UJ	5.3 U	-	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	1.4 J	0.49 UJ	0.67 J	-	0.9 J	0.5 U
Diethylphthalate	ug/L	N	6000	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	-	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2.1 U	-	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	2.9 UJ	0.53 U	-	0.6 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	0.39 J	0.19 J	0.19 J	-	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 J	0.2 J	0.2 J	0.5 J	0.5	0.1 U	0.1 U	0.1 U	0.5	0.1 U	0.1 U	0.38 J	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.39 J	0.42 J	-	2	0.6
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.12 U	-	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	6 U	5 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5.1 U	4.9 UJ	5.3 U	-	6 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.98 UJ	0.53 U	-	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.12 U	-	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	6.7	1.6 J	3.4	-	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.8 U	0.8 U	0.7 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.71 U	0.68 UJ	0.53 U	-	0.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 UJ	0.8 U	0.8 U	0.7 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.71 U	0.68 UJ	0.53 U	-	0.6 U	0.5 U
Naphthalene	ug/L	N	300	0.3 J	0.1 U	0.2 J	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 J	0.1 UJ	0.1 U	0.1 U	0.1 U	15	0.2 J	37	5 J	0.1 U	0.5 J	2 J	0.1 U	10	2.2 J	5.7	-	2	0.8
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.51 U	0.49 UJ	0.53 U	-	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	1.6 UJ	1.6 U	1.1 U	-	0.6 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**5J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.98 U	1.1 U	-	**6J**	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.2 J	0.1 J	0.1 U	0.2 J	0.2 J	1.8	0.76 J	0.74	-	0.2 J	0.1 U
Phenol	ug/L	N	2000	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	10	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.7 J	0.5 U	0.5 U	0.6 U	0.51 U	0.49 U	0.53 U	310 J	0.6 U	0.9 J
Pyrene	ug/L	N	200	0.1 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 J	0.1 U	0.3 J	0.2 J	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.098 UJ	0.11 U	-	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	100 J	100 J	170 J	150 J	350 J	260 J	470 J	130 J	320 J	130 J	160 J	220 J	-	2700 J	730 J	-	1300 J	1300 J	850 J	840 J	1000 J	-	-	-	-	1400 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-393	MW-393	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-396	MW-396	MW-396	MW-396	MW-396	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R
			Field Sample ID	M393A1X	M393A4X	M395A1X	M395A2X	M395A3X	M395A4X	M395A5X	M395A6X	M395A7X	M395A8X	M395A9X	M395B1X	D1206171	M395B2X	D0318148	M396A1X	M396A2X	M396A3X	M396A4X	M396RA5X	M396RA6X	M396RA7X	M396RA8X	M396RA9X	M396RB1X	M396RB2X	M396RB3X
			Sample Date	09/12/2014	10/14/2015	05/06/2014	07/10/2014	11/18/2014	04/10/2015	06/12/2015	08/25/2015	10/30/2015	05/11/2016	11/04/2016	06/09/2017	12/06/2017	12/06/2017	03/18/2014	03/18/2014	06/13/2014	10/17/2017	12/11/2017	10/18/2018	01/17/2019	04/09/2019	07/12/2019	09/30/2019	01/23/2020	03/26/2020	12/11/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.6 U	7	0.5 U	0.6 U	0.5 U	4	0.5 U	0.5 U	0.5 U	0.57 U	0.5 UJ	0.5 U	0.5 U	40	49	25	3	4	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	11 U	12 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	10 U	10 U	11 U	12 U	10 UJ	10 U	14 U	15 U	15 U	15 U	16 U	15 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.41 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.4 J	2	11	0.1 U	0.1 U	5	2	0.1 U	0.11 U	0.2 J	0.1 U	0.4 J	**35**	28	**36**	3	8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.6 U	4	0.5 U	0.6 J	0.5 U	0.6 U	0.6 J	2	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	7	23	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	6 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	6 U	5 UJ	5 U	8 U	8 U	8 U	9 U	9 U	9 U	8 U	8.1 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
4-Chloroaniline	ug/L	N	30	0.5 U	2 U	0.5 U	0.5 U	0.6 U	0.5 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	0.5 U	0.5 UJ	0.6 U	2 U	2 U	4 U	4 U	4 U	4 U	5 U	4 U	4 U	4.1 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.6 U	5	0.5 U	0.6 U	0.5 U	0.6 U	0.9 J	2	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	4	17	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.6 U	0.5 U	0.5 U	0.9 U	1 U	0.9 U	1 U	1 U	1 U	0.9 U	0.91 U
4-Nitrophenol	ug/L	N	NA	11 U	12 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	11 U	10 U	11 U	10 U	10 U	11 U	12 U	10 U	10 U	10 U	11 U	10 U	11 U	12 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.8	0.8	1	0.4 J	0.1 U	2	2	0.9	0.11 U	1	2	2	3	4	0.1 U	4	3	1	0.1 U	1	0.9	1	0.1 U	1	0.77
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	5 U	4 U	4 U	4.1 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	0.4 J	0.1 J	0.11 U	0.2 J	0.6 J	0.1 J	0.6	1	3	2	2	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	3 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.11 U	0.1 U	**0.2J**	0.1 U	**0.2J**	**0.4J**	**1**	**0.9**	**2**	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.11 U	0.1 U	**0.2J**	0.1 U	**0.2J**	**0.4J**	**1**	**1**	**2**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.11 U	0.1 U	0.2J	0.1 U	0.1J	**0.3J**	**0.8**	**0.6**	**1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 J	0.11 U	0.1 U	0.3 J	0.1 U	0.2 J	0.3 J	0.9	0.9	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.3 J	0.5 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	2 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5.1 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	6 U	5 U	5 U	6 U	5 U	6 U	5 U	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5.1 U
Carbazole	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	3	4	3	5	5	1 J	0.6 J	0.6 J	0.8 J	1 J	0.5 U	1 J	0.51 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.2 J	0.4 J	0.1 U	0.11 U	0.1 U	0.5 J	0.1 U	0.3 J	0.8	3	2	4	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	6 U	5 U	5 U	5.1 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.3J	0.3J	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.6 J	0.6 J	0.5 U	0.6 U	0.9 J	1	0.5 U	0.57 U	0.6 J	0.7 J	0.7 J	1	2	1	2	2	0.6 J	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 J	0.6 J	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.2 J	0.1 U	0.4 J	0.1 U	0.1 U	0.3 J	0.1 U	0.2 J	0.11 U	0.2 J	0.6 J	0.1 J	0.4 J	0.8	2	1	3	0.7	0.1 U	0.2 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.9	0.1 U	0.8	0.3 J	0.4 J	2	2	0.5 J	0.11 U	1	2 J	1 J	3	4	5	5	5	2	0.8	1	1	2	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	6 U	5 U	5 U	6 U	5 U	6 U	5 UJ	5 U	5 U	5.7 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U	6 UJ	6 U	5 U	5 U	5.1 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	**0.3J**	**0.3J**	**0.5J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.7 U	0.71 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.7 J	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.8 U	0.7 U	0.71 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	2	4	9	1	0.1 U	3	0.1 U	0.1 U	0.11 U	0.5	0.1 U	0.1 U	57	57	31	13	25	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.51 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.6 U	2 U	2 U	1.6 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 J	0.1 U	0.1 U	0.1 U	0.8	0.1 U	0.1 U	0.6	0.6	0.1 U	0.11 U	0.1 U	0.9 J	0.4 J	3	6	15	7	12	3	0.1 U	0.1 U	1	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	0.5 U	0.6 U	2	0.5 U	0.6 U	0.6 J	0.6 U	0.5 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.5 U	26	25	3	0.5 U	1 J	0.5 U	0.5 U	0.5 U	0.6 U	0.7 J	0.5 U	0.5 U	0.51 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.2 J	0.1 U	0.5 J	0.1 U	0.1 U	0.4 J	0.8	0.1 U	0.11 U	0.2 J	0.8 J	0.2 J	0.8	1	4	3	6	1	0.4 J	0.4 J	0.4 J	0.1 U	0.1 U	0.3 J	0.1 U
Total TIC SVOCS	ug/L	N	NA	150 J	-	1100 J	760 J	990 J	800 J	430 J	630 J	780 J	390 J	11 J	260 J	360 J	210 J	1600 J	2900 J	760 J	600 J	-	360 J	360 J	230 J	160 J	400 J	0 U	160 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-396R	MW-396R	MW-396R	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398
			Field Sample ID	D060220211A	M396RB5	M396RB7	M397A1X	M397A2X	M397A3X	M397A4X	M397A5X	M397A6X	M397A7X	M397A8X	D0930198	M397A9X	M397B1X	D0324208	M397B2X	M397B3X	M397B5	M397B7	D0612148	M398A1X	M398A2X	M398A3X	D1208178	M398A4X	D1017188A
			Sample Date	06/02/2021	06/02/2021	12/09/2021	03/18/2014	06/13/2014	10/16/2017	12/12/2017	10/17/2018	01/17/2019	04/09/2019	07/12/2019	09/30/2019	09/30/2019	01/23/2020	03/24/2020	03/24/2020	12/11/2020	06/04/2021	12/10/2021	06/12/2014	06/12/2014	09/24/2014	10/16/2017	12/08/2017	12/08/2017	10/17/2018
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
2,4,6-Trichlorophenol	ug/L	N	20	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
2,4-Dichlorophenol	ug/L	N	20	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
2,4-Dimethylphenol	ug/L	N	100	3.3 U	3 U	3 U	0.6 U	0.7 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3.1 U	3.3 U	3.1 U	20	24	0.6 U	1 J	0.5 U	5 U	15 U
2,4-Dinitrophenol	ug/L	N	40	16 U	14 U	14 U	11 U	15 U	10 U	10 U	14 U	14 U	15 U	15 U	15 U	17 U	15 U	16 U	15 U	14 U	15 U	14 UJ	11 U	10 U	11 UJ	11 U	10 U	110 U	72 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	11 U	5 U
2,6-Dinitrotoluene	ug/L	N	5	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
2-Chloronaphthalene	ug/L	N	600	0.45 U	0.4 U	0.41 U	0.4 U	0.6 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.5 U	0.4 U	0.41 U	0.44 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	2 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.1 U	0.1 U	10	6	0.1 J	0.7	0.1 U	0.3 J	0.1 U	0.1 U	0.4 J	0.3 J	0.1 U	0.3 J	0.4 J	0.1 U	0.11 U	0.1 U	**210J**	**71 J**	13	10	5	6	**80**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1.1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	10 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3.1 U	1.1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	15 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.5 U	4 U	4.1 U	2 U	3 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3.1 U	4.4 U	4.1 U	2 U	2 U	2 U	2 U	2 U	21 U	15 U
3-Nitroaniline	ug/L	N	NA	2.2 U	2 U	2 U	0.6 U	0.7 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3.1 U	2.2 U	2.1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	15 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.9 U	8 U	8.1 U	6 U	7 U	5 U	5 U	8 U	8 U	8 U	9 U	9 U	10 U	9 U	9 U	9 U	8.3 U	8.7 U	8.2 U	5 U	5 U	6 UJ	5 U	5 U	53 U	41 U
4-Bromophenylphenylether	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
4-Chloroaniline	ug/L	N	30	4.5 U	4 U	4.1 U	0.6 U	0.7 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	5 U	4 U	4.1 U	4.4 U	4.1 U	0.5 U	0.5 U	0.6 U	2 U	2 U	21 U	21 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	3	4	0.6 U	0.5 U	0.5 U	5 U	3 U
4-Nitroaniline	ug/L	N	NA	1 U	0.9 U	0.91 U	0.6 U	0.7 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	1 U	1 U	1 U	1 U	1 U	0.93 U	0.98 U	0.92 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	5 U
4-Nitrophenol	ug/L	N	NA	11 U	10 U	10 U	11 U	15 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	12 U	11 U	12 U	11 U	10 U	11 U	10 U	11 U	10 U	11 U	11 U	10 U	110 U	52 U
Acenaphthene	ug/L	N	400	0.57	0.5	0.6	2	2	3	3	3	3	2	68	4	4	0.1 U	3	3	3.3	2.2	2.7	8 J	4 J	3	3	3	3 J	11
Acenaphthylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.5 U
Acetophenone	ug/L	N	700	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	5 U	4 U	5 U	4 U	4.1 U	1.1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	2	5 U	21 U
Anthracene	ug/L	N	2000	0.11 U	0.1 U	0.1 U	0.4 J	0.4 J	0.7	1	0.7	1	0.4 J	0.1 U	0.8	0.8	0.1 U	0.6	0.8	0.1 U	0.28 J	0.42 J	9 J	4 J	1	1	2	2 J	7
Atrazine	ug/L	N	3	1.1 U	1 U	1 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	1.1 U	1 U	2 U	2 U	2 U	2 U	2 U	21 U	10 U
Benzaldehyde	ug/L	N	NA	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	11 U	15 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.1 U	0.1 U	**0.3J**	**1**	**0.4J**	**1**	**0.4J**	**1**	**0.2J**	0.1 U	**0.3J**	**0.4J**	0.1 U	**0.7**	**0.8**	0.1 U	0.11 U	0.1 U	**8J**	**3J**	**0.8**	**0.9**	**3**	**2J**	**10J**
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.11 U	0.11 U	**0.2J**	**1**	**0.6**	**1**	**0.5J**	**1**	**0.2J**	0.1 U	**0.4J**	**0.4J**	0.1 U	**0.5J**	**0.5J**	0.1 U	0.12 U	0.11 U	**9J**	**3J**	**0.8**	**1**	**4**	**3J**	**10**
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.1 U	0.1 U	0.2J	**0.9**	**0.5J**	**1**	**0.3J**	**1**	0.1J	0.1 U	**0.3J**	**0.3J**	0.1 U	**0.7**	**0.7**	0.1 U	0.11 U	0.1 U	**4J**	**1J**	**0.3J**	**0.7**	**2**	**2J**	**4**
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.1 U	0.1 U	0.2 J	0.9	0.5 J	0.9	0.3 J	1	0.2 J	0.1 U	0.3 J	0.4 J	0.1 U	0.5 J	0.5 J	0.1 U	0.11 U	0.32 J	6 J	2 J	0.4 J	0.9	2	3 J	6
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.1 U	0.1 U	0.1 J	0.4 J	0.2 J	0.5 J	0.1 U	0.5	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.3 J	0.2 J	0.1 U	0.11 U	0.1 U	**0.7 J**	0.2 J	0.1 U	0.1 U	0.4 J	1 U	**0.6 J**
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	2 U	2 U	2 UJ	3 U	2 U	2 U	5 UJ	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5.2 U	2.2 U	2.1 U	2 J	2 U	2 U	2 U	2 U	21 U	26 UJ
Butylbenzylphthalate	ug/L	N	100	2.2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	21 U	10 U
Caprolactam	ug/L	N	4000	21	13	3 U	6 U	7 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5.2 U	3.3 U	3.1 U	5 U	5 U	6 U	5 U	5 U	53 U	26 U
Carbazole	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.7 J	1 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	11	8	7	4	5	5 U	8J
Chrysene	ug/L	N	5	0.11 U	0.1 U	0.1 U	0.4 J	2	0.7	1	0.7	2	0.2 J	0.1 U	0.4 J	0.4 J	0.1 U	0.7	0.8	0.1 U	0.11 U	0.1 U	**17J**	5 J	2	2	**6**	5 J	**20**
Di-n-butylphthalate	ug/L	N	700	2.2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	21 U	10 U
Di-n-octylphthalate	ug/L	N	100	5.6 U	5 U	5.1 U	2 U	3 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U	6 U	5 U	5.2 U	5.5 U	5.1 U	2 U	2 U	2 U	2 U	2 U	21 U	26 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.1 U	0.1 U	0.1 U	0.2J	0.1J	0.3J	0.1 U	0.3J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	**2J**	**0.7J**	0.2J	0.3J	**0.8**	**2J**	**2J**
Dibenzofuran	ug/L	N	NA	0.56 U	0.5 U	0.51 U	0.6 U	0.8 J	1	0.9 J	1 J	0.8 J	0.6 J	1 J	1 J	1 J	0.5 U	0.8 J	0.9 J	0.85 J	0.55 U	0.58 J	4 J	2 J	0.6 U	2	2	5 U	5 J
Diethylphthalate	ug/L	N	6000	2.2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	21 U	10 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	2 U	2 U	2 U	3 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	21 U	10 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3.1 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	15 U
Fluoranthene	ug/L	N	300	0.11 U	0.1 U	0.1 U	0.6	2	1	3	1	3	0.6	4	1	1	0.1 U	2	2	0.47 J	0.33 J	0.44 J	6 J	2 J	0.6	0.5 J	2	2 J	5
Fluorene	ug/L	N	300	0.13 U	0.12 U	0.12 U	1	2	2	2	2	2	1	0.1 U	2	2	0.1 U	2	2	2	0.91	0.89	15 J	6 J	6	4	6	6	19
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.5 U
Hexachlorobutadiene	ug/L	N	1	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
Hexachlorocyclopentadiene	ug/L	N	40	5.6 U	5 U	5.1 U	6 U	7 U	5 U	5 U	5 UJ	5 U	5 U	5 UJ	5 U	6 U	5 U	6 U	5 U	5.2 U	5.5 U	5.1 U	5 U	5 U	6 U	5 U	5 U	53 U	26 UJ
Hexachloroethane	ug/L	N	7	0.56 U	0.5 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.55 U	0.51 U	1 U	1 U	1 U	1 U	1 U	11 U	5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.11 U	0.11 U	0.1J	**0.5J**	0.2J	**0.9**	0.2J	**0.9**	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	**0.4J**	**0.3J**	0.1 U	0.12 U	0.12 UJ	**2J**	**0.6J**	0.1J	0.2J	**0.9**	1 U	**1J**
Isophorone	ug/L	N	40	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.9 U	0.8 U	0.8 U	0.8 U	0.72 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	4 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.9 U	0.8 U	0.8 U	0.8 U	0.72 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	4 U
Naphthalene	ug/L	N	300	0.11 U	0.1 U	0.1 U	5	6	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	29 J	19 J	20	1	0.1 U	1 U	0.5 U
Nitrobenzene	ug/L	N	6	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	1 U	1 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 U	1.7 U	1.1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	5 U	3 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**2J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	**2.4J**	1 U	1 U	1 U	1 U	1 U	11 U	5 U
Phenanthrene	ug/L	N	NA	0.12 U	0.11 U	0.11 U	0.8	1	0.2 J	0.7	0.2 J	0.6	0.1 U	1	0.6	0.6	0.1 U	0.6 J	0.8	0.1 U	0.12 U	0.11 U	43 J	12 J	12	8	15	16	54
Phenol	ug/L	N	2000	0.56 U	0.5 U	0.51 U	0.6 U	0.7 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.52 U	0.55 U	0.51 U	8	10	0.6 U	0.5 U	0.5 U	5 U	3 U
Pyrene	ug/L	N	200	0.17 J	0.11 J	0.15 J	0.8	3	2	3	1	4	0.7	3	1	1	0.1 U	2	2	0.45 J	0.29 J	0.4 J	17 J	6 J	2	2	6	7	18
Total TIC SVOCS	ug/L	N	NA	-	-	-	390 J	400 J	190 J	-	250 J	320 J	150 J	300 J	130 J	64 J	6 J	190 J	220 J	-	-	-	690 J	1400 J	610 J	610 J	-	-	2800 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402
			Field Sample ID	M398A5X	M398A6X	M398A7X	M398A8X	M398A9X	M398B1X	M398B2X	M398B3X	M398B4X	M398B5	M398B6	D121021A	M398B7	M402A1	M402A2	M402A3	M402A4	M402A5	M402A6	M402A7	M402A8	M402A9	M402B2	M402B3X	M402B4	M402B5X	M402B7
			Sample Date	10/17/2018	01/18/2019	04/08/2019	07/11/2019	09/30/2019	01/14/2020	03/24/2020	12/14/2020	03/16/2021	06/03/2021	08/30/2021	12/10/2021	12/10/2021	09/26/2014	10/28/2014	03/10/2015	05/28/2015	09/17/2015	11/17/2015	01/12/2016	04/07/2016	07/21/2016	01/19/2017	03/22/2017	04/24/2017	05/17/2017	10/11/2017
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2,4-Dichlorophenol	ug/L	N	20	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2,4-Dimethylphenol	ug/L	N	100	31 U	3 U	3 U	3 U	16 U	3 U	31 U	3.1 U	3.2 U	3 U	3.0 U	3 U	3.2 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2,4-Dinitrophenol	ug/L	N	40	140 U	14 U	14 U	15 U	74 U	14 U	140 U	14 U	15 U	14 U	14 U	14 U	15 U	11 U	11 U	12 U	11 UJ	10 U	10 U	10 U	10 U	10 U	10 UJ	-	10 U	-	10 U
2,4-Dinitrotoluene	ug/L	N	10	10 U	1 U	1 U	1 U	5 U	1 U	10 U	1.0 U	1.1 U	1 U	1.0 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	-	1 U	-	1 U
2,6-Dinitrotoluene	ug/L	N	5	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2-Chloronaphthalene	ug/L	N	600	4 U	0.4 U	0.4 U	0.4 U	2 U	0.4 U	4 U	0.41 U	0.43 U	0.41 U	0.40 U	0.41 U	0.42 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 UJ	0.4 U	0.4 U	-	0.4 U	-	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2-Methylnaphthalene	ug/L	N	30	**68**	2	0.8	1	8	0.1 U	5 J	7.3	0.11 U	2	17	1.1	2.3	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	21 U	2 U	2 U	2 U	11 U	2 U	20 U	2.0 U	1.1 U	1 U	1.0 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	31 U	3 U	3 U	3 U	16 U	3 U	31 U	3.1 U	1.1 U	1 U	1.0 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	31 U	3 UJ	3 U	3 U	16 U	3 U	31 U	3.1 U	4.3 U	4.1 U	4.0 U	4.1 U	4.2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
3-Nitroaniline	ug/L	N	NA	31 U	3 UJ	3 U	3 U	16 U	3 U	31 U	3.1 U	2.1 U	2 U	2.0 U	2 U	2.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	82 U	8 U	8 U	9 U	43 U	8 U	82 U	8.1 U	8.6 U	8.1 U	8.1 U	8.1 U	8.4 U	5 U	6 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	-	5 U	-	5 U
4-Bromophenylphenylether	ug/L	N	NA	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
4-Chloroaniline	ug/L	N	30	41 U	4 UJ	4 U	4 U	21 U	4 U	41 U	4.1 U	4.3 U	4.1 U	4.0 U	4.1 U	4.2 U	0.5 U	0.6 U	0.6 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	1.5 J	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
4-Nitroaniline	ug/L	N	NA	9 U	0.9 U	0.9 U	1 U	5 U	0.9 U	9 U	0.92 U	0.97 U	0.91 U	0.91 U	0.91 U	0.95 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
4-Nitrophenol	ug/L	N	NA	100 U	10 U	10 U	11 U	53 U	10 U	100 U	10 U	11 U	10 U	10 U	10 U	11 U	11 U	11 U	12 U	11 UJ	10 U	10 U	10 U	10 U	10 U	10 UJ	-	10 U	-	10 U
Acenaphthene	ug/L	N	400	9	2	2	3	3	1	2 J	2.1	1.5	1.7	0.10 U	1.7	1.6	0.1 U	0.2 J	0.1 U	0.2 J	0.1 J	0.2 J	0.1 UJ	0.1 UJ	0.2 J	0.1 J	-	0.1 J	-	0.2 J
Acenaphthylene	ug/L	N	NA	1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	1 U	0.10 U	0.11 U	0.1 U	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Acetophenone	ug/L	N	700	41 U	4 U	4 U	4 U	21 U	4 U	41 U	4.1 U	1.1 U	1 U	1.0 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Anthracene	ug/L	N	2000	6	0.7	0.1 U	1	2 J	0.1 U	1 U	1.6	0.4 J	0.87	0.10 U	0.42 J	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Atrazine	ug/L	N	3	21 U	2 U	2 U	2 U	11 U	2 U	20 U	2.0 U	1.1 U	1 U	1.0 U	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
Benzaldehyde	ug/L	N	NA	31 U	3 U	3 U	3 U	16 U	3 U	31 U	3.1 U	1.1 U	1 U	1.0 U	1 U	1.1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	-	1 U	-	1 U
Benzo(a)anthracene	ug/L	N	0.1	**7J**	**0.3J**	**0.8**	**0.4J**	**2J**	**0.9**	**2J**	**1.9**	**0.2J**	**0.34J**	**0.91**	**0.24J**	**0.31J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**8**	**0.4J**	**0.9**	**0.5J**	**2J**	**1**	1 U	**2.3**	**0.23J**	**0.36J**	**1.2**	0.24 UJ	0.36 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	**3J**	0.2J	**0.4J**	0.1 U	**1J**	0.1 U	1 U	**0.86**	0.11 U	0.19J	**0.50**	0.13 UJ	0.15 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	5 J	0.3 J	0.7	0.4 J	2 J	0.7	2 J	1.3	0.2 J	0.21 J	0.10 U	0.13 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	1 U	0.1 J	0.1 U	0.1 U	0.5 U	0.1 U	1 U	0.10 U	0.11 U	0.12 J	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	51 UJ	5 U	5 U	6 U	27 U	5 U	51 U	5.1 U	2.1 U	2 U	2.0 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	3 J	2 U	-	2 U	-	2 U
Butylbenzylphthalate	ug/L	N	100	21 U	2 U	2 U	2 U	11 U	2 U	20 U	2.0 U	2.1 U	2 U	2.0 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
Caprolactam	ug/L	N	4000	51 U	5 U	5 U	6 U	27 U	5 U	51 U	5.1 U	3.2 U	3 U	3.0 U	3 U	3.2 U	18	11 J	6 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	-	5 U	-	5 U
Carbazole	ug/L	N	NA	9J	5	4	6	6J	0.9 J	5 U	4.6	4.1	4	3.6	3	2.9	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Chrysene	ug/L	N	5	**15**	0.7	2	0.7	4	2	3 J	3.8	0.35 J	0.53	1.1	0.4 J	0.51 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Di-n-butylphthalate	ug/L	N	700	21 U	2 U	2 U	2 U	11 U	2 U	20 U	2.0 U	2.1 U	2 U	2.0 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
Di-n-octylphthalate	ug/L	N	100	51 U	5 U	5 U	6 U	27 U	5 U	51 U	5.1 U	5.4 U	5.1 U	5.0 U	5.1 U	5.3 U	2 U	2 U	3 J	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	**2J**	0.2J	0.2J	0.1 U	0.5 U	0.3J	1 U	0.10 U	0.11 U	0.12J	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Dibenzofuran	ug/L	N	NA	5 U	0.5 U	1 J	1 J	3 U	0.6 J	5 U	0.51 U	0.54 U	0.84 J	0.50 U	0.9 J	1.1 J	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Diethylphthalate	ug/L	N	6000	21 U	2 U	2 U	2 U	11 U	2 U	20 U	2.0 U	2.1 U	2 U	2.0 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
Dimethyl phthalate	ug/L	N	NA	21 U	2 U	2 U	2 U	11 U	2 U	20 U	2.0 U	2.1 U	2 U	2.0 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 UJ	2 U	2 U	-	2 U	-	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	31 U	3 U	3 U	3 U	16 U	3 U	31 U	3.1 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Fluoranthene	ug/L	N	300	4 J	0.1 U	0.5 J	0.1 U	1 J	0.5 J	1 U	1.3	0.11 U	0.35 J	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Fluorene	ug/L	N	300	17	3	3	3	6	2	5 J	3.9	2.4	2	1.8	2.5	2.6	0.2 J	0.3 J	0.1 J	0.2 J	0.3 J	0.3 J	0.3 J	0.2 J	0.3 J	0.2 J	-	0.1 J	-	0.2 J
Hexachlorobenzene	ug/L	N	0.02	1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	1 U	0.10 U	0.12 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Hexachlorobutadiene	ug/L	N	1	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	51 UJ	5 U	5 U	6 U	27 U	5 U	51 U	5.1 U	5.4 U	5.1 U	5.0 U	5.1 U	5.3 U	5 U	6 U	6 U	5 U	5 U	5 U	5 UJ	5 UJ	5 U	5 U	-	5 U	-	5 U
Hexachloroethane	ug/L	N	7	10 U	1 U	1 U	1 U	5 U	1 U	10 U	1.0 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 UJ	1 U	1 U	-	1 U	-	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**1J**	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	1 U	0.10 U	0.12 U	0.11J	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Isophorone	ug/L	N	40	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	7 U	0.7 U	0.7 U	0.8 U	4 U	0.7 U	7 U	0.71 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	7 U	0.7 U	0.7 U	0.8 U	4 U	0.7 U	7 U	0.71 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Naphthalene	ug/L	N	300	1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.1 U	1 U	0.10 U	0.11 U	0.5 J	0.10 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 J	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Nitrobenzene	ug/L	N	6	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 U	0.5 U	-	0.5 U	-	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	16 U	1.6 U	1.1 U	1 U	1.0 U	1 U	1.1 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Pentachlorophenol	ug/L	N	0.3	10 U	1 U	1 U	1 U	5 U	1 U	10 U	1.0 U	1.1 U	1 U	1.0 U	1 U	1.1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	**5J**	1 U	1 U	-	1 U	-	1 U
Phenanthrene	ug/L	N	NA	43	2	3	3	7	0.1 U	6	8.8	0.57	1.6	2.2	1.3	1.9	0.8	0.8	0.4 J	0.4 J	0.5 J	0.4 J	0.5 J	0.2 J	0.2 J	0.1 U	-	0.1 U	-	0.1 U
Phenol	ug/L	N	2000	5 U	0.5 U	0.5 U	0.6 U	3 U	0.5 U	5 U	0.51 U	0.54 U	0.51 U	0.50 U	0.51 U	0.53 U	0.5 U	0.6 U	0.6 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U	-	0.5 U
Pyrene	ug/L	N	200	15	0.8	2	1	4	2	4 J	3.8	0.66	0.83	1.7	0.68	0.94	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	-	0.1 U	-	0.1 U
Total TIC SVOCS	ug/L	N	NA	2700 J	860 J	440 J	740 J	1300 J	140 J	630 J	-	-	-	-	-	-	27 J	18 J	0 U	86 J	26 J	9 J	10 J	22 J	43 J	10 J	-	0 U	-	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-403	MW-403	MW-403	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R
			Field Sample ID	M402B8	M402B9	M402C1	M402C2	M402C4	M402C5	M402C6	D0925191	M402C7	M402C8	M402C9	M402D1	M402D3	M402D4X	M402D5	M402D6X	M402D7	M402D9	M402E1	M403A1X	M403A4X	M403A5X	M403RA6X	M403RA7X	M403RA8X	M403RA9X	M403RB1X
			Sample Date	01/24/2018	04/11/2018	07/17/2018	10/25/2018	01/04/2019	04/02/2019	07/01/2019	09/25/2019	09/25/2019	01/06/2020	04/03/2020	07/08/2020	10/14/2020	12/08/2020	01/07/2021	03/25/2021	04/02/2021	10/08/2021	01/14/2022	06/06/2014	10/16/2017	12/08/2017	10/18/2018	01/17/2019	04/08/2019	07/12/2019	10/01/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	3 U	3 UJ	4 U	3 UJ	3 U	4 U	3 U	3 U	3 U	3.7 U	3.2 UJ	3.3 U	3.4 U	3.2 U	3.1 U	3 U	3.1 UJ	**160**	6	53	3 U	3 J	3 U	4 U	3 U
2,4-Dinitrophenol	ug/L	N	40	10 U	11 U	15 U	15 UJ	17 U	14 UJ	14 U	17 U	16 U	14 U	15 U	17 U	15 UJ	15 U	16 U	15 U	14 U	14 U	14 U	12 U	10 U	10 U	14 U	14 U	15 U	17 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1.2 U	1.1 UJ	1.1 U	1.1 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 UJ	0.5 U	0.4 UJ	0.4 U	0.5 U	0.5 U	0.4 U	0.4 UJ	0.5 U	0.43 UJ	0.44 U	0.45 U	0.42 U	0.41 U	0.4 UJ	0.41 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	9	0.1 J	0.3 J	14	6	1	1	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	160	0.5 U	0.5 U	2	1 J	0.5 U	0.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.2 UJ	2.2 U	2.2 U	1.1 U	1 U	1 UJ	1 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	3 U	3 UJ	4 U	3 UJ	3 U	4 U	3 U	3 U	3 UJ	3.7 U	3.2 UJ	3.3 U	3.4 U	1.1 U	1 U	1 U	1 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	3 U	3 UJ	4 U	3 UJ	3 U	4 U	3 U	3 U	3 UJ	3.7 U	3.2 UJ	3.3 U	3.4 U	4.2 U	4.1 U	4 UJ	4.1 U	2 U	2 U	2 U	3 U	3 U	3 U	4 U	3 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	3 U	3 UJ	4 U	3 UJ	3 U	4 U	3 U	3 U	3 UJ	3.7 U	3.2 UJ	3.3 U	3.4 U	2.1 U	2.1 U	2 UJ	2.1 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	8 U	9 UJ	10 U	8 UJ	8 U	10 U	9 U	8 U	9 U	10 U	8.7 UJ	8.7 U	8.9 U	8.5 U	8.2 U	8.1 U	8.2 U	6 U	5 U	5 U	8 U	8 U	8 U	10 U	9 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 U	4 U	4 UJ	5 U	4 UJ	4 U	5 U	5 U	4 U	4 UJ	5 U	4.3 UJ	4.4 U	4.5 U	4.2 U	4.1 U	4 UJ	4.1 U	0.6 U	2 U	2 U	4 U	4 U	4 U	5 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.7 J	0.6 U	0.6 U	0.5 U	0.5 U	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	24	0.5 U	0.5 U	3	4	0.5 U	0.6 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.9 U	1 UJ	1 U	0.9 UJ	0.9 U	1 U	1 U	0.9 U	1 UJ	1.1 U	0.97 UJ	0.98 U	1 U	0.95 U	0.93 U	0.91 UJ	0.92 U	0.6 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	1 U	1 U
4-Nitrophenol	ug/L	N	NA	10 U	11 U	10 U	11 UJ	12 U	10 UJ	10 U	12 U	11 U	10 U	11 U	12 U	11 UJ	11 U	11 U	11 U	10 U	10 U	10 U	12 U	10 U	10 U	10 U	10 U	10 U	12 U	11 U
Acenaphthene	ug/L	N	400	0.2 J	0.1 U	0.3 J	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.16 J	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.12 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 U	4 U	4 UJ	5 U	4 UJ	4 U	5 U	5 U	4 U	4 UJ	5 U	4.3 UJ	4.4 U	4.5 U	1.1 U	1 U	1 UJ	1 U	0.6 U	0.5 U	0.5 U	21	4 U	4 U	5 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.2 J	0.1 J	0.2 J	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.2 UJ	2.2 U	2.2 U	1.1 U	1 U	1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	3 UJ	3 UJ	4 U	3 UJ	3 U	4 U	3 U	3 U	3 UJ	3.7 U	3.2 UJ	3.3 U	3.4 U	1.1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	3 U	3 U	3 U	4 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.12 U	0.11 UJ	0.11 U	0.11 U	**0.13J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	**0.2J**	0.1 U	0.1 U	0.1 U	**0.1J**	0.12 U	0.11 UJ	0.11 U	0.11 U	**0.13J**	0.11 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 UJ	**0.1J**	0.1 UJ	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 UJ	0.11 U	0.11 U	**0.21J**	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**4J**	**4J**	5 U	6 UJ	6 U	5 UJ	5 U	6 U	6 U	5 U	5 UJ	6.2 U	5.4 UJ	5.5 U	5.6 U	**4.4J**	2.1 U	2 UJ	2.1 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	**14**
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.2 UJ	2.2 U	2.2 U	2.1 U	2.1 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	6 UJ	6 U	5 UJ	5 U	6 U	6 U	5 U	5 UJ	6.2 U	5.4 UJ	5.5 U	5.6 U	3.2 U	3.1 U	3 UJ	3.1 U	6 U	5 U	5 U	5 U	5 U	5 U	6 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.6 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.17 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.2 UJ	2.2 U	2.2 U	2.1 U	2.1 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	5 U	6 UJ	6 U	5 UJ	5 U	6 U	6 U	5 U	5 UJ	6.2 U	5.4 UJ	5.5 U	5.6 U	5.3 U	5.2 U	5 UJ	5.1 U	2 U	2 U	2 U	5 U	5 U	5 U	6 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.2 UJ	2.2 U	2.2 U	2.1 U	2.1 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 U	2 U	2 U	2 U	2 UJ	2.5 U	2.2 UJ	2.2 U	2.2 U	2.1 U	2.1 U	2 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	3 U	3 UJ	4 U	3 UJ	3 U	4 U	3 U	3 U	3 UJ	3.7 U	3.2 UJ	3.3 U	3.4 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	4 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.4 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.26 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.2 J	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.2 J	0.1 J	0.2 J	0.2 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.16 J	0.11 UJ	0.11 U	0.11 U	0.13 U	0.12 U	0.12 UJ	0.12 U	0.2 J	0.1 U	0.1 U	0.1 U	0.5 J	0.5 J	0.8	0.6
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 U	0.11 UJ	0.11 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 UJ	6 UJ	6 U	5 UJ	5 U	6 U	6 U	5 U	5 UJ	6.2 UJ	5.4 UJ	5.5 U	5.6 U	5.3 U	5.2 U	5 UJ	5.1 U	6 U	5 U	5 U	5 U	5 U	5 U	6 UJ	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 UJ	1.2 U	1.1 UJ	1.1 U	1.1 U	0.53 U	0.52 U	0.5 UJ	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.7 U	0.8 UJ	0.9 U	0.7 UJ	0.7 U	0.8 U	0.8 U	0.7 U	0.8 UJ	0.87 U	0.76 UJ	0.77 U	0.78 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.9 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.7 U	0.8 UJ	0.9 U	0.7 UJ	0.7 U	0.8 U	0.8 U	0.7 U	0.8 UJ	0.87 U	0.76 UJ	0.77 U	0.78 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.9 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.11 U	0.1 U	0.1 UJ	0.1 U	18	0.3 J	0.7	64	15	13	28	0.1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 UJ	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 UJ	0.51 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	2 U	2 U	1.7 UJ	1.7 U	1.8 U	1.1 U	1 U	1 U	1 UJ	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1.2 U	1.1 UJ	1.1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.3 J	0.12 U	0.11 UJ	0.11 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.11 U	0.2 J	0.1 J	0.1 J	0.6	0.7	0.7	1	0.7
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.6 UJ	0.6 U	0.5 UJ	0.5 U	0.6 U	0.6 U	0.5 U	0.5 U	0.62 U	0.54 UJ	0.55 U	0.56 U	0.53 U	0.52 U	0.5 U	0.51 U	14	5	0.5 U	15	18	8	0.6 U	3
Pyrene	ug/L	N	200	0.1 U	0.1 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.2 J	0.1 U	0.1 U	0.1 U	0.1 UJ	0.12 J	0.11 UJ	0.11 U	0.11 U	0.27 J	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.3 J	0.2 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	21 J	4 J	5 J	4 J	84 J	110 J	-	10 J	0 U	0 U	0 U	-	-	0 U	-	-	-	-	0 U	650 J	280 J	-	1300 J	790 J	680 J	890 J	940 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-404	MW-404	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-406	MW-406
			Field Sample ID	D0122208	M403RB2X	M403RB3X	M403RB5X	M403RB7	M403RB8	M403RC1	M404A1X	M404A2X	M404RB8X	M404RB9X	M404RC1X	M404RC2	M404RC4	M405A1X	M405A2X	M405A5X	M405A6X	M405A7X	M405A8X	M405A9X	M405B1X	D0903199	M405B2X	M405B4X	D0620148	M406A1X
			Sample Date	01/22/2020	01/22/2020	03/25/2020	12/11/2020	05/06/2021	06/02/2021	12/10/2021	06/24/2014	08/13/2014	10/02/2020	12/18/2020	03/12/2021	05/26/2021	12/28/2021	08/15/2014	12/10/2014	11/21/2017	02/13/2018	05/22/2018	08/29/2018	11/19/2018	02/26/2019	09/03/2019	09/03/2019	10/06/2020	06/20/2014	06/20/2014
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 U	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 U	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 U	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3 U	4 UJ	2.9 U	3.6 U	3.7 U	16	0.6 U	-	-	-	3.1 U	4.9 J	0.6 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	13 U	11 U
2,4-Dinitrophenol	ug/L	N	40	16 U	15 U	15 U	19 UJ	14 U	17 U	17 U	11 U	12 U	-	-	-	14 U	15 U	12 U	11 U	11 U	10 U	14 U	14 U	14 U	14 U	14 U	14 U	15 U	260 U	230 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1.3 UJ	0.98 U	1.2 U	1.2 U	1 UJ	1 U	-	-	-	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	26 U	23 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	0.4 U	0.53 UJ	0.39 U	0.48 U	0.49 U	0.4 UJ	0.5 U	-	-	-	0.41 U	0.43 U	0.5 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.43 U	10 U	9 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 U	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.13 UJ	1.5	0.98	0.47 J	0.1 UJ	0.1 U	-	27 J	7.9 J	**31 J**	27 J	1	0.7	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.11 U	**32**	**40**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	2.2	0.6 U	2.6	2	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2 U	2 U	2.7 UJ	0.98 U	1.2 U	1.2 U	0.6 UJ	0.6 U	-	-	-	1 U	1.1 U	0.6 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	13 U	11 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3 U	3 U	4 UJ	0.98 U	1.2 U	1.2 U	0.6 U	0.6 U	-	-	-	1 U	1.1 U	0.6 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	13 U	11 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3 U	3 U	4 UJ	3.9 U	4.8 U	4.9 U	2 UJ	2 U	-	-	-	4.1 U	4.3 UJ	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	52 U	45 U
3-Nitroaniline	ug/L	N	NA	3 U	3 U	3 U	4 UJ	2 U	2.4 U	2.5 U	0.6 UJ	0.6 U	-	-	-	2.1 U	2.1 UJ	0.6 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	13 U	11 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	9 U	9 U	8 U	11 UJ	7.9 U	9.6 U	9.9 U	6 U	6 U	-	-	-	8.2 U	8.6 U	6 U	6 U	5 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	8.6 U	130 U	110 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
4-Chloroaniline	ug/L	N	30	5 U	4 U	4 U	5.3 UJ	3.9 U	4.8 U	4.9 U	0.6 UJ	0.6 U	-	-	-	4.1 U	4.3 UJ	0.6 U	0.6 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	13 U	11 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	3	0.6 U	4.6	0.7 J	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
4-Nitroaniline	ug/L	N	NA	1 U	1 U	1 U	1.2 UJ	0.88 U	1.1 U	1.1 U	0.6 UJ	0.6 U	-	-	-	0.92 U	0.96 U	0.6 U	0.6 U	0.5 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.97 U	13 U	11 U
4-Nitrophenol	ug/L	N	NA	11 U	11 U	11 U	13 UJ	9.8 U	12 U	12 U	11 U	12 U	-	-	-	10 U	11 UJ	12 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	260 U	230 U
Acenaphthene	ug/L	N	400	0.3 UJ	0.3 UJ	0.3 J	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	2.9	2.9	9	7	4	7	9	9	6	10	8	8	4.2	6 J	9 J
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	3 J	5 J
Acetophenone	ug/L	N	700	5 U	4 U	4 U	8.4 J	84	85	11	3 J	0.9 UJ	-	-	-	1 U	1.1 U	0.6 U	0.6 U	0.5 U	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4.3 U	13 U	11 U
Anthracene	ug/L	N	2000	0.1 J	0.1 J	0.1 J	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.62	4	2	0.5 J	0.4 J	0.1 U	0.4 J	0.3 J	0.4 J	0.7	0.6	0.11 U	5 J	8 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2.7 UJ	0.98 U	1.2 U	1.2 U	2 UJ	2 U	-	-	-	1 U	1.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	52 U	45 U
Benzaldehyde	ug/L	N	NA	3 U	3 U	3 U	4.2 J	11	13	13	1 UJ	1 U	-	-	-	1 U	1.1 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	26 U	23 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	**3**	**2**	**0.3J**	**0.2J**	0.1 U	0.1 U	0.1 U	**0.3J**	**0.3J**	**0.3J**	0.11 U	**6J**	**10J**
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.13 UJ	0.11 U	0.13 U	0.14 U	0.1 UJ	0.1 U	-	-	-	0.11 U	0.12 U	**2**	**2**	**0.2J**	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	**0.3J**	0.11 U	**7J**	**11J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	**3**	**2**	0.2J	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.11 U	**3J**	**6J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.38 J	2	1	0.2 J	0.2 J	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.1 U	0.11 U	4 J	7 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	**1**	**0.9**	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.11 U	3 U	2 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 UJ	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 U	0.6 U	-	-	-	0.51 U	0.54 UJ	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	6 U	5 U	5 U	6.7 UJ	2 U	2.4 U	2.5 U	2 UJ	2 U	-	-	-	2.1 U	2.1 U	**6**	3 J	2 U	**4J**	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	52 U	45 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2.7 UJ	2 U	2.4 U	2.5 U	2 UJ	2 U	-	-	-	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	52 U	45 U
Caprolactam	ug/L	N	4000	6 U	5 U	5 U	6.7 UJ	2.9 U	3.6 U	3.7 U	6 UJ	6 U	-	-	-	3.1 U	3.2 U	6 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6.4 J	130 U	110 U
Carbazole	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	2.3	2.8	0.7 J	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	4	3	0.3 J	0.3 J	0.1 U	0.1 U	0.1 U	0.4 J	0.4 J	0.3 J	0.11 U	**9J**	**15J**
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2.7 UJ	2 U	2.4 U	2.5 U	2 UJ	2 U	-	-	-	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	52 U	45 U
Di-n-octylphthalate	ug/L	N	100	6 U	5 U	5 U	6.7 UJ	4.9 U	6 U	6.2 U	2 UJ	2 U	-	-	-	5.1 U	5.4 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	52 U	45 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	**0.5J**	0.3J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	3 U	2 U
Dibenzofuran	ug/L	N	NA	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.9 J	0.54 U	3	3	1	2	2 J	3	2 J	3	3	3	1 J	13 U	11 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2.7 UJ	2 U	2.4 U	2.5 U	2 UJ	2 U	-	-	-	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	52 U	45 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2.7 UJ	2 U	2.4 U	2.5 U	2 UJ	2 U	-	-	-	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.1 U	52 U	45 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3 U	3 U	4 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.2 U	13 U	11 U
Fluoranthene	ug/L	N	300	0.1 J	0.1 J	0.1 U	0.13 UJ	0.098 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	-	0.1 U	0.11 U	8	6	0.5 J	0.6	0.1 J	0.3 J	0.3 J	0.7	1	0.9	0.39 J	9 J	13 J
Fluorene	ug/L	N	300	0.4 UJ	0.4 UJ	0.3 J	0.13 UJ	0.12 U	0.14 U	0.15 U	0.1 UJ	0.1 U	-	-	-	3.6	3.2	2	2	0.5 J	0.7	0.3 J	0.7	0.7	1	1	0.9	0.11 U	11 J	16 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.13 UJ	0.11 U	0.13 U	0.14 U	0.1 UJ	0.1 U	-	-	-	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	3 U	2 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	5 U	5 U	6.7 UJ	4.9 U	6 U	6.2 U	6 UJ	6 U	-	-	-	5.1 U	5.4 U	6 U	6 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.4 U	130 U	110 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1.3 UJ	0.49 U	0.6 U	0.62 U	1 UJ	1 U	-	-	-	0.51 U	0.54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	26 U	23 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.13 UJ	0.11 U	0.13 U	0.14 U	0.1 UJ	0.1 U	-	-	-	0.11 U	0.12 U	**1**	**1**	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1J	0.2J	0.1J	0.11 U	3 U	**3J**
Isophorone	ug/L	N	40	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.8 U	0.8 U	0.7 U	0.94 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.75 U	13 U	11 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.8 U	0.8 U	0.7 U	0.94 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.75 U	13 U	11 U
Naphthalene	ug/L	N	300	5	4	4	0.13 UJ	13	13	4.4	0.1 UJ	0.1 U	22 J	14 J	-	12 J	12 J	1	0.7	0.1 U	0.1 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	42 J	26 J
Nitrobenzene	ug/L	N	6	0.6 U	0.5 U	0.5 U	0.67 UJ	0.49 U	0.6 U	0.62 U	0.6 UJ	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	2 U	2 U	2.1 UJ	0.98 U	1.2 U	1.2 U	0.6 U	0.6 U	-	-	-	1 U	1.1 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7 U	13 U	11 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1.3 UJ	0.98 U	1.2 U	1.2 U	1 U	1 U	-	-	-	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	26 U	23 U
Phenanthrene	ug/L	N	NA	0.6	0.6	0.7	0.13 UJ	0.11 U	0.13 U	0.14 U	0.1 UJ	0.1 U	-	-	-	1.4	2.6	4	2	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.2 J	0.11 U	12 J	27 J
Phenol	ug/L	N	2000	2 J	0.5 U	0.5 U	0.67 UJ	16	17	43	0.6 U	0.6 U	-	-	-	0.51 U	0.54 U	0.6 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.54 U	13 U	11 U
Pyrene	ug/L	N	200	0.2 UJ	0.2 UJ	0.2 J	0.13 UJ	0.098 U	0.12 U	0.12 U	0.3 J	1	-	-	-	0.1 U	0.9	7	5	0.6	0.6	0.2 J	0.3 J	0.3 J	0.7	0.9	0.8	0.41 J	14 J	23 J
Total TIC SVOCS	ug/L	N	NA	-	-	240 J	-	-	-	-	820 J	1700 J	-	-	-	-	-	290 J	-	-	180 J	24 J	120 J	-	39 J	-	-	-	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-415	MW-415	MW-419	MW-419	MW-420	MW-420	MW-421	MW-421	MW-421
			Field Sample ID	D0813148	M406A2X	M406B8X	M406B9X	M406C1X	M406C2X	D052720211A	M406C3	M406C4	M406C5	M407A1X	M407A2X	M407B6X	M407B7X	M407B9X	M407C1	M407C2	M415A1X	M415A2X	M419A1X	M419A2X	M420A1X	M420A2X	M421A1X	D0720168	M421A2X
			Sample Date	08/13/2014	08/13/2014	06/18/2020	10/01/2020	12/15/2020	03/10/2021	05/27/2021	05/27/2021	09/01/2021	10/27/2021	06/24/2014	08/13/2014	06/19/2020	10/02/2020	03/12/2021	05/28/2021	12/17/2021	05/29/2015	08/26/2015	12/10/2015	07/21/2016	12/02/2015	08/01/2016	12/03/2015	07/20/2016	07/20/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 U	0.6 U	-	-	-	-	3.5 U	3.8 U	3.2 U	3 U	**120**	90	-	-	-	33 U	36 U	34	12	0.5 U	0.5 U	80	31	17	**110**	**140**
2,4-Dinitrophenol	ug/L	N	40	12 U	11 U	-	-	-	-	16 U	18 U	15 U	14 U	100 U	110 U	-	-	-	150 U	170 U	10 U	10 U	10 U	10 U	51 U	100 UJ	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	10 U	11 U	-	-	-	11 U	12 U	1 U	1 U	1 U	1 U	5 U	10 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.5 U	0.4 U	-	-	-	-	0.47 U	0.5 U	0.42 U	0.41 U	4 U	4 U	-	-	-	4.4 U	4.8 U	0.4 U	0.4 U	0.4 U	0.4 U	2 U	4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	15	18	12 J	**42 J**	**31 J**	18 J	24 J	19	24 J	6.7 J	**58**	**92**	-	-	28 J	2.1 J	25 J	**78**	**42**	0.1 U	0.1 U	18	11	0.1 U	2	2
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	8 J	5 U	-	-	-	5.5 U	6 U	2	1	0.5 U	0.5 U	46	23	4	2 J	3 J
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	5 U	5 U	-	-	-	11 U	12 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	5 U	5 U	-	-	-	11 U	12 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	-	-	-	-	4.7 U	5 U	4.2 U	4.1 U	20 U	22 U	-	-	-	44 U	48 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	2.4 U	2.5 U	2.1 U	2 U	5 U	5 U	-	-	-	22 U	24 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 U	6 U	-	-	-	-	9.4 U	10 U	8.4 U	8.1 U	51 U	54 U	-	-	-	88 U	96 U	5 U	5 U	5 U	5 U	25 U	51 U	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 U	0.6 U	-	-	-	-	4.7 U	5 U	4.2 U	4.1 U	5 U	5 U	-	-	-	44 U	48 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.7 J	5 U	5 U	-	-	-	5.5 U	6 U	3	0.5 U	0.5 U	0.5 U	12	5 U	0.7 J	0.5 U	0.7 J
4-Nitroaniline	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	1.1 U	1.1 U	0.95 U	0.91 U	5 U	5 U	-	-	-	10 U	11 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	12 U	11 U	-	-	-	-	12 U	13 U	11 U	10 U	100 U	110 U	-	-	-	110 U	120 U	10 U	10 U	10 U	10 U	51 U	100 U	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	4	4	-	-	-	-	0.96	0.69	1.5	0.76	4 J	13	-	-	-	1.1 U	1.2 U	2	0.1 U	0.8	0.6	1 J	1 U	0.6	0.1 U	0.6 J
Acenaphthylene	ug/L	N	NA	2 J	0.1 U	-	-	-	-	0.12 U	0.13 U	0.11 U	0.1 U	1 U	11	-	-	-	1.1 U	1.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.6 U	0.6 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	5 J	5 U	-	-	-	11 U	12 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
Anthracene	ug/L	N	2000	3	4	-	-	-	-	0.12 U	0.13 U	0.41 J	0.27 J	4 J	1 U	-	-	-	1.1 U	1.2 U	0.5 J	0.8	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	20 U	22 U	-	-	-	11 U	12 UJ	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	10 U	11 U	-	-	-	11 U	12 U	1 U	1 U	1 U	1 U	11 J	10 U	1 U	1 U	1 J
Benzo(a)anthracene	ug/L	N	0.1	**4J**	**6J**	-	-	-	-	0.12 U	0.13 U	0.11 U	**0.16J**	**3J**	**15**	-	-	-	1.1 U	**4.7J**	**0.2J**	**0.4J**	0.1 U	0.1 U	**0.5J**	1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	**4J**	**6J**	-	-	-	-	0.13 U	0.14 U	0.12 U	**0.18J**	**3J**	**11**	-	-	-	1.2 U	**4.3J**	0.1J	**0.5J**	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	**3**	**3**	-	-	-	-	0.12 U	0.13 U	0.11 U	0.1 U	**2J**	**9**	-	-	-	1.1 U	1.2 U	0.2J	**0.5J**	0.1J	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	2	2	-	-	-	-	0.12 U	0.13 U	0.11 U	0.1 U	2 J	8	-	-	-	1.1 U	1.2 U	0.1 U	0.4 J	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	-	-	-	-	0.12 U	0.13 U	0.11 U	0.1 U	1 U	1 U	-	-	-	1.1 U	1.2 U	0.1 U	0.2 J	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 UJ	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	-	-	-	-	2.4 U	2.5 U	2.1 U	2 U	20 U	22 U	-	-	-	22 U	24 U	2 U	2 J	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	-	-	-	-	2.4 U	2.5 U	2.1 U	2 U	20 U	22 U	-	-	-	22 U	24 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	6 U	6 U	-	-	-	-	24	15	13	3 U	51 U	54 U	-	-	-	33 U	36 U	5 U	5 U	5 U	5 U	25 U	51 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	2 J	0.6 U	-	-	-	-	0.59 U	0.63 U	1 J	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	1	1	0.5 U	0.5 U	3 U	5 U	0.6 J	0.8 J	0.8 J
Chrysene	ug/L	N	5	**6**	**8**	-	-	-	-	0.12 U	0.13 U	0.11 U	0.25 J	5	**24**	-	-	-	1.1 U	3.7 J	0.3 J	0.5	0.1 U	0.1 U	0.6 J	1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	-	-	-	-	2.4 U	2.5 U	2.1 U	2 U	20 U	22 U	-	-	-	22 U	24 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	-	-	-	-	5.9 U	6.3 U	5.3 U	5.1 U	20 U	22 U	-	-	-	55 U	60 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	-	-	-	-	0.12 U	0.13 U	0.11 U	0.1 U	1 U	1 U	-	-	-	1.1 U	1.2 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	2	2	-	-	-	-	0.59 U	0.63 U	0.6 J	0.51 U	5 U	8 J	-	-	-	5.5 U	6 U	3	3	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	-	-	-	-	2.4 U	2.5 U	2.1 U	2 U	20 U	22 U	-	-	-	22 U	24 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	-	-	-	-	2.4 U	2.5 U	2.1 U	2 U	20 U	22 U	-	-	-	22 U	24 U	2 U	2 U	2 U	2 U	10 U	20 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 J	10 J	-	-	-	5.5 U	6 U	0.7 J	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	5	7	-	-	-	-	0.22 J	0.18 J	0.3 J	0.31 J	5 J	18	-	-	-	1.1 U	3.2 J	0.7	0.1 U	0.5 J	0.2 J	0.9 J	1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	6 J	10 J	-	-	-	-	0.98	0.69	2.3	1.2	9	26	-	-	-	2.9 J	5.5 J	8	7	0.4 J	0.6	2 J	4 J	0.8	0.6	0.6
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	-	-	-	-	0.13 U	0.14 U	0.12 U	0.11 U	1 U	1 U	-	-	-	1.2 U	1.3 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 U	6 U	-	-	-	-	5.9 U	6.3 U	5.3 U	5.1 U	51 U	54 U	-	-	-	55 U	60 U	5 U	5 U	5 U	5 U	25 U	51 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	10 U	11 U	-	-	-	5.5 U	6 U	1 U	1 U	1 U	1 U	5 U	10 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**1**	**1**	-	-	-	-	0.13 U	0.14 U	0.12 U	0.11 U	1 U	1 U	-	-	-	1.2 U	1.3 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.5 U	1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	48	53	30 J	93 J	77 J	81 J	51 J	55	59 J	8.9 J	120	170	79 J	190 J	100 J	110 J	67 J	81	71	0.1 U	0.1 U	57	28	3	6	6
Nitrobenzene	ug/L	N	6	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.51 U	5 U	5 U	-	-	-	5.5 U	6 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 U	0.6 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	5 U	5 U	-	-	-	11 U	12 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	-	-	-	-	1.2 U	1.3 U	1.1 U	1 U	10 U	11 U	-	-	-	11 U	12 U	1 U	1 U	1 U	1 U	5 U	10 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	11 J	17 J	-	-	-	-	0.13 U	0.14 U	2.4	1.5	24	96	-	-	-	1.8 J	9.2	8	7	0.6	0.2 J	3	3 J	0.7	0.9	0.9
Phenol	ug/L	N	2000	0.6 U	0.6 U	-	-	-	-	0.59 U	0.63 U	0.53 U	0.67 J	5 U	5 U	-	-	-	5.5 U	6 U	2	0.5 U	0.6 J	0.5 U	45	5 U	2	0.7 J	2 J
Pyrene	ug/L	N	200	9 J	13 J	-	-	-	-	0.46 J	0.4 J	0.45 J	0.71	9	35	-	-	-	1.1 U	6.8	1	1	0.5	0.1 J	1 J	3 J	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	840 J	620 J	-	-	-	-	-	-	-	-	2700 J	4100 J	-	-	-	-	-	-	-	-	-	2100 J	-	540 J	-	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-421	MW-421	MW-422	MW-422	MW-422	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-424	MW-424	MW-433	MW-433	MW-433	MW-466	MW-466	MW-467	MW-467	MW-467	MW-467	MW-474
			Field Sample ID	M421A6	M421A7	M422A2X	M422A3X	M422A7	M423A2X	M423A3X	M423A7X	M423A8X	D0507218	M423A9	M423B1	M423B2	M423B3	M423B4	M424A1X	M424A2X	D0826158	M433A1X	M433A2X	M466A1X	M466A2X	M467A1X	M467A2X	M467A6	M467A7	M474A1
			Sample Date	06/09/2021	12/15/2021	12/03/2015	07/22/2016	06/09/2021	12/10/2015	07/18/2016	11/19/2020	02/25/2021	05/07/2021	05/07/2021	06/10/2021	08/05/2021	11/11/2021	12/14/2021	09/15/2015	12/16/2015	08/26/2015	08/26/2015	10/13/2015	12/03/2015	08/01/2016	12/02/2015	08/01/2016	06/10/2021	12/14/2021	01/08/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	4.7 J	16 U	0.5 U	0.5 U	3.4 U	0.5 U	0.5 U	3.1 U	3 U	3.1 U	3.1 U	3.1 U	3 U	3.1 UJ	3.1 U	49	16	9	12	0.5 U	**380**	9 J	3 J	5 U	3.3 U	15 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	15 U	75 U	10 U	10 U	16 U	10 U	10 U	15 U	14 U	15 U	14 U	15 U	14 U	15 UJ	15 U	10 U	11 U	10 U	10 U	10 U	51 U	100 UJ	51 U	100 UJ	15 U	72 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	5.4 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	10 U	5 U	10 U	1.1 U	5.1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.44 U	2.1 U	0.4 U	0.4 U	0.45 U	0.4 U	0.4 U	0.42 U	0.41 U	0.42 U	0.41 U	0.42 U	0.4 U	0.42 UJ	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2 UJ	4 U	2 U	4 U	0.43 U	2.1 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	0.54 U	3	0.1 U	0.11 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	**67**	20	0.1 U	0.1 U	0.1 U	**34 J**	1 U	1 J	**1100J**	0.11 U	0.51 U	**42**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	15	4	0.5 U	0.5 U	0.8 J	640	32	3 U	5 U	0.54 U	2.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	5.4 U	0.5 U	0.5 U	1.1 U	0.5 U	0.5 U	2.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	1.1 U	5.1 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	5.4 U	0.5 U	0.5 U	1.1 U	0.5 U	0.5 U	3.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5 U	3 U	5 U	1.1 U	5.1 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.4 U	21 UJ	2 U	2 U	4.5 U	2 U	2 U	3.1 U	4.1 U	4.2 U	4.1 U	4.2 U	4 U	4.2 UJ	4.2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	4.3 U	21 U	2 U
3-Nitroaniline	ug/L	N	NA	2.2 U	11 U	0.5 U	0.5 U	2.3 U	0.5 U	0.5 U	3.1 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	2.2 U	10 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.7 U	43 U	5 U	5 U	9.1 U	5 U	5 U	8.3 U	8.1 U	8.4 U	8.2 U	8.4 U	8.1 U	8.3 UJ	8.4 U	5 U	5 U	5 U	5 U	5 UJ	26 U	50 U	26 U	52 U	8.7 U	41 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.4 U	21 U	2 U	2 U	4.5 U	2 U	2 U	4.2 U	4.1 U	4.2 U	4.1 U	4.2 U	4 U	4.2 UJ	4.2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	4.3 U	21 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	1.2 J	2.7 U	0.5 U	0.5 U	1.1 J	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	3	2	0.5 U	0.7 J	0.5 U	710	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.98 U	4.8 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.94 U	0.91 U	0.94 U	0.92 U	0.94 U	0.91 U	0.94 UJ	0.94 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.98 U	4.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 U	54 UJ	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	11 U	10 U	10 U	10 UJ	51 U	100 U	51 U	100 U	11 U	51 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	0.54 U	0.8	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	2 J	1 U	1 J	1 U	0.11 U	0.51 U	56
Acenaphthylene	ug/L	N	NA	0.11 U	0.54 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.7 J	1 U	0.11 U	0.51 U	0.7
Acetophenone	ug/L	N	700	1.1 U	5.4 U	0.5 U	0.5 U	1.1 U	0.5 U	0.5 U	4.2 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	1.1 U	5.1 U	0.5 U
Anthracene	ug/L	N	2000	0.11 U	0.54 U	0.8	0.1 U	0.11 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	8 J	2 J	0.5 U	14 J	0.11 U	0.51 U	4
Atrazine	ug/L	N	3	1.1 U	5.4 U	2 U	2 U	1.1 U	2 U	2 U	2.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	1.1 U	5.1 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	5.4 U	1 U	1 U	1.1 U	1 U	1 U	3.1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	5 UJ	10 U	5 U	10 U	1.1 U	5.1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	0.54 U	**0.2J**	0.1 U	0.11 U	**0.2J**	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**3J**	**1J**	0.5 U	**6J**	0.11 U	0.51 U	**0.5J**
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	0.59 U	**0.2J**	0.1 U	0.12 U	**0.2J**	0.1J	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.5 U	1 U	0.12 U	0.57 U	0.1J
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	0.54 U	0.1 U	0.1 U	0.11 U	0.2J	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**1J**	1 U	0.5 U	**4J**	0.11 U	0.51 U	0.2J
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	0.54 U	0.1 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 J	1 U	0.5 U	1 U	0.11 U	0.51 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	0.54 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.5 U	1 U	0.11 U	0.51 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	11 U	2 U	2 U	2.3 U	2 U	2 U	5.2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 J	2 U	10 UJ	20 U	10 U	21 U	2.2 U	10 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.2 U	11 U	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	2.2 U	10 U	2 U
Caprolactam	ug/L	N	4000	3.3 U	16 U	5 U	5 U	3.4 U	5 U	5 U	5.2 U	3 U	3.1 U	3.1 U	11	3 U	3.1 UJ	3.1 U	5 U	5 U	5 U	5 U	5 U	26 UJ	50 U	26 U	52 U	3.3 U	15 U	5 U
Carbazole	ug/L	N	NA	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	32J	6J	3 U	5 U	0.54 U	2.6 U	14
Chrysene	ug/L	N	5	0.11 U	0.54 U	0.6	0.1 U	0.11 U	0.3 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**6J**	**8**	0.5 U	**23J**	0.11 U	0.51 U	0.4 J
Di-n-butylphthalate	ug/L	N	700	2.2 U	11 U	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	2.2 U	10 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.5 U	27 U	2 U	2 U	5.7 U	2 U	2 U	5.2 U	5.1 U	5.2 U	5.1 U	5.2 U	5 U	5.2 UJ	5.2 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	5.4 U	26 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	0.54 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.5 U	1 U	0.11 U	0.51 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	27 J	0.54 U	2.6 U	23
Diethylphthalate	ug/L	N	6000	2.2 U	11 U	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2 UJ	2.1 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	2.2 U	10 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 U	11 UJ	2 U	2 U	2.3 U	2 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 U	2 U	2.1 UJ	2.1 U	2 U	2 U	2 U	2 U	2 U	10 UJ	20 U	10 U	21 U	2.2 U	10 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	3.1 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	5
Fluoranthene	ug/L	N	300	0.11 U	0.54 U	0.6	0.2 J	0.11 U	0.4 J	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.5 U	15 J	0.11 U	0.51 U	5
Fluorene	ug/L	N	300	0.13 U	0.64 U	1	0.1 U	0.14 U	0.1 U	0.1 J	0.1 U	0.12 U	0.13 U	0.12 U	0.13 U	0.12 U	0.13 UJ	0.13 U	1	0.5 J	0.1 U	0.1 U	0.1 U	5 J	1 J	2 J	83 J	0.13 U	0.62 U	28
Hexachlorobenzene	ug/L	N	0.02	0.12 U	0.59 U	0.1 U	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.5 U	1 U	0.12 U	0.57 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.5 U	27 UJ	5 U	5 U	5.7 U	5 U	5 U	5.2 U	5.1 U	5.2 U	5.1 U	5.2 U	5 U	5.2 UJ	5.2 U	5 U	5 U	5 U	5 U	5 U	26 UJ	50 U	26 U	52 U	5.4 U	26 U	5 U
Hexachloroethane	ug/L	N	7	0.55 U	2.7 U	1 U	1 U	0.57 U	1 U	1 U	1 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	1 U	1 U	1 U	1 U	1 U	5 UJ	10 U	5 U	10 U	0.54 U	2.6 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	0.59 U	0.1J	0.1 U	0.12 U	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 UJ	1 U	0.5 U	1 U	0.12 U	0.57 U	0.1 U
Isophorone	ug/L	N	40	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.73 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.73 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	9 J	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
Naphthalene	ug/L	N	300	0.11 U	0.54 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	82	35	0.1 U	0.1 U	0.1 U	51 J	1 U	0.5 U	**700J**	0.11 U	0.51 U	35
Nitrobenzene	ug/L	N	6	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 UJ	5 U	3 U	5 U	0.54 U	2.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	5.4 U	0.5 U	0.5 U	1.1 U	0.5 U	0.5 U	1.7 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	3 U	5 U	3 U	5 U	1.1 U	5.1 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	5.4 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 UJ	5 U	10 U	5 U	10 U	1.1 U	5.1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	0.59 U	4	0.1 U	0.12 U	0.1 U	0.1 J	0.1 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.11 UJ	0.12 U	0.9	0.4 J	0.1 U	0.1 U	0.1 J	37 J	2 J	2 J	130J	0.12 U	0.57 U	28
Phenol	ug/L	N	2000	0.55 U	2.7 U	0.5 U	0.5 U	0.57 U	0.5 U	0.5 U	0.52 U	0.51 U	0.52 U	0.51 U	0.52 U	0.5 U	0.52 UJ	0.52 U	1	0.5 U	0.5 U	0.5 U	0.5 U	200	9 J	3 U	5 U	0.54 U	2.6 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	0.54 U	0.7	0.3 J	0.11 U	0.5 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	7 J	4 J	0.7 J	28 J	0.11 U	0.51 U	3
Total TIC SVOCS	ug/L	N	NA	-	-	590 J	-	-	-	260 J	-	-	-	-	-	-	-	-	-	-	-	-	-	1300 J	-	690 J	-	-	-	320 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-520	MW-520	MW-521	MW-521	MW-521
			Field Sample ID	M474A3	M474A4	M474A6	M474A7	M474A8	M474A9	M474B1	M474B2	M474B3	M474B4	M474B5	M474B6	M474B7	M474B8	M474B9	M474C1	M474C2	M474C3	M474C4	M474C5	M474C7	M474C8	M520B3X	M520B7	M521B2X	M521B3X	M521B5
			Sample Date	07/20/2016	10/17/2016	01/19/2017	04/18/2017	07/19/2017	10/10/2017	01/25/2018	04/12/2018	07/18/2018	10/26/2018	01/09/2019	04/05/2019	07/05/2019	10/03/2019	01/08/2020	04/06/2020	07/09/2020	10/12/2020	01/08/2021	04/14/2021	10/06/2021	01/19/2022	11/05/2020	11/03/2021	08/26/2020	11/05/2020	05/21/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.5 U	3.6 U	3.3 UJ	3.2 U	3 U	3 U	-	-	-	-	-
2,4-Dinitrophenol	ug/L	N	40	10 U	10 U	11 UJ	11 U	10 U	10 U	10 UJ	10 U	15 U	15 U	15 U	14 U	14 U	15 U	15 U	14 U	17 U	17 U	16 UJ	15 U	14 U	14 U	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	1.1 UJ	1.1 U	1 U	1 U	-	-	-	-	-
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.40 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.47 U	0.48 U	0.44 UJ	0.43 U	0.4 U	0.4 U	-	-	-	-	-
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
2-Methylnaphthalene	ug/L	N	30	2	0.23 J	0.1 U	0.1 U	0.4 J	2	0.5 J	0.1 U	1	0.9	0.4 J	0.2 J	1	1	0.1 U	0.1 U	0.68	18 J	0.11 UJ	0.11 U	0.22 J	0.1 U	-	-	-	-	-
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.4 U	2.2 UJ	1.1 U	1 U	1 U	-	-	-	-	-
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.5 U	3.6 U	3.3 UJ	1.1 U	1 U	1 U	-	-	-	-	-
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.5 U	3.6 U	3.3 UJ	4.3 U	4 U	4 U	-	-	-	-	-
3-Nitroaniline	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.5 U	3.6 U	3.3 UJ	2.1 U	2 U	2 U	-	-	-	-	-
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	8 U	8 U	9 U	8 U	8 U	9 U	9 U	8 U	9.4 U	9.5 U	8.9 UJ	8.5 U	8.1 U	8 U	-	-	-	-	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
4-Chloroaniline	ug/L	N	30	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.7 U	4.8 U	4.4 UJ	4.3 U	4 U	4 U	-	-	-	-	-
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	3.0 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
4-Nitroaniline	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.9 U	0.9 U	1 U	0.9 U	0.9 U	1 U	1 U	0.9 U	1.1 U	1.1 U	1 UJ	0.96 U	0.91 U	0.91 U	-	-	-	-	-
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 UJ	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U	11 U	11 U	10 U	12 U	12 U	11 UJ	11 U	10 U	10 U	-	-	-	-	-
Acenaphthene	ug/L	N	400	42	51	64	56	30	46	52	35	40	38	37	20	31	33	36	47	34	31	23 J	29	34	29	-	-	-	-	-
Acenaphthylene	ug/L	N	NA	0.6	0.49 J	0.7	0.7	0.3 J	0.1 U	0.6	0.3 J	0.3 J	0.2 J	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.22 J	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	-	-	-	-	-
Acetophenone	ug/L	N	700	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.8 J	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4.7 U	4.8 U	4.4 UJ	1.1 U	1 U	1 U	-	-	-	-	-
Anthracene	ug/L	N	2000	5	2.7	2	2	1	2	3	1	2	2	1	1	2	1	0.9	2	1.2	1.5	0.98 J	0.88	2	0.96	-	-	-	-	-
Atrazine	ug/L	N	3	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.4 U	2.2 UJ	1.1 U	1 U	1 U	-	-	-	-	-
Benzaldehyde	ug/L	N	NA	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	3 UJ	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.5 U	3.6 U	3.3 UJ	1.1 U	1 U	1 U	-	-	-	-	-
Benzo(a)anthracene	ug/L	N	0.1	**2**	0.10 U	0.1J	0.1 U	0.1J	0.1 U	**0.8**	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	**0.4J**	0.1 U	0.1 U	0.1 U	**0.13J**	**0.23J**	**0.16J**	0.11 U	**0.28J**	0.1 U	-	-	-	-	-
Benzo(a)pyrene	ug/L	N	0.1	**0.5J**	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.3J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	**0.2J**	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 UJ	0.12 U	0.11 U	0.11 U	-	-	-	-	-
Benzo(b)fluoranthene	ug/L	N	0.2	**0.7**	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.2J	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	-	-	-	-	-
Benzo(g,h,i)perylene	ug/L	N	NA	0.2 J	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	-	-	-	-	-
Benzo(k)fluoranthene	ug/L	N	0.5	0.3 J	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	-	-	-	-	-
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	ug/L	N	3	3 J	2.0 U	2 U	2 U	3 J	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.9 U	6 U	5.6 UJ	2.1 U	2 U	2 U	-	-	-	-	-
Butylbenzylphthalate	ug/L	N	100	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	3 J	2 U	2 U	2 U	2 U	2.4 U	2.4 U	2.2 UJ	2.1 U	2 U	2 U	-	-	-	-	-
Caprolactam	ug/L	N	4000	5 U	5.0 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.9 U	6 U	5.6 UJ	3.2 U	3 U	3 U	-	-	-	-	-
Carbazole	ug/L	N	NA	11	11	3	5	7	11	6	5	9	9	5	4	8	10	4	7	7.6	8.3	3.9 J	5.6	8.3	5.2	-	-	-	-	-
Chrysene	ug/L	N	5	2	0.10 U	0.2 J	0.1 U	0.2 J	0.1 U	0.8	0.1 J	0.1 U	0.1 U	0.1 U	0.3 J	0.4 J	0.1 U	0.1 U	0.1 U	0.12 U	0.18 J	0.15 J	0.11 U	0.1 U	0.1 U	-	-	-	-	-
Di-n-butylphthalate	ug/L	N	700	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.4 U	2.2 UJ	2.1 U	2 U	2 U	-	-	-	-	-
Di-n-octylphthalate	ug/L	N	100	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.9 U	6 U	5.6 UJ	5.3 U	5 U	5 U	-	-	-	-	-
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 UJ	0.11 U	0.1 U	0.1 U	-	-	-	-	-
Dibenzofuran	ug/L	N	NA	17	18	26	24	10	14	21	14	12	11	13	7	9	10	12	16	9.9	9.1	6.4 J	6.6	8.8	6.5	-	-	-	-	-
Diethylphthalate	ug/L	N	6000	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.4 U	2.2 UJ	2.1 U	2 U	2 U	-	-	-	-	-
Dimethyl phthalate	ug/L	N	NA	2 U	2.0 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.4 U	2.4 U	2.2 UJ	2.1 U	2 U	2 U	-	-	-	-	-
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	2	1.5	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.5 U	3.6 U	3.3 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
Fluoranthene	ug/L	N	300	12	2.8	2	2	2	2	6	2	2	2	1	2	4	2	1	2	2.1	2.6	1.8 J	1.1	3.3	1.2	-	-	-	-	-
Fluorene	ug/L	N	300	22	23	25	24	13	17	19	13	14	14	14	8	12	12	13	17	12	12	8.6 J	9.4	13	9.5	-	-	-	-	-
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 UJ	0.12 U	0.11 U	0.11 U	-	-	-	-	-
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.0 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.9 U	6 U	5.6 UJ	5.3 U	5 U	5 U	-	-	-	-	-
Hexachloroethane	ug/L	N	7	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	1.1 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1J	0.10 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.12 U	0.12 U	0.11 UJ	0.12 U	0.11 U	0.11 U	-	-	-	-	-
Isophorone	ug/L	N	40	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.83 U	0.83 U	0.78 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.50 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.8 U	0.7 U	0.7 U	0.83 U	0.83 U	0.78 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
Naphthalene	ug/L	N	300	9	1.3	0.2 J	0.1 U	1	1 U	3	0.1 U	1	3	0.8	0.3 J	0.7	1	0.4 J	0.4 J	0.72	0.71	0.11 UJ	0.38 J	0.78	0.39 J	16 J	31 J	300 J	270 J	25 J
Nitrobenzene	ug/L	N	6	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.9 U	1.9 U	1.8 UJ	1.1 U	1 U	1 U	-	-	-	-	-
Pentachlorophenol	ug/L	N	0.3	1 U	1.0 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2 U	1.2 U	1.1 UJ	1.1 U	1 U	1 U	-	-	-	-	-
Phenanthrene	ug/L	N	NA	26	13	2	3	3	6	2	0.5	3	2	0.3 J	0.5	2	3	0.1 U	0.1 U	1.5	1.8	0.16 J	0.12 U	2.2	0.11 U	-	-	-	-	-
Phenol	ug/L	N	2000	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.59 U	0.6 U	0.56 UJ	0.53 U	0.5 U	0.5 U	-	-	-	-	-
Pyrene	ug/L	N	200	8	1.5	1	1	1	1	4	1	1	1	0.9	2	2	1	0.6	1	1.2	1.6	1.1 J	0.65	2	0.8	-	-	-	-	-
Total TIC SVOCS	ug/L	N	NA	420 J	240 J	120 J	230 J	380 J	520 J	150 J	43 J	180 J	330 J	210 J	110 J	270 J	260 J	130 J	270 J	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-540	MW-540	MW-540	MW-540	MW-540	MW-540	MW-540R	MW-540R
			Field Sample ID	M538A1X	D0518181	M538A2X	M538A3X	M538A4X	M538A5X	M538A6X	M538A7X	M538A8	M539A1X	M539A2X	D0827189	M539A3X	M539A4X	M539A5X	M539A6X	M539A8X	M539A9	M539B1	M540A1X	M540A2X	M540A3X	M540A4X	M540A5X	M540A6X	M540RA8X	M540RA9X
			Sample Date	02/13/2018	05/18/2018	05/18/2018	08/30/2018	11/16/2018	03/01/2019	09/06/2019	09/08/2020	10/06/2021	02/13/2018	05/18/2018	08/27/2018	08/27/2018	11/16/2018	03/01/2019	09/03/2019	10/05/2020	01/11/2022	03/30/2022	02/12/2018	05/18/2018	08/27/2018	11/21/2018	02/27/2019	09/06/2019	10/06/2020	02/16/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 UJ	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.1 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	3.1 U	3.2 UJ	**2300**	**1800**	**1600**	**1400**	**480**	**470**	32 U	15 U
2,4-Dinitrophenol	ug/L	N	40	10 U	14 U	14 U	14 U	14 U	14 U	15 U	15 U	14 U	10 U	14 U	15 U	15 U	14 UJ	14 U	14 U	14 U	14 U	15 UJ	110 U	14 U	140 U	70 U	140 U	160 U	150 U	70 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1.1 U	11 U	1 U	10 U	5 U	10 U	11 U	11 U	5 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 UJ	0.4 UJ	0.42 U	0.41 U	0.4 UJ	0.4 U	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.4 UJ	0.41 U	0.42 U	4 U	0.4 U	4 U	2 U	4 U	5 U	4.3 U	2 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 UJ	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
2-Methylnaphthalene	ug/L	N	30	7	0.4 J	0.6 J	9 J	2	11 J	0.3 J	0.1 U	0.22 J	0.5 J	0.7	0.1 UJ	0.1 UJ	0.9 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	**58**	**56**	**58**	**47**	**38**	**530**	6.1	3.2
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 UJ	5 U	13	7 J	3 J	5 U	6 U	5.3 U	2.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2.1 U	1 U	0.5 UJ	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	1 U	1.1 U	5 U	2 U	20 U	10 U	20 U	23 U	21 U	5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	1 U	0.5 U	3 U	3 U	3 U	3 UJ	3 U	3 U	3 U	1 U	1.1 UJ	5 U	3 U	31 U	15 U	30 U	34 U	32 U	5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3.1 U	4.1 U	2 UJ	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	4.1 U	4.2 U	22 U	3 U	31 U	15 U	30 U	34 U	32 U	20 U
3-Nitroaniline	ug/L	N	NA	0.5 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3.1 U	2 U	0.5 UJ	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	2.1 U	2.1 U	5 U	3 U	31 U	15 U	30 U	34 U	32 U	10 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	8 U	8 U	8 U	8 U	8 U	8 U	8.3 U	8.2 U	5 U	8 U	8 U	9 U	8 UJ	8 U	8 U	8.1 U	8.2 U	8.4 U	55 U	8 U	82 U	40 U	81 U	92 U	85 U	40 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
4-Chloroaniline	ug/L	N	30	2 U	4 U	4 U	4 UJ	4 U	4 UJ	4 UJ	4.2 U	4.1 U	2 UJ	4 U	4 UJ	4 UJ	4 UJ	4 UJ	4 UJ	4 UJ	4.1 U	4.2 U	22 U	4 U	41 U	20 U	40 U	46 U	43 U	20 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 UJ	5 U	11	5 U	3 U	5 U	6 U	5.3 U	2.5 U
4-Nitroaniline	ug/L	N	NA	0.5 U	0.9 U	0.9 U	0.9 UJ	0.9 U	0.9 UJ	1 UJ	0.94 U	0.92 U	0.5 UJ	0.9 U	0.9 UJ	1 UJ	0.9 UJ	0.9 UJ	0.9 UJ	0.91 UJ	0.92 U	0.95 U	5 U	0.9 U	9 U	5 U	9 U	10 U	9.6 U	4.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	10 UJ	10 U	10 U	10 U	10 U	11 UJ	110 U	10 U	100 U	50 U	100 U	110 U	110 U	50 U
Acenaphthene	ug/L	N	400	0.7	0.1 U	0.1 U	1 J	0.4 J	1 J	2 J	0.44 J	0.38 J	0.2 J	0.1 U	0.3 J	0.1 UJ	0.1 UJ	0.1 UJ	0.2 UJ	0.1 UJ	0.1 U	0.11 U	3 J	0.9	2 J	2 J	1 U	19	1.1 U	0.5 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	1 U	0.1 U	1 U	0.5 U	1 U	1 U	1.1 U	0.5 U
Acetophenone	ug/L	N	700	0.5 U	4 U	4 U	4 UJ	4 U	4 UJ	4 UJ	4.2 U	1 U	0.5 UJ	4 U	4 UJ	4 UJ	4 UJ	4 UJ	4 UJ	4 UJ	1 U	1.1 U	5 U	4 U	41 U	20 U	40 U	46 U	43 U	5 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.2 J	0.5 J	0.1 U	0.1 U	0.1 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	2 J	0.2 J	2 J	1 J	1 U	31	1.4 J	1.6 J
Atrazine	ug/L	N	3	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2.1 U	1 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	1 U	1.1 U	22 U	2 U	20 U	10 U	20 U	23 U	21 U	5 U
Benzaldehyde	ug/L	N	NA	1 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3.1 U	1 U	1 UJ	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	1 U	1.1 U	11 U	3 U	31 U	15 U	30 U	34 U	32 U	5 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	**0.82**	0.1 U	0.1 UJ	**0.6**	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	**2J**	**0.2J**	**2J**	0.5 U	**2J**	**47**	**1.5J**	**1.6J**
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	**0.76**	0.11 U	0.1 UJ	**0.8**	0.1J	0.1 UJ	**0.2J**	0.1 UJ	0.1 UJ	0.1 UJ	0.11 U	0.12 U	**3J**	**0.3J**	**2J**	0.5 U	**3J**	**58**	1.1 U	**2.1J**
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	**0.64**	0.1 U	0.1 UJ	**0.7**	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.17J	0.1 U	0.11 U	**2J**	0.1 U	**2J**	0.5 U	1 U	**28**	1.1 U	**1J**
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.86	0.1 U	0.1 UJ	0.5	0.1 J	0.1 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	2 J	0.1 J	2 J	0.5 U	3 J	40	1.1 U	1.9 J
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.4 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	1 U	0.1 U	1 U	0.5 U	1 U	**7**	1.1 U	0.5 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	**4J**	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5.2 U	2 UJ	2 UJ	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	2.1 U	2.1 U	22 U	5 U	51 U	25 U	50 U	57 U	53 U	10 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2.1 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2.1 U	2.1 U	22 U	2 U	20 U	10 U	20 U	23 U	21 U	10 U
Caprolactam	ug/L	N	4000	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5.2 U	3.1 U	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	20 J	31	3.2 U	55 U	5 U	51 U	25 U	50 U	57 U	53 U	15 U
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 UJ	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.7 J	5 U	3 J	5 U	6 U	5.3 U	2.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.62	0.1 U	0.1 UJ	0.7	0.1 UJ	0.1 UJ	0.2 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	4 J	0.4 J	3 J	0.5 U	3 J	**75**	1.1 U	2.6
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2.1 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2.1 U	2.1 U	22 U	2 U	20 U	10 U	20 U	23 U	21 U	10 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5.2 U	5.1 U	2 UJ	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5.1 U	5.3 U	22 U	5 U	51 U	25 U	50 U	57 U	53 U	25 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	1 U	0.1 U	1 U	0.5 U	1 U	**14**	1.1 U	0.5 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.6 J	0.9 J	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.9 J	5 U	3 U	5 U	6 U	5.3 U	2.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2.1 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2.1 U	2.1 U	22 U	2 U	20 U	10 U	20 U	23 U	21 U	10 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2.1 U	2 U	2 UJ	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2 UJ	2.1 U	2.1 U	22 U	2 U	20 U	10 U	20 U	23 U	21 U	10 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	3 U	3 U	3 UJ	3 U	3 UJ	3 UJ	3.1 U	0.51 U	0.5 UJ	3 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	0.51 U	0.53 U	5 U	3 U	31 U	15 U	30 U	34 U	32 U	2.5 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.28 J	0.1 UJ	0.1 UJ	0.9	0.1 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	3 J	0.2 J	3 J	0.9 J	2 J	24	1.1 U	1.1 J
Fluorene	ug/L	N	300	0.8	0.1 U	0.1 U	1 J	0.6	2 J	2 J	0.73	0.84*1	0.2 J	0.4 J	0.3 J	0.1 UJ	0.1 UJ	0.2 J	0.1 UJ	0.1 UJ	0.12 U	0.13 U	5 J	2	4 J	3	1 U	55	1.1 U	2.1 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.11 U	0.12 U	1 U	0.1 U	1 U	0.5 U	1 U	1 U	1.1 U	0.55 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5 U	5 UJ	5 U	5 UJ	5 UJ	5.2 U	5.1 U	5 UJ	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5.1 U	5.3 U	55 U	5 U	51 U	25 U	50 U	57 U	53 U	25 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	0.51 U	1 UJ	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	0.51 U	0.53 U	11 U	1 U	10 U	5 U	10 U	11 U	11 U	2.5 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1 UJ	0.1 U	0.11 U	0.1 UJ	**0.4J**	0.1J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.11 U	0.12 U	1 U	0.1 U	**2J**	0.5 U	1 U	1 U	1.1 U	0.55 U
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.73 U	0.51 U	0.5 UJ	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.71 UJ	0.51 U	0.53 U	5 U	0.7 U	7 U	4 U	7 U	8 U	7.5 U	2.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 UJ	0.7 UJ	0.73 U	0.51 UJ	0.5 UJ	0.7 U	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.7 UJ	0.71 UJ	0.51 U	0.53 U	5 U	0.7 U	7 U	4 U	7 U	8 U	7.5 U	2.5 U
Naphthalene	ug/L	N	300	3	0.4 J	0.9 J	6 J	2	6 J	1 J	0.1 U	0.1 UJ	1 J	1	0.2 J	0.2 J	1 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	46	87	59	88	49	250	3.9 J	2.3 J
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.52 U	0.51 U	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.51 U	0.53 U	5 U	0.5 U	5 U	3 U	5 U	6 U	5.3 U	2.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1.7 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	1.6 U	1 U	1.1 UJ	5 U	0.5 U	5 U	3 U	5 U	6 U	17 U	5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**16J**	1 U	1 U	1 U	1 U	1.1 U	11 U	1 U	10 U	5 U	10 U	11 U	11 U	5 U
Phenanthrene	ug/L	N	NA	0.5 J	0.3 J	0.3 J	0.8 J	0.4 J	1 J	2 J	0.77	0.65 J	0.3 J	0.7	0.3 J	0.2 J	0.6 J	0.1 UJ	0.1 UJ	0.1 UJ	0.11 U	0.12 U	13	3	10	4	8	180	4.5 J	4.1
Phenol	ug/L	N	2000	0.6 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.51 U	0.53 UJ	5 U	4	5 U	3 U	5 U	6 U	5.3 U	2.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.7 J	1.1	0.75*1	0.1 UJ	1	0.2 J	0.1 UJ	0.3 J	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.11 U	5 J	0.5 J	4 J	2 J	3 J	110	1.1 U	3.8
Total TIC SVOCS	ug/L	N	NA	250 J	1200 J	110 J	300 J	-	370 J	-	-	-	42 J	100 J	40 J	23 J	-	400 J	-	-	-	-	4300 J	1900 J	2100 J	-	1600 J	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-540R	MW-540R	MW-540R	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541R	MW-541R	MW-541R	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543
			Field Sample ID	M540RB1	M540RB2	M540RB3	M541A1X	M541A2X	M541A3X	M541A4X	M541A5X	M541A6X	D1006208	M541RA8X	M541RA9	M542A1X	M542A2X	M542A3X	M542A4X	M542A5X	M542A6X	M542A8X	M542A9	D0214189	M543A1X	M543A2X	M543A3X	M543A4X	M543A5X	M543A6X
			Sample Date	05/24/2021	09/02/2021	11/23/2021	02/12/2018	05/18/2018	08/28/2018	11/20/2018	02/28/2019	09/04/2019	10/06/2020	10/06/2020	10/01/2021	02/13/2018	05/23/2018	08/28/2018	11/20/2018	02/28/2019	09/04/2019	10/07/2020	10/01/2021	02/14/2018	02/14/2018	05/23/2018	08/29/2018	11/15/2018	02/21/2019	09/06/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.51 UJ	0.5 U	0.53 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.51 UJ	0.5 U	0.53 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
2,4-Dichlorophenol	ug/L	N	20	0.51 UJ	0.5 U	0.53 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
2,4-Dimethylphenol	ug/L	N	100	3.1 UJ	3 U	3.2 UJ	0.5 U	3 U	3 U	3 U	3 U	15 U	31 U	32 U	3 U	2	3 U	3 U	3 U	3 U	3 U	16 U	3 U	0.5 U	0.6 U	3 U	16 U	15 U	30 U	31 U
2,4-Dinitrophenol	ug/L	N	40	14 UJ	14 U	15 UJ	10 U	15 U	15 U	14 U	14 U	71 U	140 U	150 U	14 U	11 U	14 U	14 U	14 U	14 U	14 U	73 U	14 U	10 U	11 U	14 U	74 U	71 U	140 U	140 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	1 U	1.1 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	5 U	10 U	11 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5.2 U	1 U	1 U	1 U	1 U	5 U	5 U	10 U	10 U
2,6-Dinitrotoluene	ug/L	N	5	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
2-Chloronaphthalene	ug/L	N	600	0.41 UJ	0.4 U	0.43 UJ	0.4 UJ	0.4 U	0.4 U	0.4 UJ	0.4 UJ	2 U	4.1 U	4.3 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	2.1 U	0.41 U	0.4 U	0.4 U	0.4 U	2 U	2 U	4 U	4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.51 UJ	0.5 U	0.53 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
2-Methylnaphthalene	ug/L	N	30	0.22 J	0.34 J	0.11 UJ	1 J	0.1 U	0.1 J	0.1 UJ	0.1 UJ	0.5 U	1 U	1.1 U	0.1 U	6	0.7	0.3 J	0.4 J	0.1 U	0.1 U	0.52 U	0.1 U	8	8	7	**480**	**2100J**	**86**	**270**
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.51 UJ	0.5 U	0.53 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	0.8 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 UJ	1 U	1.1 UJ	0.5 UJ	2 U	2 U	2 UJ	2 UJ	10 U	21 U	22 U	1 U	0.5 U	2 U	2 U	2 U	2 U	2 U	10 U	1 U	0.5 U	0.6 U	2 U	11 U	10 U	20 U	21 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 UJ	1 UJ	1.1 UJ	0.5 U	3 U	3 U	3 U	3 U	15 U	31 U	32 U	1 U	0.5 U	3 U	3 U	3 U	3 U	3 U	16 U	1 U	0.5 U	0.6 U	3 U	16 U	15 U	30 U	31 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.1 UJ	4 U	4.3 UJ	2 UJ	3 U	3 U	3 UJ	3 UJ	15 U	31 U	32 U	4.1 U	2 U	3 U	3 U	3 U	3 U	3 U	16 U	4.1 U	2 U	2 U	3 U	16 U	15 U	30 U	31 U
3-Nitroaniline	ug/L	N	NA	2.1 UJ	2 U	2.1 UJ	0.5 UJ	3 U	3 U	3 UJ	3 UJ	15 U	31 U	32 U	2 U	0.5 U	3 U	3 U	3 U	3 U	3 U	16 U	2 U	0.5 U	0.6 U	3 U	16 U	15 U	30 U	31 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.2 UJ	8.1 U	8.5 UJ	5 U	8 U	8 U	8 U	8 U	41 U	83 U	86 U	8.1 U	5 U	8 U	8 U	8 U	8 U	8 U	42 U	8.1 U	5 U	6 U	8 U	42 U	40 U	81 U	83 U
4-Bromophenylphenylether	ug/L	N	NA	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
4-Chloroaniline	ug/L	N	30	4.1 UJ	4 U	4.3 UJ	2 UJ	4 U	4 U	4 UJ	4 UJ	20 U	41 U	43 U	4.1 U	2 U	4 U	4 U	4 U	4 U	4 U	21 U	4.1 U	2 U	2 U	4 U	21 U	20 U	40 U	41 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.51 UJ	0.5 U	0.53 UJ	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	2	2 J	0.7 J	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 UJ	5 U	5 U
4-Nitroaniline	ug/L	N	NA	0.92 UJ	0.91 U	0.96 UJ	0.5 UJ	0.9 U	0.9 U	0.9 UJ	0.9 UJ	5 U	9.3 U	9.7 U	0.91 U	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	4.7 U	0.91 U	0.5 U	0.6 U	0.9 U	5 U	5 U	9 U	9 U
4-Nitrophenol	ug/L	N	NA	10 UJ	10 U	11 UJ	10 U	10 U	10 U	10 U	10 U	51 U	100 U	110 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	52 U	10 U	10 U	11 U	10 U	53 U	50 U	100 U	100 U
Acenaphthene	ug/L	N	400	0.1 UJ	0.28 J	0.43 J	3 J	11	16	14 J	19 J	32	1 U	1.1 U	0.1 U	8	1	1	3	1	1	1.3 J	1.1	1	2	2	20	92 J	5	1 U
Acenaphthylene	ug/L	N	NA	0.1 UJ	0.1 U	0.11 UJ	0.1 UJ	0.2 J	0.3 J	0.2 J	0.1 UJ	0.5 U	1 U	1.1 U	0.1 U	1	0.1 U	0.3 J	0.2 J	0.1 U	0.2 J	0.52 U	0.1 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	1 U	1 U
Acetophenone	ug/L	N	700	1 UJ	1 U	1.1 UJ	0.5 UJ	4 U	4 U	4 UJ	4 UJ	20 U	41 U	43 U	1 U	0.5 U	4 U	4 U	4 U	4 U	4 U	21 U	1 U	0.5 U	0.6 U	4 U	21 U	20 U	40 U	41 U
Anthracene	ug/L	N	2000	0.1 UJ	0.38 J	0.33 J	0.6 J	0.7	0.7	0.2 J	0.6 J	0.8 J	1 U	1.1 U	0.1 U	5	0.4 J	0.8	0.8	0.5	0.6	1.3 J	0.17 J	0.9	0.8	0.6	24	98 J	5 J	10
Atrazine	ug/L	N	3	1 UJ	1 U	1.1 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	10 U	21 U	22 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	1 U	2 U	2 U	2 U	11 U	10 U	20 U	21 U
Benzaldehyde	ug/L	N	NA	1 UJ	1 U	1.1 UJ	1 UJ	3 U	3 U	3 UJ	3 UJ	15 U	31 U	32 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	16 U	1 U	1 U	1 U	3 U	16 U	15 U	30 U	31 U
Benzo(a)anthracene	ug/L	N	0.1	**0.33J**	**0.31J**	**0.24J**	**0.8J**	**0.7**	**0.9**	0.1 UJ	**0.6J**	**0.7J**	1 U	1.1 U	0.1 U	**11**	0.1 U	**0.3J**	**0.3J**	**0.8**	**0.9**	**3.5**	0.1 U	**1**	**1**	0.1 U	**48**	**160J**	**9**	**20**
Benzo(a)pyrene	ug/L	N	0.1	**0.31J**	**0.26J**	**0.25J**	**0.6J**	**0.6**	**0.8**	0.1 UJ	0.6 UJ	**0.6J**	1 U	1.1 U	0.11 U	**11**	0.1 U	**0.2J**	**0.2J**	**0.8**	**0.8**	**3.2**	0.11 U	**2**	**2**	**0.3J**	**94**	**350J**	**16**	**37**
Benzo(b)fluoranthene	ug/L	N	0.2	0.16J	0.17J	0.11 UJ	**0.7J**	0.1 U	**0.8**	0.1 UJ	**0.7J**	0.5 U	1 U	1.1 U	0.1 U	**12**	0.1 U	0.2J	0.2J	**0.8**	**0.9**	**4**	0.1 U	**1**	**1**	0.1 U	**47**	**190J**	**8**	**17**
Benzo(g,h,i)perylene	ug/L	N	NA	0.21 J	0.22 J	0.19 J	0.3 J	0.3 J	0.2 J	0.1 UJ	0.2 J	0.5 U	1 U	1.1 U	0.1 U	5	0.1 U	0.1 U	0.1 U	0.3 J	0.4 J	2 J	0.1 U	3	3	0.4 J	63	230J	18	50
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	0.1 U	0.11 UJ	0.3 J	0.1 U	0.4 J	0.1 UJ	0.2 J	0.5 U	1 U	1.1 U	0.1 U	**5**	0.1 U	0.1 U	0.1 J	0.2 J	0.4 J	**1.6J**	0.1 U	0.1 U	0.1 U	0.1 U	**7**	**31J**	**1 J**	**3J**
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 UJ	5 U	5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.1 UJ	2 U	2.1 UJ	**4J**	5 U	5 U	5 UJ	5 UJ	26 U	52 U	54 U	2 U	**4J**	5 U	5 U	5 U	5 U	5 U	26 U	2 U	2 U	2 U	5 U	26 U	25 U	50 U	52 U
Butylbenzylphthalate	ug/L	N	100	2.1 UJ	2 U	2.1 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	10 U	21 U	22 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	11 U	10 UJ	20 U	21 U
Caprolactam	ug/L	N	4000	3.1 UJ	3 U	3.2 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	26 U	52 U	54 U	3 U	5 U	5 U	5 U	5 U	5 U	5 U	26 U	3 U	5 U	6 U	5 U	26 U	25 U	50 U	52 U
Carbazole	ug/L	N	NA	0.87 J	0.83 J	0.6 J	0.6 J	0.6 J	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	2	0.5 U	0.5 J	0.8 J	0.5 U	0.5 U	2.6 U	0.51 U	1 J	0.7 J	2 J	11	30J	5 U	10J
Chrysene	ug/L	N	5	0.42 J	0.57	0.39 J	0.9 J	0.7	0.9	0.1 UJ	0.7 J	0.8 J	1 U	1.1 U	0.1 U	**12**	0.1 U	0.3 J	0.4 J	0.8	0.8	3.5	0.1 U	2	2	0.4 J	**85**	**270J**	**15**	**34**
Di-n-butylphthalate	ug/L	N	700	2.1 UJ	2 U	2.1 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	10 U	21 U	22 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	11 U	10 U	20 U	21 U
Di-n-octylphthalate	ug/L	N	100	5.1 UJ	5 U	5.3 UJ	2 UJ	5 U	5 U	5 UJ	5 UJ	26 U	52 U	54 U	5.1 U	2 U	5 U	5 U	5 U	5 U	5 U	26 U	5.1 U	2 U	2 U	5 U	26 U	25 U	50 U	52 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	0.1 U	0.11 UJ	0.1J	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.5 U	1 U	1.1 U	0.1 U	**1**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.52 U	0.1 U	**0.7**	**0.6**	0.1 U	**17**	**59J**	**5J**	**10**
Dibenzofuran	ug/L	N	NA	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.9 J	2	0.6 J	2 J	3 U	5.2 U	5.4 U	0.51 U	6	0.5 J	1 J	2 J	0.5 U	0.5 U	2.6 U	0.84 J	0.8 J	0.8 J	0.9 J	13	46 J	5 U	5 U
Diethylphthalate	ug/L	N	6000	2.1 UJ	2 U	2.1 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	10 U	21 U	22 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	11 U	10 UJ	20 U	21 U
Dimethyl phthalate	ug/L	N	NA	2.1 UJ	2 U	2.1 UJ	2 UJ	2 U	2 U	2 UJ	2 UJ	10 U	21 U	22 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	10 U	2 U	2 U	2 U	2 U	11 U	10 UJ	20 U	21 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	3 U	3 U	3 UJ	3 UJ	15 U	31 U	32 U	0.51 U	1	3 U	3 U	3 U	3 U	3 U	16 U	0.51 U	1	2	3 U	16 U	15 U	30 U	31 U
Fluoranthene	ug/L	N	300	0.1 UJ	0.1 U	0.11 UJ	2 J	1	2	0.3 J	1 J	2 J	1 U	1.1 U	0.1 U	25	0.6	1	2	2	2	6.6	0.2 J	1	0.8	0.1 U	26	98 J	5 J	8
Fluorene	ug/L	N	300	0.12 UJ	0.53	0.37 J	0.7 J	0.7	2	0.6 J	1 J	2 J	1 U	1.1 U	0.12 U	6	0.9	1	2	0.6	0.5	0.84 J	0.9	2	2	2	43	170 J	11	24
Hexachlorobenzene	ug/L	N	0.02	0.11 UJ	0.11 U	0.12 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.5 U	1 U	1.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.52 U	0.11 U	0.1 U	0.1 U	0.1 U	0.5 U	0.5 U	1 U	1 U
Hexachlorobutadiene	ug/L	N	1	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.1 UJ	5 U	5.3 UJ	5 UJ	5 U	5 U	5 UJ	5 UJ	26 U	52 U	54 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	26 UJ	5.1 U	5 U	6 U	5 U	26 U	25 U	50 U	52 U
Hexachloroethane	ug/L	N	7	0.51 UJ	0.5 U	0.53 UJ	1 UJ	1 U	1 U	1 UJ	1 UJ	5 U	10 U	11 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	5.2 U	0.51 U	1 U	1 U	1 U	5 U	5 UJ	10 U	10 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 UJ	0.11 U	0.12 UJ	**0.3J**	**0.3J**	**0.4J**	0.1 UJ	0.1 UJ	0.5 U	1 U	1.1 U	0.11 U	**5**	0.1 U	0.1J	0.1 U	**0.4J**	**0.5J**	**2.1J**	0.11 U	**0.6**	**0.5J**	0.1 U	**18**	**48J**	**4J**	1 U
Isophorone	ug/L	N	40	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.7 U	0.7 U	0.7 UJ	0.7 UJ	4 U	7.2 U	7.5 U	0.51 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	3.6 U	0.51 U	0.5 U	0.6 U	0.7 U	4 U	4 U	7 U	7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.7 U	0.7 U	0.7 UJ	0.7 UJ	4 U	7.2 U	7.5 U	0.51 U	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	3.6 U	0.51 U	0.5 U	0.6 U	0.7 U	4 U	4 U	7 U	7 U
Naphthalene	ug/L	N	300	0.22 J	0.1 U	0.11 UJ	0.8 J	0.1 U	0.9	0.1 UJ	0.1 UJ	0.5 U	1 U	1.1 U	0.1 U	31	5	2	4	0.8	1	0.52 U	0.96	10	10	16	220	**890J**	58	180
Nitrobenzene	ug/L	N	6	0.51 UJ	0.5 U	0.53 UJ	0.5 UJ	0.5 U	0.5 U	0.5 UJ	0.5 UJ	3 U	5.2 U	5.4 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
p-Chloro-m-cresol	ug/L	N	NA	1 UJ	1 U	1.1 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	17 U	17 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	8.3 U	1 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1.1 UJ	1 U	1 U	1 U	1 U	1 UJ	5 U	10 U	11 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	5.2 U	1 U	1 U	1 U	1 U	5 U	5 U	10 U	10 U
Phenanthrene	ug/L	N	NA	0.65 J	0.87	0.66	2 J	2	1	0.1 J	0.4 J	0.7 J	1 U	1.1 U	0.11 U	24	1	2	1	0.6	0.8	3.7	0.54	6	5	3	150	530J	31	65
Phenol	ug/L	N	2000	0.68 J	0.5 U	0.85 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	3 U	5.2 U	5.4 U	0.51 U	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2.6 U	0.51 U	0.5 U	0.6 U	0.5 U	3 U	3 U	5 U	5 U
Pyrene	ug/L	N	200	0.59 J	0.62	0.54	1 J	1	2	0.2 J	1 J	2 J	1 U	1.1 U	0.1 U	24	0.3 J	1	1	2	2	6.3	0.51	2	2	0.7	72	**240J**	15	31
Total TIC SVOCS	ug/L	N	NA	-	-	-	1000 J	33 J	60 J	-	120 J	-	-	-	-	850 J	370 J	160 J	-	300 J	-	0 U	-	630 J	420 J	200 J	1300 J	-	1600 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550
			Field Sample ID	M543RA8X	M543RA9X	M543RB1	M543RB2	M543RB3	M544A1X	M544A2X	M544A3X	M544A4X	D0220199	M544A5X	M544A6X	M544A8X	M544A9X	M544B1	M544B2	M544B3	D1126188	M550A1X	M550A2X	D0503198	M550A3X	M550A4X	M550A5X	D0219208	M550A6X	D0519208
			Sample Date	10/05/2020	02/17/2021	05/25/2021	09/01/2021	11/15/2021	02/14/2018	05/23/2018	08/29/2018	11/14/2018	02/20/2019	02/20/2019	09/06/2019	10/05/2020	02/17/2021	05/25/2021	09/01/2021	11/15/2021	11/26/2018	11/26/2018	02/04/2019	05/03/2019	05/03/2019	07/29/2019	11/07/2019	02/19/2020	02/19/2020	05/19/2020
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	-	2.6 U	5.2 U	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	-	2.6 U	5.2 U	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	-	2.6 U	5.2 U	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	-	37 J	58 J	39 J	320 U	0.5 U	3 U	3 U	17	3 U	3 U	12	32 U	31 U	31 U	31 UJ	330 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	-	74 U	150 U	140 U	1500 U	10 U	14 U	14 U	14 U	14 U	15 U	15 U	150 U	150 U	140 U	150 UJ	1500 U	14 U	15 U	14 U	15 U	16 U	14 U	14 U	15 U	15 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	-	5.3 U	10 U	10 U	110 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	11 UJ	10 U	10 U	10 UJ	110 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.7 J	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	-	2.1 U	4.2 U	4.1 U	42 UJ	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	4.2 UJ	4.2 U	4.1 U	4.2 UJ	43 U	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	2.6 U	5.2 U	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	**290J**	**32 J**	**150J**	**130J**	**160J**	0.2 J	0.1 U	1	9 J	1 J	0.1 U	1	**170J**	**35 J**	**81 J**	**78 J**	**130J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	2.6 U	9.3 J	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	-	5.3 U	10 U	10 U	110 UJ	0.5 U	2 U	2 U	2 UJ	2 U	2 U	2 U	21 UJ	10 U	10 U	10 UJ	110 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	5.3 U	10 U	10 U	110 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	32 U	10 U	10 U	10 UJ	110 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	-	21 U	42 U	41 U	420 UJ	2 U	3 U	3 U	3 UJ	3 U	3 U	3 U	32 UJ	42 U	41 U	42 UJ	430 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	-	11 U	21 U	21 U	210 UJ	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3 U	32 UJ	21 U	21 U	21 UJ	220 U	3 UJ	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	42 U	84 U	83 U	850 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	85 U	83 U	82 U	84 UJ	870 U	8 U	9 U	8 U	9 U	9 U	8 U	8 U	9 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	-	21 U	42 U	41 U	420 UJ	2 U	4 U	4 U	4 UJ	4 U	4 U	4 U	42 UJ	42 U	41 U	42 UJ	430 U	4 UJ	4 U	4 U	4 U	5 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	3.7 J	5.2 U	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.6 J	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	-	4.8 U	9.4 U	9.3 U	96 UJ	0.5 U	0.9 U	0.9 U	0.9 UJ	0.9 U	1 U	0.9 U	9.5 UJ	9.3 U	9.3 U	9.4 UJ	98 U	0.9 U	1 U	0.9 U	1 U	1 U	0.9 U	0.9 U	1 U	1 U	0.9 U
4-Nitrophenol	ug/L	N	NA	-	53 U	100 U	100 U	1100 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	110 U	100 U	100 U	100 UJ	1100 U	10 U	11 U	10 U	11 U	12 U	10 U	10 U	11 U	11 U	10 U
Acenaphthene	ug/L	N	400	-	8	1 U	1 U	160 J	0.4 J	0.1 U	0.8	1 J	0.1 U	0.1 U	1	1.1 UJ	9.9	15	29 J	100	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	-	0.53 U	1 U	1 U	11 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	1.1 UJ	1 U	1 U	1 UJ	11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	-	5.3 U	10 U	10 U	110 UJ	0.5 U	4 U	4 U	4 UJ	4 U	4 U	4 U	42 UJ	10 U	10 U	10 UJ	110 U	4 U	4 U	4 U	4 U	5 U	4 U	4 U	4 U	4 U	4 U
Anthracene	ug/L	N	2000	-	8.7	9.1	7	110 J	0.5 J	0.1 U	0.2 J	0.8 J	0.1 UJ	0.1 UJ	0.1 U	28 J	1 U	24	42 J	120	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	-	5.3 U	10 U	10 U	110 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	21 UJ	10 U	10 U	10 UJ	110 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	-	5.3 U	10 U	10 U	110 UJ	1 U	3 U	3 U	3 UJ	3 U	3 U	3 U	32 UJ	10 U	10 U	10 UJ	110 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	-	**14**	**16**	**18**	**310J**	**0.5**	0.1 U	**0.2J**	**0.7J**	**2J**	**2J**	0.1 U	**58J**	**18**	**27**	**46J**	**110**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	-	**29**	**29**	**32**	**560J**	**0.6**	0.1 U	**0.3J**	**1J**	**2J**	**3J**	0.1 U	**69J**	**25**	**42**	**58J**	**150**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	-	**14**	**12**	**16**	**260J**	**0.3J**	0.1 U	0.1J	**0.8J**	**1J**	**1J**	0.1 U	**43J**	**11**	**20**	**36J**	**82**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	-	27	32	35	660J	0.7	0.1 U	0.2 J	1 J	2 J	3 J	0.1 U	46 J	25	35	69 J	150	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	-	**2.5J**	1 U	1 U	11 UJ	0.1 U	0.1 U	0.1 U	0.2 UJ	0.2 J	0.1 UJ	0.1 U	**7.9J**	1 U	1 U	1 UJ	11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	-	11 U	21 U	21 U	210 UJ	2 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 U	53 UJ	21 U	21 U	21 UJ	220 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	-	11 U	21 U	21 U	210 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	21 UJ	21 U	21 U	21 UJ	220 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	-	16 U	31 U	31 U	320 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	53 UJ	31 U	31 U	31 UJ	330 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U
Carbazole	ug/L	N	NA	-	7.8J	13J	9.6J	53 UJ	0.5 U	0.5 U	1 J	2 UJ	0.8 J	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	-	**23**	**24**	**29**	**500J**	0.8	0.1 U	0.3 J	1 J	3 J	3 J	0.1 U	**90J**	**30**	**37**	**80J**	**200**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	-	11 U	21 U	21 U	210 UJ	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 U	21 UJ	21 U	21 U	21 UJ	220 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	-	26 U	52 U	52 U	530 UJ	2 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 U	53 UJ	52 U	51 U	52 UJ	540 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	-	**7.1**	**7.6**	**5.8**	**160J**	0.3J	0.1 U	0.1 U	0.3UJ	**0.6J**	**0.7J**	0.1 U	**16J**	1 U	**9.9**	**20J**	**36J**	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	55 J	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	-	11 U	21 U	21 U	210 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	21 UJ	21 U	21 U	21 UJ	220 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	-	11 U	21 UJ	21 U	210 UJ	2 U	2 U	2 U	2 UJ	2 U	2 U	2 U	21 UJ	21 U	21 UJ	21 UJ	220 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	3 U	3 U	3 UJ	3 U	3 U	3 U	32 UJ	5.2 U	5.1 U	5.2 UJ	54 U	3 U	3 U	3 U	3 U	4 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	-	6.5	1 U	8.3	140 J	0.4 J	0.1 U	0.2 J	0.7 J	1 J	1 J	0.1 U	39 J	14	22	35 J	82	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Fluorene	ug/L	N	300	-	15	12	19	300 J	0.7	0.1 U	1	1 J	0.9 J	0.4 J	1	89 J	31	44	73 J	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	-	0.58 U	1.2 U	1.1 U	12 UJ	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	1.1 UJ	1.1 U	1.1 U	1.2 UJ	12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	-	26 U	52 U	52 U	530 UJ	5 U	5 U	5 U	5 UJ	5 U	5 U	5 U	53 UJ	52 U	51 U	52 UJ	540 U	5 U	5 U	5 U	5 U	6 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	-	2.6 U	5.2 U	5.2 U	53 UJ	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	11 UJ	5.2 U	5.1 U	5.2 UJ	54 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	-	**5.3**	**6.8**	**8.3**	**120J**	0.1J	0.1 U	0.1 U	**0.4UJ**	**0.4J**	**0.6J**	0.1 U	1.1 UJ	**5J**	**7.1**	1.2 UJ	**31J**	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	7.4 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.7 UJ	0.7 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.7 U	0.7 U	0.7 UJ	0.7 U	0.7 U	0.7 U	7.4 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.7 U	0.7 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	250 J	46 J	240 J	240 J	170 J	0.1 U	0.1 U	1	6 J	2 J	0.1 U	1	82 J	54	81	140 J	**380**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrobenzene	ug/L	N	6	-	2.6 U	5.2 U	5.2 U	53 UJ	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	5.3 UJ	5.2 U	5.1 U	5.2 UJ	54 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	-	5.3 U	10 U	10 U	110 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	17 U	10 U	10 U	10 UJ	110 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	2 U	2 U	2 U
Pentachlorophenol	ug/L	N	0.3	-	5.3 U	10 U	10 U	110 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	11 U	10 U	10 U	10 UJ	110 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	-	49	52	58	1000J	1	0.1 U	2	5 J	1 J	0.1 UJ	0.1 U	300J	120	160	250J	650	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenol	ug/L	N	2000	-	6.1 J	5.2 U	5.2 U	53 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5.3 U	5.2 U	5.1 U	5.2 UJ	54 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	-	21	24	25	**470J**	1	0.3 J	0.6	2 J	3 J	3 J	0.9	110 J	38	65	110 J	**260**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	130 J	5 J	170 J	-	420 J	300 J	-	-	-	-	-	-	-	-	22 J	28 J	0 U	16 J	0 U	0 U	0 U	0 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-552	MW-552	MW-552	MW-562	MW-562
			Field Sample ID	M550A7X	M550A8X	M550A9X	M550B1X	M550B2	M550B3	M551A1X	D0204198B	M551A2X	M551A3X	M551A4X	M551A5X	M551A6X	M551A7X	M551A8X	M551A9X	M551B1X	M551B2X	M551B3	D1007218	M551B4	M552A1X	D0821198	M552A2X	M562A1X	M562A2X
			Sample Date	05/19/2020	08/27/2020	01/06/2021	04/02/2021	07/14/2021	10/08/2021	11/26/2018	02/04/2019	02/04/2019	05/03/2019	07/26/2019	11/06/2019	12/19/2019	02/28/2020	05/18/2020	08/24/2020	01/06/2021	04/01/2021	07/14/2021	10/07/2021	10/07/2021	07/25/2019	08/21/2019	08/21/2019	07/25/2019	08/22/2019
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3 U	3.1 U	3.1 U	3 U	3.1 U	3.1 U	**200**	**130**	**140**	**160**	**120**	41	15	30 UJ	3 U	5.1 J	4.7 J	44	14	3.1 U	6.8 J	5 J	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	15 U	14 U	15 U	14 U	15 U	14 U	14 U	15 U	15 U	14 U	15 U	140 U	15 U	15 U	15 U	14 U	14 U	14 U	15 U	14 U	15 U	16 U	14 U	14 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.42 U	0.41 U	0.42 U	0.41 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	4 U	0.4 U	0.43 U	0.42 U	0.4 U	0.41 U	0.41 U	0.42 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	7	9	10	13	3	0.4 J	0.1 U	1 U	0.1 U	0.11 U	0.11 U	1.2	0.43 J	0.1 U	0.1 U	2	0.1 U	0.3 J	0.4 J	0.4 J
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	15	160	180	99	36	2 J	0.5 U	5 U	0.5 U	0.53 U	0.61 J	6.6	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	2 U	2.1 U	2.1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 UJ	2 U	2.1 U	2.1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	3 U	3.1 U	3.1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 UJ	3 U	3.2 U	3.2 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U
3,3'-Dichlorobenzidine	ug/L	N	30	3 U	3.1 U	3.1 U	4.1 U	4.2 U	4.1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3.2 U	3.2 U	4 U	4.1 U	4.1 U	4.2 U	3 U	3 U	3 U	3 U	3 U
3-Nitroaniline	ug/L	N	NA	3 U	3.1 U	3.1 U	2 U	2.1 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3.2 U	3.2 U	2 U	2 U	2.1 U	2.1 U	3 U	3 U	3 U	3 U	3 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8.2 U	8.3 U	8.1 U	8.4 U	8.2 U	8 U	8 U	8 U	8 U	8 U	8 U	8 U	81 UJ	8 U	8.5 UJ	8.4 U	8 U	8.1 UJ	8.2 U	8.4 U	8 U	9 U	9 U	8 U	8 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4 U	4.1 U	4.2 U	4.1 U	4.2 U	4.1 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	40 U	4 U	4.3 U	4.2 U	4 U	4.1 U	4.1 U	4.2 U	4 U	4 U	4 U	4 U	4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.8 J	4 J	0.5 U	3	2 J	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	17	0.5 U	0.6 U	2 J	0.5 U
4-Nitroaniline	ug/L	N	NA	0.9 U	0.93 U	0.94 U	0.91 U	0.94 U	0.92 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	9 UJ	0.9 U	0.96 U	0.95 U	0.9 U	0.91 U	0.93 U	0.94 U	0.9 U	1 U	1 U	0.9 U	0.9 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	10 U	10 U	100 U	10 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Acetophenone	ug/L	N	700	4 U	4.1 U	4.2 U	1 U	1 U	1 U	4 U	4 U	10 J	4 U	4 U	4 U	4 U	40 UJ	4 U	4.3 U	4.2 U	1 U	1 U	1 U	1 U	4 U	4 U	7 J	4 U	4 U
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Atrazine	ug/L	N	3	2 U	2.1 U	2.1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2.1 U	2.1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	3 U	3.1 U	3.1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 U	3 U	3.2 U	3.2 U	1 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	3 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	**0.2J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 UJ	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	5 U	5.1 U	5.2 U	2 U	2.1 U	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	51 U	5 U	5.3 U	5.3 U	2 U	2 U	2.1 U	2.1 U	5 U	5 U	6 U	5 U	5 U
Butylbenzylphthalate	ug/L	N	100	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5.1 U	5.2 U	3 U	3.1 U	3.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	51 U	5 U	5.3 U	5.3 U	3 U	3 U	3.1 U	3.1 U	5 U	5 U	6 U	5 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5 U	5.1 U	5.2 U	5.1 U	5.2 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	51 U	5 U	5.3 U	5.3 U	5 U	5.1 U	5.2 U	5.2 U	5 U	5 U	6 U	5 U	5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2.1 U	2.1 U	2 U	2.1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	20 U	2 U	2.1 U	2.1 U	2 U	2 U	2.1 U	2.1 U	2 U	2 U	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	3 U	3.1 U	3.1 U	0.51 U	0.52 U	0.51 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	30 UJ	3 U	3.2 U	3.2 U	0.5 U	0.51 U	0.52 U	0.52 U	3 U	3 U	3 U	3 U	3 U
Fluoranthene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.12 U	0.13 U	0.12 U	0.1 U	0.1 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.13 U	0.1 U	0.2 J	0.2 J	0.1 U	0.3 J
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.1 U	5.2 U	5.1 U	5.2 U	5.1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	51 U	5 U	5.3 U	5.3 U	5 U	5.1 U	5.2 U	5.2 U	5 U	5 U	6 U	5 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	0.51 U	0.52 U	0.51 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 U	1 U	1.1 U	1.1 U	0.5 U	0.51 U	0.52 U	0.52 U	1 U	1 U	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 UJ	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.7 U	0.72 U	0.73 U	0.51 U	0.52 U	0.51 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	7 U	0.7 U	0.75 U	0.74 U	0.5 U	0.51 U	0.52 U	0.52 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.7 U	0.72 U	0.73 U	0.51 U	0.52 U	0.51 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	7 U	0.7 U	0.75 U	0.74 U	0.5 U	0.51 U	0.52 U	0.52 U	0.7 U	0.8 U	0.8 U	0.7 U	0.7 U
Naphthalene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	22	22	27	26	8	8	0.1 U	3 J	0.5 J	0.11 U	1.1	6.7	2.3	0.1 U	1.2	11	0.1 U	0.4 J	2	2
Nitrobenzene	ug/L	N	6	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	5 U	0.5 U	0.53 U	0.53 U	0.5 U	0.51 U	0.52 U	0.52 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	2 U	1.6 U	1.7 U	1 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	16 U	2 U	1.7 U	1.7 U	1 U	1 U	1 U	1 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	10 UJ	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.1 J	0.2 J	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	1 U	0.1 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 U	0.8	0.7 J	1 J	1	0.7
Phenol	ug/L	N	2000	0.5 U	0.51 U	0.52 U	0.51 U	0.52 U	0.51 U	1 J	3	3	13	0.5 U	0.5 U	0.5 U	5 U	0.5 U	5	0.53 U	0.5 U	0.51 U	0.71 J	0.52 U	11	0.5 U	0.6 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	1 UJ	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 U
Total TIC SVOCS	ug/L	N	NA	0 U	0 U	-	-	-	-	-	610 J	800 J	980 J	2300 J	430 J	-	7200 J	35 J	-	-	-	-	-	-	1300 J	180 J	310 J	130 J	2600 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-564S	MW-576	MW-576	MW-576	MW-577R	MW-577R	MW-577R	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-583	MW-583	MW-583	MW-583	MW-583	MW-584	MW-584	MW-584	MW-584	MW-584
			Field Sample ID	M564SA1	M576A3X	M576A4X	M576A7	M577RA3X	M577RA4X	M577RA5	D1121198	M578A1X	M578A2X	M578A3X	D1214208	M578B4X	D0316218	M578A6	M578A7	M578A9	M583A2X	M583A3X	M583A4	M583A5	M583A6	M584A2X	M584A3X	M584A4	M584A5	D1115218
			Sample Date	07/25/2019	12/09/2020	03/08/2021	08/26/2021	10/19/2020	01/14/2021	04/09/2021	11/21/2019	11/21/2019	01/14/2020	03/27/2020	12/14/2020	12/14/2020	03/16/2021	06/03/2021	08/30/2021	12/10/2021	10/09/2020	02/17/2021	05/24/2021	09/03/2021	11/23/2021	10/05/2020	02/17/2021	05/26/2021	09/01/2021	11/15/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	-	-	-	0.52 U	0.51 U	0.51 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 U	10 U	5.1 U	5.7 U	59 U
2,4,6-Trichlorophenol	ug/L	N	20	-	-	-	0.52 U	0.51 U	0.51 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 U	10 U	5.1 U	5.7 U	59 U
2,4-Dichlorophenol	ug/L	N	20	-	-	-	0.52 U	0.51 U	0.51 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 U	10 U	5.1 U	5.7 U	59 U
2,4-Dimethylphenol	ug/L	N	100	-	-	-	3.1 U	3.8 J	3 U	3.4 U	3 U	3 U	3 U	3 U	3.1 U	3.0 U	-	3 U	-	3 U	41 J	35 J	43 J	3 U	35 J	340 U	60 U	31 U	34 U	350 U
2,4-Dinitrophenol	ug/L	N	40	-	-	-	15 U	14 U	14 U	16 U	14 U	14 U	15 U	14 U	15 U	14 U	-	14 U	-	14 U	150 U	130 U	13 UJ	14 U	140 UJ	1600 U	280 U	140 U	160 U	1600 U
2,4-Dinitrotoluene	ug/L	N	10	-	-	-	1.0 U	1 U	1 UJ	1.1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	-	1 U	-	1 U	10 U	9.5 U	0.96 UJ	1 U	10 UJ	110 UJ	20 U	10 U	11 U	120 U
2,6-Dinitrotoluene	ug/L	N	5	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
2-Chloronaphthalene	ug/L	N	600	-	-	-	0.41 U	0.4 U	0.41 UJ	0.45 U	0.4 U	0.4 U	0.4 U	0.4 U	0.41 U	0.41 U	-	0.4 U	-	0.4 U	4.2 U	3.8 U	0.38 UJ	0.4 U	4 UJ	45 UJ	8 U	4.1 U	4.6 U	47 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	-	-	-	0.52 U	0.51 U	0.51 U	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 U	10 U	5.1 U	5.7 U	59 U
2-Methylnaphthalene	ug/L	N	30	-	8.2 J	-	0.10 U	0.1 U	0.1 UJ	0.11 U	1 J	5 J	15	**170**	16 J	0.10 U	-	**81 J**	**38**	**85 J**	**63**	28	8.3 J	0.1 U	14	**500J**	**61 J**	**71 J**	**62 J**	**70 J**
2-Methylphenol (o-Cresol)	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.77 J	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	24	21	22 J	0.51 U	21	56 U	10 U	5.1 U	5.7 U	59 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	-	-	-	1.0 U	2 U	2 UJ	1.1 U	2 U	2 U	2 U	2 U	2.1 U	2.0 U	-	1 U	-	1 U	21 U	9.5 U	0.96 UJ	1 U	10 UJ	230 UJ	20 U	10 U	11 U	120 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	-	-	-	1.0 U	3 U	3 U	1.1 U	3 U	3 U	3 U	3 U	3.1 U	3.0 U	-	1 U	-	1 U	31 U	9.5 U	0.96 UJ	1 U	10 UJ	340 U	20 U	10 U	11 U	120 U
3,3'-Dichlorobenzidine	ug/L	N	30	-	-	-	4.1 U	3 U	3 UJ	4.5 U	3 U	3 U	3 U	3 U	3.1 U	3.0 U	-	4 U	-	4 U	31 U	38 U	3.8 UJ	4 U	40 UJ	340 UJ	80 U	41 U	46 U	470 U
3-Nitroaniline	ug/L	N	NA	-	-	-	2.1 U	3 U	3 UJ	2.3 U	3 U	3 U	3 U	3 U	3.1 U	3.0 U	-	2 U	-	2 U	31 U	19 U	1.9 UJ	2 U	20 UJ	340 UJ	40 U	20 U	23 U	230 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	-	-	-	8.3 U	8.1 U	8.1 UJ	9 U	8 U	8 U	9 U	8 U	8.3 U	8.1 U	-	8.1 U	-	8.1 U	83 U	76 U	7.7 UJ	8.1 U	80 UJ	900 U	160 U	82 U	91 U	940 U
4-Bromophenylphenylether	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
4-Chloroaniline	ug/L	N	30	-	-	-	4.1 U	4 U	4.1 UJ	4.5 U	4 U	4 U	4 U	4 U	4.1 U	4.1 U	-	4 U	-	4 U	42 U	38 U	3.8 UJ	4 U	40 UJ	450 UJ	80 U	41 U	46 U	470 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.94 J	0.56 U	1 J	1 J	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	160	160	300J	0.51 U	150	56 U	10 U	8.8 J	5.7 U	59 U
4-Nitroaniline	ug/L	N	NA	-	-	-	0.93 U	0.91 U	0.91 UJ	1 U	0.9 U	0.9 U	1 U	0.9 U	0.93 U	0.91 U	-	0.91 U	-	0.91 U	9.4 U	8.5 U	0.86 UJ	0.91 U	9 UJ	100 UJ	18 U	9.2 U	10 U	110 U
4-Nitrophenol	ug/L	N	NA	-	-	-	10 U	10 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 U	-	10 U	-	10 U	100 U	95 U	9.6 UJ	10 U	100 UJ	1100 U	200 U	100 U	110 U	1200 U
Acenaphthene	ug/L	N	400	-	-	-	0.10 U	0.1 U	0.26 UJ	0.11 U	19	18	39	78	3.5	0.10 U	-	31	-	32	1 U	0.95 U	0.096 UJ	0.1 U	1 UJ	11 UJ	94	1 U	1.1 U	88
Acenaphthylene	ug/L	N	NA	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	0.2 J	0.3 J	0.4 J	0.8	0.10 U	0.10 U	-	0.27 J	-	0.34 J	1 U	0.95 U	0.096 UJ	0.1 U	1 UJ	11 UJ	2 U	1 U	1.1 U	12 U
Acetophenone	ug/L	N	700	-	-	-	1.0 U	4 U	4.1 UJ	1.1 U	4 U	4 U	4 U	4 U	4.1 U	4.1 U	-	1 U	-	1 U	47 J	26 J	39 J	1 U	46 J	450 UJ	20 U	10 U	11 U	120 U
Anthracene	ug/L	N	2000	-	-	-	0.10 U	0.1 U	0.14 UJ	0.11 U	0.5 J	0.5 J	0.9	2	0.10 U	0.10 U	-	0.8	-	0.44 J	1 U	0.95 U	0.096 UJ	0.1 U	1 UJ	270 J	85	1 U	1.1 U	71
Atrazine	ug/L	N	3	-	-	-	1.0 U	2 U	2 UJ	1.1 U	2 U	2 U	2 U	2 U	2.1 U	2.0 U	-	1 U	-	1 U	21 U	9.5 U	0.96 UJ	1 U	10 UJ	230 UJ	20 U	10 U	11 U	120 U
Benzaldehyde	ug/L	N	NA	-	-	-	1.0 U	3 U	3 UJ	1.1 U	3 U	3 U	3 U	3 U	3.1 U	3.0 U	-	1 U	-	1 U	31 U	9.5 U	0.96 UJ	1 U	10 UJ	340 UJ	20 U	10 U	11 U	120 U
Benzo(a)anthracene	ug/L	N	0.1	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	**0.2J**	**0.2J**	**0.2J**	0.1J	0.10 U	0.10 U	-	0.1 U	-	0.1 U	1 U	**1.8J**	0.096 UJ	0.1 U	1 UJ	**290J**	**69**	1 U	**2.4J**	**62**
Benzo(a)pyrene	ug/L	N	0.1	-	-	-	0.11 U	0.1 U	0.1 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.11 U	-	0.11 U	1 U	**1.4J**	0.11 UJ	0.11 U	1.1 UJ	**260J**	**80**	1.1 U	**2.4J**	**77**
Benzo(b)fluoranthene	ug/L	N	0.2	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.1 U	-	0.1 U	1 U	**1.1J**	0.096 UJ	0.1 U	1 UJ	**150J**	**43**	1 U	**1.9J**	**42J**
Benzo(g,h,i)perylene	ug/L	N	NA	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.1 U	-	0.1 U	2.2 J	1.6 J	0.096 UJ	0.1 U	1 UJ	180J	51	1 U	2.3 J	76
Benzo(k)fluoranthene	ug/L	N	0.5	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.1 U	-	0.1 U	1 U	0.95 U	0.096 UJ	0.1 U	1 UJ	**34J**	**8.2J**	1 U	1.1 U	12 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
bis(2-Chloroethyl) ether	ug/L	N	7	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
bis(2-chloroisopropyl) ether	ug/L	N	300	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	-	-	-	2.1 U	5.1 U	5.1 UJ	2.3 U	5 U	5 U	5 U	5 U	5.2 U	5.1 U	-	2 U	-	2 U	52 U	19 U	1.9 UJ	2 U	20 UJ	560 UJ	40 U	20 U	23 U	230 U
Butylbenzylphthalate	ug/L	N	100	-	-	-	2.1 U	2 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.1 U	2.0 U	-	2 U	-	2 U	21 U	19 U	1.9 UJ	2 U	20 UJ	230 UJ	40 U	20 U	23 U	230 U
Caprolactam	ug/L	N	4000	-	-	-	3.1 U	5.1 U	5.1 UJ	3.4 U	5 U	5 U	5 U	5 U	5.2 U	5.1 U	-	3 U	-	3 U	52 U	28 U	2.9 UJ	3 U	30 UJ	560 UJ	60 U	31 U	34 U	350 U
Carbazole	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.97 UJ	0.63 J	4	4	10	17	0.52 U	0.51 U	-	7.4	-	7.5	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
Chrysene	ug/L	N	5	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	0.2 J	0.2 J	0.2 J	0.1 U	0.10 U	0.10 U	-	0.1 U	-	0.1 U	1 U	**5.2**	0.096 UJ	0.1 U	1 UJ	**480J**	**110**	1 U	3 J	**110**
Di-n-butylphthalate	ug/L	N	700	-	-	-	2.1 U	2 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.1 U	2.0 U	-	2 U	-	2 U	21 U	19 U	1.9 UJ	2 U	20 UJ	230 UJ	40 U	20 U	23 U	230 U
Di-n-octylphthalate	ug/L	N	100	-	-	-	5.2 U	5.1 U	5.1 UJ	5.6 U	5 U	5 U	5 U	5 U	5.2 U	5.1 U	-	5.1 U	-	5 U	52 U	47 U	4.8 UJ	5.1 U	50 UJ	560 UJ	100 U	51 U	57 U	590 U
Dibenz(a,h)anthracene	ug/L	N	0.3	-	-	-	0.10 U	0.1 U	0.1 UJ	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.1 U	-	0.1 U	1 U	0.95 U	0.096 UJ	0.1 U	1 UJ	11 UJ	**14**	1 U	1.1 U	**20J**
Dibenzofuran	ug/L	N	NA	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	5	5	21	52	0.63 J	0.51 U	-	17	-	17	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
Diethylphthalate	ug/L	N	6000	-	-	-	2.1 U	2 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.1 U	2.0 U	-	2 U	-	2 U	21 U	19 U	1.9 UJ	2 U	20 UJ	230 UJ	40 U	20 U	23 U	230 U
Dimethyl phthalate	ug/L	N	NA	-	-	-	2.1 U	2 U	2 UJ	2.3 U	2 U	2 U	2 U	2 U	2.1 U	2.0 U	-	2 U	-	2 U	21 U	19 U	1.9 UJ	2 U	20 UJ	230 UJ	40 U	20 U	23 U	230 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	-	-	-	0.52 U	3 U	3 UJ	0.56 U	3 U	3 U	11 J	26	3.1 U	3.0 U	-	7.9	-	7.3	31 U	4.7 U	0.48 UJ	0.51 U	5 UJ	340 UJ	38 J	5.1 U	5.7 U	59 U
Fluoranthene	ug/L	N	300	-	-	-	0.10 U	0.1 U	0.25 UJ	0.11 U	3	3	3	3	0.10 U	0.10 U	-	1.4	-	0.89	1 U	2 J	0.096 UJ	0.1 U	1 UJ	**320J**	69	1 U	1.1 U	63
Fluorene	ug/L	N	300	-	-	-	1.8	0.1 U	0.37 UJ	0.2 J	5	5	16	38	0.51 J	0.10 U	-	13	-	12	1 U	2.7 J	0.11 UJ	0.12 U	1.2 UJ	11 UJ	170	1.2 U	1.4 U	150
Hexachlorobenzene	ug/L	N	0.02	-	-	-	0.11 U	0.1 U	0.1 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.11 U	-	0.11 U	1 U	1 U	0.11 UJ	0.11 U	1.1 UJ	11 UJ	2.2 U	1.1 U	1.3 U	13 U
Hexachlorobutadiene	ug/L	N	1	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
Hexachlorocyclopentadiene	ug/L	N	40	-	-	-	5.2 U	5.1 U	5.1 UJ	5.6 U	5 U	5 U	5 U	5 U	5.2 U	5.1 U	-	5.1 U	-	5 U	52 U	47 U	4.8 UJ	5.1 U	50 UJ	560 UJ	100 U	51 U	57 U	590 U
Hexachloroethane	ug/L	N	7	11000 U	-	-	0.52 U	1 U	1 UJ	0.56 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	-	0.51 U	-	0.5 U	10 U	4.7 U	0.48 UJ	0.51 U	5 UJ	110 UJ	10 U	5.1 U	5.7 U	59 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	-	-	-	0.11 U	0.1 U	0.1 UJ	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 U	0.10 U	-	0.11 U	-	0.11 U	1 U	1 U	0.11 UJ	0.11 U	1.1 UJ	11 UJ	**11**	1.1 U	1.3 U	13 U
Isophorone	ug/L	N	40	-	-	-	0.52 U	0.51 U	1 UJ	0.78 J	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
N-Nitrosodi-n-propylamine	ug/L	N	10	-	-	-	0.52 U	0.71 U	0.71 UJ	0.56 U	0.7 U	0.7 U	0.8 U	0.7 U	0.73 U	0.71 U	-	0.51 U	-	0.5 U	7.3 U	4.7 U	0.48 UJ	0.51 U	5 UJ	79 UJ	10 U	5.1 U	5.7 U	59 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	-	-	-	0.52 U	0.71 U	0.71 UJ	0.56 U	0.7 U	0.7 U	0.8 U	0.7 U	0.73 U	0.71 U	-	0.51 U	-	0.5 U	7.3 U	4.7 U	0.48 UJ	0.51 U	5 UJ	79 UJ	10 U	5.1 U	5.7 U	59 U
Naphthalene	ug/L	N	300	-	-	11 J	6.2	8.4	17 UJ	6.2	1 J	12 J	20	290	12 J	0.10 U	5.3 J	250 J	250	270 J	53	27	49 J	83 J	31	**340J**	71 J	120 J	110 J	99 J
Nitrobenzene	ug/L	N	6	-	-	-	0.52 U	0.51 U	0.51 UJ	0.56 U	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	5.2 U	4.7 U	0.48 UJ	0.51 U	5 UJ	56 UJ	10 U	5.1 U	5.7 U	59 U
p-Chloro-m-cresol	ug/L	N	NA	-	-	-	1.0 U	1.6 UJ	1.6 U	1.1 U	0.5 U	0.5 U	0.5 U	2 U	1.7 U	1.6 U	-	1 U	-	1 U	17 U	9.5 U	0.96 UJ	1 U	10 UJ	180 U	20 U	10 U	11 U	120 U
Pentachlorophenol	ug/L	N	0.3	-	-	-	1.0 U	1 U	1 U	1.1 U	1 U	1 U	1 U	1 U	1.0 U	1.0 U	-	1 U	-	1 U	10 U	9.5 U	0.96 UJ	1 U	10 UJ	110 U	20 U	10 U	11 U	120 U
Phenanthrene	ug/L	N	NA	-	-	-	1.8	0.1 U	0.53 UJ	0.32 J	5	5	14	30	0.10 U	0.10 U	-	14	-	7.5	14	12	1.1 J	0.11 U	1.1 UJ	1900J	470	18	17	430
Phenol	ug/L	N	2000	-	-	-	0.52 U	0.51 U	0.51 U	4.5	0.5 U	0.5 U	0.5 U	0.5 U	0.52 U	0.51 U	-	0.51 U	-	0.5 U	180	180	390 J	0.51 U	220	56 U	10 U	5.1 U	5.7 U	59 U
Pyrene	ug/L	N	200	-	-	-	0.10 U	0.1 U	0.18 UJ	0.11 U	2	2	2	1	0.11 J	0.10 U	-	0.79	-	0.5	1 U	5.8	0.096 UJ	0.1 U	1 UJ	**630J**	170	5.8	5.8	160
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	320 J	220 J	360 J	580 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-584	MW-585	MW-585	MW-585	MW-586	MW-586	MW-586	MW-587	MW-587	MW-587	MW-588	MW-588	MW-588	MW-589	MW-589	MW-589	MW-598	MW-598R	MW-603	MW-603	MW-603	MW-603	MW-603	MW-603	MW-604	MW-604	MW-604
			Field Sample ID	M584A6	M585A1X	M585A2X	M585A3	M586A1X	M586A2X	M586A3	M587A1X	M587A2X	M587A3	M588A2X	M588A3X	M588A4	M589A1X	M589A2	M589A5	M598A1X	M598A2	D1123208	M603A1X	M603A2X	M603A3	M603A4	M603A5	M604A1X	M604A2X	M604A3
			Sample Date	11/15/2021	10/16/2020	01/13/2021	04/08/2021	10/14/2020	01/15/2021	04/08/2021	10/15/2020	01/08/2021	04/12/2021	10/20/2020	01/15/2021	04/09/2021	05/18/2020	06/11/2021	12/14/2021	05/18/2020	06/11/2021	11/23/2020	11/23/2020	02/23/2021	05/04/2021	08/04/2021	11/10/2021	11/19/2020	02/22/2021	05/11/2021
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	0.5 U	0.52 U	0.56 U	3 U	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
2,4,6-Trichlorophenol	ug/L	N	20	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	0.5 U	0.52 U	0.56 U	3 U	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
2,4-Dichlorophenol	ug/L	N	20	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	0.5 U	0.52 U	0.56 U	3 U	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
2,4-Dimethylphenol	ug/L	N	100	62 U	4.1 J	5.7 J	3.8 J	3.3 U	3.1 U	3 U	3.1 U	6.4 U	3.3 U	3.1 U	3.1 U	3.2 U	10	3.1 U	3.3 U	64	3.2 U	3.3 U	3.1 U	3.2 U	3.1 U	15 U	3.3 U	22	4.3 J	16
2,4-Dinitrophenol	ug/L	N	40	290 U	14 U	14 U	15 U	15 U	15 U	14 U	14 U	30 U	16 U	14 U	14 U	15 U	14 U	14 U	16 U	74 U	15 U	15 U	14 U	15 U	14 U	71 U	15 U	14 U	14 U	15 U
2,4-Dinitrotoluene	ug/L	N	10	21 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	2.1 UJ	1.1 U	1 U	1 U	1.1 U	1 UJ	1 U	1.1 U	5 UJ	1.1 U	1.1 UJ	1 UJ	1.1 U	1 U	5.1 U	1.1 U	1 U	1 U	1.1 U
2,6-Dinitrotoluene	ug/L	N	5	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
2-Chloronaphthalene	ug/L	N	600	8.2 U	0.4 U	0.4 U	0.42 U	0.44 U	0.42 U	0.4 U	0.41 U	0.85 UJ	0.45 U	0.41 U	0.41 U	0.43 U	0.4 UJ	0.41 U	0.45 U	2 UJ	0.42 U	0.44 U	0.41 U	0.42 U	0.41 U	2 U	0.43 U	0.41 U	0.41 U	0.44 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	0.5 U	0.52 U	0.56 U	3 U	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
2-Methylnaphthalene	ug/L	N	30	**210**	0.1 U	2.2	9	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	**120J**	0.11 U	**35 J**	4.7	24 J	28 J	**87 J**	**40 J**	3.6	**42 J**	8.8
2-Methylphenol (o-Cresol)	ug/L	N	NA	10 U	0.5 U	1.5 J	1.6 J	0.55 U	0.52 U	1.6 J	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	3	0.52 U	0.56 U	62	0.53 U	1.2 UJ	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	2.9	6.4	7.7
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	21 U	2 U	2 U	1 U	2.2 U	2.1 U	1 U	2.1 U	4.2 UJ	1.1 U	2 U	2 U	1.1 U	2 UJ	1 U	1.1 U	11 UJ	1.1 U	2.2 U	2 U	1.1 U	1 U	5.1 U	1.1 U	2 U	1 U	1.1 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	21 U	3 U	3 U	1 U	3.3 U	3.1 U	1 U	3.1 U	6.4 U	1.1 U	3.1 U	3.1 U	1.1 U	3 U	1 U	1.1 U	16 U	1.1 U	3.3 U	3.1 U	1.1 U	1 U	5.1 U	1.1 U	3.1 U	1 U	1.1 U
3,3'-Dichlorobenzidine	ug/L	N	30	82 U	3 U	3 U	4.2 U	3.3 U	3.1 U	4 U	3.1 U	6.4 UJ	4.5 U	3.1 U	3.1 U	4.3 U	3 UJ	4.1 U	4.5 U	16 UJ	4.2 U	3.3 U	3.1 U	4.2 U	4.1 U	20 U	4.3 U	3.1 U	4.1 U	4.4 U
3-Nitroaniline	ug/L	N	NA	41 U	3 U	3 U	2.1 U	3.3 U	3.1 U	2 U	3.1 U	6.4 UJ	2.2 U	3.1 U	3.1 U	2.1 U	3 UJ	2.1 U	2.2 U	16 UJ	2.1 U	3.3 U	3.1 U	2.1 U	2 U	10 U	2.2 U	3.1 U	2 U	2.2 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	160 U	8.1 U	8.1 U	8.4 U	8.8 U	8.4 U	8 U	8.3 U	17 U	8.9 U	8.2 U	8.2 U	8.6 U	8 U	8.3 U	8.9 U	42 U	8.5 U	8.8 U	8.2 U	8.4 U	8.1 U	41 U	8.7 U	8.2 U	8.1 U	8.7 U
4-Bromophenylphenylether	ug/L	N	NA	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
4-Chloroaniline	ug/L	N	30	82 U	4 U	4 U	4.2 U	4.4 U	4.2 U	4 U	4.1 U	8.5 UJ	4.5 U	4.1 U	4.1 U	4.3 U	4 UJ	4.1 U	4.5 U	21 UJ	4.2 U	4.4 U	4.1 U	4.2 U	4.1 U	20 U	4.3 U	4.1 U	4.1 U	4.4 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	10 U	0.5 U	0.73 J	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	2	0.62 J	0.56 U	31	0.53 U	4.5	5.4	1.3 J	1 J	2.5 U	0.54 U	3.7	5.4	9.3
4-Nitroaniline	ug/L	N	NA	19 U	0.91 U	0.91 U	0.94 U	0.99 U	0.94 U	0.9 U	0.93 U	1.9 UJ	1 U	0.92 U	0.92 U	0.96 U	0.9 UJ	0.93 U	1 U	5 UJ	0.95 U	0.99 U	0.92 U	0.95 U	0.92 U	4.6 U	0.98 U	0.92 U	0.91 U	0.98 U
4-Nitrophenol	ug/L	N	NA	210 U	10 U	10 U	10 U	11 U	10 U	10 U	10 U	21 U	11 U	10 U	10 U	11 U	10 U	10 U	11 U	53 U	11 U	11 U	10 U	11 U	10 U	51 U	11 U	10 U	10 U	11 U
Acenaphthene	ug/L	N	400	2.1 U	0.1 U	0.32 J	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.31 J	0.91	0.82	3 J	0.1 U	0.11 U	2 J	0.11 U	0.11 U	0.8	1.1	1.3	0.51 U	1.2	1.4	0.1 UJ	0.11 U
Acenaphthylene	ug/L	N	NA	2.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.51 U	0.11 U	0.1 U	0.1 U	0.11 U
Acetophenone	ug/L	N	700	21 U	4 U	4 U	1 U	4.4 U	4.2 U	1 U	4.1 U	8.5 UJ	1.1 U	4.1 U	4.1 U	1.1 U	4 UJ	1 U	1.1 U	21 UJ	1.1 U	4.4 U	4.1 U	1.1 U	1 U	5.1 U	1.1 U	6.5 J	10	7.2
Anthracene	ug/L	N	2000	20	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.1 U	0.55	0.58	3.3	0.56	0.1 U	0.64	0.11 U
Atrazine	ug/L	N	3	21 U	2 U	2 U	1 U	2.2 U	2.1 U	1 U	2.1 U	4.2 UJ	1.1 U	2 U	2 U	1.1 U	2 UJ	1 U	1.1 U	11 UJ	1.1 U	2.2 U	2 U	1.1 U	1 U	5.1 U	1.1 U	2 U	1 U	1.1 U
Benzaldehyde	ug/L	N	NA	21 U	3 U	3 U	1 U	3.3 U	3.1 U	1 U	3.1 U	6.4 UJ	1.1 U	3.1 U	3.1 U	1.1 U	3 UJ	1 U	1.1 U	16 UJ	1.1 U	3.3 U	3.1 U	1.1 U	1 U	5.1 U	1.1 U	3.1 U	1 U	1.1 U
Benzo(a)anthracene	ug/L	N	0.1	**13**	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.1 U	**0.55**	**0.55**	**4.7**	**1.2**	0.1 U	**0.17J**	0.11 U
Benzo(a)pyrene	ug/L	N	0.1	**16**	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.21 UJ	0.12 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.11 U	0.12 U	0.5 UJ	0.12 U	0.11 U	**0.2J**	**0.66**	**0.55**	**5.2**	**0.96**	0.1 U	**0.18J**	0.12 U
Benzo(b)fluoranthene	ug/L	N	0.2	**8.3J**	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.1 U	**0.33J**	0.1 U	**2.6**	**0.56**	0.1 U	0.1 U	0.11 U
Benzo(g,h,i)perylene	ug/L	N	NA	17	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.68	0.5 UJ	0.11 U	0.11 U	0.1 U	0.48 J	0.44 J	4.7	1.1	0.1 U	0.11 J	0.11 U
Benzo(k)fluoranthene	ug/L	N	0.5	2.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.51 U	0.11 U	0.1 U	0.1 U	0.11 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
bis(2-Chloroethyl) ether	ug/L	N	7	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
bis(2-chloroisopropyl) ether	ug/L	N	300	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	41 U	5 U	5 U	2.1 U	5.5 U	5.2 U	2.6 J	5.2 U	11 UJ	2.2 U	5.1 U	5.1 U	2.1 U	5 UJ	2.1 U	2.2 U	26 UJ	2.1 U	5.5 U	5.1 U	2.1 U	2 U	10 U	2.2 U	5.1 U	2 U	2.2 U
Butylbenzylphthalate	ug/L	N	100	41 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	4.2 UJ	2.2 U	2 U	2 U	2.1 U	2 UJ	2.1 U	2.2 U	11 UJ	2.1 U	2.2 U	2 U	2.1 U	2 U	10 U	2.2 U	2 U	2 U	2.2 U
Caprolactam	ug/L	N	4000	62 U	5 U	5 U	3.1 U	5.5 U	5.2 U	3 U	5.2 U	11 UJ	3.3 U	5.1 U	5.1 U	3.2 U	5 UJ	3.1 U	3.3 U	26 UJ	3.2 U	5.5 U	5.1 U	3.2 U	3.1 U	15 U	3.3 U	5.1 U	3 U	3.3 U
Carbazole	ug/L	N	NA	10 U	0.7 J	0.54 J	0.59 J	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.57 J	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	1.2 J	1.9 J	0.82 J	1.3 J	2.5 U	1.8 J	0.51 U	1 J	0.55 U
Chrysene	ug/L	N	5	**20**	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.45 J	1.2	1	**7.7**	2.1	0.1 U	0.25 J	0.11 U
Di-n-butylphthalate	ug/L	N	700	41 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	4.2 UJ	2.2 U	2 U	2 U	2.1 U	2 UJ	2.1 U	2.2 U	11 UJ	2.1 U	2.2 U	2 U	2.1 U	2 U	10 U	2.2 U	2 U	2 U	2.2 U
Di-n-octylphthalate	ug/L	N	100	100 U	5 U	5 U	5.2 U	5.5 U	5.2 U	5 U	5.2 U	11 UJ	5.6 U	5.1 U	5.1 U	5.3 U	5 UJ	5.2 U	5.6 U	26 UJ	5.3 U	5.5 U	5.1 U	5.3 U	5.1 U	25 U	5.4 U	5.1 U	5.1 U	5.5 U
Dibenz(a,h)anthracene	ug/L	N	0.3	**5J**	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.17J	0.5 UJ	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	**1.4J**	0.11 U	0.1 U	0.1 U	0.11 U
Dibenzofuran	ug/L	N	NA	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.58 J	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 J	0.53 U	0.55 U	0.57 J	0.59 J	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
Diethylphthalate	ug/L	N	6000	41 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	4.2 UJ	2.2 U	2 U	2 U	2.1 U	2 UJ	2.1 U	2.2 U	11 UJ	2.1 U	2.2 U	2 U	2.1 U	2 U	10 U	2.2 U	2 U	2 U	2.2 U
Dimethyl phthalate	ug/L	N	NA	41 U	2 U	2 U	2.1 U	2.2 U	2.1 U	2 U	2.1 U	4.2 UJ	2.2 U	2 U	2 U	2.1 U	2 UJ	2.1 U	2.2 U	11 UJ	2.1 U	2.2 U	2 U	2.1 U	2 UJ	10 U	2.2 U	2 U	2 U	2.2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	10 U	3 U	3 U	0.52 U	3.3 U	3.1 U	0.5 U	3.1 U	6.4 UJ	0.56 U	3.1 U	3.1 U	0.53 U	3 UJ	0.52 U	0.56 U	16 UJ	0.53 U	3.3 U	3.1 U	0.53 U	0.51 U	2.5 U	0.54 U	3.1 U	0.51 U	0.55 U
Fluoranthene	ug/L	N	300	14	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.11 U	0.1 U	0.33 J	0.1 U	2.7	0.63	0.1 U	0.37 J	0.11 U
Fluorene	ug/L	N	300	29	0.1 U	0.17 J	0.13 U	0.11 U	0.1 U	0.12 U	0.1 U	0.21 UJ	0.13 U	0.1 U	0.37 J	0.37 J	0.1 UJ	0.12 U	0.13 U	5 J	0.13 U	0.93	1.8	1.7	1.5	9.5	3.3	0.1 U	1.7	0.85
Hexachlorobenzene	ug/L	N	0.02	2.3 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.21 UJ	0.12 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.11 U	0.12 U	0.5 UJ	0.12 U	0.11 U	0.1 U	0.12 U	0.11 U	0.56 U	0.12 U	0.1 U	0.11 U	0.12 U
Hexachlorobutadiene	ug/L	N	1	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
Hexachlorocyclopentadiene	ug/L	N	40	100 U	5 U	5 U	5.2 U	5.5 U	5.2 U	5 U	5.2 U	11 UJ	5.6 U	5.1 U	5.1 U	5.3 U	5 UJ	5.2 U	5.6 U	26 UJ	5.3 U	5.5 U	5.1 U	5.3 U	5.1 U	25 U	5.4 U	5.1 U	5.1 U	5.5 U
Hexachloroethane	ug/L	N	7	10 U	1 U	1 U	0.52 U	1.1 U	1 U	0.5 U	1 U	2.1 UJ	0.56 U	1 U	1 U	0.53 U	1 UJ	0.52 U	0.56 U	5 UJ	0.53 U	1.1 U	1 U	0.53 U	0.51 U	2.5 U	0.54 U	1 U	0.51 U	0.55 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	**3.2J**	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.21 UJ	0.12 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.11 U	**0.35J**	0.5 UJ	0.12 U	0.11 U	0.1 U	0.12 U	0.11 U	**1.1J**	0.12 U	0.1 U	0.11 U	0.12 U
Isophorone	ug/L	N	40	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
N-Nitrosodi-n-propylamine	ug/L	N	10	10 U	0.71 U	0.7 U	0.52 U	0.77 U	0.73 U	0.5 U	0.72 U	1.5 UJ	0.56 U	0.71 U	0.71 U	0.53 U	0.7 UJ	0.52 U	0.56 U	4 UJ	0.53 U	0.77 U	0.71 U	0.53 U	0.51 U	2.5 U	0.54 U	0.71 U	0.51 U	0.55 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	10 U	0.71 U	0.7 U	0.52 U	0.77 U	0.73 U	0.5 U	0.72 U	1.5 UJ	0.56 U	0.71 U	0.71 U	0.53 U	0.7 UJ	0.52 U	0.56 U	4 UJ	0.53 U	0.77 U	0.71 U	0.53 U	0.51 U	2.5 U	**78J**	0.71 U	0.51 U	0.55 U
Naphthalene	ug/L	N	300	67	0.1 U	17	57	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.46 J	0.1 UJ	0.1 U	0.11 U	72 J	0.11 U	61 J	42 J	26 J	32 J	65 J	41 J	6.9	43 J	15
Nitrobenzene	ug/L	N	6	10 U	0.5 U	0.5 U	0.52 U	0.55 U	0.52 U	0.5 U	0.52 U	1.1 UJ	0.56 U	0.51 U	0.51 U	0.53 U	0.5 UJ	0.52 U	0.56 U	3 UJ	0.53 U	0.55 U	0.51 U	0.53 U	0.51 U	2.5 U	0.54 U	0.51 U	0.51 U	0.55 U
p-Chloro-m-cresol	ug/L	N	NA	21 U	1.6 UJ	1.6 U	1 U	1.8 U	1.7 U	1 U	1.7 U	3.4 U	1.1 U	1.6 UJ	1.6 U	1.1 U	2 U	1 U	1.1 U	8 U	1.1 U	1.8 U	1.6 U	1.1 U	1 U	5.1 U	1.1 U	1.6 U	1 U	1.1 U
Pentachlorophenol	ug/L	N	0.3	21 U	1 U	1 U	1 U	1.1 U	1 U	1 U	1 U	2.1 U	1.1 U	1 U	1 U	1.1 U	1 U	1 U	1.1 U	5 U	1.1 U	1.1 U	1 U	1.1 U	1 U	5.1 U	1.1 U	1 U	1 U	1.1 U
Phenanthrene	ug/L	N	NA	91	0.1 U	0.17 J	0.11 U	0.11 U	0.1 U	0.11 U	0.1 U	0.21 UJ	0.12 U	0.1 U	0.1 U	0.12 U	0.1 UJ	0.11 U	0.12 U	7 J	0.12 U	0.11 U	2.8	5.1	4.8	31	9.4	0.1 U	2.6	0.12 U
Phenol	ug/L	N	2000	10 U	0.5 U	27	5.9	0.55 U	0.52 U	2.9	0.52 U	1.1 U	0.56 U	0.51 U	0.51 U	0.53 U	0.5 U	0.52 U	0.56 U	77	4.5	270	94 J	12	10	18	14	20	4.4	16
Pyrene	ug/L	N	200	32	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.1 U	0.1 U	0.21 UJ	0.11 U	0.1 U	0.1 U	0.11 U	0.1 UJ	0.1 U	0.11 U	0.5 UJ	0.11 U	0.7	0.63	1.3	1.1	9.1	2.3	0.1 U	0.76	0.38 J
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	430 J	-	-	1700 J	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-604	MW-604	MW-604	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10R	NF-10R	NF-10R	NF-10R	NF-13
			Field Sample ID	M604A4	M604A5	M604A6	NF10112X	NF10212X	NF10312X	NF10412X	NF10113X	NF10213X	NF10313X	NF10A2	NF10413X	NF10114X	NF10214X	NF10314X	NF10A3X	NF10414X	NF10A4X	NF10115X	NF10215X	NF10315X	NF10415X	NF10RB2X	NF10RB5X	NF10RB6X	NF10RB7	NF13112X
			Sample Date	08/06/2021	11/10/2021	02/09/2022	02/02/2012	04/03/2012	07/17/2012	10/11/2012	02/05/2013	04/18/2013	07/25/2013	08/19/2013	10/16/2013	03/27/2014	04/25/2014	07/25/2014	08/18/2014	10/09/2014	12/05/2014	01/15/2015	05/05/2015	07/16/2015	10/08/2015	07/08/2019	10/19/2020	01/12/2021	04/08/2021	01/24/2012
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.51 U	0.58 U	-	0.5 U	-	-	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	-	0.5 U	0.51 U	0.53 U	0.53 U	-
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.58 U	-	0.5 U	-	-	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	-	0.5 U	0.51 U	0.53 U	0.53 U	-
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.51 U	0.58 U	-	0.5 U	-	-	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	-	0.5 U	0.51 U	0.53 U	0.53 U	-
2,4-Dimethylphenol	ug/L	N	100	3 U	3 U	3.5 U	-	26	-	-	-	23	-	-	0.6 U	-	0.5 U	-	0.6 U	-	13	-	30	-	-	17	3 U	5 J	9.7 J	-
2,4-Dinitrophenol	ug/L	N	40	14 U	14 U	16 U	-	11 U	-	-	-	11 U	-	-	13 U	-	11 U	-	11 U	-	10 U	-	10 U	-	-	14 U	14 U	15 U	15 U	-
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1.2 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1.1 U	1.1 U	-
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.41 U	0.46 U	-	0.4 U	-	0.4 U	-	0.4 U	-	-	0.5 U	-	0.4 U	-	0.5 U	0.5 U	0.4 U	-	0.4 U	-	0.4 U	0.4 U	0.4 U	0.43 U	0.42 U	-
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.51 U	0.58 U	-	0.5 U	-	-	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	-	0.5 U	0.51 U	0.53 U	0.53 U	-
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.61	**30 J**	-	13	-	23	-	11	-	-	12	-	20	-	7	12	12	-	10	-	5	3	0.1 U	0.98	6.7	-
2-Methylphenol (o-Cresol)	ug/L	N	NA	5.1	0.51 U	0.58 U	-	3	-	-	-	3	-	-	2	-	0.5 U	-	0.6 U	-	6	-	2	-	-	2	0.51 U	0.93 J	18	-
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1 U	1 U	1.2 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	2 U	2 U	2.1 U	1.1 U	-
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1 U	1 U	1.2 U	-	0.5 U	-	-	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	-	3 U	3 U	3.2 U	1.1 U	-
3,3'-Dichlorobenzidine	ug/L	N	30	4 U	4.1 U	4.6 U	-	2 U	-	2 U	-	2 U	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	3 U	3 U	3.2 U	4.2 U	-
3-Nitroaniline	ug/L	N	NA	2 U	2 U	2.3 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	3 U	3 U	3.2 U	2.1 U	-
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8 U	8.1 U	9.2 U	-	5 U	-	-	-	5 U	-	-	6 U	-	5 U	-	6 U	-	5 U	-	5 U	-	-	8 U	8.1 U	8.5 U	8.4 U	-
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
4-Chloroaniline	ug/L	N	30	4 U	4.1 U	4.6 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	2	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	2 U	4 U	4 U	4.3 U	4.2 U	-
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.93 J	0.51 U	0.58 U	-	3	-	-	-	2	-	-	2	-	2	-	2	-	2	-	3	-	-	3	0.51 U	0.53 U	0.53 U	-
4-Nitroaniline	ug/L	N	NA	0.9 U	0.91 U	1 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.9 U	0.91 U	0.96 U	0.95 U	-
4-Nitrophenol	ug/L	N	NA	10 U	10 U	12 U	-	11 U	-	-	-	11 U	-	-	13 U	-	11 U	-	11 U	-	10 U	-	10 U	-	-	10 U	10 U	11 U	11 U	-
Acenaphthene	ug/L	N	400	1.1	0.93	0.12 U	-	0.1 U	-	0.1 U	-	0.1 J	-	-	0.3 J	-	0.1 U	-	0.1 U	0.1 U	0.3 J	-	0.2 J	-	0.3 J	0.5 J	0.1 U	0.27 J	0.11 U	-
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Acetophenone	ug/L	N	700	1 U	1 U	3.2 J	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	4 U	4 U	10 J	1.1 U	-
Anthracene	ug/L	N	2000	0.1 U	0.72	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Atrazine	ug/L	N	3	1 U	1 U	1.2 U	-	2 U	-	2 U	-	2 U	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2.1 U	1.1 U	-
Benzaldehyde	ug/L	N	NA	1 U	1 U	1.2 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	1 UJ	1 U	-	1 U	-	1 U	3 U	3 U	3.2 U	1.1 U	-
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	**0.27J**	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Benzo(a)pyrene	ug/L	N	0.1	0.11 U	**0.23J**	0.13 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.18J	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 U	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	2 U	2.3 U	-	2 U	-	2 U	-	2 U	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	5 U	5.1 U	5.3 U	2.1 U	-
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.3 U	-	2 U	-	2 U	-	2 U	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2.1 U	2.1 U	-
Caprolactam	ug/L	N	4000	3 U	3 U	3.5 U	-	5 U	-	5 U	-	5 U	-	-	6 U	-	5 U	-	6 U	6 U	5 U	-	5 U	-	5 U	5 U	5.1 U	5.3 U	3.2 U	-
Carbazole	ug/L	N	NA	1.5 J	1.4 J	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.9 J	0.51 U	0.7 J	0.88 J	-
Chrysene	ug/L	N	5	0.1 U	0.48 J	0.12 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	1 U
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.3 U	-	2 U	-	2 U	-	2 U	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2.1 U	2.1 U	-
Di-n-octylphthalate	ug/L	N	100	5 U	5.1 U	5.8 U	-	2 U	-	2 U	-	2 U	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	5 U	5.1 U	5.3 U	5.3 U	-
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Dibenzofuran	ug/L	N	NA	1.9 J	1.5 J	0.58 U	-	0.5 U	-	1 J	-	0.5 U	-	-	0.8 J	-	0.5 U	-	0.8 J	0.9 J	0.6 J	-	0.6 J	-	0.7 J	0.9 J	0.51 U	0.53 U	0.53 U	-
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.3 U	-	2 U	-	2 U	-	2 UJ	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2.1 U	2.1 U	-
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.3 U	-	2 U	-	2 U	-	2 UJ	-	-	3 U	-	2 U	-	2 U	2 U	2 U	-	2 U	-	2 U	2 U	2 U	2.1 U	2.1 U	-
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	3 U	3 U	3.2 U	0.53 U	-
Fluoranthene	ug/L	N	300	0.1 U	0.36 J	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.11 U	-
Fluorene	ug/L	N	300	1.3	1.3	0.14 U	-	0.5	-	1	-	0.6	-	-	1	-	1	-	1	1	0.9	-	0.7	-	0.9	0.1 U	0.1 U	0.11 U	0.32 J	-
Hexachlorobenzene	ug/L	N	0.02	0.11 U	0.11 U	0.13 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5.1 U	5.8 U	-	5 U	-	5 U	-	5 U	-	-	6 U	-	5 U	-	6 U	6 U	5 U	-	5 U	-	5 U	5 U	5.1 U	5.3 U	5.3 U	-
Hexachloroethane	ug/L	N	7	0.5 U	0.51 U	0.58 U	-	1 U	-	1 U	-	1 U	-	-	1 U	-	1 U	-	1 U	1 U	1 U	-	1 U	-	1 U	1 U	1 U	1.1 U	0.53 U	-
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.11 U	0.11 U	0.13 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.11 U	0.12 U	-
Isophorone	ug/L	N	40	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.7 U	0.71 U	0.75 U	0.53 U	-
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.7 U	0.71 U	0.75 U	0.53 U	-
Naphthalene	ug/L	N	300	14	7.9	32 J	5 J	4	6	6	5 J	5	7	4 J	5 J	5	7	5 J	0.1 U	4 J	5	3 J	4	5	5 J	44	0.1 U	4.9	50	1 U
Nitrobenzene	ug/L	N	6	0.5 U	0.51 U	0.58 U	-	0.5 U	-	0.5 U	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	0.6 U	0.5 U	-	0.5 U	-	0.5 U	0.5 U	0.51 U	0.53 U	0.53 U	-
p-Chloro-m-cresol	ug/L	N	NA	1 U	1 U	1.2 U	-	0.5 U	-	-	-	0.5 U	-	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	-	-	0.5 U	1.6 UJ	1.7 U	1.1 U	-
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1.2 U	-	1 U	-	-	-	1 U	-	-	1 U	-	1 U	-	1 U	-	1 UJ	-	1 U	-	-	1 U	1 U	1.1 U	1.1 U	-
Phenanthrene	ug/L	N	NA	0.11 U	2	0.13 U	-	0.2 J	-	0.5 J	-	0.2 J	-	-	0.2 J	-	0.3 J	-	0.2 J	0.3 J	0.2 J	-	0.2 J	-	0.1 J	0.1 U	0.1 U	0.34 J	0.46 J	-
Phenol	ug/L	N	2000	3.3	51	19	-	0.5 U	-	-	-	4	-	-	4	-	2	-	0.6 U	-	5	-	8	-	-	0.5 U	0.51 U	19 UJ	3.7	-
Pyrene	ug/L	N	200	0.1 U	1	0.12 U	-	0.1 U	-	0.1 U	-	0.1 U	-	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.31 J	0.11 U	-
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1200 J	-	2800 J	-	-	-	-	1700 J	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	NF-13	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1
			Field Sample ID	NF13212X	NF13312X	NF13412X	NF13113X	NF13213X	NF13313X	NF13413X	NF13114X	NF13214X	NF13314X	NF13414X	NF13115X	NF13215X	NF13315X	NF13415X	NF13116X	P001B6X	P001B7X	P001B8X	P001B9X	P001C1X	P001C2X	P001C3X	P001C4X	P001C5X	P001C6X	P001C7X
			Sample Date	04/03/2012	07/11/2012	10/11/2012	01/29/2013	04/18/2013	07/18/2013	10/08/2013	02/27/2014	05/02/2014	07/25/2014	10/15/2014	01/23/2015	05/05/2015	08/11/2015	10/08/2015	03/16/2016	03/09/2012	08/09/2012	04/05/2013	09/25/2013	06/24/2014	11/14/2014	06/30/2015	02/17/2016	08/16/2016	02/08/2017	08/24/2017
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.8 J	0.6 U	0.9 J	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2,4-Dinitrophenol	ug/L	N	40	11 UJ	-	-	-	11 U	-	-	-	11 U	-	-	-	11 U	-	-	10 U	11 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.5 UJ	-	0.4 U	-	0.4 U	-	0.4 U	-	0.4 U	-	0.4 U	-	0.4 U	-	0.4 U	0.4 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.5 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 UJ	-	0.1 U	-	0.1 U	-	-	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	7	0.1 U	8	0.1 U	0.5 J	0.1 U	0.1 U	2 J	0.1 U	0.7
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	6 UJ	-	-	-	6 U	-	-	-	5 U	-	-	-	5 U	-	-	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	2 U	2 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	2 U	2 U	2 UJ	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 UJ	-	-	-	11 U	-	-	-	11 U	-	-	-	11 U	-	-	10 U	11 U	10 U	11 U	10 U	10 U	11 U	10 U	10 U	10 UJ	10 U	10 U
Acenaphthene	ug/L	N	400	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	220	190	100	160	90	190	38	53	170 J	82	83
Acenaphthylene	ug/L	N	NA	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	13	3	1	1	0.8	2	0.5	0.5	1 J	0.8	0.8
Acetophenone	ug/L	N	700	0.6 UJ	-	0.7 J	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Anthracene	ug/L	N	2000	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	2	9	5	5	2	4	0.3 J	2	2 J	2	1
Atrazine	ug/L	N	3	2 UJ	-	2 U	-	2 U	-	-	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 UJ	-	1 U	-	1 U	-	-	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	**0.2J**	**0.3J**	0.1J	**0.2J**	**0.2J**	**0.4J**	0.1 U	**0.2J**	**0.2J**	**0.2J**	**0.2J**
Benzo(a)pyrene	ug/L	N	0.1	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 UJ	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Caprolactam	ug/L	N	4000	6 UJ	-	5 U	-	6 U	-	-	-	5 U	-	6 U	-	5 U	-	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 U	5 U
Carbazole	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	9	9	2	11	1	10	0.9 J	0.6 J	6J	0.5 U	2
Chrysene	ug/L	N	5	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.2 J	0.1 U	0.1 J	0.2 J	0.2 J	0.4 J	0.1 U	0.1 J	0.2 J	0.2 J	0.1 U
Di-n-butylphthalate	ug/L	N	700	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	89	88	37	67	10	59	5	5	47 J	8	11
Diethylphthalate	ug/L	N	6000	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 UJ	-	2 U	-	2 UJ	-	2 U	-	2 U	-	2 U	-	2 U	-	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.6 UJ	-	0.5 U	-	0.6 U	-	-	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Fluoranthene	ug/L	N	300	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	8	15	9	11	10	11	3	4	7 J	5	4
Fluorene	ug/L	N	300	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	66	78	17	47	5	41	3	3	31 J	7	8
Hexachlorobenzene	ug/L	N	0.02	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	6 UJ	-	5 U	-	6 U	-	6 U	-	5 U	-	6 U	-	5 U	-	5 U	5 U	6 U	5 U	6 U	5 U	5 U	6 U	5 U	5 U	5 UJ	5 U	5 U
Hexachloroethane	ug/L	N	7	1 UJ	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	2 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.1 J	1 U	1 U	1 U	0.1 U	1 U	2 U	1 U	0.1 U	1 U	1 U	1 U	0.1 U	2 U	1 U	1 U	1	60	2	83	0.7	16	0.2 J	0.4 J	38 J	0.2 J	14
Nitrobenzene	ug/L	N	6	0.6 UJ	-	0.5 U	-	0.6 U	-	0.6 U	-	0.5 U	-	0.6 U	-	0.5 U	-	0.5 U	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.5 U	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	-	-	-	1 U	-	-	-	1 U	-	-	-	1 U	-	-	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	5	5	2	10	0.4 J	7	0.1 U	0.2 J	2 J	0.3 J	0.3 J
Phenol	ug/L	N	2000	0.6 UJ	-	-	-	0.6 U	-	-	-	0.5 U	-	-	-	0.5 U	-	-	0.8 J	0.6 U	0.5 U	0.6 U	0.5 U	0.5 U	0.6 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.1 UJ	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	-	0.1 U	0.1 U	5	8	6	6	7	7	2	3	4 J	3	3
Total TIC SVOCS	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report

Chevron Perth Amboy Facility

			Location ID	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02
			Field Sample ID	D1017178A	P001C8X	P001C9X	P001D2	P001D3X	P001D4X	D1207181	P001D5X	P001D6X	P001D7X	P001D8X	P001D9X	P001E1X	P001E2X	P001E3X	P001E4X	P001E5X	P001E6	P001E7	D1124211	P001E8	R002B4X	R002B5X	D0312148	R002B6X	R002B8X	R002C1X
			Sample Date	10/17/2017	10/17/2017	12/11/2017	06/06/2018	08/23/2018	10/01/2018	12/07/2018	12/07/2018	03/19/2019	06/12/2019	09/06/2019	12/06/2019	03/13/2020	06/12/2020	09/03/2020	12/08/2020	03/25/2021	06/24/2021	09/21/2021	11/24/2021	11/24/2021	04/30/2013	06/19/2013	03/12/2014	03/12/2014	07/31/2014	01/19/2015
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	0.5 U	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.7 U	3.4 U	3.4 U	3.1 U	3 U	3.2 U	3.2 U	0.6 UJ	0.6 U	-	-	0.6 U	2
2,4-Dinitrophenol	ug/L	N	40	10 UJ	10 U	11 U	14 U	14 U	14 U	14 U	14 U	14 U	13 U	14 U	14 U	15 U	14 U	17 U	16 U	16 U	15 U	14 U	15 U	15 U	11 UJ	12 U	-	-	12 U	11 U
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1 UJ	1 U	1 UJ	1.2 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	1 U	-	-	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 UJ	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 UJ	0.4 U	0.41 UJ	0.49 U	0.45 U	0.46 U	0.42 U	0.4 U	0.43 U	0.43 U	0.4 UJ	0.5 U	-	-	0.5 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.1 U	0.2 J	1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.4 UJ	0.4 J	-	-	0.3 J	1
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.5 U	2.2 U	1.1 U	1 U	1 U	1.1 U	1.1 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3.1 U	3.7 U	3.4 U	1.1 U	1 U	1 U	1.1 U	1.1 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 UJ	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 UJ	3.7 U	3.4 U	4.6 U	4.2 U	4 U	4.3 U	4.3 U	2 UJ	2 U	-	-	2 U	2 U
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 UJ	3.7 U	3.4 U	2.3 U	2.1 U	2 U	2.1 U	2.1 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 UJ	5 U	5 U	8 U	8 U	8 U	8 U	8 U	8 U	7 U	8 U	8 U	8 U	8.2 U	9.8 U	9 U	9.1 U	8.3 U	8.1 U	8.5 U	8.5 U	6 UJ	6 U	-	-	6 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
4-Chloroaniline	ug/L	N	30	2 U	2 UJ	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4.1 UJ	4.9 U	4.5 U	4.6 U	4.2 U	4 U	4.3 U	4.3 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	1 J	-	-	0.6 U	5
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.8 U	0.9 U	0.9 UJ	0.9 U	0.92 UJ	1.1 U	1 U	1 U	0.94 U	0.91 U	0.96 U	0.96 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
4-Nitrophenol	ug/L	N	NA	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	9 U	10 U	10 U	10 U	10 U	12 U	11 U	11 U	10 U	10 U	11 U	11 U	11 UJ	12 U	-	-	12 U	11 U
Acenaphthene	ug/L	N	400	110	150 J	110	47	31	43 J	39	37	59	16	84	80 UJ	24	35 J	55	26	40	35	17	46	52	0.1 UJ	0.3 J	-	-	0.1 U	0.1 U
Acenaphthylene	ug/L	N	NA	1	2 J	1	2	1	0.5	0.3 J	0.4 J	0.1 U	0.09 U	0.1 U	0.5 UJ	0.1 U	0.1 UJ	0.31 J	0.11 U	0.23 J	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1 U
Acetophenone	ug/L	N	700	0.5 U	0.5 UJ	0.5 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 UJ	4 U	4.1 UJ	4.9 U	4.5 U	1.1 U	1 U	1 U	1.1 U	1.1 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Anthracene	ug/L	N	2000	2	13 J	4	0.5 J	0.2 J	1	0.6	0.5 J	0.9	0.09 U	3	4 UJ	0.1 U	0.64 J	1.6	0.11 U	0.58	0.77	0.55	0.43 J	0.52 J	0.1 UJ	0.1 U	-	-	0.1 U	0.1 J
Atrazine	ug/L	N	3	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.5 U	2.2 U	1.1 U	1 U	1 U	1.1 U	1.1 U	2 UJ	2 U	-	-	2 U	2 U
Benzaldehyde	ug/L	N	NA	1 U	1 UJ	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 UJ	3.7 U	3.4 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	1 U	-	-	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	**0.5J**	**5J**	**2**	0.1 U	0.1 U	**0.8**	0.1 U	0.1 U	0.1 U	0.09 U	**2**	**2UJ**	0.1 U	0.1 UJ	**0.56J**	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1J
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	**2J**	**0.5**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	**0.8**	**0.7UJ**	0.1 U	0.1 UJ	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1J
Benzo(b)fluoranthene	ug/L	N	0.2	0.2J	**2J**	**0.6**	0.1 U	0.1 U	**0.4J**	0.1 U	0.1 U	0.1 U	0.09 U	**0.8**	**0.6UJ**	0.1 U	0.1 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.2J
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 J	1 J	0.3 J	0.1 U	0.1 U	0.3 J	0.1 U	0.1 U	0.1 U	0.09 U	0.5 J	0.4 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.5 J	0.2 J	0.1 U	0.1 U	0.4 J	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.2 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	**15J**	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	**5UJ**	5 UJ	5.1 UJ	6.1 U	5.6 U	2.3 U	2.1 U	2 U	2.1 U	2.1 U	2 UJ	2 U	-	-	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.5 U	2.2 U	2.3 U	2.1 U	2 U	2.1 U	2.1 U	2 UJ	2 U	-	-	2 U	2 U
Caprolactam	ug/L	N	4000	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5.1 UJ	6.1 U	5.6 U	3.4 U	3.1 U	47	3.2 U	3.2 U	6 UJ	6 U	-	-	6 U	5 U
Carbazole	ug/L	N	NA	0.5 U	0.5 UJ	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Chrysene	ug/L	N	5	0.5 J	5 J	1	0.1 U	0.1 U	0.7	0.1 U	0.1 U	0.1 U	0.09 U	2	1 UJ	0.1 U	0.1 UJ	0.47 J	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.2 J
Di-n-butylphthalate	ug/L	N	700	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.5 U	2.2 U	2.3 U	2.1 U	2 U	2.1 U	2.1 U	2 UJ	2 U	-	-	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	2 U	2 UJ	2 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5.1 UJ	6.1 U	5.6 U	5.7 U	5.2 U	5 U	5.3 U	5.3 U	2 UJ	2 U	-	-	2 U	2 J
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	**0.6J**	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1 U
Dibenzofuran	ug/L	N	NA	0.5 U	2 J	11	2 J	0.8 J	3	0.5 U	0.5 U	1 J	0.5 U	4	3 UJ	0.5 U	0.97 J	4.7	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Diethylphthalate	ug/L	N	6000	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.5 U	2.2 U	2.3 U	2.1 U	2 U	2.1 U	2.1 U	2 UJ	2 U	-	-	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2 U	2 UJ	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U	2 UJ	2.5 U	2.2 U	2.3 U	2.1 U	2 U	2.1 U	2.1 U	2 UJ	2 U	-	-	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 UJ	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 UJ	3 U	3.1 UJ	3.7 U	3.4 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Fluoranthene	ug/L	N	300	8	53 J	17	3	2	9	2	2	2	1	13	17 UJ	1	1.7 J	6.4	1.2	1.5	1.6	1.7	1.7	1.7	0.1 UJ	0.1 U	-	-	0.1 U	0.3 J
Fluorene	ug/L	N	300	0.3 J	2 J	9	0.4 J	0.1 U	0.8	0.1 U	0.1 U	0.1 U	0.09 U	1	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.14 U	0.13 U	0.12 U	0.13 U	0.13 U	0.1 UJ	0.2 J	-	-	0.1 U	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 UJ	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 UJ	5 U	5.1 UJ	6.1 U	5.6 U	5.7 U	5.2 U	5 U	5.3 U	5.3 U	6 UJ	6 U	-	-	6 U	5 U
Hexachloroethane	ug/L	N	7	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1 UJ	1 U	1 UJ	1.2 U	1.1 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	1 U	1 U	-	-	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	**0.6J**	0.2J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.13 U	0.11 U	0.11 U	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	0.1 U	0.1 U
Isophorone	ug/L	N	40	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.7 UJ	0.7 U	0.71 UJ	0.86 U	0.78 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 UJ	0.5 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.7 U	0.6 U	0.7 U	0.7 UJ	0.7 U	0.71 UJ	0.86 U	0.78 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Naphthalene	ug/L	N	300	0.1 U	0.3 J	20	0.2 J	0.4 J	0.8	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.11 U	0.1 U	0.1 U	0.11 U	0.11 U	4 J	4 J	1 U	1 U	3	10
Nitrobenzene	ug/L	N	6	0.5 U	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 UJ	0.5 U	0.51 UJ	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	0.5 UJ	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	2 U	1.6 U	2 U	1.8 U	1.1 U	1 U	1 U	1.1 U	1.1 U	0.6 UJ	0.6 U	-	-	0.6 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1.2 U	1.1 U	1.1 U	1 U	1 U	1.1 U	1.1 U	1 UJ	1 U	-	-	1 U	1 U
Phenanthrene	ug/L	N	NA	0.1 U	0.1 UJ	2	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.09 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.12 U	0.11 U	0.13 U	0.11 U	0.13 J	0.12 U	0.12 U	0.1 UJ	0.1 U	-	-	0.1 U	0.3 J
Phenol	ug/L	N	2000	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.51 U	0.61 U	0.56 U	0.57 U	0.52 U	0.5 U	0.53 U	0.53 U	0.6 UJ	2	-	-	5	24
Pyrene	ug/L	N	200	7	46 J	13	2	1	7	2	2	1	0.7	11	12 UJ	0.1 U	1.1 J	4.5	0.89	0.91	1.1	1.1	1	0.98	0.1 UJ	0.1 U	-	-	0.2 J	0.3 J
Total TIC SVOCS	ug/L	N	NA	240 J	540 J	-	290 J	-	370 J	270 J	360 J	200 J	250 J	420 J	250 UJ	-	-	-	-	-	-	-	-	-	360 UJ	520 J	-	-	310 J	-

Notes:

1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-02	RW-02	RW-02	RW-02	RW-21	RW-21	RW-31	RW-31	RW-31	RW-31	RW-31	RW-35R	RW-35R	RW-35R	RW-35R	RW-35R	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41
			Field Sample ID	R002C3X	R002C9X	R002D5X	R002D6X	R021B9X	R021C1	R031C1X	R031C2X	R031C3	R031C4	R031C5	D0223218X	R035RB7X	R035RB8	R035RB9	R035RC1	R041A1	R041A3X	R041A6X	R041B5X	R041B6X	R041B7	D0610211A	R41B8	R041B9	R041C1
			Sample Date	12/14/2015	11/29/2017	12/04/2020	03/30/2021	08/27/2020	04/23/2021	11/20/2020	02/26/2021	05/11/2021	08/05/2021	11/03/2021	02/23/2021	02/23/2021	05/04/2021	08/04/2021	11/10/2021	08/16/2013	12/10/2015	07/21/2016	11/20/2020	02/25/2021	05/07/2021	06/10/2021	06/10/2021	08/05/2021	11/11/2021
Parameter Name	**Report Units**	**Filtered**	**DMS CMI GW Criteria**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
2,4,5-Trichlorophenol	ug/L	N	700	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.52 U	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
2,4,6-Trichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.52 U	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
2,4-Dichlorophenol	ug/L	N	20	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.52 U	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
2,4-Dimethylphenol	ug/L	N	100	0.5 U	1	3.1 U	3 U	3.1 U	3.1 U	3.3 U	3.6 U	3.3 U	3 U	3 UJ	6.7 J	5.7 J	14	11	13	-	0.5 U	0.5 U	3.2 U	3.3 UJ	3.1 U	3 U	3 UJ	3 U	3.2 UJ
2,4-Dinitrophenol	ug/L	N	40	10 U	11 U	14 U	14 U	14 U	14 U	15 UJ	17 U	15 U	14 U	14 UJ	15 U	15 U	14 U	14 U	14 U	-	10 U	10 U	15 U	15 UJ	14 U	14 U	14 UJ	14 U	15 UJ
2,4-Dinitrotoluene	ug/L	N	10	1 U	1 U	1 U	1 U	1 U	1 U	1.1 UJ	1.2 U	1.1 U	1 U	1 UJ	1.1 UJ	1.1 UJ	1 UJ	1 U	0.98 U	-	1 U	1 U	1.1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 UJ
2,6-Dinitrotoluene	ug/L	N	5	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
2-Chloronaphthalene	ug/L	N	600	0.4 U	0.4 U	0.41 U	0.4 U	0.41 U	0.41 U	0.44 UJ	0.48 U	0.44 U	0.4 U	0.4 UJ	0.43 UJ	0.42 UJ	0.41 UJ	0.41 U	0.39 U	-	0.4 U	0.4 U	0.43 U	0.44 U	0.41 U	0.4 U	0.4 U	0.41 U	0.43 UJ
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 U	0.53 U	0.52 U	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
2-Methylnaphthalene	ug/L	N	30	0.3 J	0.3 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	2.7 J	2.7 J	3.1 J	1.5	0.098 U	-	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 U	2 J	7	8.9	4.6	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	0.5 U	0.5 U	2.1 U	1 U	2 U	1 U	2.2 UJ	1.2 U	1.1 U	1 U	1 UJ	1.1 UJ	1.1 UJ	1 UJ	1 U	0.98 U	-	0.5 U	0.5 U	2.1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 UJ
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	0.5 U	0.5 U	3.1 U	1 U	3.1 U	1 U	3.3 UJ	1.2 U	1.1 U	1 U	1 UJ	1.1 U	1.1 U	1 U	1 U	0.98 U	-	0.5 U	0.5 U	3.2 UJ	1.1 UJ	1 U	1 U	1 UJ	1 U	1.1 UJ
3,3'-Dichlorobenzidine	ug/L	N	30	2 U	2 U	3.1 U	4 U	3.1 U	4.1 U	3.3 UJ	4.8 U	4.4 U	4 U	4 UJ	4.3 UJ	4.2 UJ	4.1 UJ	4.1 U	3.9 U	-	2 U	2 U	3.2 U	4.4 U	4.1 U	4 U	4 U	4.1 U	4.3 UJ
3-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	3.1 U	2 U	3.1 U	2 U	3.3 UJ	2.4 U	2.2 U	2 U	2 UJ	2.1 UJ	2.1 UJ	2.1 UJ	2 U	2 U	-	0.5 U	0.5 U	3.2 U	2.2 U	2 U	2 U	2 U	2 U	2.2 UJ
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	5 U	5 U	8.2 U	8.1 U	8.2 U	8.2 U	8.8 U	9.6 U	8.8 U	8.1 U	8 UJ	8.5 U	8.5 U	8.3 UJ	8.1 U	7.8 U	-	5 U	5 U	8.6 U	8.8 UJ	8.2 U	8 U	8 UJ	8.1 U	8.6 UJ
4-Bromophenylphenylether	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
4-Chloroaniline	ug/L	N	30	2 U	2 U	4.1 U	4 U	4.1 U	4.1 U	4.4 UJ	4.8 U	4.4 U	4 U	4 UJ	4.3 UJ	4.2 UJ	4.1 UJ	4.1 U	3.9 U	-	2 U	2 U	4.3 U	4.4 U	4.1 U	4 U	4 U	4.1 U	4.3 UJ
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	2.3	2 J	5.3	0.51 U	2.3	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
4-Nitroaniline	ug/L	N	NA	0.5 U	0.5 U	0.93 U	0.91 U	0.92 U	0.92 U	0.99 UJ	1.1 U	0.99 U	0.91 U	0.9 UJ	0.96 UJ	0.96 UJ	0.93 UJ	0.91 U	0.88 U	-	0.5 U	0.5 U	0.96 U	0.99 U	0.92 U	0.9 U	0.9 U	0.91 U	0.97 UJ
4-Nitrophenol	ug/L	N	NA	10 U	11 U	10 U	10 U	10 U	10 U	11 U	12 U	11 U	10 U	10 UJ	11 U	11 U	10 U	10 U	9.8 U	-	10 U	10 U	11 U	11 UJ	10 U	10 U	10 UJ	10 U	11 UJ
Acenaphthene	ug/L	N	400	0.1 U	0.1 U	0.13 J	0.1 U	0.15 J	0.1 U	1.3 J	1.1	0.11 U	0.56	0.74 J	0.11 UJ	0.19 J	0.1 UJ	0.1 U	0.098 U	-	0.5	0.4 J	0.27 J	0.11 U	0.23 J	0.1 U	0.1 U	0.21 J	0.11 UJ
Acenaphthylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Acetophenone	ug/L	N	700	0.5 U	0.5 U	4.1 U	1 U	4.1 U	1 U	4.4 UJ	1.2 U	1.1 U	1 U	1 UJ	7.4 J	7 J	22 J	5.8	4.6 J	-	0.5 U	0.5 U	4.3 U	1.1 U	1 U	1 U	1 U	1 U	1.1 UJ
Anthracene	ug/L	N	2000	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.3 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Atrazine	ug/L	N	3	2 U	2 U	2.1 U	1 U	2 U	1 U	2.2 UJ	1.2 U	1.1 U	1 U	1 UJ	1.1 UJ	1.1 UJ	1 UJ	1 U	0.98 U	-	2 U	2 U	2.1 U	1.1 U	1 U	1 U	1 U	1 U	1.1 UJ
Benzaldehyde	ug/L	N	NA	1 U	1 U	3.1 U	1 U	3.1 U	1 U	3.3 UJ	1.2 U	1.1 U	1 U	1 UJ	1.1 UJ	1.1 UJ	1 UJ	1 U	0.98 U	-	1 U	1 U	3.2 U	1.1 U	1 U	1 U	1 U	1 U	1.1 UJ
Benzo(a)anthracene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Benzo(a)pyrene	ug/L	N	0.1	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 UJ	0.13 U	0.12 U	0.11 U	0.11 UJ	0.12 UJ	0.12 UJ	0.11 UJ	0.11 U	0.11 U	-	**0.2J**	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 UJ
Benzo(b)fluoranthene	ug/L	N	0.2	0.1 U	0.1J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.2J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Benzo(g,h,i)perylene	ug/L	N	NA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.2 J	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Benzo(k)fluoranthene	ug/L	N	0.5	0.1 U	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
bis(2-Chloroethyl) ether	ug/L	N	7	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
bis(2-chloroisopropyl) ether	ug/L	N	300	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2 U	3 J	5.1 U	2 U	5.1 U	2 U	5.5 UJ	2.4 U	2.2 U	2 U	2 UJ	2.1 UJ	2.1 UJ	2.1 UJ	2 U	2 U	-	2 U	2 U	5.3 U	2.2 U	2 U	2 U	2 U	2 U	2.2 UJ
Butylbenzylphthalate	ug/L	N	100	2 U	2 U	2.1 U	2 U	2 U	2 U	2.2 UJ	2.4 U	2.2 U	2 U	2 UJ	2.1 UJ	2.1 UJ	2.1 UJ	2 U	2 U	-	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 UJ
Caprolactam	ug/L	N	4000	5 U	5 U	5.1 U	3 U	5.1 U	3.1 U	5.5 UJ	3.6 U	3.3 U	3 U	3 UJ	3.2 UJ	3.2 UJ	3.1 U	3 U	2.9 U	-	5 U	5 U	5.3 U	3.3 U	3.1 U	3 U	3 U	3 U	3.2 UJ
Carbazole	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
Chrysene	ug/L	N	5	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Di-n-butylphthalate	ug/L	N	700	2 U	2 U	2.1 U	2 U	2 U	2 U	2.2 UJ	2.4 U	2.2 U	2 U	2 UJ	2.1 UJ	2.1 UJ	2.1 UJ	2 U	2 U	-	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 UJ
Di-n-octylphthalate	ug/L	N	100	2 U	2 U	5.1 U	5.1 U	5.1 U	5.1 U	5.5 UJ	6 U	5.5 U	5 U	5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.1 U	4.9 U	-	2 U	2 U	5.3 UJ	5.5 U	5.1 U	5 U	5 U	5.1 U	5.4 UJ
Dibenz(a,h)anthracene	ug/L	N	0.3	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Dibenzofuran	ug/L	N	NA	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
Diethylphthalate	ug/L	N	6000	2 U	2 U	2.1 U	2 U	2 U	2 U	2.2 UJ	2.4 U	2.2 U	2 U	2 UJ	2.1 UJ	2.1 UJ	2.1 UJ	2 U	2 U	-	2 U	2 U	2.1 U	2.2 UJ	2 U	2 U	2 U	2 U	2.2 UJ
Dimethyl phthalate	ug/L	N	NA	2 U	2 U	2.1 U	2 U	2 U	2 UJ	2.2 UJ	2.4 U	2.2 U	2 U	2 UJ	2.1 UJ	2.1 UJ	2.1 UJ	2 U	2 U	-	2 U	2 U	2.1 U	2.2 U	2 U	2 U	2 U	2 U	2.2 UJ
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.5 U	0.5 U	3.1 U	0.51 U	3.1 U	0.51 U	3.3 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	3.2 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
Fluoranthene	ug/L	N	300	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.4 J	0.2 J	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Fluorene	ug/L	N	300	0.1 U	0.1 U	0.1 U	0.12 U	0.1 U	0.12 U	0.11 UJ	0.14 U	0.13 U	0.45 J	0.51 J	0.13 UJ	0.27 J	0.12 UJ	0.12 U	0.22 J	-	0.5 J	0.3 J	0.11 U	0.13 U	0.21 J	0.12 U	0.12 U	0.23 J	0.13 UJ
Hexachlorobenzene	ug/L	N	0.02	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 UJ	0.13 U	0.12 U	0.11 U	0.11 UJ	0.12 UJ	0.12 UJ	0.11 UJ	0.11 U	0.11 U	-	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 UJ
Hexachlorobutadiene	ug/L	N	1	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
Hexachlorocyclopentadiene	ug/L	N	40	5 U	5 U	5.1 U	5.1 U	5.1 U	5.1 U	5.5 UJ	6 U	5.5 U	5 U	5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.1 U	4.9 U	-	5 U	5 U	5.3 U	5.5 U	5.1 U	5 U	5 U	5.1 U	5.4 UJ
Hexachloroethane	ug/L	N	7	1 U	1 U	1 U	0.51 U	1 U	0.51 U	1.1 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	1 U	1 U	1.1 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.1 U	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 UJ	0.13 U	0.12 U	0.11 U	0.11 UJ	0.12 UJ	0.12 UJ	0.11 UJ	0.11 U	0.11 U	-	0.2J	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 UJ
Isophorone	ug/L	N	40	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.61 J	0.53 UJ	0.88 J	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
N-Nitrosodi-n-propylamine	ug/L	N	10	0.5 U	0.5 U	0.72 U	0.51 U	0.71 U	0.51 U	0.77 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.75 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.5 U	0.5 U	0.72 U	0.51 U	0.71 U	0.51 U	0.77 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.75 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
Naphthalene	ug/L	N	300	3	3	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	5.4 J	5.6 J	8 J	6.8	5.9	1 U	0.1 U	0.1 U	0.11 U	0.11 U	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ
Nitrobenzene	ug/L	N	6	0.5 U	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 UJ	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 UJ	0.53 UJ	0.52 UJ	0.51 U	0.49 U	-	0.5 U	0.5 U	0.53 U	0.55 U	0.51 U	0.5 U	0.5 U	0.51 U	0.54 UJ
p-Chloro-m-cresol	ug/L	N	NA	0.5 U	0.5 U	1.6 U	1 U	1.6 U	1 U	1.8 U	1.2 U	1.1 U	1 U	1 UJ	1.1 U	1.1 U	1 U	1 U	0.98 U	-	0.5 U	0.5 U	1.7 U	1.1 UJ	1 U	1 U	1 UJ	1 U	1.1 UJ
Pentachlorophenol	ug/L	N	0.3	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.2 U	1.1 U	1 U	1 UJ	1.1 U	1.1 U	1 U	1 U	0.98 U	-	1 U	1 U	1.1 U	1.1 UJ	1 U	1 U	1 UJ	1 U	1.1 UJ
Phenanthrene	ug/L	N	NA	0.1 J	0.1 U	0.1 U	0.11 U	0.1 U	0.11 U	0.11 UJ	0.13 U	0.12 U	0.11 U	0.11 UJ	0.39 J	0.42 J	0.11 UJ	0.11 U	0.39 J	-	0.1 U	0.1 U	0.11 U	0.12 U	0.11 U	0.11 U	0.11 U	0.11 U	0.12 UJ
Phenol	ug/L	N	2000	3	0.5 U	0.51 U	0.51 U	0.51 U	0.51 U	0.55 U	0.6 U	0.55 U	0.5 U	0.5 UJ	0.53 U	3	7.4	0.51 U	4.8	-	0.5 U	0.5 U	0.53 U	0.55 UJ	0.51 U	0.5 U	0.5 UJ	0.51 U	0.54 UJ
Pyrene	ug/L	N	200	0.2 J	0.1 J	0.1 U	0.1 U	0.1 U	0.1 U	0.11 UJ	0.12 U	0.11 U	0.1 U	0.1 UJ	0.11 UJ	0.11 UJ	0.1 UJ	0.1 U	0.098 U	-	0.6	0.2 J	0.23 J	0.11 U	0.11 J	0.1 U	0.1 U	0.1 U	0.11 UJ
Total TIC SVOCS	ug/L	N	NA	-	460 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

MNA Appendix A6 Main Yard - SVOCs and TICs
Historical Groundwater VOC Concentration Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-41	RW-42	RW-42	RW-42	RW-42
			Field Sample ID	R041C2	R042B5	D1204158	R042B7X	R042B9X
			Sample Date	12/15/2021	08/12/2013	12/04/2015	12/04/2015	07/29/2016
Parameter Name	Report Units	Filtered	DMS CMI GW Criteria	Report Result	Report Result	Report Result	Report Result	Report Result
2,4,5-Trichlorophenol	ug/L	N	700	0.56 U	-	0.5 U	0.5 U	0.5 U
2,4,6-Trichlorophenol	ug/L	N	20	0.56 U	-	0.5 U	0.5 U	0.5 U
2,4-Dichlorophenol	ug/L	N	20	0.56 U	-	0.5 U	0.5 U	0.5 U
2,4-Dimethylphenol	ug/L	N	100	3.4 U	-	2	2	0.5 U
2,4-Dinitrophenol	ug/L	N	40	16 U	-	10 U	10 U	10 U
2,4-Dinitrotoluene	ug/L	N	10	1.1 U	-	1 U	1 U	1 U
2,6-Dinitrotoluene	ug/L	N	5	0.56 U	-	0.5 U	0.5 U	0.5 U
2-Chloronaphthalene	ug/L	N	600	0.45 U	-	0.4 U	0.4 U	0.4 U
2-Chlorophenol (o-Chlorophenol)	ug/L	N	40	0.56 U	-	0.5 U	0.5 U	0.5 U
2-Methylnaphthalene	ug/L	N	30	0.11 U	-	0.1 J	13	0.1 U
2-Methylphenol (o-Cresol)	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
2-Nitroaniline (o-Nitroaniline)	ug/L	N	NA	1.1 U	-	0.5 U	0.5 U	0.5 U
2-Nitrophenol (o-Nitrophenol)	ug/L	N	NA	1.1 U	-	0.5 U	0.5 U	0.5 U
3,3'-Dichlorobenzidine	ug/L	N	30	4.5 UJ	-	2 U	2 U	2 U
3-Nitroaniline	ug/L	N	NA	2.2 U	-	0.5 U	0.5 U	0.5 U
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol)	ug/L	N	NA	8.9 U	-	5 U	5 U	5 U
4-Bromophenylphenylether	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
4-Chloroaniline	ug/L	N	30	4.5 U	-	2 U	2 U	2 U
4-Chlorophenyl phenyl ether	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
4-Methylphenol (p-Cresol)	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
4-Nitroaniline	ug/L	N	NA	1 U	-	0.5 U	0.5 U	0.5 U
4-Nitrophenol	ug/L	N	NA	11 UJ	-	10 U	10 U	10 U
Acenaphthene	ug/L	N	400	0.11 U	-	0.2 J	4	0.1 U
Acenaphthylene	ug/L	N	NA	0.11 U	-	0.1 U	38	0.1 U
Acetophenone	ug/L	N	700	1.1 U	-	0.5 U	0.6 J	0.5 U
Anthracene	ug/L	N	2000	0.11 U	-	0.1 U	10	0.1 U
Atrazine	ug/L	N	3	1.1 U	-	2 U	2 U	2 U
Benzaldehyde	ug/L	N	NA	1.1 U	-	1 U	1 U	1 U
Benzo(a)anthracene	ug/L	N	0.1	0.11 U	-	0.1 U	**22**	0.1 U
Benzo(a)pyrene	ug/L	N	0.1	0.12 U	-	0.1J	**14**	0.1 U
Benzo(b)fluoranthene	ug/L	N	0.2	0.11 U	-	0.2J	**12**	0.1 U
Benzo(g,h,i)perylene	ug/L	N	NA	0.11 U	-	0.1 U	4	0.1 U
Benzo(k)fluoranthene	ug/L	N	0.5	0.11 U	-	0.1 U	**3**	0.1 U
bis(2-Chloroethoxy)methane	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
bis(2-Chloroethyl) ether	ug/L	N	7	0.56 U	-	0.5 U	0.5 U	0.5 U
bis(2-chloroisopropyl) ether	ug/L	N	300	0.56 U	-	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate	ug/L	N	3	2.2 U	-	2 U	2 U	2 U
Butylbenzylphthalate	ug/L	N	100	2.2 U	-	2 U	2 U	2 U
Caprolactam	ug/L	N	4000	3.4 U	-	5 U	5 U	5 U
Carbazole	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
Chrysene	ug/L	N	5	0.11 U	-	0.2 J	**25**	0.1 U
Di-n-butylphthalate	ug/L	N	700	2.2 U	-	2 U	2 U	2 U
Di-n-octylphthalate	ug/L	N	100	5.6 U	-	2 U	2 U	2 U
Dibenz(a,h)anthracene	ug/L	N	0.3	0.11 U	-	0.1 U	**2**	0.1 U
Dibenzofuran	ug/L	N	NA	0.56 U	-	0.5 U	0.5 U	0.5 U
Diethylphthalate	ug/L	N	6000	2.2 U	-	2 U	2 U	2 U
Dimethyl phthalate	ug/L	N	NA	2.2 UJ	-	2 U	2 U	2 U
Diphenyl (Biphenyl, Phenyl benzene)	ug/L	N	400	0.56 U	-	0.5 U	7	0.5 U
Fluoranthene	ug/L	N	300	0.11 U	-	0.3 J	27	0.1 U
Fluorene	ug/L	N	300	0.16 J	-	0.2 J	19	0.1 U
Hexachlorobenzene	ug/L	N	0.02	0.12 U	-	0.1 U	0.1 U	0.1 U
Hexachlorobutadiene	ug/L	N	1	0.56 U	-	0.5 U	0.5 U	0.5 U
Hexachlorocyclopentadiene	ug/L	N	40	5.6 U	-	5 U	5 U	5 U
Hexachloroethane	ug/L	N	7	0.56 U	-	1 U	1 U	1 U
Indeno(1,2,3-cd)Pyrene	ug/L	N	0.2	0.12 U	-	0.1 U	**3**	0.1 U
Isophorone	ug/L	N	40	0.56 U	-	0.5 U	0.5 U	0.5 U
N-Nitrosodi-n-propylamine	ug/L	N	10	0.56 U	-	0.5 U	0.5 U	0.5 U
N-Nitrosodimethylamine	ug/L	N	NA	-	-	-	-	-
N-Nitrosodiphenylamine (Diphenylamine)	ug/L	N	10	0.56 U	-	0.5 U	0.5 U	0.5 U
Naphthalene	ug/L	N	300	0.11 U	1 UJ	0.2 J	17	0.1 U
Nitrobenzene	ug/L	N	6	0.56 U	-	0.5 U	0.5 U	0.5 U
p-Chloro-m-cresol	ug/L	N	NA	1.1 U	-	0.5 U	0.5 U	0.5 U
Pentachlorophenol	ug/L	N	0.3	1.1 U	-	1 U	1 U	1 U
Phenanthrene	ug/L	N	NA	0.12 U	-	0.1 J	73	0.1 U
Phenol	ug/L	N	2000	0.56 U	-	0.5 U	0.5 U	0.5 U
Pyrene	ug/L	N	200	0.11 U	-	0.3 J	45	0.1 U
Total TIC SVOCS	ug/L	N	NA	-	-	240 J	400 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. NJDEP Approved Site Cleanup Critera
5. J - Estimated value
6. U - Not detected

APPENDIX B

Geochemical Parameter Results in Groundwater

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0037R	MW-0037RR	MW-0044	MW-0044	MW-0044	MW-0044	MW-0044	MW-0044	MW-0044	MW-0045	MW-0045	MW-0045	MW-0045	MW-0054	MW-0054
			Field Sample ID	M037RA1	M037RRC3	M044B9	M044B9X	M044B9X	M044C1	M044C1X	M044C2	M044C2X	M045B9	M045B9X	M045C1	M045C1X	D08151312	M054B3
			Sample Date	08/20/2013	05/13/2021	04/02/2012	04/03/2012	04/03/2012	06/12/2012	06/13/2012	08/05/2013	08/06/2013	06/27/2012	06/28/2012	08/07/2013	08/08/2013	08/15/2013	08/15/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	6300	-	-	-	10 U	-	-	-	-	-	-	-	-	860	890
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8450**	**3200**	**1320**	-	-	196 J	-	285	-	**7740**	-	**6730**	-	**2340**	**2460**
Iron	ug/L	Y	300	-	2600 UJ	14.1 U	-	-	14.1 U	-	43.0 U	-	**7340**	-	**6410**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	3500	1900	-	9.5	-	-	5.0 U	-	3.0 U	-	5.0 U	-	3.0 U	10000	12000
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	93 J	-	-	1500	-	3300	-	910	-	40 U	-	40 U	40 U	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**323000**	150000 J	-	-	36300	-	12400	-	38700	-	98500	-	83500	20700	19700

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-0054	MW-0054	MW-0054	MW-0054	MW-0054R	MW-0054R	MW-0054R	MW-0055	MW-0055	MW-0055	MW-0055R	MW-0055R	MW-0055R	MW-0055R	MW-0056
			Field Sample ID	D1202148	M054B5	D1203148	M054B5X	M054RD9	M054RE1	M054RE3	M055A1	M055A2	M055A2X	M055RC6	M055RC7	M055RC8	M055RC9	M056B2
			Sample Date	12/02/2014	12/02/2014	12/03/2014	12/03/2014	05/14/2021	07/30/2021	02/01/2022	08/14/2013	12/02/2014	12/03/2014	05/14/2021	07/30/2021	12/21/2021	02/01/2022	08/14/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	2800	-	-	-	-	-	-	3800
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**369**	**414**	-	-	**1500**	**3300**	**310**	**2790**	**10800**	-	**470J**	**640**	**670**	**540**	**3750**
Iron	ug/L	Y	300	76.6 UJ	81.7 UJ	-	-	1300 UJ	**1900**	59 J	-	**10400**	-	370 UJ	190 J	270	280	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	37	15	3.4 J	9200	-	-	420	560	810	800	440
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 UJ	40 UJ	40 UJ	40 U	-	-	40 UJ	40 UJ	40 UJ	40 UJ	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	15 U	15 U	15 U	-	-	15 U	15 U	15 U	15 U	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	169000	163000 J	**270000J**	110000 J	72000 J	4100 J	-	162000	**480000J**	**470000J**	**280000J**	**300000J**	**359000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0056R	MW-0056R	MW-101	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102	MW-102R	MW-102R	MW-102R	MW-103	MW-103
			Field Sample ID	M056RD8	M056RD9	M101B8	M102B9	M102B9X	M102B9X	M102C1	M102C1X	M102C4	M102C4X	M102RA8	M102RA9	M102RB1	M103B3	M103B3X
			Sample Date	05/13/2021	12/21/2021	08/07/2013	04/03/2012	04/03/2012	04/03/2012	06/12/2012	06/13/2012	08/12/2013	08/13/2013	05/21/2021	09/30/2021	12/28/2021	08/26/2013	08/27/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	3800	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	170 J	170 J	**58000**	**3210**	-	-	**2480**	-	**634**	-	**41000**	**1300**	**1700**	**24600**	-
Iron	ug/L	Y	300	41 U	41 U	**58100**	-	-	-	**1990**	-	145 J	-	**32000**	**1100**	**1300**	**21400**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	5800	8700 J	-	-	2500	-	-	5.2 J	-	1600	320	810	1900	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 U	-	-	40 U	-	4000	-	40 U	40 UJ	76 J	40 UJ	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	54	-	-	170	-	15 U	-	15 U	15 U	15 U	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**290000J**	130000 J	183000	-	-	12100	-	36800	-	40000	**270000J**	72000 J	11000 J	-	20700

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103
			Field Sample ID	M103B4	M103B4X	M103B5	M103B5X	M103HS	M103B6	M103B6X	M103B7	M103B7X	M103C1	M103C1X	M103C2	M103C2X	M103C4	M103C4X
			Sample Date	08/20/2014	08/21/2014	07/15/2015	07/16/2015	02/02/2016	02/11/2016	02/12/2016	08/18/2016	08/19/2016	02/27/2018	02/28/2018	08/13/2018	08/14/2018	03/11/2019	03/11/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**36500**	-	**11000**	-	**5270**	**2710**	-	**4560**	-	**2600**	-	**4340**	-	**3130**	-
Iron	ug/L	Y	300	**33500**	-	**10000**	-	201	88.8 J	-	97.8 J	-	80.5 U	-	**1190**	-	40 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	42 J	-	360	1800	-	850	-	310	-	1700	-	1100	-	1200 UJ
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	15 U	-	17 J	-	24 J	-	16 J	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	55700	-	80200	72600	-	157000	-	78300	-	113000	-	58500	-	170000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-103	MW-105	MW-105	MW-108	MW-108	MW-108	MW-108	MW-108
			Field Sample ID	M103C5	M103C5X	M103C6	M103C6X	M103C7	M103C7X	M103C8	M103C9	M105B8	M105B9	M108B6	M108B6X	M108B7	M108B7X	M108B8
			Sample Date	09/18/2019	09/18/2019	03/11/2020	03/11/2020	09/23/2020	09/23/2020	06/24/2021	12/17/2021	07/28/2016	10/26/2016	08/06/2013	08/15/2013	08/20/2014	08/21/2014	12/19/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	225000 J	189000 J	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3790J**	-	**1960**	-	-	-	**750**	**20000**	**248000**	**223000**	**15800**	-	**28700**	-	**552**
Iron	ug/L	Y	300	**2080**	-	92.0 J	-	**12000**	-	41 U	**17000**	**304000**	**211000**	**15700**	-	**17700**	-	135 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	12000	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	1000	2900	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	380	-	40 UJ	940 J	40 UJ	250 U	250 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	15 U	15 U	-	-	-	36 J	-	16 J	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	47800 J	-	153000 J	-	89000 J	200000 J	77000 J	**572000**	**473000**	-	15300 J	-	27100	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-108	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110
			Field Sample ID	M108B8X	M108C1	M108C1X	M108C2	M108C2X	M108C3	M108C3X	M108C4	M108C4X	M110B4	M110B4X	M110B5	M110B5X	D1202151	M110B6
			Sample Date	12/20/2016	02/28/2018	03/01/2018	03/05/2019	03/05/2019	02/17/2020	02/17/2020	03/31/2021	03/31/2021	08/06/2013	08/15/2013	08/21/2014	08/22/2014	12/02/2015	12/02/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1200**	-	**4760**	-	**12200**	-	**1100**	-	**37000**	-	**60400**	-	**16400**	**16200**
Iron	ug/L	Y	300	-	**591**	-	**2940**	-	157 J	-	**430**	-	**26000**	-	**50900**	-	**6300**	**8440**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	-	40 U	-	40 U	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 UJ	-	15 J	-	15 U	-	44 J	-	52	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	27100	-	27200	-	25200	-	23100 J	-	26000 J	-	**364000**	-	**486000**	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-110	MW-111	MW-111	MW-111
			Field Sample ID	D1203151	M110B6X	D0920161	M110B7	D0921161	M110B7X	M110B9	M110B9X	M110C1	M110C1X	M110C2	M110C2X	M111B5	M111B6	M111B6X
			Sample Date	12/03/2015	12/03/2015	09/20/2016	09/20/2016	09/21/2016	09/21/2016	02/28/2018	03/01/2018	02/28/2019	02/28/2019	02/25/2020	02/26/2020	06/18/2012	08/06/2013	08/15/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**25900**	**26400**	-	-	**100000**	-	**121000**	-	**36900**	-	**55400**	**38100**	-
Iron	ug/L	Y	300	-	-	**23900**	**24200**	-	-	**99900**	-	**110000**	-	**36500**	-	-	**37300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	40 U	-	-	40 U	40 U	-	40 U	-	41 UJ	-	40 U	-	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	40 J	40 J	-	-	42 J	41 J	-	74	-	15 U	-	45 J	-	-	120
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**419000**	**414000**	-	-	**438000**	**468000**	-	**377000**	-	**473000**	-	**315000J**	-	-	**457000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-111	MW-129	MW-129	MW-129
			Field Sample ID	M111B7	M111B7X	M111B8	M111B8X	D0228181	M111C1	D0301181	M111C1X	M111C2	M111C2X	M111C3	M111C3X	M129C1	M129C1X	M129C3
			Sample Date	08/20/2014	08/21/2014	09/22/2016	09/23/2016	02/28/2018	02/28/2018	03/01/2018	03/01/2018	02/28/2019	02/28/2019	02/25/2020	02/26/2020	06/28/2012	06/29/2012	08/21/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**50300**	-	**93800**	-	**23800**	**22600**	-	-	**23000**	-	**19500**	-	**1550**	-	**2540**
Iron	ug/L	Y	300	**52800**	-	**96400**	-	**23300**	**23500**	-	-	**28600**	-	**20300**	-	**1450**	-	**2600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2700	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	-	40 U	40 U	-	300	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	220	-	15 J	-	-	160	160	-	15 U	-	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**432000**	-	**498000**	-	-	**466000**	**513000**	-	**436000**	-	**420000J**	-	2500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129
			Field Sample ID	M129C3X	M129C4	M129C4X	M129C5	M129C5X	M129C6	M129C6X	M129D3	M129D3X	M129D4X	D0617191	M129D9	M129D9X	D1204191A	M129D6
			Sample Date	08/22/2014	07/15/2015	07/16/2015	04/25/2016	04/26/2016	08/04/2016	08/05/2016	06/13/2018	06/14/2018	12/03/2018	06/17/2019	06/17/2019	06/17/2019	12/04/2019	12/04/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**2240**	-	**1550**	-	**1330**	-	**2990**	-	-	**4070**	**3980**	-	**2990**	**3140**
Iron	ug/L	Y	300	-	**1990**	-	**1360**	-	**1070**	-	**2750**	-	-	**3610**	**3810**	-	**2480**	**2380**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	1500	-	980	-	6300	-	-	-	100	9000	7600	-	7600	7800	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	200 U	40 U	40 U	-	40 U	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	240	-	15 U	15 U	15 U	-	15 UJ	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2500 U	-	2500 U	-	2500 U	-	3600 J	-	1000 U	1000 U	1800 UJ	-	1100 UJ	1000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-129	MW-130	MW-130	MW-130	MW-130	MW-130	MW-130	MW-130	MW-130
			Field Sample ID	M129D6X	D0615201	M129E1	D0616201	M129E1X	M129E2	M129E2X	M130B3	M130B3X	M130B4	M130B4X	M130B5	M130B5X	M130B7	M130B7X
			Sample Date	12/04/2019	06/15/2020	06/15/2020	06/16/2020	06/16/2020	12/09/2020	12/09/2020	08/26/2013	08/27/2013	08/21/2014	08/22/2014	06/14/2016	06/15/2016	05/23/2018	05/23/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**2300**	-	**739**	-	**2150**	-	80.5 J	-	88.4 J	-
Iron	ug/L	Y	300	-	**3100**	**3100**	-	-	220	-	61.7 J	-	33.4 U	-	33.3 U	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	4600	4600	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	8100	-	-	2400	2500	-	6800	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	40 UJ	40 UJ	-	40 UJ	-	40 U	-	940	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	27 J	22 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1000 UJ	-	-	2000 UJ	2000 UJ	-	2000 UJ	-	22700	-	50000 U	-	42300	-	33700

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-130	MW-130	MW-130	MW-130	MW-130	MW-147	MW-147	MW-147	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167
			Field Sample ID	M130B8	M130B8X	M130B9	M130B9X	M130C3	D062820211A	M147D8	M147D9	M167B8	M167B8X	M167B9	M167B9X	M167C1	M167C1X	M167C2
			Sample Date	05/21/2019	05/21/2019	05/07/2020	05/07/2020	05/25/2021	06/28/2021	06/28/2021	10/22/2021	07/03/2012	07/03/2012	08/05/2013	08/06/2013	08/11/2014	08/12/2014	12/02/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**482**	-	**482**	-	260	**1900**	**1800**	**2200**	**2440**	-	**7510**	-	**5390**	-	**3060**
Iron	ug/L	Y	300	40 U	-	239	-	51 J	**1800**	**1800**	**2500**	**1260**	-	**3970**	-	**4390**	-	**1600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	27	24	22	-	3300	-	250	-	4000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	240 J	40 UJ	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	15 U	15 U	15 U	15 U	-	15 U	-	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	29100	-	20000 UJ	26000 J	**1200000**	**1200000**	**800000J**	-	38300	-	2500 U	-	113000	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167
			Field Sample ID	M167C2X	M167C3	M167C3X	M167C5	M167C5X	M167C6	M167C6X	M167C7	M167C7X	M167C8	M167C8X	M167C9	M167C9X	M167D1	M167D1X
			Sample Date	12/03/2015	04/27/2016	04/28/2016	05/09/2018	05/09/2018	06/13/2018	06/14/2018	12/11/2018	12/12/2018	04/16/2019	04/16/2019	06/21/2019	06/21/2019	10/24/2019	10/24/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	5600 J	-	-	-	1030 J	-	2830 J	-	-	-	268 J	-
Iron	ug/L	N	300	-	**1860**	-	-	-	**3530**	-	-	-	-	-	**2940**	-	-	-
Iron	ug/L	Y	300	-	**1030**	-	-	-	**3220**	-	-	-	-	-	**2300**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	760	-	1000	-	-	-	2800	-	-	-	-	-	5100	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	41 J	-	52 J	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	-	15 U	-	-	-	-	-	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	74200	-	68900	-	86500	-	27900	-	3600 J	-	32300	-	21400 J	-	21900 J

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-167	MW-167	MW-167	MW-167	MW-167	MW-167	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168	MW-168
			Field Sample ID	M167D2	M167D2X	M167D3	M167D4	M167D5	M167D6	M168B9	M168B9X	M168C1	M168C1X	M168C2	M168C2X	M168C3	M168C5	M168C5X
			Sample Date	04/27/2020	04/27/2020	07/01/2021	10/01/2021	12/28/2021	02/17/2022	07/31/2013	08/01/2013	08/12/2014	08/13/2014	12/01/2015	12/02/2015	09/14/2016	06/13/2018	06/13/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	637 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5920**	-	**3200**	**3700**	**3200**	**1900**	**20700**	-	**306**	-	**579**	-	**11800**	**512**	-
Iron	ug/L	Y	300	**684**	-	**2100**	**3600**	**2300**	**490**	**18200**	-	33.4 U	-	39.8 J	-	**6970**	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	2500	5000	4000	560	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	88 J	40 UJ	40 UJ	140 J	-	40 U	-	2700	-	2300	-	-	2200
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 UJ	15 U	15 U	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	25000	15000 J	14000 J	21000 J	32000 J	-	19400	-	73600 J	-	10000 U	-	-	78300

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-168	MW-168	MW-168	MW-168	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R
			Field Sample ID	M168C6	M168C6X	M168C7	M168C7X	M169RC1	M169RC1X	M169RC2X	M169RC3	M169RC3X	M169RC4	M169RC4X	M169RC5	M169RC5X	M169RC5X	M169RC7
			Sample Date	06/19/2019	06/19/2019	09/09/2020	09/10/2020	06/27/2012	06/28/2012	06/14/2013	07/31/2013	08/01/2013	06/23/2014	06/24/2014	08/26/2014	08/26/2014	08/26/2014	10/27/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	2700	-	-	-	-	-	53800	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	66200	-	-	-	-	770
Iron	ug/L	N	300	**2160**	-	-	-	143 J	-	-	94.0 J	-	-	-	**47100**	-	-	-
Iron	ug/L	Y	300	40 U	-	41 U	-	132 J	-	-	81.7 J	-	-	-	**47500**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	980	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	730	860	-	550	-	10000	-	-	17000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1400	-	2200 J	-	40 U	40 U	-	40 U	-	-	-	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	15 U	-	15 U	-	-	-	-	56	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	32700 J	-	33000 J	-	33900	28200	-	24700	-	14900	-	15100	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R
			Field Sample ID	M169RC7X	M169RC7X	M169RC9	M169RC9X	M169RC9X	M169RD1	M169RD1X	M169RD1X	M169RD2	M169RD2X	M169RD2X	M169RD3	M169RD3X	M169RD3X	M169RD4
			Sample Date	10/27/2014	10/27/2014	01/14/2015	01/14/2015	01/14/2015	04/27/2015	04/27/2015	04/27/2015	07/13/2015	07/13/2015	07/13/2015	10/13/2015	10/13/2015	10/13/2015	02/04/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	42300	-	-	40100	-	-	31400	-	-	24000	-	-	24500 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	16000.00	16000	-	15000.00	15000	-	12000	-	-	12000	-	-	9400	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	11500	-	-	7000	-	-	9700	-	-	6600	-	-	8500	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
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Chevron Perth Amboy Facility

			Location ID	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R
			Field Sample ID	M169RD4X	M169RD5	M169RD5X	M169RD6	M169RD6X	M169RD7	M169RD7X	M169RE1	M169RE1X	M169RE2	M169RE2X	M169RE3	M169RE3X	M169RE4	M169RE4X
			Sample Date	02/04/2016	05/13/2016	05/13/2016	08/08/2016	08/08/2016	11/04/2016	11/04/2016	05/07/2018	05/08/2018	12/03/2018	12/06/2018	04/18/2019	04/18/2019	10/28/2019	10/28/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	14100 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	18600 J	-	-	-	17400 J	-	11900 J	-	9260 J	-	9040 UJ	-	9920 J	-
Iron	ug/L	N	300	-	-	-	**14500**	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**16700**	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	8000	-	6300	-	7500	-	10700	-	14700 J	-	25300	-	13300	-	28800

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-169R	MW-183	MW-183	MW-183	MW-183	MW-183	MW-183
			Field Sample ID	D1217191	M169RE5	M169RE5X	M169RE6	M169RE6X	M169RE7	M169RE8	M169RE9	M169RF1	M183B8	M183B8X	M183C1X	D0614191	M183C2	M183C2X
			Sample Date	12/17/2019	12/17/2019	12/17/2019	04/27/2020	04/27/2020	06/30/2021	09/30/2021	12/15/2021	02/03/2022	09/14/2016	09/15/2016	06/14/2018	06/14/2019	06/14/2019	06/14/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	7540 J	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7240**	**6950**	-	**7940**	-	**6400**	**1800**	**5900**	160 J	**156000**	-	-	-	-	-
Iron	ug/L	Y	300	**5790**	**6560**	-	**7390**	-	**6200**	**1600**	**3900**	130 J	-	-	-	**85200**	**82200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	1400	-	1300	-	-	1500	710	720	52	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	40 UJ	40 UJ	40 UJ	1600 J	-	40 U	40 U	320	-	340
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	15 U	15 UJ	16 J	15 U	-	41 J	24 J	46 J	-	30 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	20100 J	-	17600 J	-	25500	22000 J	17000 J	20000 J	25000 J	-	**323000**	**331000**	224000 UJ	-	226000 UJ

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-183	MW-183	MW-183	MW-184	MW-184	MW-184	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185
			Field Sample ID	M183C3X	M183C4	M183C5	M184B8X	M184B9	M184B9X	M185C1	M185C1X	M185C3	M185C4	M185C5	M185C6	M185C9	M185C9X	M185D1
			Sample Date	06/12/2020	06/28/2021	10/22/2021	06/16/2013	08/07/2013	08/08/2013	10/21/2015	10/21/2015	02/08/2016	05/13/2016	08/09/2016	11/08/2016	05/09/2018	05/10/2018	12/03/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	93700	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	220	-	24 J	130 J	68 J	210 J	110 J	-	70.9 J
Iron	ug/L	N	300	-	**140000**	**74000**	-	**67000**	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	**130000**	**87000**	-	**68200**	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	16	12	7500	-	-	-	320	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	44 J	40 UJ	40 U	-	60 J	-	-	-	-	-	-	-	56 J	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	100 J	16 J	15 U	150 U	-	65	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	240000 J	**450000**	200000 J	25000 U	-	13000 J	-	-	-	-	-	-	-	-	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-185	MW-186	MW-186	MW-186
			Field Sample ID	M185D1X	M185D2	M185D2X	M185D3	M185D3X	M185D5	M185D5X	M185D6	D092420211C	M185D7	M185D8	M185D9	M186B8	M186B8X	M186B9
			Sample Date	12/07/2018	04/18/2019	04/19/2019	10/24/2019	10/25/2019	04/30/2020	05/01/2020	06/21/2021	09/24/2021	09/24/2021	10/22/2021	01/13/2022	06/27/2012	06/28/2012	07/31/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	22.4 J	-	83 J	-	15 UJ	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	180 J	**330J**	81 J	110 J	72 J	241	-	82.8 J
Iron	ug/L	Y	300	-	-	-	-	-	-	-	41 U	41 U	41 U	41 U	41 U	33.3 U	-	43.0 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	3.8 UJ	17	17	110	39	-	85	-
Nitrogen, Nitrate as N	ug/L	N	10000	77 J	-	190	-	300	-	40 U	250 J	76 J	40 UJ	40 UJ	170 J	-	350	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	15 U	15 U	15 U	15 U	29 J	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	26600	-	-	-	-	-	-	23000 J	27000 J	30000 J	26000 J	27000 J	-	6600	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-186	MW-188	MW-188
			Field Sample ID	M186B9X	M186C1	M186C1X	M186C2	M186C2X	M186C3	M186C5	M186C5X	D0620191	M186C6	M186C6X	M186C7	M186C7X	D1018126	M188B2
			Sample Date	08/01/2013	08/12/2014	08/13/2014	12/01/2015	12/02/2015	09/14/2016	06/13/2018	06/13/2018	06/20/2019	06/20/2019	06/20/2019	04/30/2020	05/01/2020	10/18/2012	10/18/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**22400**	-	**5890**	-	**7170**	80.5 U	-	**589J**	**378J**	-	123 J	-	-	-
Iron	ug/L	Y	300	-	**21700**	-	-	-	**3140**	80.5 U	-	**313**	288	-	41.2 U	-	**23400**	**23400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	50	-	17000	-	2100	-	-	89	160	-	160	-	4.7 J	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	81 J	-	40 U	-	40 U	-	-	140	40 U	-	40 U	-	440	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-	15 U	-	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	7300	-	10000 U	-	104000	-	-	27100	18100	-	18600	-	14800 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188
			Field Sample ID	M188B2X	M188B3	M188B3X	M188B4	M188B4X	M188B5X	M188B6X	M188B7	M188B7X	M188B8	M188B8X	M188B9	M188B9X	M188C1	M188C1X
			Sample Date	10/18/2012	12/13/2012	12/13/2012	02/14/2013	02/14/2013	04/22/2013	06/12/2013	09/20/2013	09/20/2013	01/10/2014	01/10/2014	04/10/2014	04/10/2014	06/19/2014	06/19/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	25400	410	-	340	-	-	12600	-	26000	-
Ferrous Iron	ug/L	Y	NA	-	24200	-	25600	-	-	-	-	-	30200	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	**21900**	-	-	-	**27100**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	**21900**	-	**24900**	-	**22900**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	59 J	40 U	75 J	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	48 J	-	-	-	27 J	39 J	15 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	7700 J	-	10000 U	-	10000 U	10000 U	2500 U	-	10000 U	-	2500 U	-	12300	-	10400

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188
			Field Sample ID	M188C2	M188C2X	M188C3	M188C3X	M188C5	M188C5X	M188C6	M188C6X	M188C7	M188C7X	M188C8	M188C8X	M188C9	M188C9X	M188D1
			Sample Date	09/04/2014	09/04/2014	10/29/2014	10/29/2014	09/09/2015	09/09/2015	10/20/2015	10/20/2015	02/11/2016	02/11/2016	05/24/2016	05/24/2016	08/10/2016	08/10/2016	11/09/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	22900	-	4100	-	17200	-	19600	-	27800 J	-	27700 J	-	21100 J	-	24000 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	**17000**	-	-	-	-	-	-	-	**18000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10900 J	-	24200	-	12900	-	5100	-	4900 J	-	7200	-	13800	-

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188
			Field Sample ID	M188D1X	M188D2	M188D2X	M188D5	M188D5X	M188D7	M188D7X	M188E1	M188E1X	M188E2	M188E2X	M188E3	M188E3X	M188E4	M188E4X
			Sample Date	11/09/2016	05/26/2017	05/26/2017	05/12/2018	05/12/2018	02/09/2019	02/09/2019	05/04/2019	05/04/2019	07/27/2019	07/27/2019	11/02/2019	11/02/2019	01/25/2020	01/25/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	25400	-	32500 J	-
Ferrous Iron	ug/L	Y	NA	-	27100 J	-	28200 J	-	30400 J	-	32900 J	-	31700	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	550	-	2000 J	-	40 U	-	40 U	-	40 U	-	57 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	15 UJ	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	9600	-	1500 U	-	4000 U	-	4700 J	-	3100 J	-	3500 J	-	4000 J	-	20000 UJ

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

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Historical Groundwater MNA Data
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			Location ID	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-188	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189
			Field Sample ID	M188E5	M188E5X	M188E6	M188E6X	M188E7	M188E7X	M188E8	M188E9	M188F2	M189B2	M189B2X	M189B3X	M189B4	M189B4X	M189B5
			Sample Date	05/02/2020	05/02/2020	07/25/2020	07/25/2020	03/27/2021	03/27/2021	06/19/2021	09/22/2021	03/15/2022	10/17/2012	10/17/2012	06/12/2013	06/19/2014	06/19/2014	09/04/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	26000 J	-	30000 J	-	-	-	-	-	-	19600	21100	-	-
Ferrous Iron	ug/L	Y	NA	29900 J	-	-	-	-	-	-	-	-	-	-	-	-	-	16100
Iron	ug/L	N	300	-	-	-	-	-	-	**31000**	**21000**	**33000**	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	**29000**	**24000**	**31000**	**16500**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 UJ	-	40 UJ	280 J	680 J	46 J	-	40 U	40 UJ	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 UJ	-	-	-	-	15 UJ	15 UJ	15 U	-	23 J	24 J	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	4300 J	-	5600	-	3000 J	4000 UJ	4000 UJ	10000 UJ	-	25000 U	7000 J	-	13000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189
			Field Sample ID	M189B5X	M189B6	M189B6X	M189B8	M189B8X	M189B9	M189B9X	M189C1	M189C1X	M189C2	M189C2X	M189C3	M189C3X	M189C4	M189C4X
			Sample Date	09/04/2014	10/29/2014	10/29/2014	09/09/2015	09/09/2015	10/20/2015	10/20/2015	02/11/2016	02/11/2016	05/24/2016	05/24/2016	08/10/2016	08/10/2016	11/09/2016	11/09/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	4400	-	17400	-	12000	-	17900 J	-	19200 J	-	21800 J	-	13500 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**11600**	-	-	-	-	-	-	-	**11000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	8900 J	-	11200	-	12700	-	12300	-	25900	-	14300	-	14400	-	15500

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-189	MW-190
			Field Sample ID	M189C5	M189C5X	M189C7	M189C7X	M189C9	M189C9X	M189D1	M189D1X	M189D2	M189D2X	M189D3	M189D4	M189D5	M189D6	M190B5
			Sample Date	05/26/2017	05/26/2017	05/12/2018	05/12/2018	05/04/2019	05/04/2019	11/02/2019	11/02/2019	05/02/2020	05/02/2020	06/19/2021	09/22/2021	12/17/2021	03/15/2022	06/19/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	26100	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	23800 J	-	16500 J	-	17700 J	-	-	-	31900 J	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	**25000**	**41000**	**26000**	**27000**	33.3 U
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	22000 UJ	**29000**	**28000**	**21000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	-	40 U	-	40 U	-	40 U	40 UJ	**90000J**	40 UJ	40 UJ	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	-	-	15 UJ	15 UJ	15 U	15 U	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	14600	-	4000 U	-	9000	-	4000 UJ	-	8500	8000 UJ	36000 J	8000 UJ	10000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190	MW-190
			Field Sample ID	M190B6	M190B6X	M190B7	M190B7X	M190B8	M190B8X	M190C5	M190C5X	M190C9	M190C9X	D0212201	D0212201X	M190D4	M190D4X	M190D6
			Sample Date	08/27/2013	08/28/2013	08/19/2014	08/20/2014	03/14/2016	03/15/2016	02/27/2018	02/28/2018	02/25/2019	02/25/2019	02/12/2020	02/12/2020	02/12/2020	02/12/2020	01/27/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	74.5 J	-	33.4 U	-	33.3 U	-	80.5 U	-	40 U	-	67.1 UJ	-	106 UJ	-	40 U
Iron	ug/L	Y	300	43.0 U	-	33.4 U	-	33.3 U	-	80.5 U	-	40 U	-	41.2 U	-	41.2 U	-	41 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	117000	-	134000	-	126000	-	94100	-	241000	-	79600 J	-	77300 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-190	MW-190	MW-190	MW-190	MW-190	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191
			Field Sample ID	M190D6X	D0503211	M190D7	M190D8	M190D9	M191B2	M191B2X	M191B3X	M191B4	M191B4X	M191B5	M191B5X	M191B6	M191B6X	M191B7
			Sample Date	01/27/2021	05/03/2021	05/03/2021	10/27/2021	03/25/2022	10/17/2012	10/17/2012	06/11/2013	09/09/2015	09/09/2015	10/20/2015	10/20/2015	02/11/2016	02/11/2016	05/24/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	33100	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	7600	-	24700	-	17300 J	-	9400 J
Iron	ug/L	N	300	-	40 U	40 U	110 UJ	80 U	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	41 U	41 U	43 J	82 U	**15700**	-	-	-	-	**23500**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	9.5	9.7	15	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	78 J	71 J	290 J	160 J	-	-	40 U	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	15 U	15 U	15 U	-	-	15 U	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	140000 J	200000 J	170000 J	230000 J	230000 J	-	10000 U	25000 U	-	2300 J	-	19700	-	10800	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191	MW-191
			Field Sample ID	M191B7X	M191B8	M191B8X	M191B9	M191B9X	M191C1	M191C1X	M191C3	M191C3X	M191C5	M191C5X	M191C6	M191C6X	M191C7	M191C7X
			Sample Date	05/24/2016	08/10/2016	08/10/2016	11/09/2016	11/09/2016	05/26/2017	05/26/2017	05/12/2018	05/12/2018	05/04/2019	05/04/2019	11/02/2019	11/02/2019	05/02/2020	05/02/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	13900 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	15500 J	-	25900 J	-	17600 J	-	14500 J	-	14600 J	-	-	-	28200 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	**18900**	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	15 U	-	-	-	-	-	15 UJ
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	15000	-	10400	-	6300	-	1500 U	-	4000 U	-	2400 J	-	10000 UJ	-	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-191	MW-191	MW-191	MW-191	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M191C8	M191C9	M191D1	M191D2	M216B5	M216B5X	M216B5X	M216B6	M216B6X	M216B7	D1213128	M216B8	M216B8X	M216B9	M216B9X
			Sample Date	06/19/2021	09/22/2021	12/17/2021	03/15/2022	04/04/2012	04/04/2012	04/04/2012	06/14/2012	06/15/2012	10/19/2012	12/13/2012	12/13/2012	12/13/2012	02/13/2013	02/13/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	3800	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	3400	3700	-	4000	-
Iron	ug/L	N	300	**21000**	**3800**	**56000**	**40000**	**3590**	-	-	**3880**	-	**3550**	-	-	-	-	-
Iron	ug/L	Y	300	19000 UJ	**4900**	**26000**	**35000**	**3340**	-	-	**3540**	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	3700	-	-	4500	-	-	-	4900	-	3600
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	130 J	40 UJ	40 UJ	-	-	40 U	-	40 U	-	-	-	-	-	42 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 UJ	15 U	15 U	15 UJ	-	-	15 U	-	15 U	-	-	-	-	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	8000 UJ	80000 J	4000 UJ	10000 UJ	-	-	93600	-	84900	-	-	-	92500	-	89800

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M216C1X	M216C2X	M216C3	M216C3X	M216C4X	M216C4	D1218135	M216C5	M216C5X	D0312145	D0312145	M216C6	M216C6	M216C6X	M216C7
			Sample Date	04/15/2013	06/04/2013	07/29/2013	07/30/2013	09/18/2013	09/19/2013	12/18/2013	12/18/2013	12/18/2013	03/12/2014	03/12/2014	03/12/2014	03/12/2014	03/12/2014	06/24/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	3900	-	-	-	-	3300	18800	17900	-	-	-	166000	-	-	-
Ferrous Iron	ug/L	Y	NA	-	3400	-	-	-	-	-	-	-	-	-	-	-	-	139000
Iron	ug/L	N	300	-	-	-	-	**2650**	-	-	**17200**	-	**146000**	-	**143000**	-	-	-
Iron	ug/L	Y	300	-	-	**2240**	-	**2650**	-	-	-	-	-	**143000**	-	**138000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	4500	-	-	5300	-	4200	-	-	2100	-	-	-	-	4300	-
Nitrogen, Nitrate as N	ug/L	N	10000	43 J	-	-	40 U	-	40 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	15 U	-	15 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	93700	92500	-	89900	-	86600	-	-	143000	-	-	-	-	25000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M216C7X	M216C8	M216C8X	M216C9X	M216C9X	M216D1	M216D1X	M216D1X	M216D3	M216D3X	M216D3X	M216D4	M216D4X	M216D4X	M216D5
			Sample Date	06/24/2014	08/11/2014	08/12/2014	08/28/2014	08/28/2014	10/31/2014	10/31/2014	10/31/2014	01/19/2015	01/19/2015	01/19/2015	04/23/2015	04/23/2015	04/23/2015	07/09/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	35400	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	1100	-	-	96900	-	-	116000	-	-	131000
Iron	ug/L	N	300	-	**100000**	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	**91900**	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	9900	-	18000	9000.00	-	-	12000.00	12000	-	16000.00	16000	-	18000	18000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	79	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1500 U	-	25000 U	-	95100	-	-	3800 J	-	-	44000	-	-	43700	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M216D5X	M216D5X	M216D6	M216D6X	M216D6X	M216D7	M216D7X	M216D9	M216D9X	M216E1	M216E1X	M216E5	M216E5X	M216E6	M216E6X
			Sample Date	07/09/2015	07/09/2015	10/12/2015	10/12/2015	10/12/2015	02/09/2016	02/09/2016	08/04/2016	08/05/2016	10/31/2016	10/31/2016	02/22/2018	02/22/2018	05/18/2018	05/18/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	43300	-	-	72800 J	-	63800 J	-	54500 J	-	44500 J	-	43300 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	**45700**	-
Iron	ug/L	Y	300	-	-	**40800**	-	-	-	-	-	-	**51100**	-	-	-	**47400**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	18000	-	-	18000	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	44 J	-	200
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	30700	-	-	131000	-	38800	-	34800	-	55300	-	56400	-	38700

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216
			Field Sample ID	M216E7	M216E7X	M216E8	M216E8X	M216E9	M216E9X	M216F1	M216F1X	M216F2	M216F2X	M216F3	M216F3X	M216F4	M216F4X	M216F5
			Sample Date	12/04/2018	12/17/2018	02/20/2019	02/22/2019	04/23/2019	04/23/2019	07/17/2019	07/17/2019	10/29/2019	10/29/2019	12/16/2019	12/16/2019	01/21/2020	01/21/2020	04/28/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	78200 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	62200 J	-	79100 J	-	64200 J	-	65400 J	-	-	-	60300 J	-	52300
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	**57800**	-	-	-	**52200**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**57000**	-	-	-	**47900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	18000	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	-	-	-	-	-	-	15 U	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	6500	-	10400	-	9200	-	22500	-	15800	-	10000 UJ	-	22700 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-216	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
			Field Sample ID	M216F5X	M216F6	M216F6X	M216F7	M216F7X	M216F8	M216F9	M216G1	M216G2	M217B3	M217B3X	M217B3X	M217B4	M217B4X	M217B5
			Sample Date	04/28/2020	07/27/2020	07/27/2020	04/06/2021	04/06/2021	06/24/2021	09/30/2021	12/28/2021	03/29/2022	04/04/2012	04/04/2012	04/04/2012	06/14/2012	06/15/2012	10/19/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	51000 J	-	59000 J	-	-	-	-	-	-	-	21200	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**60000**	-	**56000**	**50000**	**52000**	**52000**	**15300**	-	-	**13200**	-	**14500**
Iron	ug/L	Y	300	-	-	-	**54000**	-	**57000**	**45000**	**51000**	**52000**	**11500**	-	-	**13500**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	14000	13000	9700	11000	-	5400	-	-	5700	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	680	40 UJ	240 J	40 UJ	40 UJ	-	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	27 J	-	-	-	-	35 J	15 U	15 U	15 U	-	-	76	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	48900	-	63000	-	83000	75000 J	72000 J	68000 J	83000 J	-	-	118000	-	122000	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
			Field Sample ID	M217B6	M217B6X	M217B7	M217B7X	M217B8X	M217B9	M217B9X	M217C1	M217C1X	D1217135	M217C2	M217C2X	M217C3	M217C3X	M217C4
			Sample Date	12/14/2012	12/14/2012	02/14/2013	02/14/2013	04/16/2013	07/29/2013	07/30/2013	09/19/2013	09/19/2013	12/17/2013	12/17/2013	12/17/2013	03/13/2014	03/13/2014	06/20/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	94600	-	-	78500	-	-	-	-	70700	-	62300
Ferrous Iron	ug/L	Y	NA	63700	-	61300	-	-	-	-	-	-	-	50100	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**26400**	-	-	**35500**	-	-	-	**48000**	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**24100**	-	-	**36700**	**57800**	**58200**	-	**43500**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	4200	-	5300	16000	-	25000	16000	-	-	-	17000	-	14000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	50 J	-	40 U	40 U	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	59	44 J	-	15 U	59	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	73900	25000 U	-	9100 J	10000 U	-	-	-	26700	-	38100	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
			Field Sample ID	M217C4X	M217C5	M217C5X	M217C6	M217C6X	M217C7	M217C7X	M217C7X	M217C8	M217C8X	M217C8X	M217C9	M217C9X	M217C9X	M217D1
			Sample Date	06/20/2014	08/12/2014	08/13/2014	01/15/2015	01/15/2015	04/21/2015	04/21/2015	04/21/2015	07/06/2015	07/06/2015	07/06/2015	10/09/2015	10/09/2015	10/09/2015	12/01/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	63300	-	54100	-	-	52300	-	-	62800 J	-	-	-
Iron	ug/L	N	300	-	**45300**	-	-	-	-	-	-	-	-	-	-	-	-	**67200**
Iron	ug/L	Y	300	-	**44000**	-	-	-	-	-	-	-	-	-	-	-	-	**66100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	12000	-	24000	-	15000	-	14000	14000	-	13000	-	-	16000	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	31 J	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	10700	-	10000 U	-	92000	-	-	99800	-	-	37600	-	-	61500	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217
			Field Sample ID	M217D1X	M217D2	M217D2X	M217D3	M217D3X	M217D4	M217D4X	M217D5	M217D5X	M217D8	M217D8X	M217D9	M217D9X	M217E1	M217E1X
			Sample Date	12/02/2015	02/08/2016	02/08/2016	05/17/2016	05/17/2016	08/09/2016	08/09/2016	11/03/2016	11/03/2016	05/07/2018	05/08/2018	12/04/2018	12/07/2018	04/19/2019	04/22/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	19200 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	46700	-	49500 J	-	62900 J	-	52500 J	-	24300 J	-	-	-	21000 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	**25100**	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	**47700**	-	**22900**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	20000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	-	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	15 U	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	125000 U	-	198000	-	176000	-	93000	-	196000	-	56100	-	67400	-	67100

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-217	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219
			Field Sample ID	M217E2	M217E2X	M217E3	M217E3X	M217E4	M217E4X	M217E5	M217E6	M219B2	M219B2X	M219B2X	M219B3	M219B3X	M219B4	M219B5
			Sample Date	10/25/2019	10/25/2019	12/20/2019	12/20/2019	04/28/2020	04/28/2020	06/29/2021	08/31/2021	04/03/2012	04/03/2012	04/03/2012	06/12/2012	06/13/2012	10/19/2012	12/12/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	1900	-	-	-	-
Ferrous Iron	ug/L	Y	NA	20200 J	-	-	-	18900	-	-	-	-	-	-	-	-	-	2700
Iron	ug/L	N	300	-	-	**20800**	-	**18700**	-	**27000**	**26000**	**3230**	-	-	**7140**	-	**4150**	-
Iron	ug/L	Y	300	-	-	**18500**	-	**17800**	-	**20000**	**20000**	**1920**	-	-	**4220**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	6300	-	-	7900	7800	-	750	-	-	6.4 J	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	40 UJ	40 UJ	-	-	40 U	-	800	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	15 U	15 U	15 U	-	-	15 U	-	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	63200	-	40100 J	-	58900	58000 J	63000 J	-	-	37200	-	2500 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219	MW-219R	MW-219R	MW-219R
			Field Sample ID	M219B5X	M219B6	M219B6X	M219B7X	M219B8X	M219B9	M219B9X	D0917135	M219C1X	D0918135	M219C1	M219RA5	M219RA1	M219RA1X	M219RA1X
			Sample Date	12/12/2012	02/13/2013	02/13/2013	04/15/2013	06/03/2013	08/05/2013	08/06/2013	09/17/2013	09/17/2013	09/18/2013	09/18/2013	04/22/2015	10/28/2014	10/28/2014	10/28/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	2000	1100	-	-	-	-	2800	2700	-	270	-	-
Ferrous Iron	ug/L	Y	NA	-	1700	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**4220**	-	**3060**	**3270**	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**4570**	-	**3080**	**3130J**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	680	-	240	250	-	-	270	-	-	260	280	1400	-	490.00	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	40 U	40 U	-	40 U	-	-	40 U	40 U	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	15 U	15 U	-	15 U	-	-	15 U	15 U	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	17600	-	23200	29100	28800	-	27300	-	-	35100	36700	-	-	-	52500

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R
			Field Sample ID	M219RA3	M219RA3X	M219RA3X	M219RA4	M219RA4X	M219RA6	M219RA6X	M219RA6X	M219RA7	M219RA7X	M219RA7X	M219RA8	M219RA8X	M219RA9	M219RA9X
			Sample Date	01/13/2015	01/13/2015	01/13/2015	04/20/2015	04/20/2015	07/06/2015	07/06/2015	07/06/2015	10/08/2015	10/08/2015	10/08/2015	12/02/2015	12/03/2015	02/01/2016	02/01/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	780	-	-	1700	-	2200	-	-	3200	-	-	-	-	2200 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	**1280**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	**1140**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	1100.00	1100	-	-	-	700	-	-	25	-	-	630	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	170	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	72000	-	120000	-	-	107000	-	-	127000	-	118000	-	106000

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R
			Field Sample ID	M219RB2	M219RB2X	M219RB3	M219RB3X	M219RB4	M219RB4X	M219RB7	M219RB7X	M219RB8	M219RB8X	M219RB9	M219RB9X	M219RC1	M219RC1X	M219RC2
			Sample Date	05/10/2016	05/10/2016	08/08/2016	08/08/2016	11/07/2016	11/07/2016	05/09/2018	05/09/2018	12/11/2018	12/11/2018	04/16/2019	04/16/2019	10/24/2019	10/24/2019	12/20/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	2000 J	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	2000 J	-	-	-	1300	-	1500 J	-	2750 J	-	184 J	-	1130 J	-	-
Iron	ug/L	N	300	-	-	**2110**	-	-	-	**2110**	-	-	-	-	-	-	-	**1180**
Iron	ug/L	Y	300	-	-	-	-	**1370**	-	**1650**	-	-	-	-	-	-	-	**920**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	150	-	700	-	300	-	690	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	71800	-	89300	-	124000	-	95200	-	56000	-	49100	-	64300 J	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-219R	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
			Field Sample ID	M219RC2X	M219RC3	M219RC3X	M219RC4	D0826211	M219RC5	M219RC6	M219RC7	D0404123	M220A6	M220A6X	M220A6X	M220A8	M220A9X	M220B1
			Sample Date	12/20/2019	04/28/2020	04/28/2020	06/21/2021	08/26/2021	08/26/2021	10/22/2021	02/18/2022	04/04/2012	04/04/2012	04/04/2012	04/04/2012	10/19/2012	06/04/2013	06/23/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	46100	-	-	-
Ferrous Iron	ug/L	Y	NA	-	1680	-	-	-	-	-	-	-	-	-	-	-	45500	115000
Iron	ug/L	N	300	-	**1800**	-	**2300**	**2200**	**1900**	**1600**	**1900**	**48700**	**48500**	-	-	**38500**	-	-
Iron	ug/L	Y	300	-	**1360**	-	**1700**	**1900**	**1800J**	**1700**	**870**	**41600**	**42000**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	390	-	-	900	400	390	1100	650	-	-	6300	-	-	4300	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	280	40 UJ	45 J	40 UJ	40 UJ	170 J	-	-	-	40 U	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 UJ	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	15 U	15 U	15 U	15 J	15 U	-	-	-	260	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	66 J	-
Sulfate (SO4)	ug/L	N	250000	53200 J	-	37700	34000 J	31000 J	31000 J	33000 J	37000 J	-	-	-	46800	-	50600	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
			Field Sample ID	M220B1X	M220B2X	M220B2X	M220B3	M220B3X	M220B3X	M220B5	M220B5X	M220B5X	M220B6	M220B6X	M220B6X	M220B7	M220B7X	M220B7X
			Sample Date	06/23/2014	08/28/2014	08/28/2014	10/28/2014	10/28/2014	10/28/2014	01/16/2015	01/16/2015	01/16/2015	04/22/2015	04/22/2015	04/22/2015	07/10/2015	07/10/2015	07/10/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	147000	470	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	156000	-	-	143000 J	-	-	108000	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	7200	6000.00	-	-	10000.00	10000	-	13000.00	13000	-	14000	1400	-	12000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3200 J	-	1800 J	-	-	3000 J	-	-	24500	-	-	9700 J	-	-	9800

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
			Field Sample ID	M220B8	M220B8X	M220B8X	M220B9	M220B9X	M220C1	M220C1X	M220C2	M220C2X	M220C3	M220C3X	M220C6	M220C6X	M220C7	M220C7X
			Sample Date	10/13/2015	10/13/2015	10/13/2015	02/02/2016	02/02/2016	05/10/2016	05/11/2016	08/04/2016	08/05/2016	11/02/2016	11/02/2016	02/19/2018	02/19/2018	05/10/2018	05/10/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	65600 J	-	-	-
Ferrous Iron	ug/L	Y	NA	77100	-	-	42800 J	-	35100 J	-	64400 J	-	46800 J	-	-	-	23400 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	**44300**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	11000	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	720 J	-	260
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	7800	-	76000	-	7300	-	4600 J	-	7000	-	144000 J	-	59900 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220
			Field Sample ID	M220C8	M220C8X	M220C9	M220C9X	M220D1	M220D1X	M220D2	M220D2X	M220D3	M220D3X	M220D4	M220D4X	M220D5	M220D5X	M220E6
			Sample Date	12/05/2018	12/13/2018	02/19/2019	02/25/2019	04/23/2019	04/23/2019	07/17/2019	07/17/2019	10/29/2019	10/29/2019	01/21/2020	01/21/2020	05/04/2020	05/04/2020	07/27/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67000 J
Ferrous Iron	ug/L	Y	NA	97300 J	-	94900 J	-	96800 J	-	83500 J	-	22100 J	-	38700 J	-	91100 J	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	840 J	-	300	-	210	-	95 J	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	25300	-	17500	-	20300	-	26600	-	179000	-	99400 J	-	36400	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-220	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221
			Field Sample ID	M220E6X	M220E7	M220E7X	M220E8	M220E9	M220F1	M220F2	M221B1	M221B1X	M221B2	M221B2X	M221B3	M221B3X	M221B4	M221B4X
			Sample Date	07/27/2020	03/25/2021	03/25/2021	06/22/2021	09/23/2021	11/22/2021	03/17/2022	06/20/2012	06/21/2012	08/29/2013	08/30/2013	08/13/2014	08/14/2014	04/25/2016	04/26/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	76000 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**73000**	**63000**	**58000**	**58000**	**2370**	-	**340**	-	33.4 U	-	33.3 U	-
Iron	ug/L	Y	300	-	-	-	**70000**	**60000**	**58000**	**51000**	128 J	-	43.0 U	-	33.4 U	-	33.3 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	22000	18000	17000	19000	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	130 J	40 UJ	40 UJ	40 UJ	98 J	-	760	-	550	-	540	-	770
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	38 J	30 J	31 J	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	76000	-	71000	10000 UJ	8000 UJ	10000 U	24000 J	-	80400	-	81300	-	85000	-	82600

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-221	MW-222	MW-222	MW-222	MW-222
			Field Sample ID	M221B5	M221B5X	M221B6	M221B6X	D0607191	M221B8	M221B8X	M221B9	M221B9X	M221C1	M221C2	M222B2	M222B2X	M222B3	M222B3X
			Sample Date	06/19/2017	06/20/2017	06/14/2018	06/15/2018	06/07/2019	06/07/2019	06/07/2019	06/05/2020	06/05/2020	06/16/2021	10/21/2021	06/20/2012	06/21/2012	08/28/2013	08/29/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	74.7 U	-	80.5 U	-	40 U	53.6 UJ	-	-	-	73 J	**960**	281	-	50.0 J	-
Iron	ug/L	Y	300	74.7 U	-	80.5 U	-	98 UJ	40 U	-	41 U	-	41 U	**700**	33.3 U	-	43.0 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	180 J	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	950	-	200	270	-	270	-	250	60 J	170 J	-	57 J	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	28 J	-	15 U	15 U	-	15 U	-	15 U	15 U	15 UJ	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	61800	-	83200	50600 J	-	50200 J	-	34000 J	21000 J	38000	-	46500	-	46400

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222	MW-222
			Field Sample ID	M222B4	M222B4X	M222B5	M222B5X	M222B6	M222B6X	M222B7	M222B7X	M222B8	M222B8X	M222B9	M222B9X	M222C1	M222C2	M222C3
			Sample Date	08/13/2014	08/14/2014	04/25/2016	04/26/2016	06/19/2017	06/20/2017	06/14/2018	06/15/2018	06/07/2019	06/07/2019	06/05/2020	06/05/2020	06/16/2021	10/21/2021	04/04/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	150 J	-	**645**	-	**490**	-	80.5 U	-	59.9 UJ	-	-	-	66 J	130 J	**940**
Iron	ug/L	Y	300	65.3 J	-	33.3 U	-	74.7 U	-	80.5 U	-	40 U	-	41 U	-	41 U	41 U	82 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	47 J	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	130	-	490	-	40 U	-	280	-	250	130 J	97 J	95 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 UJ	-	15 U	-	15 U	-	15 UJ	15 U	15 UJ	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	54600	-	48900	-	56600	-	53300	-	51100 J	-	45000 J	52000 J	51000	38000 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-226	MW-230	MW-230	MW-230	MW-230
			Field Sample ID	M226B3	M226B3X	M226B4	M226B4X	M226B5	M226B5X	M226B6	M226B6X	D1213191	M226B7	M226B7X	M230A7	M230A7X	M230A8	M230A8X
			Sample Date	06/20/2012	06/21/2012	08/29/2013	08/30/2013	08/13/2014	08/14/2014	12/13/2019	12/13/2019	12/13/2019	12/09/2020	12/09/2020	06/12/2012	06/13/2012	08/05/2013	08/06/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	265	-	67.8 J	-	35.8 J	-	**2900**	-	**2890**	**4800**	-	**7170**	-	**14300**	-
Iron	ug/L	Y	300	33.3 U	-	43.0 U	-	33.4 U	-	**1760**	-	**2020**	41 U	-	**7320**	-	**13500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	190	-	470
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	91 J	40 U	-	40 UJ	-	1000	-	50 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	37900	-	42400	-	28600 J	-	49700 J	48100 J	-	26000 J	-	95100	-	50300

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230
			Field Sample ID	M230A9	M230A9X	M230B1	M230B1X	M230B2	M230B2X	M230B4	M230B4X	M230B5	M230B5X	M230B6	M230B6X	M230B7	M230B7X	M230B8
			Sample Date	08/11/2014	08/12/2014	12/02/2015	12/03/2015	04/27/2016	04/28/2016	05/09/2018	05/09/2018	06/13/2018	06/14/2018	12/10/2018	12/10/2018	04/17/2019	04/17/2019	06/21/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	38100 J	-	-	-	59900 J	-	42100 J	-	-
Iron	ug/L	N	300	**2090**	-	**4350**	-	**17800**	-	-	-	-	-	-	-	-	-	**40900**
Iron	ug/L	Y	300	**1790**	-	**4160**	-	**18300**	-	-	-	**41600**	-	-	-	-	-	**40200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	470	-	680	-	590	-	-	-	330	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	450	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	-	-	15 U	-	50	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	114000	-	168000	-	188000	-	95600	-	42000	-	74000	-	68400	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-230	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335
			Field Sample ID	M230B8X	M230B9	M230B9X	M230C1	M230C1X	M230C2	M230C3	M230C5	M335A1	M335A1X	M335A2	M335A2X	M335A3	M335A3X	M335A4X
			Sample Date	06/21/2019	10/25/2019	10/25/2019	04/28/2020	04/28/2020	06/22/2021	09/23/2021	03/28/2022	10/18/2012	10/18/2012	12/14/2012	12/14/2012	02/15/2013	02/15/2013	04/18/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	63200
Ferrous Iron	ug/L	Y	NA	-	29200 J	-	25000	-	-	-	-	-	-	116000	-	76500	-	-
Iron	ug/L	N	300	-	-	-	**25200**	-	**42000**	**36000**	**27000**	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	**23400**	-	**31000**	**34000**	**20000**	**4970**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	850	-	-	-	-	590	390	310	-	4600	-	8200	-	150	13000
Nitrogen, Nitrate as N	ug/L	N	10000	95 J	-	40 U	-	40 U	40 UJ	560 J	40 UJ	-	40 U	-	-	-	800 U	400 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	24 J	49 J	24 J	15 U	-	37 J	-	-	-	15 U	23 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	32400 J	-	52400	-	62800	47000 J	53000 J	100000 J	-	126000	-	250000 U	-	10000 U	10000 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335
			Field Sample ID	M335A5	M335A6	M335A6X	M335A7	M335A7X	M335A8	M335A8X	M335A9	M335A9X	M335A9X	M335B1	M335B1X	M335B1X	M335B2	M335B2X
			Sample Date	09/20/2013	12/17/2013	12/18/2013	03/11/2014	03/12/2014	06/20/2014	06/20/2014	01/19/2015	01/19/2015	01/19/2015	04/22/2015	04/22/2015	04/22/2015	07/08/2015	07/08/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	54400	-	-	31800	-	22800	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	56700	-	-	-	-	-	25200	-	-	18700 J	-	-	38400	-
Iron	ug/L	N	300	-	-	-	**46900**	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	**76000**	-	**26200**	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	17000	-	12000	-	11000	-	8900	-	15000	-	-	14000	14000	-	15000
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	12500 U	-	5000 U	-	5000 U	-	2400 J	-	-	1500 U	-	-	2500 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335
			Field Sample ID	M335B2X	M335B3	M335B3X	M335B3X	M335B4	M335B4X	M335B5	M335B5X	M335B6	M335B6X	M335B7	M335B7X	M335C1	M335C1X	M335C2
			Sample Date	07/08/2015	10/08/2015	10/08/2015	10/08/2015	02/02/2016	02/02/2016	05/16/2016	05/17/2016	08/09/2016	08/09/2016	11/03/2016	11/03/2016	05/07/2018	05/08/2018	12/04/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10600 J
Ferrous Iron	ug/L	Y	NA	-	21800	-	-	14300 J	-	35900 J	-	28300 J	-	32700 J	-	18500 J	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**31100**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	13000	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3100 J	-	-	3900 J	-	4200 J	-	35300	-	50000 U	-	9400	-	70700	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

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Historical Groundwater MNA Data
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			Location ID	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-335	MW-359	MW-359	MW-359	MW-359
			Field Sample ID	M335C2X	M335C3	M335C3X	M335C4	M335C4X	M335C5	M335C5X	M335C6	M335C7	M335C8	M335C9	M359A1	M359A1X	M359A2	M359A2X
			Sample Date	12/07/2018	04/19/2019	04/19/2019	10/28/2019	10/28/2019	05/05/2020	05/06/2020	06/21/2021	10/04/2021	12/27/2021	03/18/2022	06/05/2013	06/06/2013	09/12/2013	09/13/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	15400 J	-	17900 J	-	15800	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	**29000**	**24000**	**19000**	**35000**	**3650**	-	**481**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	**12000**	**14000**	**9300**	**15000**	**1310**	-	**540**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	1300	1400	1700	2100	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	410 J	290 J	40 UJ	40 UJ	-	240	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	15 U	15 U	15 U	15 U	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	70300	-	67200	-	55800	-	57600	44000 J	53000 J	30000 J	20000 UJ	-	**346000**	-	**296000**

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359
			Field Sample ID	M359A3	M359A3X	M359A4	M359A4X	M359A5	M359A5X	M359A6	M359A6X	M359A7	M359A7X	M359A8	M359A8X	M359A9	M359A9X	D0817151
			Sample Date	11/18/2013	11/19/2013	01/28/2014	01/29/2014	04/03/2014	04/04/2014	07/01/2014	07/01/2014	11/25/2014	11/26/2014	04/06/2015	04/07/2015	05/12/2015	05/13/2015	08/17/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1440**	-	**2600**	-	**4950**	-	**551**	-	**1360**	-	**4870**	-	**717**	-	**759**
Iron	ug/L	Y	300	**765**	-	**1310**	-	**1610**	-	**401**	-	**1270**	-	**3330**	-	**623**	-	**710**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	89 J	-	40 U	-	40 U	-	120	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	20 J	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	125000 U	-	171000	-	192000	-	222000	-	200000	-	173000	-	189000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359
			Field Sample ID	M359B1	D0818151	M359B1X	D1026151	M359B2	D1027151	M359B2X	M359B3	M359B3X	M359B4	M359B4X	M359B7	M359B7X	M359B8	M359B8X
			Sample Date	08/17/2015	08/18/2015	08/18/2015	10/26/2015	10/26/2015	10/27/2015	10/27/2015	05/05/2016	05/06/2016	10/31/2016	11/01/2016	04/19/2018	04/20/2018	11/01/2018	11/01/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**687**	-	-	**1060**	**1170**	-	-	**897**	-	**312**	-	**10400**	-	**625**	-
Iron	ug/L	Y	300	**630**	-	-	**766**	**643**	-	-	**765**	-	265 J	-	**8380**	-	263	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	40 U	-	-	40 U	40 U	-	93 J	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	-	-	15 U	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	240000	245000	-	-	209000	207000	-	**259000**	-	239000	-	216000	-	215000

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-359	MW-360	MW-360	MW-360
			Field Sample ID	M359B9	M359B9X	M359C1	M359C1X	M359C2	M359C2X	M359C3	M359C3X	D0219211	M359C4	M359C4X	M359C5	M360A1	M360A1X	M360A2
			Sample Date	05/02/2019	05/02/2019	11/18/2019	11/18/2019	05/04/2020	05/04/2020	11/23/2020	11/23/2020	02/19/2021	02/19/2021	02/19/2021	09/15/2021	06/05/2013	06/06/2013	09/16/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**13800**	-	**1160**	-	**6580**	-	**960**	-	**4600**	**4700**	-	**4400**	**4360**	-	218
Iron	ug/L	Y	300	**14300**	-	**1160**	-	**4110**	-	**1700**	-	**3800**	**3800**	-	**4100**	**3580**	-	59.5 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 UJ	40 UJ	-	47 J	40 UJ	-	220	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	36 J	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	15 U	-	15 U	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	172000	-	179000 J	-	118000 J	-	180000 J	37000 J	-	180000 J	220000 J	-	**452000**	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360
			Field Sample ID	M360A2X	M360A3	M360A3X	M360A4	M360A4X	M360A5	M360A5X	M360A6	M360A6X	M360A7	M360A7X	M360A8	M360A8X	M360A9	M360A9X
			Sample Date	09/16/2013	11/20/2013	11/21/2013	01/28/2014	01/29/2014	04/03/2014	04/04/2014	06/30/2014	07/01/2014	11/25/2014	11/26/2014	04/06/2015	04/07/2015	05/12/2015	05/13/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**3790**	-	**5170**	-	**8890**	-	**385J**	-	**1040**	-	**395**	-	**321**	-
Iron	ug/L	Y	300	-	**2670**	-	137 J	-	64.8 J	-	186 U	-	**596**	-	224	-	95.2 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	200	-	210	-	190	-	160	-	72 J	-	40 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**498000**	-	**529000**	-	**493000**	-	**493000**	-	**439000**	-	**517000**	-	**499000**	-	**257000**

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360
			Field Sample ID	M360B1	M360B1X	M360B2	M360B2X	M360B3	M360B3X	M360B4	M360B4X	M360B7	M360B7X	M360B8	M360B8X	M360B9	M360B9X	M360C1
			Sample Date	08/17/2015	08/18/2015	10/26/2015	10/27/2015	05/05/2016	05/06/2016	10/31/2016	11/01/2016	04/19/2018	04/20/2018	11/01/2018	11/01/2018	05/02/2019	05/02/2019	11/05/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	136 J	-	247	-	**864**	-	112 J	-	224 U	-	228	-	**339**	-	**7270**
Iron	ug/L	Y	300	73.8 J	-	145 J	-	140 J	-	98.8 UJ	-	80.5 U	-	40.0 U	-	67.8 J	-	**8230**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	140	-	42 J	-	40 U	-	120	-	290	-	47 J	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**469000**	-	**533000**	-	**451000**	-	**547000**	-	**520000**	-	**431000**	-	**573000**	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-360	MW-360	MW-360	MW-360	MW-360	MW-360	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361
			Field Sample ID	M360C1X	M360C2	M360C2X	M360C4	M360C4X	M360C6	M361A1	M361A1X	M361A2	M361A2X	M361A3	M361A3X	D0130141	M361A4	D0131141
			Sample Date	11/05/2019	05/04/2020	05/04/2020	02/09/2021	02/09/2021	10/06/2021	06/06/2013	06/06/2013	09/16/2013	09/16/2013	11/20/2013	11/21/2013	01/30/2014	01/30/2014	01/31/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1930**	-	**450**	-	**6700**	**579000**	-	**618000**	-	**533000**	-	**480000**	**539000**	-
Iron	ug/L	Y	300	-	**907**	-	41 U	-	**5300**	**594000**	-	**609000**	-	**579000**	-	**490000**	**548000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	750	-	58 J	-	160 J	40 UJ	-	40 U	-	40 U	-	40 U	-	-	200 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	15 UJ	-	240	-	360	-	340	-	-	320
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**609000J**	-	**655000J**	-	**540000J**	**620000J**	-	**372000**	-	**292000**	-	235000	-	-	**274000**

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361	MW-361
			Field Sample ID	M361A4X	M361A5	M361A5X	M361A6	M361A6X	M361A7	M361A7X	M361A8	M361A8X	M361A9	M361A9X	M361B1	M361B1X	M361B2	M361B2X
			Sample Date	01/31/2014	04/07/2014	04/08/2014	06/30/2014	07/01/2014	02/11/2015	02/12/2015	05/14/2015	05/15/2015	08/17/2015	08/18/2015	11/03/2015	11/04/2015	05/09/2016	05/10/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**566000**	-	**571000**	-	**567000**	-	**604000**	-	**587000**	-	**402000**	-	**568000**	-
Iron	ug/L	Y	300	-	**567000**	-	**588000**	-	**543000**	-	**551000**	-	**602000**	-	**382000**	-	**543000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	200 U	-	40 U	-	40 U	-	40 U	-	40 U	-	270	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	350	-	390	-	450	-	270	-	400	-	15 U	-	350	-	270
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**292000**	-	**258000**	-	218000	-	**252000**	-	248000	-	194000	-	2500 U	-	98500

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-361	MW-361	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362
			Field Sample ID	M361B3	M361B3X	M362A1	M362A1X	M362A2	M362A2X	D1120131	M362A3	D1121131	M362A3X	M362A4	M362A4X	M362A5	M362A5X	M362A6
			Sample Date	10/31/2016	11/01/2016	06/06/2013	06/06/2013	09/18/2013	09/19/2013	11/20/2013	11/20/2013	11/21/2013	11/21/2013	01/30/2014	01/31/2014	04/16/2014	04/17/2014	07/24/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**560000**	-	**33700**	-	**64800**	-	**34600**	**31800**	-	-	**17600**	-	**2650**	-	**4320**
Iron	ug/L	Y	300	**577000**	-	**32600**	-	**64300**	-	**33000**	**34100**	-	-	**12200**	-	**2370**	-	38.5 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	80 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	310	-	61	-	160	-	-	110	110	-	130	-	130	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	156000	-	194000	-	223000	-	-	211000	217000	-	191000	-	134000	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B1 Central Yard
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362
			Field Sample ID	M362A6X	M362A7	M362A7X	M362A8	M362A8X	M362A9	M362A9X	M362B1	M362B1X	M362B2	M362B2X	M362B3	M362B3X	M362B4	M362B4X
			Sample Date	07/25/2014	11/25/2014	11/26/2014	04/01/2015	04/01/2015	06/15/2015	06/16/2015	08/19/2015	08/20/2015	11/03/2015	11/04/2015	05/09/2016	05/10/2016	11/01/2016	11/02/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**56500**	-	**9040**	-	**20600**	-	**28400**	-	**77600**	-	**38600**	-	**68500**	-
Iron	ug/L	Y	300	-	**54000**	-	**8540**	-	**18600**	-	**28500**	-	**81200**	-	**36500**	-	**70200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	100	-	41 J	-	76	-	67	-	110	-	76	-	28 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	160000	-	191000	-	171000	-	173000	-	178000	-	175000	-	196000	-	207000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-362	MW-363
			Field Sample ID	M362B7	M362B7X	M362B8	M362B8X	M362B9	M362B9X	M362C1	M362C1X	M362C2	M362C2X	M362C3	M362C3X	M362C4	M362C5	M363A1
			Sample Date	05/02/2018	05/03/2018	11/26/2018	11/26/2018	05/10/2019	05/10/2019	11/22/2019	11/22/2019	05/08/2020	05/08/2020	11/20/2020	11/20/2020	05/03/2021	10/28/2021	06/06/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**51200**	-	**75900J**	-	**60500**	-	**79000**	-	**73000**	-	**60000**	-	**82000**	**52000**	**149000**
Iron	ug/L	Y	300	**52400**	-	**74500J**	-	**56800**	-	**79000**	-	**71600**	-	**44000**	-	**70000**	**49000**	**144000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	3.9 UJ	3 U	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	40 UJ	40 UJ	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	80	-	27 J	-	17 UJ	-	19 J	-	36 J	-	22 J	21 J	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	230000	-	**298000**	-	**301000**	-	**281000J**	-	**301000J**	-	**310000J**	**350000J**	180000 J	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363
			Field Sample ID	M363A1X	M363A2	M363A2X	M363A3	M363A3X	M363A4X	M363A5	M363A5X	M363A6	M363A6X	M363A7	M363A7X	M363A8	M363A8X	M363A9
			Sample Date	06/06/2013	09/18/2013	09/19/2013	11/25/2013	11/26/2013	01/31/2014	04/03/2014	04/04/2014	06/30/2014	07/01/2014	04/01/2015	04/02/2015	06/15/2015	06/16/2015	08/19/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**156000**	-	**162000**	-	-	**28600**	-	**182000**	-	**106000**	-	**173000**	-	**160000**
Iron	ug/L	Y	300	-	**153000**	-	**150000**	-	-	**20900**	-	**178000**	-	**98000**	-	**162000**	-	**162000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	52 J	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	140	-	210	-	180	170	-	120	-	180	-	170	-	170	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**414000**	-	**393000**	-	**365000**	**330000**	-	**256000**	-	**427000**	-	**336000**	-	**433000**	-

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Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363
			Field Sample ID	M363A9X	M363B1	M363B1X	M363B2	M363B2X	M363B3	M363B3X	D0502181	M363B6	D0503181	M363B6X	M363B7	M363B7X	M363B8	M363B8X
			Sample Date	08/20/2015	11/03/2015	11/04/2015	05/09/2016	05/10/2016	11/01/2016	11/02/2016	05/02/2018	05/02/2018	05/03/2018	05/03/2018	11/26/2018	11/26/2018	05/10/2019	05/10/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**150000**	-	**284000**	-	**214000**	-	**290000**	**267000**	-	-	**230000J**	-	**262000**	-
Iron	ug/L	Y	300	-	**158000**	-	**286000**	-	**223000**	-	**286000**	**265000**	-	-	**220000J**	-	**255000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	160	-	150	-	160	-	86	-	-	170	170	-	68 J	-	74
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**477000**	-	**408000**	-	**619000**	-	**677000**	-	-	**733000**	**698000**	-	**640000**	-	**687000**

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-363	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364
			Field Sample ID	M363B9	M363B9X	M363C1	M363C1X	D1120201	M363C2	M363C2X	M363C3	M363C4	M364A1	M364A1X	M364A2	M364A2X	M364A3	M364A3X
			Sample Date	11/22/2019	11/22/2019	05/08/2020	05/08/2020	11/20/2020	11/20/2020	11/20/2020	05/03/2021	10/28/2021	06/18/2013	06/19/2013	09/18/2013	09/19/2013	11/25/2013	11/26/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**229000**	-	**268000**	-	**210000**	**200000**	-	**25000**	**41000**	**8280**	-	**4380**	-	**3830**	-
Iron	ug/L	Y	300	**225000**	-	**256000**	-	**210000**	**210000**	-	**270000**	**24000**	**4680**	-	**2580**	-	**2040**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	40 U	-	40 U	40 UJ	170 J	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	66 J	-	91	69 J	-	63 J	74	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**637000J**	-	**691000J**	**690000J**	-	**650000J**	**790000J**	120000 J	-	**361000**	-	**447000**	-	**422000**

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364
			Field Sample ID	M364A4	M364A5	M364A5X	M364A6	M364A6X	M364A7	M364A7X	M364A8	M364A8X	M364A9	M364A9X	M364B1	M364B1X	M364B2	M364B2X
			Sample Date	01/30/2014	04/07/2014	04/08/2014	06/30/2014	07/01/2014	04/08/2015	04/09/2015	06/24/2015	06/25/2015	09/02/2015	09/03/2015	10/29/2015	10/30/2015	05/09/2016	05/10/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**103000**	**1600**	-	**1150**	-	**749**	-	**7690**	-	**464**	-	**5230**	-	**2240**	-
Iron	ug/L	Y	300	**102000**	94.5 J	-	83.6 J	-	183 J	-	203	-	33.3 U	-	221	-	79.3 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	110	-	40 U	-	40 U	-	40 U	-	40 U	-	220	-	110
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**392000**	-	**391000**	-	**382000**	-	**386000**	-	181000	-	**356000**	-	**320000**

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364	MW-364
			Field Sample ID	M364B4	M364B4X	M364B7	M364B7X	M364B8	M364B8X	M364B09	M364B9X	M364C1	M364C1X	M364C2	M364C2X	M364C3	M364C3X	M364C4
			Sample Date	11/10/2016	11/11/2016	05/02/2018	05/03/2018	11/30/2018	11/30/2018	05/09/2019	05/09/2019	11/07/2019	11/07/2019	05/07/2020	05/07/2020	11/24/2020	11/24/2020	06/25/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**30700**	-	**375**	-	**352**	-	**431**	-	110 J	-	239	-	250	-	**1200**
Iron	ug/L	Y	300	175 J	-	80.5 U	-	40.0 U	-	34.2 U	-	66.1 J	-	41.2 U	-	41 U	-	41 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.6 J
Nitrogen, Nitrate as N	ug/L	N	10000	-	940	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	55 J	520 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 UJ	-	15 U	-	15 U	-	15 U	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	221000	-	**399000**	-	**373000**	-	**348000J**	-	**390000J**	-	**361000J**	-	**350000J**	**340000J**

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-364	MW-365	MW-365	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367
			Field Sample ID	M364C5	M365A1	M365A1X	M367A1X	M367A2	M367A2X	M367A2X	M367A3	M367A3X	M367A4	M367A4X	M367A5	M367A5X	M367A6	M367A6X
			Sample Date	10/29/2021	06/26/2013	06/27/2013	06/14/2013	10/21/2015	10/21/2015	10/21/2015	02/04/2016	02/04/2016	05/09/2016	05/09/2016	08/04/2016	08/05/2016	11/02/2016	11/02/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	23100	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	250	-	-	120 J	-	770 J	-	410 J	-	520 J	-
Iron	ug/L	N	300	**1100**	**54300**	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	41 U	**2980**	-	-	235	-	-	-	-	-	-	-	-	**345**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	7.7	-	-	-	-	21	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	40 U	690	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	15 U	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**370000J**	-	250000 U	250000 U	-	-	143000	-	159000	-	168000	-	174000	-	182000

Notes:
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367
			Field Sample ID	M367A9	M367A9X	M367B1	M367B1X	M367B2	M367B2X	M367B3	M367B3X	M367B4	M367B4X	M367B5	M367B5X	M367B6	M367B6X	M367B7
			Sample Date	02/19/2018	02/19/2018	05/11/2018	05/11/2018	12/05/2018	12/17/2018	02/21/2019	02/22/2019	04/26/2019	04/26/2019	07/15/2019	07/19/2019	10/30/2019	10/31/2019	01/22/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	56 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	6400 J	-	32100 J	-	11000 J	-	65500 J	-	107000 J	-	95200 J	-	88000 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	490	-	720	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 J	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	245000	-	**280000**	-	17800	-	13500	-	26600	-	26500	-	2500 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-367	MW-368	MW-368	MW-368
			Field Sample ID	M367B7X	M367B8	M367B8X	M367B9	M367B9X	M367C1	M367C1X	M367C2	M367C3	M367C4	D0225221A	M367C5	M368A1X	M368A2	M368A2X
			Sample Date	01/28/2020	05/05/2020	05/06/2020	07/29/2020	07/30/2020	03/24/2021	03/25/2021	06/29/2021	09/22/2021	12/20/2021	02/25/2022	02/25/2022	06/06/2013	06/24/2014	06/24/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	75000 J	-	39000 J	-	-	-	-	-	-	36200	-	-
Ferrous Iron	ug/L	Y	NA	-	78900	-	-	-	-	-	-	-	-	-	-	-	154000	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	**38000**	**21000**	**36000**	**23000**	**28000**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	**28000**	**18000**	**27000**	**22000**	**22000**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	4500	24000	22000	21000	24000 UJ	4200	-	15000
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 UJ	40 UJ	40 UJ	40 UJ	40 UJ	40 UJ	40 U	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	-	-	-	25 J	15 UJ	15 U	15 U	15 UJ	43 J	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	33300	-	27300	-	8000	-	84000	120000 J	34000 J	56000 J	78000 J	90000 J	59200	-	1500 U

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368
			Field Sample ID	M368A4	M368A4X	M368A4X	M368A6	M368A6X	M368A6X	M368A7	M368A7X	M368A7X	M368A8	M368A8X	M368A8X	M368A9	M368A9X	M368A9X
			Sample Date	10/30/2014	10/30/2014	10/30/2014	01/16/2015	01/16/2015	01/16/2015	04/23/2015	04/23/2015	04/23/2015	07/09/2015	07/09/2015	07/09/2015	10/12/2015	10/12/2015	10/12/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	120	-	-	335000	-	-	116000	-	-	74800	-	-	75900	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	**75000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	17000.00	-	-	13000.00	13000	-	16000	16000	-	16000	-	-	11000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	1500 U	-	-	1500 U	-	-	5000	-	-	6900	-	-	14200

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368
			Field Sample ID	M368B1	M368B1X	M368B2	M368B2X	M368B3	M368B3X	M368B4	M368B4X	M368B8	M368B8X	M368B9	M368B9X	M368C1	M368C1X	M368C2
			Sample Date	02/01/2016	02/01/2016	05/10/2016	05/10/2016	08/04/2016	08/05/2016	10/31/2016	10/31/2016	02/20/2018	02/20/2018	05/11/2018	05/11/2018	12/04/2018	12/14/2018	02/19/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	53300 J	-	-
Ferrous Iron	ug/L	Y	NA	81400 J	-	74500 J	-	74900 J	-	52300 J	-	54500 J	-	54500 J	-	-	-	60300 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	**47000**	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	130	-	120	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	27200	-	28500	-	33000	-	29000	-	37300	-	25100	-	56700	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368	MW-368
			Field Sample ID	M368C2X	M368C3	M368C3X	M368C4	M368C4X	M368C5	M368C5X	M368C6	M368C6X	M368C7	M368C7X	M368C8	M368C8X	M368D1	M368D1X
			Sample Date	02/22/2019	04/23/2019	04/23/2019	07/16/2019	07/16/2019	11/01/2019	11/01/2019	01/20/2020	01/20/2020	05/06/2020	05/06/2020	07/30/2020	07/30/2020	03/26/2021	03/26/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	47000 J	-	48000 J	-
Ferrous Iron	ug/L	Y	NA	-	61600 J	-	55600 J	-	60500 J	-	57700 J	-	51600 J	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	15 U	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	68100	-	71100	-	72200	-	88900	-	82000 J	-	88800	-	77000	-	77000

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-368	MW-368	MW-368	MW-368	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369
			Field Sample ID	M368D2	M368D3	M368D4	M368D5	M369A1X	M369A2	M369A2X	M369A2X	M369A4	M369A4X	M369A4X	M369A5	M369A5X	M369A5X	M369A6
			Sample Date	06/22/2021	09/23/2021	12/29/2021	03/28/2022	06/06/2013	10/28/2014	10/28/2014	10/28/2014	01/13/2015	01/13/2015	01/13/2015	04/21/2015	04/21/2015	04/21/2015	07/10/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	27700	1300	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	52500	-	-	46400	-	-	45000
Iron	ug/L	N	300	**45000**	**42000**	**47000**	**43000**	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	**43000**	**43000**	**42000**	**41000**	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	9300	7500	7100	8800	2800	-	5900.00	5900	-	6600.00	-	-	6400	6400	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 UJ	40 UJ	40 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	36 J	15 U	15 U	15 U	15 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	75000 J	91000 J	75000 J	96000 J	56700	-	-	30900	-	-	32500	-	-	30900	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369
			Field Sample ID	M369A6X	M369A6X	M369A7	M369A7X	M369A7X	M369A8	M369A8X	M369A9	M369A9X	M369RB1	M369RB1X	M369RB2	M369RB2X	M369RB6	M369RB6X
			Sample Date	07/10/2015	07/10/2015	10/09/2015	10/09/2015	10/09/2015	02/02/2016	02/02/2016	05/12/2016	05/12/2016	08/04/2016	08/05/2016	11/02/2016	11/02/2016	02/21/2018	02/21/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	44900 J	-	-	51200 J	-	49500 J	-	47300 J	-	51700 J	-	50100 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	**49400**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	5500	-	-	4400	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	170
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	41100	-	-	41100	-	36500	-	38400	-	46300	-	37400	-	30500

Notes:
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Appendix B1 Central Yard
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			Location ID	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369
			Field Sample ID	M369RB7	M369RB7X	M369B8	M369B8X	M369B9	M369B9X	M369RC1	M369RC1X	M369RC2	M369RC2X	M369RC3	M369RC3X	M369RC4	M369RC4X	M369RC5
			Sample Date	05/11/2018	05/11/2018	12/04/2018	12/14/2018	02/20/2019	02/21/2019	04/23/2019	04/23/2019	07/16/2019	07/16/2019	10/30/2019	10/30/2019	01/20/2020	01/20/2020	05/05/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	46000 J	-	-	-	-	-	-	-	-	4210 J	-	-	-
Ferrous Iron	ug/L	Y	NA	64400 J	-	-	-	55700 J	-	57200 J	-	49400 J	-	49100 J	-	56100 J	-	49100
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	190	-	40 U	-	40 U	-	1000	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	25100	-	23800	-	38500	-	56600	-	80000	-	64800	-	47200 J	-

Notes:
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-369	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370
			Field Sample ID	M369RC5X	M369RC6	M369RC6X	M369RC8	M369RC8X	M369C9	M369RD1	M369RD2	M369D3	M370A2	M370A2X	M370A3	M370A4	M370A4X	M370A5
			Sample Date	05/05/2020	07/29/2020	07/30/2020	03/26/2021	03/26/2021	06/24/2021	09/23/2021	11/08/2021	01/11/2022	01/19/2015	01/19/2015	04/24/2015	07/08/2015	07/08/2015	10/09/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	47000 J	-	51000 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	25400	-	20800	21900	-	22200 J
Iron	ug/L	N	300	-	-	-	-	-	**45000**	**42000**	**43000**	**43000**	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**48000**	**44000**	**43000**	**42000**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	9600	7600	7900	8600	-	1.5	-	-	0.66	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	64 J	-	380 J	40 UJ	40 UJ	40 UJ	40 UJ	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	33 J	-	-	-	-	57	15 U	15 U	15 U	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	56900 J	-	110000	-	17000	51000 J	73000 J	75000 J	89000 J	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370	MW-370
			Field Sample ID	M370A5X	M370A6	M370A7	M370A8	M370A9	M370B3	M370B3X	M370B4	M370B4X	M370B5	M370B5X	M370B6	M370B6X	M370B7X	M370B8
			Sample Date	10/09/2015	02/09/2016	05/12/2016	08/09/2016	11/08/2016	05/07/2018	05/08/2018	12/03/2018	12/17/2018	04/19/2019	04/19/2019	10/31/2019	10/31/2019	04/30/2020	06/22/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	20900	-	-	-
Ferrous Iron	ug/L	Y	NA	-	24400 J	23500 J	21900 J	24900 J	20100 J	-	23800 J	-	16600 J	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**8100**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**15000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	0.31J	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	490	-	130	-	140	-	40 U	440	310 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	15 U	-	-	-	-	15 U	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	34400	-	40000 J

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-370	MW-370	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371
			Field Sample ID	M370B9	M370C1	D0710135	M371A1	M371A2	M371A2X	M371A3	M371A3X	M371A4	M371A4X	M371A5	M371A5X	M371A6	M371A7	M371A8
			Sample Date	09/21/2021	11/08/2021	07/10/2013	07/10/2013	01/14/2015	01/14/2015	04/27/2015	04/27/2015	07/07/2015	07/07/2015	10/12/2015	10/12/2015	02/03/2016	05/16/2016	08/11/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	50 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	180	-	280	-	210	-	100	-	83 J	150 J	68 J
Iron	ug/L	N	300	**9700**	**30000**	148 J	148 J	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	**8200**	**23000**	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	3 U	31	-	-	-	2500.00	-	1300	-	2600	-	3000	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	460 J	40 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 UJ	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	56000 J	120000 J	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371	MW-371
			Field Sample ID	D1110165	M371A9	M371B3	M371B3X	M371B4	M371B4X	M371B5	M371B5X	M371B6	M371B6X	M371B7	M371B7X	M371B8	M371B9	M371C1
			Sample Date	11/10/2016	11/10/2016	05/07/2018	05/08/2018	12/12/2018	12/18/2018	04/18/2019	04/18/2019	10/24/2019	10/25/2019	05/06/2020	05/06/2020	06/22/2021	09/21/2021	12/16/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	170 J	140 J	-	56.1 J	-	25 J	-	5780 J	-	121 J	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	**920**	**630J**	**400**
Iron	ug/L	Y	300	74.7 U	74.7 U	-	-	-	-	-	-	-	-	-	-	220 J	41 U	41 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	410	280	880
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	-	40 U	-	40 UJ	-	40 U	-	40 U	40 UJ	150 J	40 UJ
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 U	15 U	15 U	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	24000 J	32000 J	19000 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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Chevron Perth Amboy Facility

			Location ID	MW-372	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R
			Field Sample ID	M372A1X	M372RA1	M372RA1X	M372RA1X	M372RA3	M372RA3X	M372RA4	M372RA4X	M372RA5	M372RA5X	M372RA5X	M372RA6	M372RA6X	M372RA6X	M372RA7
			Sample Date	06/14/2013	10/30/2014	10/30/2014	10/30/2014	01/15/2015	01/15/2015	04/24/2015	04/24/2015	07/07/2015	07/07/2015	07/07/2015	10/12/2015	10/12/2015	10/12/2015	02/03/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	1300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	3800	-	-	11100	-	10600	-	8000	-	-	15300	-	-	13400 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	**13800**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	1300	-	4600.00	4600	-	5500	-	-	-	1600	-	-	930	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	35500	-	-	25700	-	31600	-	39400	-	-	43000	-	-	32300	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R
			Field Sample ID	M372RA7X	M372RA8	M372RA8X	M372RA9	M372RA9X	M372RB1	M372RB1X	M372RB4	M372RB4X	M372RB5	M372RB5X	M372RB6	M372RB6X	M372RB7	M372RB7X
			Sample Date	02/03/2016	05/11/2016	05/11/2016	08/11/2016	08/11/2016	11/04/2016	11/04/2016	05/07/2018	05/08/2018	12/03/2018	12/06/2018	04/18/2019	04/18/2019	10/24/2019	10/24/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	7500 J	-	14100 J	-	13300 J	-	4600 J	-	485 J	-	2290 UJ	-	3020 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**12800**	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	40 U	-	310	-	40 U	-	980
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	38900	-	41300	-	30000	-	36400	-	24600	-	7100	-	29900	-	16600 J

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-372R	MW-372R	MW-372R	MW-372R	MW-372R	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390
			Field Sample ID	M372RB8	M372RB8X	M372RB9	M372RC1	M372RC2	M390A1	M390A1X	M390A2	M390A2X	M390A3	M390A3X	M390A4	M390A4X	M390A5	M390A5X
			Sample Date	05/01/2020	05/01/2020	06/21/2021	09/21/2021	11/02/2021	01/08/2014	01/09/2014	04/16/2014	04/17/2014	07/14/2014	07/15/2014	02/11/2015	02/12/2015	05/14/2015	05/15/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	2090 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**3700**	**2100**	**1500**	**1450**	-	**1200**	-	238	-	203	-	**402J**	-
Iron	ug/L	Y	300	-	-	**780**	**2200**	290	**326**	-	140 J	-	73.9 J	-	127 J	-	72.7 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	670	430 UJ	350	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	76 J	160 J	130 J	-	1400	-	1100	-	1000	-	900	-	950
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	15 U	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	29100	18000 J	19000 J	19000 J	-	53100	-	63000	-	69200	-	57300	-	37500

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390
			Field Sample ID	D0826151	D0827151	M390A6	M390A6X	M390A7	M390A7X	M390A8	M390A8X	D1110161	M390A9	D1111161	M390A9X	M390B3	M390B3X	M390B4
			Sample Date	08/27/2015	08/27/2015	08/27/2015	08/27/2015	10/27/2015	10/28/2015	05/12/2016	05/13/2016	11/10/2016	11/10/2016	11/11/2016	11/11/2016	04/24/2018	04/25/2018	11/05/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	184 J	-	175 J	-	176 J	-	172 J	-	202	218	-	-	151 J	-	99.9 J
Iron	ug/L	Y	300	66.9 J	-	73.6 J	-	57.3 J	-	95.2 J	-	95.9 J	76.9 J	-	-	92.5 J	-	84.8 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	980	-	1100	-	-	1700	1700	-	1100	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	900	-	910	-	15 U	-	15 U	-	-	15 U	15 U	-	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	53100 J	-	50000 U	-	53400	-	51000	-	-	27200 J	35000 J	-	70800	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
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			Location ID	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-390	MW-416	MW-416
			Field Sample ID	M390B4X	M390B5	M390B5X	D1101191	D1101191X	M390B6	M390B6X	M390B7	M390B7X	M390B8	M390B8X	M390C5	M390B9	M416A1	M416A1X
			Sample Date	11/05/2018	03/28/2019	03/28/2019	11/01/2019	11/01/2019	11/01/2019	11/01/2019	02/19/2020	02/19/2020	10/29/2020	10/29/2020	06/23/2021	10/27/2021	05/18/2015	05/19/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	104 J	-	84.4 J	-	182 J	-	224	-	-	-	**1400**	120 J	**234000**	-
Iron	ug/L	Y	300	-	**3000**	-	58.8 J	-	56.1 J	-	82.8 J	-	74 J	-	51 J	70 UJ	**220000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	350	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	2200	-	1300	-	1500	-	1500	-	1000	-	1200 J	1500 J	1100 J	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 UJ	-	15 U	-	15 U	-	15 U	-	15 U	15 U	15 U	-	490
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	65200 J	-	61000	-	56600 J	-	59300 J	-	53600 J	-	12000 J	61000 J	47000 J	-	**273000**

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416
			Field Sample ID	M416A2	M416A2X	M416A3	M416A3X	M416A4	M416A4X	M416A7	M416A7X	M416A8	M416A8X	M416B5	M416B5X	M416B6	M416B6X	M416B7
			Sample Date	08/19/2015	08/20/2015	10/27/2015	10/28/2015	03/01/2016	03/02/2016	08/11/2016	08/12/2016	11/14/2016	11/15/2016	04/19/2018	04/20/2018	06/13/2018	06/13/2018	10/05/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**196000**	-	**213000**	-	**186000**	-	**119000**	-	**142000**	-	**82100**	-	**70400**	-	**81800**
Iron	ug/L	Y	300	**211000**	-	**215000**	-	**120000**	-	**122000**	-	**139000**	-	**88700**	-	**73300**	-	**83500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	220	-	**1600**	-	160	-	53	-	110	-	260 U	-	85	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**252000**	-	242000	-	217000	-	200000	-	198000	-	**272000**	-	220000	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416
			Field Sample ID	M416B7X	M416B8	M416B8X	D0426191	M416B9	M416B9X	M416C1	M416C1X	M416C2	M416C2X	M416C3	M416C3X	M416C4	M416C4X	M416C6
			Sample Date	10/05/2018	12/04/2018	12/04/2018	04/26/2019	04/26/2019	04/26/2019	06/17/2019	06/17/2019	09/05/2019	09/05/2019	12/05/2019	12/05/2019	03/25/2020	03/25/2020	09/17/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**177000**	-	**75900**	**72600**	-	**99600**	-	**251000**	-	**240000**	-	**85400**	-	-
Iron	ug/L	Y	300	-	**166000**	-	**79700**	**92100**	-	**79700**	-	**248000**	-	**250000**	-	**105000**	-	**88000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	92000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	950	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	38 J	-	51	46 J	-	56 J	-	15 U	-	76	-	26 J	-	77	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**263000**	-	**290000**	**257000**	-	**262000**	-	**253000J**	-	**311000J**	-	**271000J**	-	**297000J**	-

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-416	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417
			Field Sample ID	M416C6X	M416C7	M416C7X	M416C8	M416C8X	M416C9	M416D1	M416D2	M416D3	M417A1	M417A1X	M417A2	M417A2X	M417A3	M417A3X
			Sample Date	09/17/2020	12/29/2020	12/29/2020	03/18/2021	03/18/2021	05/28/2021	09/02/2021	11/23/2021	02/18/2022	05/18/2015	05/19/2015	08/19/2015	08/20/2015	10/27/2015	10/28/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**150000**	-	**190000J**	-	**99000**	**140000**	**160000**	**130000**	**884000**	-	**1070000**	-	**1090000**	-
Iron	ug/L	Y	300	-	**160000**	-	**180000**	-	**230000J**	**130000**	**170000**	**140000**	**882000**	-	**1060000**	-	**1080000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	40 UJ	-	40 UJ	40 UJ	40 U	40 UJ	40 UJ	-	40 U	-	400 U	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	55	-	48 J	-	36 J	15 U	18 J	15 U	15 U	-	230	-	300	-	**2000**
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**310000J**	-	250000 J	-	**280000J**	**320000J**	**290000**	**330000J**	**330000J**	-	219000	-	**288000**	-	**275000**

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417
			Field Sample ID	M417A4	M417A4X	M417A7	M417A7X	M417A8	M417A8X	M417B5	M417B5X	M417B6	M417B6X	M417B7	M417B7X	M417B8	M417B8X	M417B9
			Sample Date	03/01/2016	03/02/2016	08/11/2016	08/12/2016	11/14/2016	11/15/2016	04/19/2018	04/20/2018	06/13/2018	06/13/2018	10/05/2018	10/05/2018	12/04/2018	12/04/2018	04/26/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1080000**	-	**1040000**	-	**1120000**	-	**1140000**	-	**1090000**	-	**1040000**	-	**1110000**	-	**1060000**
Iron	ug/L	Y	300	**1060000**	-	**1050000**	-	**1090000**	-	**1160000**	-	**1090000**	-	**1020000**	-	**1070000**	-	**518000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	230	-	37 J	-	240	-	210 U	-	36 J	-	50	-	22 J	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**287000**	-	**253000**	-	**268000**	-	**278000**	-	**325000**	-	**289000**	-	245000	-

Notes:
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5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417
			Field Sample ID	M417B9X	M417C1	M417C1X	M417C2	M417C2X	M417C3	M417C3X	M417C4	M417C4X	M417C5	M417C5X	M417C6	M417C6X	M417C7	M417C7X
			Sample Date	04/26/2019	06/17/2019	06/17/2019	09/05/2019	09/05/2019	12/05/2019	12/05/2019	03/25/2020	03/26/2020	06/16/2020	06/16/2020	09/22/2020	09/22/2020	12/29/2020	12/29/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1080000**	-	**1010000**	-	**1090000J**	-	**1000000**	-	-	-	-	-	**790000**	-
Iron	ug/L	Y	300	-	**1040000**	-	**1040000**	-	**1140000J**	-	206 U	-	**880000**	-	**950000**	-	**670000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	980000	-	990000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	230	-	280	-	40 U	-	40 U	-	40 U	-	40 UJ	-	40 UJ	-	40 UJ
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	61	-	21 UJ	-	72	-	15 U	-	22 J	-	64	-	33 J	-	17 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**326000**	-	318000 UJ	-	**321000J**	-	**322000J**	-	244000 J	-	**300000J**	-	**310000J**	-	**290000J**

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-417	MW-417	MW-417	MW-417	MW-417	MW-417	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418	MW-418
			Field Sample ID	M417C8	M417C8X	M417C9	M417D1	M417D2	M417D3	M418A1	M418A1X	M418A2	M418A2X	M418A3	M418A3X	M418A4	M418A4X	M418A7
			Sample Date	03/18/2021	03/18/2021	05/28/2021	09/02/2021	12/21/2021	02/18/2022	05/18/2015	05/19/2015	08/17/2015	08/18/2015	10/27/2015	10/28/2015	03/01/2016	03/02/2016	08/11/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**910000J**	-	**980000**	**760000**	**1100000**	**930000**	**105000**	-	**77300**	-	**68400**	-	**94700**	-	**84000**
Iron	ug/L	Y	300	**950000**	-	**1100000J**	**650000**	**940000**	**970000**	**104000**	-	**113000**	-	**65900**	-	**92700**	-	**85000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	40 UJ	40 U	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	29 J	15 U	15 J	15 U	15 U	-	320	-	15 U	-	**1300**	-	140	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**330000J**	**330000J**	**320000**	**320000J**	**320000J**	-	230000	-	230000	-	232000	-	219000	-

Notes:
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Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-418	MW-418	MW-418	MW-434	MW-434	MW-434	MW-434	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R
			Field Sample ID	M418A7X	M418A8	M418A8X	M434A1	M434A1X	M434A2X	M434A2	M434RA7	M434RA7X	M434RA8	M434RA8X	D0810188	M434RA9	M434RA9X	M434RB1
			Sample Date	08/12/2016	11/14/2016	11/15/2016	10/06/2015	10/06/2015	12/07/2015	12/15/2015	02/05/2018	02/05/2018	05/02/2018	05/02/2018	08/10/2018	08/10/2018	08/10/2018	11/07/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**64000**	-	**67700**	-	-	**40900**	**31400**	-	**76700**	-	**89000**	**83400**	-	**45200**
Iron	ug/L	Y	300	-	**65800**	-	**62800**	-	-	**40600**	**30500**	-	**76100**	-	**82600**	**80000**	-	**45800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	23 J	-	51	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	205000	-	195000	-	249000	54600	-	-	**1610000**	-	**2210000**	**898000**	-	**858000J**	-

Notes:
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-434R	MW-435	MW-435	MW-435	MW-435	MW-435	MW-435R	MW-435R
			Field Sample ID	M434RB1X	M434RB2	M434RB2X	M434RB3X	M434RB4X	M434RB5	M434RB6	M434RB7	D1006158A	M435A1	M435A1X	M435A2X	M435A2	D0206188	M435RA6
			Sample Date	11/07/2018	02/06/2019	02/06/2019	02/03/2020	03/03/2021	05/24/2021	09/15/2021	10/28/2021	10/06/2015	10/06/2015	10/06/2015	12/07/2015	12/14/2015	02/06/2018	02/06/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**22800**	-	-	-	**73000**	**110000**	**120000**	**41800**	**38600**	-	-	**51400**	**707**	**763J**
Iron	ug/L	Y	300	-	**24200**	-	-	-	**66000J**	**100000**	**120000**	**64700**	**56600**	-	-	**48100**	**308**	80.5 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	360	170	210	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 UJ	40 UJ	40 UJ	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	21 J	15 U	15 U	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1020000**	-	**956000**	**774000**	**1300000**	**3100000J**	**1300000J**	**1200000J**	146000	-	135000 J	117000	-	**557000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-435R	MW-436
			Field Sample ID	M435RA6X	M435RA7	M435RA7X	M435RA8	M435RA8X	M435RA9	M435RA9X	M435RB1	M435RB1X	M435RB2X	M435RB3X	M435RB4	M435RB5	M435RB6	M436A1
			Sample Date	02/06/2018	05/02/2018	05/02/2018	08/10/2018	08/10/2018	11/08/2018	11/08/2018	02/06/2019	02/06/2019	02/03/2020	03/03/2021	05/24/2021	09/22/2021	11/22/2021	10/08/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**2030**	-	**557**	-	**343**	-	**7400**	-	-	-	**1300**	**2400**	**5700**	**88300**
Iron	ug/L	Y	300	-	80.5 U	-	50.2 J	-	40 U	-	**2550**	-	-	-	41 U	100 UJ	72 J	**84200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3 U	3 U	3 U	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	470 J	340 J	2900 J	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 U	15 UJ	15 UJ	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**547000**	-	**548000**	-	**910000**	-	**834000**	-	**713000**	**1530000**	**550000**	**940000J**	**870000J**	**2600000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-436	MW-436	MW-436	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R	MW-436R
			Field Sample ID	M436A1X	M436A2X	M436A2	M436RA9	M436RA9X	M436RB1	M436RB1X	M436RB2	M436RB2X	M436RB3	M436RB3X	M436RB4	M436RB4X	M436RB5X	M436RB6X
			Sample Date	10/08/2015	12/07/2015	12/15/2015	02/07/2018	02/07/2018	05/03/2018	05/03/2018	08/15/2018	08/15/2018	11/09/2018	11/09/2018	02/11/2019	02/11/2019	02/17/2020	03/11/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**21100**	**7800**	-	**3200**	-	**12600**	-	**10300**	-	**5080**	-	-	-
Iron	ug/L	Y	300	-	-	**20500**	80.5 U	-	**310**	-	**1690**	-	**9060**	-	**1110**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	213000	224000	-	-	**570000**	-	**1900000**	-	**661000**	-	**862000**	-	118000	236000	**770000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-436R	MW-436R	MW-436R	MW-436R	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438
			Field Sample ID	M436RB7	M436RB8	M436RB9	M436RC1	M438A1	M438A1X	M438A2X	M438A2	M438A6	M438A6X	M438A7	M438A7X	M438A8	M438A8X	M438A9
			Sample Date	05/24/2021	09/22/2021	11/22/2021	03/30/2022	10/06/2015	10/06/2015	12/08/2015	12/15/2015	02/05/2018	02/05/2018	05/02/2018	05/02/2018	08/09/2018	08/09/2018	11/07/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**38000**	**71000**	**31000**	**36000**	**55300**	-	-	**17200**	**6340**	-	**15700**	-	**9130**	-	**12400**
Iron	ug/L	Y	300	**29000**	**69000**	**26000**	**32000**	**54000**	-	-	**15400**	**6250**	-	**11800**	-	**8850**	-	**11900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	20	11	24	16	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 UJ	120 J	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	280 J	24 J	15 U	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**3300000J**	**3000000J**	**1700000**	**6300000J**	-	**280000**	73200	-	-	**263000**	-	**279000**	-	147000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-438	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439
			Field Sample ID	M438A9X	M438B1	M438B1X	M438B2X	M438B3X	M438B4	M438B5	M439A1	M439A1X	M439A2X	M439A2	M439A3	M439A3X	M439A5	M439A5X
			Sample Date	11/07/2018	02/06/2019	02/06/2019	02/04/2020	03/03/2021	05/28/2021	10/29/2021	10/07/2015	10/07/2015	12/07/2015	12/14/2015	02/29/2016	03/01/2016	08/23/2016	08/23/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**3240**	-	-	-	**1300**	**2400**	**16500**	-	-	**90000**	**1220**	-	**5000**	-
Iron	ug/L	Y	300	-	**2520**	-	-	-	**1100**	**2900**	94.8 J	-	-	**969**	159 J	-	**3720**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	400	900	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 UJ	40 UJ	-	-	-	-	-	310	-	160
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	15 UJ	-	-	-	-	-	23 J	-	31 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	39800	-	55900	16700	26000	4500 J	12000 J	-	104000	**284000**	-	-	95400 J	-	250000 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-439	MW-440	MW-440
			Field Sample ID	M439B3	M439B3X	M439B4	M439B4X	M439B5	M439B5X	M439B6	M439B6X	M439B7	M439B7X	M439B8X	M439C1	M439C2	M440A1	M440A1X
			Sample Date	02/05/2018	02/06/2018	05/07/2018	05/08/2018	08/13/2018	08/13/2018	11/28/2018	11/28/2018	02/15/2019	02/15/2019	02/04/2020	06/01/2021	08/13/2021	10/07/2015	10/07/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	265	-	80.5 U	-	131 J	-	**2000**	-	**1660**	-	-	**710**	**9100**	**64500**	-
Iron	ug/L	Y	300	80.5 U	-	80.5 U	-	40.0 U	-	**1590**	-	40.2 UJ	-	-	250	**1400**	**64900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	170	3 U	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	40 UJ	40 UJ	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 U	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	111000	-	231000	-	70700	-	133000	-	61300	69300	42000 J	41000 J	-	**292000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440
			Field Sample ID	D120815A8	M440A2X	D1214158	M440A2	M440A6	M440A6X	M440A7	M440A7X	M440A8	M440A8X	M440A9	M440A9X	D0207198	M440B1	M440B1X
			Sample Date	12/08/2015	12/08/2015	12/14/2015	12/14/2015	02/06/2018	02/06/2018	05/01/2018	05/01/2018	08/14/2018	08/14/2018	11/08/2018	11/08/2018	02/07/2019	02/07/2019	02/07/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**4070**	**4010**	**2200**	-	**353000**	-	**3130**	-	**3070**	-	**2700**	**3050J**	-
Iron	ug/L	Y	300	-	-	**1220**	**2220J**	80.5 U	-	**309**	-	233 J	-	**1010**	-	**2210J**	**996J**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	123000 J	79200 J	-	-	-	62900	-	25100	-	29000	-	36300	37900	-	41800

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-440	MW-441	MW-441	MW-441	MW-441	MW-441R	MW-441R	MW-441R	MW-441R
			Field Sample ID	D0204208	M440B2X	M440B3X	M440B4	M440B5	M440B6	M440B7	M441A1	M441A1X	M441A2X	M441A2	M441RA6	M441RA6X	D0503188	M441RA7
			Sample Date	02/04/2020	02/04/2020	03/05/2021	06/01/2021	08/13/2021	10/29/2021	03/30/2022	10/07/2015	10/07/2015	12/09/2015	12/15/2015	02/07/2018	02/07/2018	05/03/2018	05/03/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**25000**	**21000**	**24000**	**140000**	**28200**	-	-	**29000**	**128000**	-	**73000**	**77600**
Iron	ug/L	Y	300	-	-	-	**1300**	**450**	41 U	**24000**	**28400**	-	-	**26100**	**130000**	-	**55400**	**60200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	240	3 U	27	680	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 UJ	2400 J	99 J	140 J	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	15 U	15 U	15 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	41400 J	53300 J	22000	10000 UJ	**1000000J**	22000 J	100000 UJ	-	84700	113000	-	-	**4100000**	**2570000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-441R	MW-483	MW-483	MW-484
			Field Sample ID	M441RA7X	M441RA8	M441RA8X	M441RA9	M441RA9X	M441RB1	M441RB1X	M441RB2X	M441RB3X	M441RB4	M441RB6	M441RB7	M483A1	M483A2	M484A1
			Sample Date	05/03/2018	08/14/2018	08/14/2018	11/09/2018	11/09/2018	02/11/2019	02/11/2019	02/03/2020	03/05/2021	06/02/2021	09/17/2021	01/10/2022	08/03/2016	10/26/2016	08/03/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	350 J	29 J	58800 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**253000**	-	**307000**	-	**2640**	-	-	-	**370000**	**6900**	**370000**	**413**	74.7 U	**75600**
Iron	ug/L	Y	300	-	**248000**	-	**315000**	-	**1250**	-	-	-	**290000**	**4900**	**310000**	193 J	74.7 U	**52900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2200	3 U	8200	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	40 UJ	550 J	40 UJ	250 U	1500	250 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	110 J	15 U	15 U	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**2620000J**	-	**3740000**	-	**3780000**	-	**741000**	**2020000**	**3700000**	**4500000J**	**520000J**	**3600000J**	175000	61800	177000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-484	MW-485	MW-485	MW-486	MW-486	MW-486	MW-487	MW-487	MW-487	MW-488	MW-488	MW-509	MW-509	MW-509	MW-509
			Field Sample ID	M484A2	M485A1	M485A2	D0802165	M486A1	M486A2	M487A1	D10251615	M487A2	M488A1	M488A2	D1010168	M509A1	M509A1X	M509A2
			Sample Date	10/27/2016	08/02/2016	10/25/2016	08/02/2016	08/02/2016	10/24/2016	08/01/2016	10/25/2016	10/25/2016	08/01/2016	10/24/2016	10/10/2016	10/10/2016	10/10/2016	11/10/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	49 J	10 UJ	-	13800 J	19900 J	10100 UJ	-	11500 J	23600 UJ	60400 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**50000**	275	**437**	**11500**	**12100**	**23500**	**9260**	**9190**	**9250**	**22500**	**59600**	**40300**	**40500**	-	**33500**
Iron	ug/L	Y	300	**58000**	74.7 U	74.7 U	-	**13700**	**17800**	**7850**	-	**8030**	**18800**	**56000**	**36500**	**36100**	-	**33700**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1100	1200	-	430 J	250 UJ	250 U	-	250 U	250 U	250 U	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	32300	18600	-	9200	3900 J	71400	-	27300	218000	215000	195000	-	179000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509	MW-509
			Field Sample ID	M509A2X	M509A6	M509A6X	M509A7	M509A7X	M509A8	M509A8X	M509A9	M509A9X	M509B1	M509B1X	M509B2X	M509B3X	M509B4	M509B5
			Sample Date	11/10/2016	02/07/2018	02/07/2018	05/01/2018	05/01/2018	08/14/2018	08/14/2018	11/08/2018	11/08/2018	02/07/2019	02/07/2019	02/04/2020	03/05/2021	06/03/2021	10/28/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**56900**	-	**40400**	-	**24000**	-	**65900**	-	**42600**	-	-	-	**56000**	**57000**
Iron	ug/L	Y	300	-	**54700**	-	**41200**	-	**18200**	-	**57500**	-	**39500**	-	-	-	**49000**	**46000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2400	730 J
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 UJ	40 UJ
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	15 J
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	187000 J	-	197000	-	215000	-	183000	-	202000	-	145000	181000	160000	43000 J	190000 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-513	MW-514	MW-514
			Field Sample ID	M513A3	M513A3X	M513A4	M513A4X	M513A5	M513A5X	M513A6	M513A6X	M513A7	M513A7X	M513A8	M513B1	M513B3	M514A3	M514A3X
			Sample Date	05/10/2018	05/10/2018	12/05/2018	12/10/2018	04/22/2019	04/22/2019	11/01/2019	11/01/2019	05/07/2020	05/07/2020	06/22/2021	08/31/2021	03/21/2022	02/16/2018	02/16/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	22100 J	-	18600 J	-	22600 J	-	24100 J	-	20900 J	-	-	-	-	16 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	**31000**	**43000**	**41000**	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**27000**	**37000**	**29000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	9400	13000	8400	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	50 J	-	40 U	-	40 U	-	40 U	-	40 UJ	40 UJ	40 UJ	160 J	-	63 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	61	-	-	-	-	-	38 J	17 J	16 J	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	55200	-	98100	-	72900	-	60700	-	67400	41000 J	59000 J	20000 UJ	-	35500

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514
			Field Sample ID	M514A4	M514A4X	M514A5	M514A5X	M514A6	M514A6X	M514A7	M514A7X	M514A8	M514A8X	M514A9	M514A9X	M514B1	M514B1X	M514B2
			Sample Date	05/11/2018	05/11/2018	12/05/2018	12/13/2018	02/19/2019	02/21/2019	04/24/2019	04/24/2019	07/15/2019	07/18/2019	10/29/2019	10/30/2019	01/22/2020	01/22/2020	05/07/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	37 J	-	14200 J	-	10200 J	-	7000 J	-	14300 J	-	18800 J	-	21800 J	-	15400 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	66 J	-	40 U	-	40 U	-	220	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	22400	-	17300	-	20100	-	22500	-	69400	-	24000	-	22300	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-514	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515
			Field Sample ID	M514B2X	M514B3	M514B3X	M514B4	M514B4X	M514B5	M514B6	M514B8	M515A3	M515A3X	M515A4	M515A4X	M515A5	M515A5X	M515A6
			Sample Date	05/07/2020	07/28/2020	07/28/2020	03/26/2021	03/26/2021	07/01/2021	08/26/2021	03/21/2022	05/10/2018	05/10/2018	12/11/2018	12/11/2018	04/25/2019	04/25/2019	10/30/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	470 J	-	23000 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	10100 J	-	24500 J	-	4540 J	-	17800 J
Iron	ug/L	N	300	-	-	-	-	-	**4100**	**19000**	**28000**	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**930**	**11000**	**14000**	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	3.4 J	100	33	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	97 J	-	60 J	160 J	40 UJ	40 UJ	-	40 U	-	40 U	-	58 J	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	15 U	15 U	15 U	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	24500	-	30000	-	20000	22000 J	20000 J	20000 UJ	-	31500	-	25900	-	26000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-515	MW-515	MW-515	MW-515	MW-515	MW-515	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516
			Field Sample ID	M515A6X	M515A7	M515A7X	M515A8	M515A9	M515B2	M516A1	M516A1X	M516A3	M516A3X	M516A4	M516A4X	M516A5	M516A5X	M516A6
			Sample Date	10/30/2019	05/06/2020	05/06/2020	07/01/2021	08/26/2021	01/13/2022	05/12/2018	05/12/2018	02/09/2019	02/09/2019	05/04/2019	05/04/2019	07/27/2019	07/27/2019	11/02/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	203
Ferrous Iron	ug/L	Y	NA	-	18500 J	-	-	-	-	950 J	-	190 J	-	898 J	-	405	-	-
Iron	ug/L	N	300	-	-	-	**30000**	**26000**	**120000**	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	**15000**	**21000**	**22000**	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	5700	5100	4500	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	40 UJ	40 UJ	40 UJ	-	40 U	-	40 UJ	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	15 U	15 U	15 U	-	15 UJ	-	15 UJ	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	29200	-	29700	20000 UJ	23000 J	40000 J	-	29500	-	24800	-	26600	-	19700	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-516	MW-517	MW-517
			Field Sample ID	M516A6X	M516A7	M516A7X	M516A8	M516A8X	M516A9	M516A9X	M516B1	M516B1X	M516B2	M516B3	M516B4	M516B5	M517A3	M517A3X
			Sample Date	11/02/2019	01/25/2020	01/25/2020	05/02/2020	05/02/2020	07/25/2020	07/25/2020	03/27/2021	03/27/2021	06/19/2021	09/22/2021	12/17/2021	03/15/2022	02/14/2018	02/14/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	346 J	-	-	-	230 J	-	70 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	24.1 J	-	-	-	-	-	-	-	-	-	5200 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	**900**	**360**	**540**	**1600**	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	**540**	130 J	**390**	82 U	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 UJ	-	750 J	40 UJ	40 UJ	40 UJ	40 UJ	-	230
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 UJ	-	-	-	-	15 UJ	15 UJ	15 U	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	22300 J	-	24600 J	-	23900	-	25000 J	-	23000	26000 J	30000 J	27000 J	27000 J	-	**389000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517
			Field Sample ID	M517A4	M517A4X	M517A5	M517A5X	M517A6	M517A6X	M517A7	M517A7X	M517A8	M517A8X	M517A9	M517A9X	M517B1	M517B1X	M517B2
			Sample Date	05/10/2018	05/10/2018	12/05/2018	12/14/2018	02/19/2019	02/26/2019	04/24/2019	04/25/2019	07/18/2019	07/19/2019	10/28/2019	10/29/2019	01/22/2020	01/28/2020	05/07/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	26400 J	-	146000 J	-	56400 J	-	44800 J	-	99400 J	-	161000 J	-	117000 J	-	66700 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**443000J**	-	4500 J	-	10500	-	19200	-	8000	-	3400 J	-	37500	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-517	MW-518	MW-518	MW-518	MW-518	MW-518	MW-518	MW-518	MW-518
			Field Sample ID	M517B2X	M517B3	M517B3X	M517B4	M517B4X	M517B5	M517B6	M518A3	M518A3X	M518A4	M518A4X	M518A5	M518A5X	M518A6	M518A6X
			Sample Date	05/08/2020	07/28/2020	07/29/2020	03/25/2021	03/26/2021	06/22/2021	10/28/2021	02/16/2018	02/16/2018	05/14/2018	05/14/2018	12/11/2018	12/11/2018	04/25/2019	04/25/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	87000 J	-	54000 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	5700 J	-	6400 J	-	2200 J	-	6550 J	-
Iron	ug/L	N	300	-	-	-	-	-	**39000**	**52000**	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	**35000**	**52000**	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	4700	12000 J	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 UJ	40 UJ	40 UJ	-	250	-	650	-	40 U	-	1200
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	47 J	-	-	-	-	19 J	39 J	-	15 U	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	32100	-	110000	-	28000	8000 UJ	8000 UJ	-	242000	-	**300000**	-	84600	-	99200

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-518	MW-518	MW-518	MW-518	MW-518	MW-518	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519
			Field Sample ID	M518A7	M518A7X	M518A8	M518A8X	M518A9	M518B1	M519A3	M519A3X	M519A4	M519A4X	M519A7	M519A7X	M519A8	M519A8X	M519A9
			Sample Date	10/23/2019	10/23/2019	05/04/2020	05/04/2020	06/22/2021	09/21/2021	02/20/2018	02/21/2018	05/14/2018	05/15/2018	04/26/2019	04/30/2019	07/15/2019	07/19/2019	10/28/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	5320 J	-	926 J	-	-	-	15 J	-	21 J	-	70.9 J	-	135 J	-	288 J
Iron	ug/L	N	300	-	-	-	-	**1700**	**3200**	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	**1300**	**2600**	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	12	17	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	71 J	120 J	55 J	-	360	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	15 U	15 U	-	-	-	15 U	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	155000 J	-	112000	120000 J	94000 J	-	3200 J	-	1000 U	-	44000	-	25100	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-519	MW-528	MW-528	MW-528
			Field Sample ID	M519A9X	M519B1	M519B1X	M519B2	M519B2X	M519B3	M519B3X	M519B4	M519B4X	M519B5	M519B6	M519B7	M528A1	M528A1X	M528A2
			Sample Date	10/29/2019	01/27/2020	01/28/2020	05/06/2020	05/07/2020	07/28/2020	07/29/2020	03/24/2021	03/25/2021	06/30/2021	09/23/2021	12/14/2021	02/14/2018	02/14/2018	05/15/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	3700 J	-	7000 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	644 J	-	1150 J	-	-	-	-	-	-	-	-	14100 J	-	21300 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	**30000**	**38000**	**34000**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	**28000**	**34000**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	22000	24000	21000	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	40 UJ	40 UJ	40 UJ	-	40 UJ	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	-	-	-	15 U	120	15 J	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	32300	-	35400	-	42500	-	160 J	-	12000	8000 UJ	8000 UJ	4000 UJ	-	168000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-528	MW-529	MW-529
			Field Sample ID	M528A2X	M528A3	M528A3X	M528A5	M528A5X	M528A6	M528A6X	M528A7	M528A7X	M528A8	M528A9	M528B1	M528B2	M529A1	M529A1X
			Sample Date	05/15/2018	12/18/2018	12/18/2018	04/25/2019	04/25/2019	10/29/2019	10/30/2019	05/04/2020	05/04/2020	06/18/2021	08/31/2021	12/27/2021	03/30/2022	02/13/2018	02/13/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	2620 J	-	15400 J	-	32900 J	-	17800 J	-	-	-	-	-	21200 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	**17000**	**15000**	**37000**	**8400J**	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	**12000**	**13000**	**35000**	**4400**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	3.3 UJ	3 U	3 U	3.0 U	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	190	-	40 U	-	40 U	-	40 U	-	40 U	720 J	100 J	40 UJ	40 UJ	-	40 UJ
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	16 J	20 J	15 U	15 U	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	147000	-	57600 J	-	94000	-	64500	-	87800	140000 J	130000 J	130000 J	140000 J	-	216000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-529	MW-530
			Field Sample ID	M529A2	M529A2X	M529A3	M529A3X	M529A4	M529A4X	M529A5	M529A5X	M529A6	M529A6X	M529A7	M529A8	M529A9	M529B1	M530A1
			Sample Date	05/16/2018	05/16/2018	12/12/2018	12/18/2018	04/17/2019	04/17/2019	10/23/2019	10/23/2019	05/04/2020	05/04/2020	06/16/2021	08/31/2021	12/27/2021	03/30/2022	02/12/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	30200 J	-	83500 J	-	2950 J	-	14000 J	-	15200 J	-	-	-	-	-	940 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	**36000**	**39000**	**32000**	**8000**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**34000**	**32000**	**31000**	**7200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	240	230	220	84	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	160	-	170	-	40 U	40 UJ	40 UJ	49 J	40 UJ	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	15 U	15 U	15 U	15 U	15 U	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	223000	-	212000	-	50600	-	53400 J	-	156000	190000 J	190000 J	220000 J	110000 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530	MW-530
			Field Sample ID	M530A1X	M530A2	M530A2X	M530A3	M530A3X	M530A4	M530A4X	M530A5	M530A5X	M530A6	M530A6X	M530A7	M530A8	M530A9	M530B1
			Sample Date	02/12/2018	05/16/2018	05/16/2018	12/12/2018	12/18/2018	04/17/2019	04/17/2019	10/23/2019	10/23/2019	04/30/2020	04/30/2020	05/26/2021	09/16/2021	12/28/2021	03/29/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	85 J	-	8970 J	-	11500 J	-	14300 J	-	9960 J	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	**8200**	**3400**	**9300**	**22000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	**3400**	41 U	270	82 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	11	3.2 UJ	14	3 U
Nitrogen, Nitrate as N	ug/L	N	10000	280	-	670	-	40 U	-	40 U	-	40 U	-	40 U	240 J	630 J	430 J	660 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	19 J	15 U	15 U	15 U	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	122000	-	132000	-	126000	-	168000	-	155000 J	-	244000	110000 J	37000 J	140000 J	140000 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
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			Location ID	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-531	MW-532	MW-532	MW-532
			Field Sample ID	M531A1	M531A1X	M531A2	M531A2X	M531A3	M531A3X	M531A4	M531A4X	M531B2	M531B2X	M531A6	M531A7	M532A1	M532A1X	M532A2
			Sample Date	05/16/2018	05/17/2018	12/05/2018	12/10/2018	04/22/2019	04/22/2019	10/23/2019	10/23/2019	05/07/2020	05/07/2020	06/18/2021	10/04/2021	02/13/2018	02/13/2018	05/15/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	59300 J	-	56400 J	-	77400 J	-	56200 J	-	69200 J	-	-	-	22000 J	-	14200 J
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	**64000**	**68000**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**71000**	**66000**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2400	2400	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	190	-	40 U	-	1900	-	40 U	-	810	140 J	40 UJ	-	40 U	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	67	-	-	-	-	-	20 J	24 J	15 UJ	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	58600	-	10100	-	20800	-	11500	-	20000	8000 UJ	20000 UJ	-	101000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
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Chevron Perth Amboy Facility

			Location ID	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-532	MW-533	MW-533
			Field Sample ID	M532A2X	M532A3	M532A3X	M532A4	M532A4X	M532A5	M532A5X	M532A6	M532A6X	M532A7	M532C8	D1228211B	M532A9	M533A1	M533A1X
			Sample Date	05/15/2018	12/04/2018	12/07/2018	04/19/2019	04/22/2019	10/31/2019	10/31/2019	05/05/2020	05/05/2020	06/18/2021	09/29/2021	12/28/2021	12/28/2021	02/12/2018	02/12/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	14500 J	-	-	-	12000	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	12600 J	-	-	-	10800	-	-	-	-	-	630 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	**17000**	**13000**	**12000**	**13000**	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	**14000**	**10000**	**11000**	**11000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	4700	4400	4500	3900	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	40 UJ	40 UJ	40 UJ	40 UJ	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	15 U	15 U	15 U	15 U	15 U	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	90500	-	91300	-	74900	-	74900	-	76500 J	86000 J	86000 J	87000 J	79000 J	-	**358000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	MW-533	TP2-018	TP2-018
			Field Sample ID	M533A2	M533A2X	M533A3	M533A3X	M533A4	M533A4X	M533A5	M533A5X	M533A6	M533A6X	M533A7	M533A8	M533B1	TP2018A7	TP2018X
			Sample Date	05/16/2018	05/17/2018	12/10/2018	12/10/2018	04/16/2019	04/16/2019	10/25/2019	10/25/2019	04/30/2020	04/30/2020	06/29/2021	09/16/2021	03/29/2022	06/28/2012	06/29/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	2000 J	-	75800 J	-	2720 J	-	1690 J	-	338 J	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	**4500**	**6000**	**3800**	**140000**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**1100**	**1100**	**340**	**140000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	390	130	280	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	40 UJ	40 UJ	40 UJ	-	40 U
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	-	-	15 U	15 U	15 U	15 U	-	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**276000**	-	196000	-	192000	-	174000	-	184000	89000 J	110000 J	98000 J	-	2500 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018	TP2-018
			Field Sample ID	TP2018A8	TP2018A8X	TP2018B1	TP2018B1X	TP2018B2	TP2018B2X	TP2018B3	TP2018B3X	TP2018B4	TP2018B4X	TP2018B5	TP2018B5X	TP2018B6	TP2018B6X	TP2018B7X
			Sample Date	09/10/2012	09/11/2012	08/12/2013	08/13/2013	10/31/2013	11/01/2013	02/11/2014	02/11/2014	11/05/2014	11/06/2014	07/01/2015	07/02/2015	10/08/2015	10/08/2015	12/08/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**150000**	-	**149000**	-	**129000**	-	**166000**	-	**140000**	-	**130000**	-	**140000**	-	-
Iron	ug/L	Y	300	**151000**	-	**149000**	-	**126000**	-	**159000**	-	**140000**	-	**127000**	-	**140000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	200 U	-	200 U	-	40 U	-	40 U	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	120	-	81	-	81	-	170	-	40 J	-	120	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	2500 U	-	2500 U	-	5000 J	-	10000 U	-	7000 J	-	2500 U	-	1500 U	1600 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	TP2-018	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R
			Field Sample ID	TP2018B7	TP2018RC2	TP2018RC2X	TP2018RC3	TP2018RC3X	TP2018RC4	TP2018RC4X	D1109188	TP2018RC5	TP2018RC5X	TP2018RC6	TP2018RC6X	TP2018RC7	TP2018RC7X
			Sample Date	12/14/2015	02/06/2018	02/06/2018	05/02/2018	05/02/2018	08/15/2018	08/15/2018	11/09/2018	11/09/2018	11/09/2018	02/06/2019	02/06/2019	07/26/2019	07/26/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**72600**	**1570000**	-	**967000**	-	**1140000**	-	**1340000**	**1350000**	-	**624000**	-	**1130000**	-
Iron	ug/L	Y	300	**83400**	**1410000**	-	**973000**	-	**1200000**	-	**1360000**	**1480000**	-	**589000**	-	**1010000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**14100000**	-	**21600000**	-	**21900000**	**23400000**	-	**21400000**	-	**9150000**	-	**22400000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criter
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B1 Central Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R	TP2-018R
			Field Sample ID	TP2018RC8X	TP2018RC9X	D0304218	TP2018RD1X	TP2018RD2	TP2018RD3	TP2018RD4
			Sample Date	02/03/2020	09/02/2020	03/04/2021	03/04/2021	05/11/2021	10/05/2021	12/27/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**96000**	**260000**	**36000**
Iron	ug/L	Y	300	-	-	-	-	**90000J**	**270000**	**32000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	440	2000	490
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	45 J	170 J	380 J
Nitrogen, Nitrate as N	ug/L	Y	10000	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	36 J	270 J	15 U
Nitrogen, Nitrite	ug/L	Y	1000	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**13400000**	**18000000E**	**7400000**	**7800000**	**1600000J**	**19000000J**	**3400000J**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01
			Field Sample ID	MP01A1	MP01A1X	MP01A2	MP01A3X	MP01A4	MP01A4X	MP01A5X	MP01A6	MP01A6X	MP01A7	MP01A7	MP01A7X	MP01A8	MP01A8X	MP01A9
			Sample Date	11/13/2012	11/13/2012	01/18/2013	05/10/2013	07/09/2013	07/09/2013	10/17/2013	12/11/2013	12/11/2013	04/01/2014	04/01/2014	04/01/2014	07/15/2014	07/15/2014	09/09/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**15200**	-	**10500**	-	**678**	-	-	**60200**	-	**11400**	-	-	**19000**	-	**1860J**
Iron	ug/L	Y	300	-	-	**858**	-	294	-	-	**37100**	-	-	**2180**	-	33.4 U	-	175 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	11000	-	**10800000**	-	**1310000**	**21800000**	-	**7980000**	-	-	**1910000**	-	**2000000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R
			Field Sample ID	MP01A9X	MP01B1	MP01B1X	MP01B2	MP01B2X	MP01B3	MP01B3X	MP01RB4	MP01RB5	MP01RB5X	MP01RB6	MP01RB7	MP01RB7X	D0119178	D0119178X
			Sample Date	09/09/2014	01/14/2015	01/14/2015	04/22/2015	04/22/2015	07/16/2015	07/16/2015	07/27/2016	09/01/2016	09/01/2016	10/18/2016	12/07/2016	12/07/2016	01/19/2017	01/19/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	4500 J	-	-	3200 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**400**	-	**5420**	-	**2430000**	-	**4410**	**3450**	-	**2900**	**1790**	-	**2990**	-
Iron	ug/L	Y	300	-	155 UJ	-	170 J	-	182 J	-	**4050**	**4240**	-	**2040**	**1050**	-	**2430**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 U	-	-	250 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**3160000J**	-	**2300000**	-	**1560000**	-	**1640000**	**1080000**	-	**998000**	**1040000**	-	**493000**	-	**1210000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R
			Field Sample ID	MP01RB8	MP01RB8X	MP01RB9	MP01RB9X	MP01RC1	MP01RC1X	MP01RC2	MP01RC2X	MP01RC3	MP01RC3X	MP01RC4	MP01RC4X	MP01RC5	MP01RC5X	MP01RC6
			Sample Date	01/19/2017	01/19/2017	04/25/2017	04/25/2017	07/12/2017	07/12/2017	10/19/2017	10/19/2017	01/09/2018	01/09/2018	05/22/2018	05/22/2018	08/17/2018	08/17/2018	11/12/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3100**	-	**2740**	-	**4320**	-	**1400**	-	**4260**	-	**1310**	-	**3410J**	-	**7520**
Iron	ug/L	Y	300	**2470**	-	**2650**	-	**3520**	-	**877**	-	**4140**	-	**715**	-	**2090**	-	**2510**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**1260000**	-	**1170000**	-	**406000**	-	**510000**	-	140000	-	**1120000**	-	**661000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R
			Field Sample ID	MP01RC6X	D0208198	MP01RC7	MP01RC7X	D0506198	MP01RC8	MP01RC8X	MP01RC9	MP01RC9X	MP01RD1X	D0218208	MP01RD2	MP01RD2X	D0515208	MP01RD3
			Sample Date	11/12/2018	02/08/2019	02/08/2019	02/08/2019	05/06/2019	05/06/2019	05/06/2019	08/02/2019	08/02/2019	09/23/2019	02/18/2020	02/18/2020	02/18/2020	05/15/2020	05/15/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**5360J**	**5240**	-	**5220**	**5250**	-	**11600**	-	-	**30800**	**30700**	-	**54700**	**51200J**
Iron	ug/L	Y	300	-	**4210**	**4030**	-	**4470**	**4950**	-	**10800**	-	-	**24900**	**29300**	-	**49100**	**54000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	-	250 U	-	-	-	7700 J	-	6100 J	450 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	40 U	-	40 U	-	40 U	40 U	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1100000**	**1550000**	-	**1480000J**	**1700000**	-	**1810000**	-	**1420000**	**808000**	**35400000J**	-	**46900000J**	**14500000J**	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-01R	MP-02	MP-02	MP-02	MP-02	MP-02
			Field Sample ID	MP01RD3X	MP01RD4	MP01RD5	MP01RD5X	MP01RD6	MP01RD6X	MP01RD7	MP01RD8	MP01RD9	MP01RE1	MP02A1	MP02A1X	MP02A2	MP02A3X	MP02A4
			Sample Date	05/15/2020	09/04/2020	11/06/2020	11/06/2020	02/04/2021	02/04/2021	05/18/2021	08/25/2021	11/12/2021	02/08/2022	11/13/2012	11/13/2012	01/18/2013	05/10/2013	07/09/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**23000**	-	**35000**	**54000**	**63000**	**35000**	**29400**	-	**31300**	-	**3600**
Iron	ug/L	Y	300	-	**40000**	**28000**	-	**7600**	-	**22000**	**24000**	**53000**	**29000**	-	-	**26800**	-	**2590J**
Iron, Total Recoverable	ug/L	N	NA	-	3700	41000	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	1200 J	-	-	250 U	-	250 U	-	-	-	250 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	250 U	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**32900000J**	-	-	**41000000**	-	**2800000**	**41000000**	**28000000**	**2800000**	**20000000**	-	18000	-	**12800000**	-

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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02	MP-02
			Field Sample ID	MP02A4X	MP02A5X	MP02A6	MP02A6	MP02A6X	MP02A7	MP02A7X	MP02A8	MP02A8X	MP02A9	MP02A9X	MP02B1	MP02B1X	MP02B2	MP02B2X
			Sample Date	07/09/2013	10/17/2013	12/12/2013	12/12/2013	12/12/2013	04/03/2014	04/03/2014	07/22/2014	07/22/2014	09/09/2014	09/09/2014	01/15/2015	01/15/2015	04/22/2015	04/22/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**85000**	-	-	**89900**	-	**76700**	-	**68100J**	-	**11500**	-	**29600**	-
Iron	ug/L	Y	300	-	-	-	**85300**	-	**80400**	-	**82300**	-	**62500J**	-	**10800**	-	**27800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**6670000**	**14500000**	-	-	**9010000**	-	**1060000**	-	**1500000**	-	**3660000J**	-	**559000**	-	**391000**

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-02	MP-02	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R
			Field Sample ID	MP02B3	MP02B3X	MP02RB4	MP02RB5	MP02RB5X	MP02RB6	D1206168B	D1206168BX	MP02RB7	MP02RB7X	MP02RB8	MP02RB8X	MP02RB9	MP02RB9X	MP02RC1
			Sample Date	07/21/2015	07/21/2015	07/27/2016	08/30/2016	08/30/2016	10/18/2016	12/06/2016	12/06/2016	12/06/2016	12/06/2016	01/18/2017	01/18/2017	04/17/2017	04/17/2017	07/11/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	4000 J	-	-	7100 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**27400J**	-	**3970**	**4000**	-	**6610**	**7600**	-	**7720**	-	247	-	**1890**	-	**3840**
Iron	ug/L	Y	300	**27900J**	-	**3590**	**4300**	-	**5780**	**7130**	-	**7060**	-	**926**	-	74.7 U	-	**3190**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	-	-	250 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**425000**	**793000**	-	**767000**	**708000**	-	**757000**	-	**743000**	-	**273000**	-	27800	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R
			Field Sample ID	MP02RC1X	MP02RC2	MP02RC2X	MP02RC3	MP02RC3X	MP02RC4	MP02RC4X	MP02RC5	MP02RC5X	MP02RC6	MP02RC6X	MP02RC7	MP02RC8	MP02RC9	MP02RC9X
			Sample Date	07/11/2017	10/18/2017	10/18/2017	01/09/2018	01/09/2018	05/22/2018	05/22/2018	08/27/2018	08/27/2018	11/12/2018	11/12/2018	02/08/2019	05/07/2019	08/02/2019	08/02/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**2380**	-	**4330**	-	**2230**	-	**5120**	-	**6430**	-	**6510J**	**2200**	**6240**	-
Iron	ug/L	Y	300	-	**2380**	-	**3370**	-	**2270**	-	**4990**	-	**4040**	-	**1070J**	**2130**	**6090**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	207000	-	**1050000**	-	**595000**	-	224000	-	**656000**	-	**1250000**	-	-	-	**959000**

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R	MP-02R
			Field Sample ID	D0923198X	MP02RD1X	MP02RD2	MP02RD2X	MP02RD3	MP02RD3X	MP02RD4	MP02RD4X	D1106208	MP02RD5	MP02RD5X	D0204218	MP02RD6	MP02RD6X	MP02RD7
			Sample Date	09/23/2019	09/23/2019	02/17/2020	02/18/2020	05/15/2020	05/15/2020	09/01/2020	09/01/2020	11/06/2020	11/06/2020	11/06/2020	02/04/2021	02/04/2021	02/04/2021	05/17/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**9890**	-	**26900**	-	-	-	-	-	-	**32000J**	**44000J**	-	**160000**
Iron	ug/L	Y	300	-	-	**9210**	-	**23300**	-	**9700**	-	**14000**	**13000**	-	**42000J**	**45000J**	-	**150000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	12000	-	20000	21000	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	250 U	-	250 U	250 U	-	250 U	250 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	40 U	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	250 UJ	250 U	-	**2200J**	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**821000**	**773000**	-	**2430000**	-	**14700000**	-	**2900000J**	**1600000**	-	**1800000**	**1500000**	-	**1800000J**	**3300000**

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-02R	MP-02R	MP-02R	MP-02R	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03
			Field Sample ID	MP02RD8	D1112218	MP02RD9	MP02RE1	MP03A1	MP03A1X	MP03A2	MP03A3X	MP03A4	MP03A4X	MP03A5X	MP03A6	MP03A6X	MP03A7	MP03A7
			Sample Date	08/25/2021	11/12/2021	11/12/2021	02/08/2022	11/13/2012	11/13/2012	01/18/2013	05/13/2013	07/02/2013	07/02/2013	10/16/2013	12/11/2013	12/11/2013	04/01/2014	04/01/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**150000**	**70000**	**72000**	**29000**	**22300**	-	**35200**	-	**23300**	-	-	**147000**	-	**68600**	-
Iron	ug/L	Y	300	**140000**	**70000**	**70000**	**28000**	-	-	**33000**	-	**20100**	-	-	**143000J**	-	-	**67400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**7900000**	**4500000**	**5400000**	**3100000**	-	3000 J	-	128000	-	226000	**14400000**	-	**18400000**	-	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03	MP-03R	MP-03R	MP-03R	MP-03R
			Field Sample ID	MP03A7X	MP03A8	MP03A8X	MP03A9	MP03A9X	MP03B1X	MP03B1	MP03B2X	MP03B2	MP03B3	MP03B3X	MP03RB4	MP03RB5	MP03RB5X	D10201615
			Sample Date	04/01/2014	07/09/2014	07/10/2014	09/10/2014	09/10/2014	01/09/2015	01/15/2015	04/16/2015	04/21/2015	07/21/2015	07/21/2015	07/26/2016	08/29/2016	08/29/2016	10/20/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	12200 J	-	-	11700 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**39600**	-	**24800**	-	-	**9350**	-	**3740**	**4980J**	-	**12900**	**16400**	-	**10200**
Iron	ug/L	Y	300	-	**33300**	-	**23500**	-	-	**8070**	-	**3380**	**4230J**	-	**11400**	**14600**	-	**6130**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	250 U	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**2560000**	-	**3270000**	-	**3290000**	**1050000**	-	**822000**	-	-	**394000**	**1250000**	-	**1020000**	**1080000**

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R
			Field Sample ID	MP03RB6	MP03RB7	MP03RB7X	MP03RB8	MP03RB8X	MP03RB9	MP03RB9X	MP03RC1	MP03RC1X	MP03RC2	MP03RC2	MP03RC3	MP03RC3X	MP03RC4	MP03RC4X
			Sample Date	10/20/2016	12/05/2016	12/05/2016	01/17/2017	01/17/2017	04/17/2017	04/17/2017	07/07/2017	07/07/2017	10/19/2017	10/19/2017	01/09/2018	01/09/2018	05/21/2018	05/21/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	10000 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10600**	**8630**	-	**5510**	-	**4060**	-	**5800**	-	-	**12200**	**12500**	-	**3630**	-
Iron	ug/L	Y	300	**6710**	**6430**	-	**4320**	-	**4150**	-	**5770**	-	-	**12100**	**15700**	-	**3190**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1060000**	-	**1300000J**	-	**1250000**	-	**1800000**	-	**1540000**	**1120000J**	-	-	**1420000**	-	**1290000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R	MP-03R
			Field Sample ID	MP03RC5	MP03RC5X	MP03RC6	MP03RC6X	MP03RC7	MP03RC7X	MP03RC8	MP03RC8X	MP03RC9	MP03RC9X	D0903208	MP03RD1	MP03RD2	MP03RD2X	MP03RD3
			Sample Date	08/27/2018	08/27/2018	11/13/2018	11/13/2018	02/08/2019	02/08/2019	05/09/2019	05/09/2019	08/05/2019	08/05/2019	09/03/2020	09/03/2020	02/04/2021	02/04/2021	08/25/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**11300**	-	**1830**	-	**4700J**	-	**14700**	-	**22800**	-	-	-	**120000**	-	**34000**
Iron	ug/L	Y	300	**9890**	-	**1630**	-	**8190J**	-	**9290**	-	**22600**	-	**96000**	**93000**	**130000**	-	**37000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	99000	86000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	9900	-	**1200000**	-	**949000**	-	195000	-	**524000**	-	-	-	**2000000**	**1600000**

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-03R	MP-03R	MP-04	MP-04	MP-04	MP-04	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R
			Field Sample ID	D020420228A	MP03RD4	MP04A1	MP04A1X	MP04A2	MP04A3X	MP04A4	MP04A4X	MP04A5X	MP04A6	MP04A6X	MP04A7	MP04A7	MP04A7X	MP04A8
			Sample Date	02/04/2022	02/04/2022	11/13/2012	11/13/2012	01/18/2013	05/13/2013	08/01/2013	08/01/2013	10/16/2013	12/11/2013	12/11/2013	04/01/2014	04/01/2014	04/03/2014	07/15/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**62000**	**66000**	**30400**	-	**30200**	-	**4130J**	-	-	**5890**	-	**3720**	-	-	**8760**
Iron	ug/L	Y	300	**69000**	**60000**	-	-	**30000**	-	**802J**	-	-	**4040**	-	-	**2060**	-	**4100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**13000000**	**13000000**	-	15000 U	-	**10200000**	-	**7890000**	**20700000**	-	**20800000**	-	-	**8560000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04R	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR
			Field Sample ID	MP04A8X	MP04RB1	MP04RB1X	MP04RB3	MP04RB3X	MP04RB4X	MP04RB4	MP04RRB5	MP04RRB6	MP04RRB6X	MP04RRB7	MP04RRB8	MP04RRB8X	MP04RRB9
			Sample Date	07/15/2014	09/10/2014	09/10/2014	04/21/2015	04/21/2015	07/23/2015	07/24/2015	07/27/2016	08/29/2016	08/29/2016	10/19/2016	12/06/2016	12/07/2016	01/23/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	22100 J	-	-	19100 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4510**	-	**2650**	-	-	**1860**	**20800**	**16300**	-	**19500**	**12500**	-	**5310**
Iron	ug/L	Y	300	-	**2890**	-	**2410**	-	-	**1030**	**30200**	**16500**	-	**19900**	**11600**	-	**4030**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 U	-	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**3350000**	-	**2750000**	-	**2250000**	**408000**	-	**1550000**	-	**1920000**	**1500000**	-	**1060000**	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR
			Field Sample ID	MP04RRB9X	MP04RRC1	MP04RRC1X	MP04RRC2	MP04RRC2X	MP04RRC3	MP04RRC3X	MP04RRC5	MP04RRC5X	MP04RRC6	MP04RRC6X	D1115188	MP04RRC7	MP04RRC7X
			Sample Date	01/25/2017	04/17/2017	04/17/2017	07/07/2017	07/10/2017	10/18/2017	10/18/2017	05/21/2018	05/21/2018	08/27/2018	08/27/2018	11/15/2018	11/15/2018	11/15/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**8640**	-	**12100**	-	**4800**	-	**11500**	-	**13800**	-	**10400**	**10500J**	-
Iron	ug/L	Y	300	-	**9330**	-	**10500**	-	**1730**	-	**12800**	-	**12800**	-	**7640**	**8320**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1360000**	-	**2020000**	-	**3840000**	-	**1790000**	-	**371000**	-	**1720000**	**1950000**	-	**2030000**

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MP-04RR	MW-0043	MW-0043
			Field Sample ID	MP04RRC8	MP04RRC8X	MP04RRC9	MP04RRC9X	MP04RRD1	MP04RRD1X	MP04RRD2	MP04RRD2X	MP04RRD3	MP04RRD3X	MP04RRD4	MP04RRD5	M043C7	M043C8
			Sample Date	02/07/2019	02/07/2019	05/07/2019	05/07/2019	08/05/2019	08/05/2019	09/01/2020	09/01/2020	02/05/2021	02/05/2021	08/24/2021	02/03/2022	04/30/2012	08/27/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**9910**	-	**12400**	-	**22200**	-	-	-	**55000**	-	**140000**	**140000**	**451**	**7810**
Iron	ug/L	Y	300	**8850**	-	**10400**	-	**19700**	-	**19000**	-	**56000**	-	**130000**	**190000**	-	**6770**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	19000	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 U	-	-	-	250000 UJ	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	250 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**271000**	-	**299000**	-	**1980000**	-	**4700000**	-	**4600000**	**28000000**	**53000000**	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043
			Field Sample ID	M043C8X	M043C9	M043C9X	M043D1	M043D1X	M043D2	M043D2X	M043D3	M043D3X	M043D4	M043D4X	M043D5	M043D5X	M043D6	M043D6X
			Sample Date	08/28/2012	06/24/2013	06/25/2013	10/01/2013	10/02/2013	06/16/2014	06/17/2014	11/04/2014	11/05/2014	07/09/2015	07/10/2015	03/17/2016	03/18/2016	09/27/2016	09/28/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**775**	-	**28900**	-	**993**	-	**22900**	-	**1730**	-	**6900**	-	**36900**	-
Iron	ug/L	Y	300	-	93.7 J	-	**30300**	-	**380**	-	**22000**	-	**1470**	-	**6440**	-	**37300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	55 J	-	40 U	-	43 J	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	21 J	-	27 J	-	31 J	-	15 U	-	22 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	28100	-	151000	-	10000 U	-	120000	-	12500 U	-	17800	-	20700	-	12500 U

Notes:
1. GWQS - Groundwater Quality Standard
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043
			Field Sample ID	D0328171	M043D7	D0329171	M043D7X	M043D8	M043D8X	M043D9	M043D9X	M043E2	M043E2X	M043E4	M043E4X	M043E6	M043E6X	M043E8
			Sample Date	03/28/2017	03/28/2017	03/29/2017	03/29/2017	09/11/2017	09/12/2017	02/21/2018	02/22/2018	08/01/2018	08/01/2018	02/22/2019	02/22/2019	08/20/2019	08/20/2019	05/15/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5200**	**4520**	-	-	**36000**	-	**714**	-	**9860**	-	**1850**	-	**38100**	-	**32300**
Iron	ug/L	Y	300	**5060**	**4630**	-	-	**36400**	-	**1780**	-	**7790**	-	**343**	-	**37100**	-	**33300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	40 U	-	40 U	-	110	-	110	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	31 J	31 J	-	32 J	-	15 U	-	15 U	-	15 U	-	15 UJ	-
Sulfate (SO4)	ug/L	N	250000	-	-	10000 U	10000 U	-	10000 U	-	65400	-	5500 J	-	77100	-	6300 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0043	MW-0051	MW-0051	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090
			Field Sample ID	M043E8X	M043E9	M043E9X	M043F2	M043F3	M043F4	M051C2	M051C2X	M090C9	M090C9X	M090D1	M090D1X	M090D2	M090D2X	M090D3
			Sample Date	05/15/2020	11/11/2020	11/11/2020	05/12/2021	12/27/2021	02/03/2022	07/02/2013	07/03/2013	11/25/2013	11/26/2013	09/15/2014	09/16/2014	12/15/2015	12/16/2015	05/19/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**27000**	-	**27000**	**9100**	**1000**	**80100**	-	**22100**	-	**1650**	-	**840**	-	**16000**
Iron	ug/L	Y	300	-	**26000**	-	26000 UJ	**10000**	**840**	**78700**	-	**21800**	-	**495**	-	**668**	-	**15000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	13000	7600	400	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 UJ	40 UJ	40 UJ	2100 J	-	40 U	-	40 U	-	40 U	-	43 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	10 J	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	160 J	-	15 U	15 U	15 U	15 U	-	76	-	67	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	2000 UJ	-	8000 UJ	8000 UJ	15000 J	70000 J	-	10000 U	-	**601000**	-	58600	-	116000	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090	MW-0090
			Field Sample ID	M090D3X	M090D4	M090D4X	M090D5	M090D5X	M090D6	M090D6X	M090D7	M090D7X	M090D8	M090D8X	M090D9	M090D9X	M090E1	M090E1X
			Sample Date	05/20/2016	05/16/2017	05/17/2017	11/21/2017	11/21/2017	01/31/2018	02/01/2018	03/05/2019	03/05/2019	05/17/2019	05/17/2019	08/14/2019	08/14/2019	11/01/2019	11/01/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**52700**	-	**30300**	-	**13700**	-	**4380**	-	**20700**	-	**15400**	-	**22000**	-
Iron	ug/L	Y	300	-	**52400**	-	**29600**	-	**9500**	-	**2340**	-	**20300**	-	**14200**	-	**20600**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	30 J	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	70600	-	24600	-	53000	-	83200	-	43700	-	27600	-	1500 UJ	-	14800

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0090	MW-0090	MW-0090	MW-0090	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
			Field Sample ID	M090E2	M090E2X	M0090E3	M0090E3X	M006B6	M006B7	M006B7X	M006B8	M006B8X	M006B9	M006B9X	M006C1	M006C1X	M006C2	M006C2X
			Sample Date	02/10/2020	02/10/2020	05/14/2020	05/14/2020	05/01/2012	07/09/2013	07/10/2013	09/29/2014	09/30/2014	01/06/2016	01/07/2016	02/21/2017	02/22/2017	02/19/2018	02/20/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**19200**	-	**13000**	-	**327**	**320**	-	293	-	**375**	-	257	-	102 J	-
Iron	ug/L	Y	300	**16900**	-	**12200**	-	-	43.0 U	-	45.3 J	-	33.3 U	-	74.7 U	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	140	-	180	-	120	-	110	-	71 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	110000	-	130000	-	-	33100	-	31400	-	31000	-	33000	-	32900

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
			Field Sample ID	M006C3	M006C3X	M006C4	M006C4X	M007B6	M007B6X	M007B9	M007B9X	M007C1	M007C2	M007C3	M007C4	M007C4X	M007C5	M007C6
			Sample Date	02/20/2019	02/20/2019	03/30/2020	03/30/2020	07/09/2013	07/10/2013	06/18/2014	06/19/2014	03/06/2015	07/02/2015	08/25/2015	10/01/2015	10/02/2015	10/27/2015	01/06/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	630	350	1100	-	-	350	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**496**	-	225	-	**7100**	-	**433**	-	**903**	**576**	**2440**	**2470**	-	**513**	76.2 J
Iron	ug/L	Y	300	40 U	-	46 J	-	**5620**	-	33.4 U	-	**398**	217	**679**	**841**	-	229	33.3 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	41 J	-	40 U	-	1800	-	1300	250 U	-	1000	320 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 UJ	-	15 U	-	15 U	-	15 U	-	-	-	-	41 J	-	-
Sulfate (SO4)	ug/L	N	250000	-	37500	-	32600 J	-	54500	-	64600	28600	60500	52600	-	57100	59500	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-8	MW-8
			Field Sample ID	M007C6X	M007C7	M007C8	M007C9	M007D1	M007D1X	M007D2	M007D3	M007D3X	M007D4	M007D4X	M007D5	M007D5X	D0710131	M008C1
			Sample Date	01/07/2016	03/29/2016	06/29/2016	10/06/2016	02/21/2017	02/22/2017	11/01/2017	02/19/2018	02/20/2018	02/20/2019	02/20/2019	03/30/2020	03/30/2020	07/10/2013	11/01/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	4700	690 J	870 J	-	-	140 J	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**11800**	**744**	**1070**	74.7 U	-	188 J	80.5 U	-	**1470**	-	**591**	-	**4220**	**11000**
Iron	ug/L	Y	300	-	**22800**	**772**	**460**	74.7 U	-	89.4 J	80.5 U	-	294	-	**520**	-	**2440**	**11100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	770	650	250 U	250 U	-	470	1800	-	810	-	130	-	1500	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	15 U	-	-	15 U	-	15 U	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	52500	52700	54800	50600	-	42000	50000	-	133000	-	197000	-	**263000J**	-	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-8	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9	MW-10	MW-14
			Field Sample ID	M008C1X	M009C1	M009C1X	M009C2	M009C2X	M009C3	M009C3X	M009C4	M009C4X	M009C5	M009C5X	M009C6	M009C6X	M010C8X	M014B8
			Sample Date	11/01/2013	06/19/2013	06/20/2013	06/19/2014	06/20/2014	03/10/2016	03/11/2016	03/29/2017	03/30/2017	03/27/2018	03/28/2018	03/26/2019	03/26/2019	10/26/2017	07/07/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4920**	-	**5090**	-	**1840**	-	**4260**	-	**3080**	-	**8040**	-	-	76.4 J
Iron	ug/L	Y	300	-	43.0 U	-	74.1 J	-	**604**	-	**3200**	-	**506**	-	**695**	-	-	33.4 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	2100 J	-	**277000**	-	197000	-	**341000**	-	**322000**	-	216000	-	200000	94200 J	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
			Field Sample ID	M014B8X	M014B9	M014B9X	M014C1	M014C1X	M014C3	M014C4	M014C4X	M014C5	M014C6X	M014C7X	M014C8X	M014C9X	M014D1X	M014D2X
			Sample Date	07/08/2015	01/06/2016	01/07/2016	08/04/2016	08/05/2016	02/07/2017	02/16/2017	02/17/2017	04/18/2017	08/25/2017	03/27/2018	08/14/2018	03/25/2019	09/18/2019	03/26/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	68 J	-	-	49 J	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	162 J	-	105 J	-	74.7 U	**302**	-	115 J	-	-	-	-	-	-
Iron	ug/L	Y	300	-	33.3 U	-	74.7 U	-	74.7 U	74.7 U	-	74.7 UJ	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	48 J	250 U	-	120	250 UJ	40 U	40 U	40 U	40 U	40 U	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	15 U	-	15 U	15 U	15 U	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	76700	-	138000	-	90300	191000	-	205000	156000 J	153000	126000	107000	117000	103000 UJ	141000 J

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131
			Field Sample ID	M014D3X	M014D4X	D0629211	M014D5	M014D6	M014D8	M131B8	M131B8X	D1108138	M131B9	M131B9X	M131C1X	M131C1	M131C2	M131C2X
			Sample Date	09/23/2020	03/02/2021	06/29/2021	06/29/2021	09/27/2021	02/03/2022	04/29/2013	04/30/2013	11/08/2013	11/08/2013	11/08/2013	01/08/2014	01/10/2014	06/09/2014	06/10/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	140 J	120 J	**960**	40 U	**2840**	-	**9160**	**8800**	-	-	**7540**	**12900**	-
Iron	ug/L	Y	300	-	-	120 J	68 J	**580**	41 U	**1500**	-	**586**	**486**	-	-	**3450**	**11900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	3 U	3 U	3 U	3.0 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 UJ	40 UJ	220 J	40 UJ	-	40 U	-	-	-	-	-	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	15 U	15 U	15 UJ	15 U	-	15 U	-	-	-	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	98000 J	150000 J	180000 J	170000 J	120000 J	140000 J	-	2500 U	1500 U	-	1500 U	13600	-	-	7800

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131	MW-131R	MW-131R	MW-131R
			Field Sample ID	M131C3	M131C4	M131C5	M131C5	M131C5X	M131C6	M131C7	M131C7X	M131C8	M131C8X	M131C9	M131C9X	M131RD1	M131RD1X	M131RD2
			Sample Date	03/17/2015	06/29/2015	07/20/2015	07/20/2015	07/20/2015	10/05/2015	10/29/2015	10/30/2015	12/02/2015	12/02/2015	02/18/2016	02/19/2016	06/06/2016	06/06/2016	09/06/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	1200	56300	-	-	-	125000 J	-	-	-	-	-	-	197000 J	-	323000 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3300**	**58800**	**38800**	-	-	**148000J**	**276000**	-	**309000**	-	**5120**	-	**142000**	-	**438000**
Iron	ug/L	Y	300	-	-	-	**37200**	-	-	**274000**	-	**258000**	-	**3910**	-	**182000**	-	**456000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	3900	4500	-	-	-	4000 J	-	-	-	-	-	-	3460	-	7200
Nitrogen, Nitrate as N	ug/L	N	10000	250 UJ	250 U	-	-	-	490 J	-	-	-	-	-	40 U	390 J	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 J	-	-	-
Sulfate (SO4)	ug/L	N	250000	111000	**709000**	-	-	**6950000**	**13800000J**	-	**29800000**	-	**38000000**	-	**8610000**	-	**2150000**	**15200000**

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R
			Field Sample ID	D1201168B	M131RD4	M131RD4X	M131RD6X	M131RD6	M131RD7	M131RD7X	M131RD8	M131RD8X	D0314181	M131RD9	D0315181	M131RD9X	M131RE1	M131RE1X
			Sample Date	12/01/2016	12/01/2016	12/01/2016	03/03/2017	03/06/2017	06/06/2017	06/06/2017	12/06/2017	12/06/2017	03/14/2018	03/14/2018	03/15/2018	03/15/2018	06/04/2018	06/04/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**64300**	**64800**	-	-	**256000**	**106000**	-	**164000**	-	**3450**	**3690**	-	-	**988**	-
Iron	ug/L	Y	300	**64000**	**68300**	-	-	**268000**	**93600**	-	**155000**	-	229	**322**	-	-	**406**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	40 U	-	-	**50500J**	**12400J**	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	44 J	-	-	15 U	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	**1800000**	-	**1920000**	236000	-	-	**580000**	-	**1120000**	-	-	69900	59800	-	**270000**

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R	MW-131R
			Field Sample ID	M131RE2	M131RE2X	M131RE3	M131RE3X	M131RE4	M131RE4X	D121220191	M131RE5	M131RE5X	M131RE6	M131RE6X	M131RE7X	M131RE8X	M131RE9	M131RF1
			Sample Date	12/04/2018	12/04/2018	03/12/2019	03/12/2019	06/24/2019	06/24/2019	12/12/2019	12/12/2019	12/12/2019	03/17/2020	03/17/2020	06/26/2020	12/10/2020	06/30/2021	10/05/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3980**	-	**523**	-	**2350**	-	**5370**	**5440**	-	**326**	-	-	-	**9200**	**9800**
Iron	ug/L	Y	300	**319**	-	186 J	-	40.0 U	-	**5000**	**5290**	-	152 UJ	-	-	-	**8700**	**9600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	2000	9700
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	95 J	-	-	-	-	-	-	40 U	-	-	40 UJ	360 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	-	-	-	-	-	-	15 U	15 UJ
Sulfate (SO4)	ug/L	N	250000	-	69400	-	128000	-	**294000J**	**294000J**	-	**279000J**	-	129000 J	210000 J	**350000**	210000 J	180000 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-131R	MW-131R	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132
			Field Sample ID	M131RF2	M131RF3	D0423124	M132C2	D1114127	M132C3	M132C3X	M132C4	D0510138	M132C5	M132C5X	D0703138	M132C6	M132C6X	D1018138
			Sample Date	12/16/2021	02/11/2022	04/23/2012	04/23/2012	11/14/2012	11/14/2012	11/14/2012	01/29/2013	05/10/2013	05/10/2013	05/10/2013	07/03/2013	07/03/2013	07/03/2013	10/18/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**15000**	**3200**	**13000**	**13500**	**14500**	**14000**	-	**19000**	**4210J**	**3420J**	-	**6010**	**7640**	-	**12400**
Iron	ug/L	Y	300	**16000**	**1800**	-	-	-	-	-	**16700**	**2800J**	**2550J**	-	**5770**	**7060**	-	**7650**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	3700	72	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	91 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	160000 J	**260000J**	-	-	15700	-	16300	-	**7540000J**	-	**18000000J**	**7440000**	-	**7870000**	**46100000**

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132
			Field Sample ID	M132C7	M132C7X	D1212138	D1212138	M132C8	M132C8	M132C8X	D0401148	D0401148	M132C9	M132C9	D0403148	M132C9X	D0711148	D0711148
			Sample Date	10/18/2013	10/18/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	12/12/2013	04/01/2014	04/01/2014	04/01/2014	04/01/2014	04/03/2014	04/03/2014	07/11/2014	07/11/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5920**	-	**4080**	-	**3560**	-	-	**40300**	-	**42100**	-	-	-	**11100**	-
Iron	ug/L	Y	300	**5590**	-	-	**832J**	-	**886J**	-	-	**32300**	-	**32500**	-	-	-	141 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**48600000**	**29700000**	-	-	-	**28800000**	-	-	-	-	**5540000**	**6130000J**	**10300000**	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132	MW-132
			Field Sample ID	M132D1	M132D1	M132D1X	D0911148B	D0911148B	M132D2	M132D2	M132D2X	D0115158B	M132D3	M132D3X	D0421158	M132D4	M132D4X	D0722158
			Sample Date	07/11/2014	07/11/2014	07/11/2014	09/11/2014	09/11/2014	09/11/2014	09/11/2014	09/11/2014	01/13/2015	01/15/2015	01/15/2015	04/21/2015	04/21/2015	04/21/2015	07/22/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**13000**	-	-	**4900**	-	**4650**	-	-	**1460**	**1900**	-	**4510**	**4220**	-	**624**
Iron	ug/L	Y	300	-	156 J	-	-	76.4 J	-	96.5 J	-	**1950**	**1870J**	-	280	202	-	63.0 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**10400000**	**12000000**	-	-	-	**5700000**	**13500000**	-	**13700000**	**2060000**	-	**2190000**	**2420000J**

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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132	MW-132	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R
			Field Sample ID	M132D5	M132D5X	D0726168	M132RD5	D0830168	M132RD6	M132RD6X	M132RD7	M132RD8	M132RD8X	M132RD9	M132RD9X	M132RE1	M132RE1X	M132RE2
			Sample Date	07/22/2015	07/22/2015	07/26/2016	07/26/2016	08/30/2016	08/30/2016	08/30/2016	10/18/2016	12/06/2016	12/06/2016	01/26/2017	01/26/2017	04/18/2017	04/18/2017	07/06/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	6400 J	6600 J	-	-	-	3700 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**842J**	-	**6890**	**7080**	**12400**	**11800**	-	**5870**	**2550**	-	**426**	-	**2690**	-	**13000**
Iron	ug/L	Y	300	63.9 J	-	**6470**	**6330**	**11300**	**14100**	-	**3070**	273	-	74.7 U	-	**2720**	-	**12000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	250 U	-	-	-	250 U	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**2420000J**	**1990000J**	**2130000J**	**2030000**	-	**1970000**	**2020000**	-	**896000**	-	**1770000**	-	**862000**	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R
			Field Sample ID	M132RE2X	M132RE3	M132RE3X	M132RE4	M132RE4X	M132RE5	M132RE5X	M132RE6	M132RE6X	M132RE8	M132RE8X	M132RE9	M132RE9X	D0201191B	M132RF1
			Sample Date	07/06/2017	10/18/2017	10/18/2017	01/09/2018	01/09/2018	04/26/2018	04/27/2018	05/24/2018	05/24/2018	08/27/2018	08/28/2018	11/19/2018	11/19/2018	02/01/2019	02/01/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**11100**	-	**13600**	-	**6830**	-	**9310**	-	**13500J**	-	**2150**	-	**14900**	**13100**
Iron	ug/L	Y	300	-	**8390**	-	**13500**	-	**6910**	-	**9300**	-	**12800J**	-	**1290**	-	**9780J**	**14600J**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	250 U	-	-	-	40 U	-	-	-	40 U	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	25000 U	-	-	-	15 U	-	-	-	15 U	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	**1340000**	-	**1830000**	-	**1430000**	-	**1100000**	-	**988000**	-	**1110000**	-	**498000**	**614000**	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132R	MW-132RR	MW-132RR	MW-132RR
			Field Sample ID	M132RF1X	D0509191	D0509191	M132RF2	M132RF2X	M132RF3	M132RF3X	M132RF4X	D0226201	D0226201X	M132RF7	M132RF7X	M132RRF9	M132RRF9X	M132RRG1
			Sample Date	02/01/2019	05/09/2019	05/09/2019	05/09/2019	05/09/2019	08/15/2019	08/15/2019	09/23/2019	02/26/2020	02/26/2020	02/26/2020	02/26/2020	05/19/2020	05/19/2020	08/19/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**13500**	-	**12800**	-	**16100**	-	-	**61900**	-	**60900**	-	**117000**	-	-
Iron	ug/L	Y	300	-	-	**14000**	**12500**	-	**15400**	-	-	**59200**	-	**58500**	-	**112000**	-	**200000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	-	-	-	250 U	-	250 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	40 U	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	-	-	-	-	-	-	42 J	-
Sulfate (SO4)	ug/L	N	250000	**573000**	-	**1440000J**	-	**1380000J**	-	**1100000J**	**793000**	-	**22900000J**	-	**6960000J**	-	**2980000J**	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-132RR	MW-141	MW-141	MW-141	MW-141	MW-141
			Field Sample ID	M132RRG1X	M132RRG2	M132RRG2X	M132RRG3	M132RRG3X	D0517218	M132RRG4	M132RRG5	M132RRG6	M132RG7	M141B7	M141B7X	M141B8	D0917141	M141B8X
			Sample Date	08/19/2020	11/06/2020	11/06/2020	02/04/2021	02/04/2021	05/17/2021	05/17/2021	08/26/2021	11/23/2021	02/03/2022	07/01/2013	07/02/2013	09/16/2014	09/17/2014	09/17/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**100000**	-	**120000**	**120000**	**110000**	**120000**	**120000**	51.6 J	-	287	-	-
Iron	ug/L	Y	300	-	**90000**	-	**120000**	-	**110000**	**110000**	**110000**	**120000J**	**120000J**	43.0 U	-	34.9 J	-	-
Iron, Total Recoverable	ug/L	N	NA	-	100000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	280 UJ	40 UJ	40 UJ	-	40 UJ	50000 UJ	-	2200	-	190	240
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	40 U	40 U	-	40 U	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	49 J	-	-	46 J	29 J	-	15 UJ	-	-	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	**3200000J**	-	**2300000J**	-	**22000000**	**6000000**	**6400000J**	**3000000**	**4300000**	**9200000**	-	111000	-	78500	90000

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-141	MW-142
			Field Sample ID	M141B9	M141B9X	M141C1	M141C1X	M141C2	M141C2X	M141C3	M141C3X	M141C4	M141C4X	M141C5	M141C5X	M141C6	M141C6X	M142B7
			Sample Date	12/07/2015	12/08/2015	09/26/2016	09/27/2016	03/02/2017	03/03/2017	02/20/2018	02/21/2018	02/21/2019	02/21/2019	02/18/2020	02/19/2020	01/22/2021	01/22/2021	07/15/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	46.3 J	-	**764**	-	74.7 U	-	80.5 U	-	245	-	**442**	-	120 J	-	43.0 U
Iron	ug/L	Y	300	33.3 U	-	74.7 U	-	74.7 U	-	80.5 U	-	40 U	-	41.2 U	-	41 U	-	**5220**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	3600	-	2700	-	1200	-	5500	-	1600	-	1600	-	1500 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	158000	-	118000	-	101000	-	72300	-	48800	-	37200 J	-	41000 J	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142	MW-142
			Field Sample ID	M142B7X	M142B8	M142B8X	M142B9	M142B9X	M142C1	M142C1X	M142C2	M142C2X	M142C3	M142C3X	M142C4	M142C4X	M142C5	M142C5X
			Sample Date	07/16/2013	11/13/2014	11/14/2014	12/07/2015	12/08/2015	02/10/2016	02/11/2016	03/01/2017	03/02/2017	02/20/2018	02/21/2018	02/21/2019	02/21/2019	02/20/2020	02/20/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	180 J	-	**1100**	-	**1750**	-	**366**	-	**311**	-	**4950**	-	270	-
Iron	ug/L	Y	300	-	33.4 U	-	58.1 J	-	198 J	-	103 J	-	80.5 U	-	40 U	-	41.2 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	210	-	1000	-	40 J	-	310	-	40 U	-	59 J	-	40 U	-	2000
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	38 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	28300	-	62600	-	47400	-	51300	-	56800	-	49600	-	52700	-	**285000J**

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-142	MW-142	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143
			Field Sample ID	M142C6	M142C6X	M143B7	M143B7X	M143B8	M143B8X	M143B9	M143B9X	M143C1	M143C1X	M143C2	M143C2X	D0220181	M143C3	D0221181
			Sample Date	01/28/2021	01/28/2021	07/01/2013	07/02/2013	09/16/2014	09/17/2014	10/01/2015	10/02/2015	03/03/2016	03/04/2016	03/01/2017	03/02/2017	02/20/2018	02/20/2018	02/21/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2800**	-	**2300**	-	**1660**	-	**595**	-	**1330**	-	**1490**	-	**318**	**568**	-
Iron	ug/L	Y	300	**670**	-	43.0 U	-	57.2 J	-	33.3 U	-	130 J	-	74.7 U	-	**666**	**398**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	-	1400	-	2700	-	6900	-	640	-	1200	-	-	1300
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	19 J	-	-	15 J
Sulfate (SO4)	ug/L	N	250000	-	**260000J**	-	8100	-	18300	-	48500	-	9500 J	-	6600	-	-	3700

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-143	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144
			Field Sample ID	M143C3X	M143C4	M143C4X	M143C5	M143C5X	M143C6	M143C6X	M144C4	M144C4X	M144C5	M144C5X	M144C6	M144C6X	M144C7	M144C7X
			Sample Date	02/21/2018	02/19/2019	02/19/2019	02/17/2020	02/17/2020	02/05/2021	02/05/2021	05/26/2016	05/27/2016	09/14/2016	09/14/2016	12/22/2016	12/27/2016	05/30/2017	05/31/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	159000 J	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4940**	-	**959**	-	**540J**	-	**198000**	-	**147000**	-	**87600**	-	**181000**	-
Iron	ug/L	Y	300	-	151 J	-	41.2 U	-	41 U	-	**203000**	-	**149000**	-	**86800**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	1300	-	890	-	2000	-	410 J	-	40 U	-	-	-	-	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	18 J	-	15 U	-	15 U	-	15 U	-	100	-	-	-	-	-	76
Sulfate (SO4)	ug/L	N	250000	5700	-	3500	-	118000 J	-	75000 J	-	**359000**	-	**345000**	-	54200	-	240000

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144	MW-144
			Field Sample ID	M144C8	M144C8X	M144C9	M144C9X	M144D1	D07161915	M144D2	M144D3	M144D4	D05272015	M144D5	M144D6	M144D6X	M144D7	D12032015
			Sample Date	05/29/2018	05/30/2018	05/30/2019	05/30/2019	06/18/2019	07/16/2019	07/16/2019	08/22/2019	04/02/2020	05/27/2020	05/27/2020	06/12/2020	06/12/2020	08/27/2020	12/03/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**169000**	-	**157000**	-	**152000**	**143000**	**148000**	**128000**	**153000**	**150000**	**148000J**	-	-	-	**76000**
Iron	ug/L	Y	300	-	-	-	-	**148000**	**142000**	**140000**	**128000**	**147000**	**146000**	**147000**	-	-	**110000**	**74000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	160000	-	95000	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	-	-	-	-	-	-	-	40 UJ	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	35 J	-	110	-	-	-	-	-	-	-	-	81	-	-
Sulfate (SO4)	ug/L	N	250000	-	240000	-	97800	113000	104000	101000	164000	125000	145000 J	149000 J	-	120000 J	43000	4100 J

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-144	MW-144	MW-144	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145
			Field Sample ID	M144D8	M144D9	M144E1	M145B6	M145B6X	M145B7	M145B7X	M145B8	M145B8X	M145B9	M145B9X	M145C1	M145C1X	M145C2	M145C2X
			Sample Date	12/03/2020	06/23/2021	09/23/2021	06/24/2013	06/25/2013	09/22/2014	09/23/2014	11/19/2015	11/20/2015	01/04/2016	01/05/2016	03/06/2017	03/07/2017	02/14/2018	02/15/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**78000**	**120000**	**97000**	**27900**	-	**54700**	-	**3150J**	-	**823**	-	**767**	-	**702**	-
Iron	ug/L	Y	300	**74000**	**130000**	**90000**	**20800**	-	**52400**	-	**837J**	-	283	-	**313**	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	2300	9700	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	40 UJ	-	40 U	-	40 U	-	-	-	40 U	-	40 U	-	250
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	33 J	140	-	55	-	42 J	-	-	-	36 J	-	130	-	46 J
Sulfate (SO4)	ug/L	N	250000	4100 J	20000 UJ	8000 UJ	-	88500	-	93200	-	104000	-	98400	-	102000	-	90100

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-145	MW-145	MW-145	MW-145	MW-145	MW-145	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146
			Field Sample ID	M145C3	M145C3X	M145C4	M145C4X	M145C5	M145C5X	M146B7	M146B7X	M146B9	M146B9X	M146C1	M146C1X	M146C2	M146C2X	M146C3
			Sample Date	02/05/2019	02/05/2019	01/31/2020	01/31/2020	01/27/2021	01/28/2021	06/26/2013	06/27/2013	11/18/2015	11/20/2015	09/27/2016	09/28/2016	02/27/2017	02/28/2017	02/14/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1490**	-	**516**	-	**810**	-	**1250**	-	**1680**	-	**15800**	-	**1560**	-	**2210**
Iron	ug/L	Y	300	**342**	-	65.7 J	-	**370**	-	**525**	-	187 UJ	-	**15200**	-	**900**	-	**1030**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	150	-	40 U	-	51 J	-	63 J	-	-	-	40 U	-	69 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	22 J	-	15 U	-	15 U	-	-	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	75900 J	-	93900 J	-	86000 J	-	2500 U	-	7900	-	12500 U	-	2500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146	MW-146
			Field Sample ID	M146C3X	M146C4	M146C4X	M146C5	M146C5X	M146C6X	M146C7	M146C7X	M146C8X	M146C9	M146C9X	D0301218A	M146D1	M146D1X	M146D2
			Sample Date	02/15/2018	04/18/2018	04/19/2018	01/29/2019	01/29/2019	11/15/2019	05/29/2020	05/29/2020	09/01/2020	11/11/2020	11/11/2020	03/01/2021	03/01/2021	03/01/2021	05/14/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	92.7 J	-	**2540**	-	-	**1840**	-	-	-	-	**14000**	**14000**	-	**15000**
Iron	ug/L	Y	300	-	**1860**	-	**343J**	-	-	**1660**	-	-	**18000**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	18000	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	430	-	-	-	390	-	-	300 J	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	15 U	-	-	15 U	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1200 J	-	1000 U	-	1000 U	2500 J	-	21900 J	6500	-	520	-	-	2600 J	2100 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-146	MW-146	MW-146	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148
			Field Sample ID	M146D3	M146D4	M146D5	M148B8	M148B8X	M148C2	M148C2X	M148C3	M148C4	D0306171	M148C6	D0307171	M148C6X	M148C7	M148C7X
			Sample Date	08/20/2021	11/09/2021	02/02/2022	06/24/2013	06/25/2013	01/04/2016	01/05/2016	06/08/2016	09/08/2016	03/06/2017	03/06/2017	03/07/2017	03/07/2017	02/21/2018	02/22/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	10 UJ	2600 J	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2000**	**9600**	**2400**	165 J	-	**4530**	-	**2730**	**2800**	**3010**	**2950**	-	-	**1570**	-
Iron	ug/L	Y	300	-	-	-	43.0 U	-	**3080**	-	-	-	176 J	181 J	-	-	**3010**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	250	150	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	40 U	250 U	250 U	-	-	40 U	40 U	-	48 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	15 U	-	-	-	-	15 U	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	1700 J	1900 J	9300 J	-	14500	-	13900	55500	65900	-	-	30100	30300	-	26400

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-148	MW-149	MW-149	MW-149	MW-149	MW-149
			Field Sample ID	D0205191	M148C8	M148C8X	M148C9	M148C9X	M148D1	M148D1X	M148D2	D0917211	M148D3	M149C6	M149C6X	M149C7	M149C7X	M149E3
			Sample Date	02/05/2019	02/05/2019	02/05/2019	02/06/2020	02/07/2020	03/30/2021	03/31/2021	06/03/2021	09/17/2021	09/17/2021	09/21/2016	09/21/2016	12/14/2016	12/20/2016	06/21/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	51700 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2940**	**2930**	-	**4010**	-	**2700**	-	**3300**	**990**	**1000**	**47600**	-	**46200**	-	**53000**
Iron	ug/L	Y	300	40 U	40.7 J	-	41.2 U	-	41 U	-	41 U	170 J	130 J	**46900**	-	**44800**	-	**52000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	25	34	33	-	-	-	-	15000
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	1400	-	110 J	1700 J	540 UJ	290 UJ	-	-	-	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 J	-	15 U	-	53	-	15 U	15 U	74 J	80 J	-	-	-	-	45 J
Sulfate (SO4)	ug/L	N	250000	10000 U	-	10000 U	-	21000 J	-	32000 J	48000 J	54000 J	52000 J	-	1500 U	-	4500 J	8000 UJ

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-149	MW-149	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151
			Field Sample ID	M149E4	M149E5	M151C2	M151C3	M151C3X	M151C4X	M151C4	M151C4	M151C5	M151C5	M151C5X	M151C7	M151D2	M151D3	M151D4
			Sample Date	12/17/2021	03/31/2022	08/16/2013	10/30/2013	10/30/2013	01/09/2014	01/10/2014	01/10/2014	08/15/2014	08/15/2014	08/15/2014	11/10/2014	12/23/2014	01/21/2015	03/10/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	47000	-	-	-	-	-	36400	-	-	42600	-	-	250
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**50000**	**50000**	**47700**	**51400**	-	-	**1970**	-	**21500**	-	-	**44400**	**1610**	**1890**	**440**
Iron	ug/L	Y	300	**49000**	**51000**	-	**51400**	-	-	-	65.8 J	-	**21100**	-	**41900**	139 J	224	225
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	16000	17000	11000	-	-	-	-	-	-	-	9500	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 U	-	-	-	-	-	-	-	250 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	41 J	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	8000 UJ	8000 UJ	1500 U	-	1500 U	15900 J	-	-	-	-	4100 J	1500 U	10400	9100	7200

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151
			Field Sample ID	M151D5	M151D6	M151D7	M151D8	M151D9	M151E1X	M151E2	M151E3	M151E3X	M151E4	M151E5	M151E5X	M151E6	D0315191	M151E8X
			Sample Date	07/01/2015	10/27/2015	03/30/2016	06/27/2016	09/29/2016	09/22/2017	10/25/2017	02/16/2018	02/16/2018	03/28/2018	05/30/2018	05/31/2018	10/09/2018	03/15/2019	03/15/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	140	160	130	4900	55000 J	-	35700 J	-	-	110 J	-	-	12200 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1770**	98.2 J	**1640**	**5360**	**59700**	-	**29200**	**971**	-	**368**	**402**	-	**11600**	-	-
Iron	ug/L	Y	300	33.4 U	36.3 J	45.2 J	**3990**	**50600**	-	**29000**	**2720**	-	80.5 U	80.5 U	-	**12500**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	930	1700	3000	250 U	1200	-	250 UJ	-	1100	250 U	-	40 U	250 U	140	130
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	250 UJ	-	15 U	-	-	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	13900	55600	16400	66000	**501000**	**3200000**	**2230000J**	-	92700	34300	-	**451000**	**1280000**	50600 J	78200 J

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-151	MW-152	MW-152	MW-152	MW-152	MW-152	MW-152	MW-152
			Field Sample ID	M151E9X	M151F1X	M151F2X	M151F3X	M151F4	M151F5	M151F6	M151F7	M152C3	D0712131	M152C3X	M152C4	M152C5	M152C6	M152C7
			Sample Date	09/05/2019	03/03/2020	09/04/2020	03/11/2021	05/27/2021	07/29/2021	10/22/2021	03/23/2022	07/11/2013	07/12/2013	07/12/2013	03/18/2015	06/30/2015	10/06/2015	11/25/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	230	16100	1000	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	140 J	**460**	-	**1100**	**45100**	-	-	**2140**	**14300**	**8480**	-
Iron	ug/L	Y	300	-	-	-	-	41 U	41 U	-	82 U	**43500**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	100	3 U	6200	3 U	-	-	-	7400	8800	12000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1200	-	89 J	330 J	810 J	40 UJ	2700 J	-	50 J	40 U	780	250 U	250 U	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	15 U	15 U	15 UJ	15 U	-	15 U	19 J	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	**470000J**	22100 J	**330000**	36000 J	9500 J	17000 J	2000 UJ	8900 J	-	12500 U	12500 U	48900	53300	24300	5800 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-152	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153
			Field Sample ID	M152C8	M153C2	M153C2	M153C2X	M153C3	M153C3X	M153C4	M153C4X	M153C5	M153C5X	M153C6	M153C6X	M153C7	M153C7X	M153C8
			Sample Date	12/14/2015	06/05/2012	06/05/2012	06/06/2012	09/04/2012	09/05/2012	07/02/2013	07/03/2013	10/03/2013	10/04/2013	06/10/2014	06/11/2014	01/13/2015	01/14/2015	01/06/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**30000**	**1890**	-	-	**722**	-	**4440**	-	**1560**	-	**5070**	-	**6900**	-	**839**
Iron	ug/L	Y	300	**29000**	52.4 J	33.3 U	-	-	-	65.7 J	-	43.0 U	-	113 J	-	75.8J	-	33.3 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	640	-	3300	-	92 J	-	40 U	-	310	-	84J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15U	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	24400	-	42400	-	70700	-	75800	-	50500	-	20000J	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153
			Field Sample ID	M153C8X	M153C9	M153C9X	M153D1	M153D1X	M153D2	M153D2X	M153D3	M153D3X	M153D4	M153D4X	M153D5	M153D5X	M153D6	M153D6X
			Sample Date	01/07/2016	08/04/2016	08/05/2016	02/27/2017	02/28/2017	08/28/2017	08/29/2017	03/12/2018	03/13/2018	08/29/2018	08/30/2018	03/14/2019	03/14/2019	08/28/2019	08/28/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1100**	-	**3250**	-	**2740**	-	**8310**	-	**2530**	-	**3270**	-	**1120**	-
Iron	ug/L	Y	300	-	107 J	-	**360**	-	-	-	**1470**	-	**321J**	-	40 U	-	46 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	1700	-	1500	-	1700	-	1800	-	1200	-	1100	-	790	-	1600
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	21 J	-	15 U	-	15 U	-	15 U	-	15 U	-	29 J
Sulfate (SO4)	ug/L	N	250000	45600	-	57600	-	36800	-	25400	-	16800	-	22800	-	10400	-	21100 J

Notes:
1. GWQS - Groundwater Quality Standard
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-153	MW-155	MW-155R	MW-155R	MW-155R	MW-155R	MW-155R	MW-155R
			Field Sample ID	M153D7	M153D7X	M153D8	M153D8X	M153D9	M153D9X	M153E1	M153E2	M155C1	M155RA1	M155RA1X	M155RA3	M155RA3X	M155RA4	M155RA4X
			Sample Date	03/11/2020	03/11/2020	08/17/2020	08/19/2020	02/04/2021	02/04/2021	05/27/2021	10/20/2021	06/07/2012	07/26/2016	07/26/2016	03/08/2017	03/09/2017	03/28/2018	03/29/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**11100**	-	-	-	170 J	-	**1300**	260	**4410**	**19600**	-	**29000**	-	**31700**	-
Iron	ug/L	Y	300	91.7 J	-	41 U	-	41 U	-	41 U	41 U	-	**17800**	-	**23200**	-	**44900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	1900	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	3 U	4.5 J	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1200	-	970 J	-	700 J	1700 J	1400 J	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	15 U	15 U	-	-	25 J	-	31 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	9200 J	-	25000 J	-	17000 J	19000 J	22000 J	-	-	10000 U	-	81300	-	115000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-156R	MW-157	MW-157	MW-157	MW-157	MW-157
			Field Sample ID	M156RA1	M156RA2	M156RA3	M156RA4	M156RA5	D0324201	M156RA7	M156RA8	M156RA9	M156RB1	M157C3	M157C3X	M157C4	M157C4X	M157C6
			Sample Date	11/04/2015	03/17/2016	03/08/2017	03/28/2018	03/27/2019	03/24/2020	03/24/2020	05/03/2021	10/22/2021	02/14/2022	10/16/2018	10/16/2018	12/06/2018	12/06/2018	02/24/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**18600**	**10500**	**5860**	**3690**	**7270**	237	298	**1100**	200	**3300**	**477**	-	252	-	264
Iron	ug/L	Y	300	-	**9950**	-	-	-	-	-	**1000**	150 UJ	-	181 J	-	40 U	-	41.2 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	14000	12000	-	-	15	-	3 U	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	40 UJ	40 UJ	-	-	830	-	1300	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	15 UJ	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	13000 J	150000 J	-	-	78500	-	72200	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-157	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172
			Field Sample ID	M157C6X	M172B9	M172C1	M172C1X	M172C2	M172C2X	M172C4	M172C4X	D1104141	M172C5	D1105141	M172C5X	M172C6	M172C6X	M172C7
			Sample Date	02/25/2020	06/19/2012	09/06/2012	09/07/2012	07/10/2013	07/11/2013	06/19/2014	06/20/2014	11/04/2014	11/04/2014	11/05/2014	11/05/2014	07/09/2015	07/10/2015	03/10/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**15900**	**19900**	-	**3530**	-	**16300**	-	**20700**	**20600**	-	-	**976**	-	**3740**
Iron	ug/L	Y	300	-	-	**19100**	-	**2940**	-	**1580**	-	**16900**	**17500**	-	-	128 J	-	**3270**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	7900 J	-	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	33 J	-	32 J	-	16 J	-	-	17 J	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	73100 J	-	-	5000 U	-	12500 U	-	5000 U	-	-	5000 U	10000 U	-	5000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172
			Field Sample ID	M172C7X	M172C8	M172C8X	M172C9	M172C9X	M172D1	M172D1X	M172D2	M172D2X	M172D3	M172D3X	M172D4	M172D4X	D0820191A	M172D5
			Sample Date	03/11/2016	09/27/2016	09/28/2016	03/29/2017	03/30/2017	09/12/2017	09/13/2017	03/27/2018	03/28/2018	08/27/2018	08/28/2018	03/22/2019	03/22/2019	08/20/2019	08/20/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**44300**	-	**10400**	-	**1810**	-	**475**	-	**415U**	-	**5060**	-	**2280**	**2190**
Iron	ug/L	Y	300	-	**41300**	-	**9240**	-	151 J	-	80.5 U	-	85.7 UJ	-	**385**	-	**1350**	**1300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	16 J	-	85	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	10000 U	-	10000 U	-	10000 U	-	10000 U	-	6600	-	1000 U	-	3100	4000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-172	MW-173	MW-173	MW-209	MW-209	MW-209
			Field Sample ID	M172D5X	M172D6	M172D6X	M172D7	M172D7X	M172D8	M172D8X	M172D9	M172E1	M172E2	M173B7	M173B7X	M209B6	M209B6X	M209B7
			Sample Date	08/20/2019	03/12/2020	03/12/2020	08/10/2020	08/11/2020	03/04/2021	03/04/2021	05/26/2021	09/24/2021	02/03/2022	05/09/2013	05/10/2013	07/08/2013	07/09/2013	11/24/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**19700**	-	-	-	**6800**	-	**29000**	**7400**	**32000**	**13100**	-	**10300**	-	**29500**
Iron	ug/L	Y	300	-	**15100**	-	41 U	-	-	-	**25000**	**6900**	**26000**	**10500**	-	50.9 J	-	**425**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	180 J	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	95	16	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	60 J	-	40 UJ	40 UJ	550 J	40 UJ	-	45 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	15 U	15 U	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	1500 UJ	-	25600 J	-	9500 J	-	18000 J	53000 J	26000 J	10000 UJ	-	47200	-	3100 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-209	MW-209	MW-209	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
			Field Sample ID	M209B7X	M209B8	M209B8X	M213A2	M213A3X	M213A6	M213A6X	M213A7	M213A7X	M213A8	M213A8X	M213B1	M213B2	M213B2X	M213B3
			Sample Date	11/25/2015	06/12/2017	06/13/2017	01/29/2013	05/09/2013	07/13/2015	07/14/2015	10/16/2015	10/20/2015	02/29/2016	03/01/2016	07/26/2016	08/17/2016	08/18/2016	08/31/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	13900 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**15800**	-	**19700**	-	**23600**	-	**34700**	-	**15900**	-	**13500**	**15700**	-	**18200**
Iron	ug/L	Y	300	-	74.7 U	-	**17900**	-	**23400**	-	**33400**	-	**15800**	-	**13100**	-	-	**18500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	550	-	170	-	-	-	40 U	-	40 U	-	40 U	250 U	-	42 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 J	-	-	-	29 J	-	15 U	-	27 J	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	29900	-	10700 J	-	1600 J	-	5000 U	-	5000 U	-	4100 J	10600	-	5400	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
			Field Sample ID	M213B3X	M213B4	M213B6	M213B6X	M213D7	M213D7X	M213B8	M213B8X	M213B9	M213B9X	M213C1	M213C1X	M213C2	M213C2X	M213C3
			Sample Date	09/01/2016	10/20/2016	12/07/2016	12/07/2016	01/16/2017	01/16/2017	01/30/2017	01/31/2017	04/24/2017	04/24/2017	07/10/2017	07/11/2017	10/19/2017	10/19/2017	01/10/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	22000 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**21700**	**13900**	-	**9880**	-	**7840**	-	**6310**	-	**11300**	-	**15400**	-	**7110**
Iron	ug/L	Y	300	-	**22800**	**13700**	-	**9790**	-	-	-	**6610**	-	**11600**	-	**14400**	-	**7040**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	-	-	-	-	41 J	-	-	-	40 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	-	-	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	2500 J	1500 U	-	150000 UJ	-	7900	-	10000 U	-	16000	-	3500 J	-	3000 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213
			Field Sample ID	M213C3X	M213C4	M213C4X	M213C5	M213C5X	M213C7	M213C7X	M213C8	M213C8X	M213RC9	M213RC9X	M213RD1	M213RD2	M213RD2X	M213RD3
			Sample Date	01/10/2018	02/06/2018	02/07/2018	05/09/2018	05/10/2018	08/29/2018	08/29/2018	11/06/2018	11/06/2018	02/01/2019	02/01/2019	05/13/2019	08/13/2019	08/13/2019	02/20/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**5160**	-	**9690**	-	**23000**	-	**16000**	-	**8860**	-	**9300**	**37500**	-	**10500**
Iron	ug/L	Y	300	-	**4600**	-	**9560**	-	**22600**	-	**15300**	-	**8920**	-	**7830**	**36600**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	-	-	-	-	-	-	40 U	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	-	-	-	-	-	-	15 U	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	7700	-	1000 U	-	14900	-	2800 J	-	7300	-	-	-	-	4000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-213	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214
			Field Sample ID	M213RD3X	M213RD4	M213RD4X	D0216211	D0216211X	M213D5	M213D5X	M213D6	M213D8	M214A1	M214A2	M214A3	M214A3X	D0128137	M214A4
			Sample Date	02/20/2020	08/18/2020	08/18/2020	02/16/2021	02/16/2021	02/16/2021	02/16/2021	08/25/2021	02/09/2022	04/23/2012	06/21/2012	11/14/2012	11/14/2012	01/28/2013	01/28/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**9700**	-	**9700**	-	**16000**	**5900**	**37700**	**33600**	**26800**	-	**19000J**	**19100**
Iron	ug/L	Y	300	-	**21000**	-	**9400**	-	**9300**	-	**14000**	**5300**	-	-	-	-	**11800J**	**12000**
Iron, Total Recoverable	ug/L	N	NA	-	24000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	20 J	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	4000 UJ	-	10000 UJ	-	2000 UJ	-	2000 UJ	4500 J	28000 J	-	-	-	33700	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214	MW-214
			Field Sample ID	M214A5X	M214A6	M214A6X	M214A7X	M214A8	M214A8X	M214A9	M214A9X	M214B1	M214B1	M214B1X	M214B2	M214B2X	M214B3	M214B3X
			Sample Date	05/10/2013	07/03/2013	07/03/2013	10/17/2013	12/18/2013	12/18/2013	03/31/2014	03/31/2014	07/11/2014	07/11/2014	07/11/2014	09/10/2014	09/10/2014	03/10/2015	03/10/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1590**	-	-	**42200**	-	**52000**	-	**65600**	-	-	**48000**	-	**34600**	-
Iron	ug/L	Y	300	-	144 J	-	-	**29100**	-	**44800**	-	-	**49900**	-	**43900**	-	**31500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**5180000**	-	**5920000**	**14100000**	-	**18000000**	-	**1190000**	-	-	**816000**	-	**771000**	-	182000

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-214	MW-214	MW-214	MW-214	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R
			Field Sample ID	M214B4	M214B4X	M214B5X	M214B5	M214RB6	M214RB7	M214RB7X	M214RB8	M214RB9	M214RB9X	M214RC1	M214RC1X	D0420178	M214RC2	M214RC2X
			Sample Date	04/21/2015	04/22/2015	07/23/2015	07/24/2015	07/25/2016	08/29/2016	08/29/2016	10/17/2016	12/05/2016	12/05/2016	01/17/2017	01/17/2017	04/20/2017	04/20/2017	04/20/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	4500 J	-	-	5200 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**19100**	-	-	**14200**	**5220**	**4200**	-	**5050**	**2050**	-	**1560**	-	**5710**	**5530**	-
Iron	ug/L	Y	300	**11200**	-	-	**10900**	**2700**	**3000**	-	**4620**	**1540**	-	**1150**	-	**4840**	**4340**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	-	-	250 U	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**460000**	113000	-	198000	-	199000	207000	-	**1020000**	-	**1830000**	**1260000**	-	**1280000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R
			Field Sample ID	M214RC3	M214RC3X	M214RC4	M214RC4	M214RC5	M214RC5X	M214RC6	M214RC6X	M214RC7	M214RC7X	M214RC8	M214RC8X	M214RC9	M214RC9X	M214RD1
			Sample Date	07/06/2017	07/07/2017	10/19/2017	10/19/2017	01/11/2018	01/11/2018	05/23/2018	05/23/2018	08/27/2018	08/27/2018	11/13/2018	11/13/2018	02/07/2019	02/07/2019	05/08/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7860**	-	-	**15200**	**18700**	-	**5390**	-	**9060**	-	**4420**	-	**9620**	-	**1850**
Iron	ug/L	Y	300	**7050**	-	-	**13800**	**17400**	-	**4450**	-	**5530**	-	**3500**	-	**5350**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**1640000**	**534000J**	-	-	**605000**	-	**989000**	-	**433000**	-	**708000**	-	**388000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-214R	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215
			Field Sample ID	M214RD1X	M214RD2	M214RD2X	M214RD3	M214RD4	M214RD4X	M214RD5	M214RD6	M215A1	M215A2	M215A3	M215A3X	M215A4	M215A5X	M215A6
			Sample Date	05/08/2019	08/02/2019	08/02/2019	09/03/2020	02/05/2021	02/05/2021	08/25/2021	02/09/2022	04/23/2012	06/20/2012	11/14/2012	11/14/2012	01/28/2013	05/13/2013	07/01/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**2470**	-	-	**98000**	-	**25000**	**53000**	**6290**	**21300**	**30000**	-	**16300**	-	**49300**
Iron	ug/L	Y	300	**1330**	**2300**	-	**3400**	**100000**	-	**25000**	**69000**	-	-	-	-	**14800**	-	**46900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	4200	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 U	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**358000**	-	**397000**	-	-	**470000**	**1100000**	**2300000**	-	-	-	**269000**	-	196000	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215	MW-215
			Field Sample ID	M215A6X	M215A7X	M215A8	M215A8X	M215A9	M215A9X	M215B1	M215B1X	M215B2	M215B2	M215B2X	M215B3	M215B3X	M215B4	M215B4X
			Sample Date	07/02/2013	10/15/2013	12/16/2013	12/16/2013	03/31/2014	03/31/2014	07/16/2014	07/16/2014	09/11/2014	09/11/2014	09/11/2014	01/14/2015	01/14/2015	04/22/2015	04/22/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**24200**	-	**6170**	-	**36900**	-	**11100**	-	-	**6270**	-	**3910**	-
Iron	ug/L	Y	300	-	-	**17100**	-	**4520**	-	**28500**	-	-	**9850**	-	**5260**	-	**1760**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**3820000**	**5990000**	-	**2680000**	-	**508000**	-	120000	-	-	**335000**	-	182000	-	96900

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-215	MW-215	MW-227R	MW-227R	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235
			Field Sample ID	M215B5X	M215B5	M227RA5	M227RA6	M235A9	M235A9X	M235B1	M235B1X	M235B2	M235B2X	M235B3	M235B3X	M235B4	M235B4X	M235B5
			Sample Date	07/23/2015	07/24/2015	05/25/2021	10/28/2021	06/26/2012	06/27/2012	09/04/2012	09/05/2012	05/09/2013	05/10/2013	10/01/2013	10/02/2013	08/11/2014	08/12/2014	11/04/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**10900**	**1300**	**9500**	**761**	-	**2470**	-	**1970**	-	**3590**	-	**1280**	-	**1200**
Iron	ug/L	Y	300	-	**10500**	**1100**	**12000**	**17000**	-	119 J	-	**1360**	-	**615**	-	54.6 J	-	**428**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	280	13000	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	40 UJ	-	540	-	400	-	930	-	330	-	810	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	117000	-	63000	60000 J	-	45600 J	-	74200	-	158000	-	148000	-	125000	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235
			Field Sample ID	M235B5X	M235B6	M235B6X	M235B7	M235B7X	M235B8	M235B8X	M235B9	M235B9X	M235C1	M235C1X	M235C2	M235C2X	M235C3	M235C3X
			Sample Date	11/05/2014	07/14/2015	07/15/2015	02/09/2016	02/10/2016	08/18/2016	08/19/2016	02/27/2017	02/28/2017	08/30/2017	08/31/2017	02/14/2018	02/15/2018	08/27/2018	08/28/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	138 J	-	208	-	**334**	-	74.7 U	-	**326**	-	92.7 J	-	**453U**	-
Iron	ug/L	Y	300	-	33.3 U	-	37.3 J	-	74.7 U	-	74.7 U	-	80.5 U	-	80.5 U	-	215 UJ	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	70 J	-	140	-	1600	-	940	-	1600	-	1000	-	2100	-	790
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	99800	-	72500	-	50300	-	134000	-	77700	-	78700	-	52100	-	70300

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-235	MW-236	MW-236	MW-236
			Field Sample ID	M235C4	M235C4X	M235C5	M235C5X	M235C6	M235C6X	D0828201	D0828201X	M235C8	M235C8X	M235C9	M235C9X	M236B2	M236B2X	M236B3
			Sample Date	01/29/2019	01/29/2019	08/20/2019	08/20/2019	01/27/2020	01/27/2020	08/28/2020	08/28/2020	08/28/2020	08/28/2020	01/28/2021	01/28/2021	05/02/2012	05/03/2012	09/04/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**464**	-	135 J	-	83.9 J	-	-	-	-	-	190 J	-	**21600**	-	**22600**
Iron	ug/L	Y	300	40 U	-	119 J	-	41.2 U	-	41 U	-	41 U	-	41 U	-	**19100**	-	**16800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	52 J	-	160 J	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1400	-	710	-	790	-	680 J	-	610 J	-	1000 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 UJ	-	15 U	-	15 U	-	15 U	-	15 U	-	23 J	-
Sulfate (SO4)	ug/L	N	250000	-	47800	-	56600 J	-	79200 J	-	120000 J	-	120000 J	-	94000 J	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236
			Field Sample ID	M236B3X	M236B4	M236B4X	M236B6	M236B6X	M236B7	M236B7X	M236B8	M236C1	M236C1X	D03161515	M236C2	D06301515	M236C3	M236C4
			Sample Date	09/05/2012	05/09/2013	05/10/2013	10/03/2013	10/04/2013	11/06/2013	11/06/2013	01/06/2014	11/04/2014	11/05/2014	03/16/2015	03/16/2015	06/30/2015	06/30/2015	07/09/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	26400	-	21200	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**21900**	-	**24900**	-	**19000**	-	**29600**	**17700**	-	**26100**	**20500**	**21600**	**22600**	**20900**
Iron	ug/L	Y	300	-	**17900**	-	**20100**	-	**18800**	-	**28500**	**16700**	-	-	-	-	-	**19800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	14000	-	15000	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	-	-	-	40 U	-	250 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	18 J	-	15 U	-	15 U	-	-	-	-	19 J	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	10000 U	-	10000 U	-	10000 U	-	1500 U	-	-	10000 U	-	3700 J	-	1500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236
			Field Sample ID	M236C4X	D10061515	M236C5	M236C6	M236C6X	M236C9	M236C9X	M236D1	M236D1X	M236D2	M236D2X	D0830171	M236D3	D0831171	M236D3X
			Sample Date	07/10/2015	10/06/2015	10/06/2015	01/04/2016	01/05/2016	06/20/2016	06/21/2016	09/06/2016	09/07/2016	02/27/2017	02/28/2017	08/30/2017	08/30/2017	08/31/2017	08/31/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	18300	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**19900**	**20900**	**16200**	-	**16000**	-	**24100**	-	**11900**	-	**21400**	**21600**	-	-
Iron	ug/L	Y	300	-	-	-	**15800**	-	**14000**	-	**23300**	-	**12000**	-	**20500**	**21100**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	14000	-	-	-	16000	-	12000	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	250 UJ	-	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	16 J	-	-	-	15 U	-	15 U	-	15 U	-	19 J	-	-	38 J	34 J
Sulfate (SO4)	ug/L	N	250000	12500 U	-	1500 U	-	10000 U	-	60500	-	180000	-	60100	-	-	**4290000**	**4290000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-236	MW-245
			Field Sample ID	M236D4	M236D4X	M236D5	M236D5X	M236D6	M236D6X	M236D8	M236D8X	M236D9	M236D9X	M236E1	M236E1X	M236E2	M236E2X	M245B2
			Sample Date	02/14/2018	02/15/2018	08/29/2018	08/30/2018	01/29/2019	01/29/2019	09/26/2019	09/26/2019	01/24/2020	01/24/2020	07/24/2020	07/24/2020	01/22/2021	01/22/2021	05/02/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**13000**	-	**12900**	-	**18000**	-	**9300**	-	**9670**	-	-	-	**11000**	-	**23400**
Iron	ug/L	Y	300	**12700**	-	**12400**	-	**13500**	-	**9690**	-	**9700**	-	**9800**	-	**10000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	10000	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	120	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**269000**	-	**2380000**	-	**360000**	-	**1220000J**	-	**646000J**	-	**950000J**	-	**600000J**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245
			Field Sample ID	M245B2X	M245B3	M245B3X	M245B4	M245B4X	M245B8	M245B8X	M245B9	M245C1	M245C1X	M245C5	M245C5X	M245C6	M245C6X	M245C8
			Sample Date	05/03/2012	08/30/2012	08/31/2012	10/03/2013	10/04/2013	11/30/2015	12/01/2015	12/17/2015	02/18/2016	02/19/2016	06/20/2016	06/21/2016	09/06/2016	09/07/2016	01/26/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	1400 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**18200**	-	**19100**	-	**7190**	-	**4630**	**10600**	-	**10600**	-	**8410**	-	**9960**
Iron	ug/L	Y	300	-	**16700**	-	**12300**	-	**7180**	-	-	**9340**	-	**9890**	-	**11300**	-	**9560**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3100	-	4400	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	250 U	-	40 U	-	58 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	-	10000 U	-	10000 U	-	125000 U	6000	-	10000 U	-	5000 U	-	3800 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245	MW-245
			Field Sample ID	M245C8X	M245C9	M245C9X	M245D1	M245D1X	M245D2	M245D2X	M245D3	M245D3X	D0722191	M245D4	M245D4X	M245D5	M245D5X	M245D6
			Sample Date	01/27/2017	08/02/2017	08/03/2017	02/06/2018	02/07/2018	07/24/2018	07/25/2018	01/30/2019	01/30/2019	07/22/2019	07/22/2019	07/22/2019	01/29/2020	01/30/2020	08/17/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**8810**	-	**5360**	-	**10400**	-	**7580**	-	**13600**	**14400**	-	**10800**	-	-
Iron	ug/L	Y	300	-	**8250**	-	**5000**	-	**9840**	-	**7320**	-	**11500**	**11500**	-	**6010**	-	**5400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7300
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	51 J	-	43 J	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	24 J	-	15 U	-	15 U	-	15 U	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	2500 U	-	10000 U	-	50000 U	-	2000 U	-	1000 U	1000 UJ	-	1000 UJ	-	2000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-245	MW-245	MW-245	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246	MW-246
			Field Sample ID	M245D6X	M245D7	M245D7X	M246B3	M246B3X	M246B4	M246B4X	M246B5	M246B5X	M246B6	M246B6X	M246B7	M246B7X	M246B8	M246B8X
			Sample Date	08/17/2020	02/05/2021	02/05/2021	06/05/2012	06/06/2012	08/30/2012	08/31/2012	05/10/2013	05/10/2013	11/06/2013	11/06/2013	01/06/2014	01/08/2014	06/09/2014	06/10/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**10000J**	-	**87700**	-	**87300**	-	**90000**	-	**85000**	-	**107000**	-	**98900**	-
Iron	ug/L	Y	300	-	**2300**	-	**86800**	-	**86400**	-	**92400**	-	**86500**	-	**99900**	-	**93000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	2200 J	-	40 U	-	40 U	-	40 U	-	-	-	-	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	27 J	-	28 J	-	15 U	-	87	-	-	-	-	-	130
Sulfate (SO4)	ug/L	N	250000	2000 UJ	-	20000 UJ	-	10000 U	-	2500 U	-	10000 U	-	4000 J	-	1500 UJ	-	2500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-246	MW-246	MW-246	MW-246	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R
			Field Sample ID	M246B9X	M246C1X	M246C2	M246C2X	M246RC3X	M246RC4	M246RC4X	M246RC6	M246RC6X	D0303178B	M246RC8	M246RC8X	M246RC9	M246RC9X	D1207178A
			Sample Date	07/20/2015	10/28/2015	12/01/2015	12/01/2015	06/06/2016	09/06/2016	09/06/2016	11/29/2016	11/29/2016	03/03/2017	03/03/2017	03/03/2017	06/07/2017	06/07/2017	12/07/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**107000**	-	-	**111000**	-	**111000**	-	**96900**	**94800**	-	**79400**	-	**97100**
Iron	ug/L	Y	300	-	-	**108000**	-	-	**111000**	-	**113000**	-	**93100**	**88400**	-	**80600**	-	**93700**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	600	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	250 U	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	5200	10500	-	11800	51400	-	42200	-	21700	186000	-	192000 J	-	**482000J**	14300

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R
			Field Sample ID	M246R1D	M246R1DX	M246RD1X	M246RD2	M246RD2X	M246RD3	M246RD3X	M246RD4	M246RD4X	D0625191	M246RD5	M246RD5X	M246RD6	M246RD6X	M246RD7
			Sample Date	12/07/2017	12/07/2017	12/11/2017	03/14/2018	03/15/2018	06/06/2018	06/06/2018	03/12/2019	03/12/2019	06/25/2019	06/25/2019	06/25/2019	09/06/2019	09/06/2019	12/13/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**96200**	-	-	**100000**	-	**51400**	-	**26200**	-	**10300**	**10000**	-	**77200**	-	**12900**
Iron	ug/L	Y	300	**96700**	-	-	**73800**	-	**50400**	-	**23600**	-	**7970**	**7680**	-	**76900**	-	**11300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	1200	-	-	-	40 U	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	58	-	25 J	-	-	-	15 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	15300	-	-	**450000**	-	**410000**	-	**674000**	**298000J**	-	**290000J**	-	**263000J**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-246R	MW-247	MW-247	MW-247	MW-248R
			Field Sample ID	M246RD7X	D0327201	M246RD8	M246RD8X	M246RD9X	M246RE1	M246RE2	D122120211A	M246RE3	D031820221A	M246RE4	M247RA4X	M247B2	M247B2X	M248RA4
			Sample Date	12/13/2019	03/27/2020	03/27/2020	03/27/2020	09/03/2020	06/24/2021	09/27/2021	12/21/2021	12/21/2021	03/18/2022	03/18/2022	05/25/2012	07/09/2013	07/10/2013	05/24/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**8420**	**8720**	-	-	**12000**	**12000**	**9700**	**9500**	**11000**	**11000**	-	**41900**	-	**487**
Iron	ug/L	Y	300	-	**7950**	**7930**	-	-	**11000**	**15000**	**8900**	**9300**	**11000**	**11000**	-	**39500**	-	52.2 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	660	380	1600	1600	540	560 J	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 UJ	1800 J	40 UJ	40 UJ	40 UJ	40 UJ	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	15 UJ	15 U	15 U	15 U	15 U	15 U	-	54	-
Sulfate (SO4)	ug/L	N	250000	139000 J	**389000J**	-	**386000J**	170000 J	**300000J**	190000 J	**330000J**	**320000J**	**350000J**	**330000J**	9800	-	20900	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R
			Field Sample ID	M248RA5	M248RA5X	M248RA6	M248RA6X	M248RA7	M248RA7X	M248RA8	M248RA8X	M248RA9	M248RA9X	M248RB1	M248RB1X	M248RB2	M248RB2X	M248RB3
			Sample Date	09/06/2012	09/07/2012	07/02/2013	07/03/2013	09/29/2014	09/30/2014	10/01/2015	10/02/2015	02/10/2016	02/11/2016	03/02/2017	03/03/2017	03/12/2018	03/13/2018	10/15/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	184 J	-	**1100**	-	**1390**	-	**802**	-	**631**	-	**2190**	-	**2060**	-	**1720**
Iron	ug/L	Y	300	42.2 J	-	64.2 J	-	81.2 J	-	**580**	-	**468**	-	**1890**	-	**674**	-	**1240**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	600	-	110	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	22 J	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	10000	-	7800	-	7300	-	7900	-	5800	-	31700	-	18700	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-248R	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249
			Field Sample ID	M248RB3X	M248RB4	M248RB4X	M248RB6	M248RB6X	M248RC1	M248RC1X	M248RC3	M248RC3X	M249B1	M249B1X	M249B2	M249B2X	M249B3	M249B3X
			Sample Date	10/15/2018	12/07/2018	12/07/2018	03/15/2019	03/15/2019	10/15/2020	10/15/2020	03/31/2021	03/31/2021	05/24/2012	05/25/2012	07/02/2013	07/03/2013	06/10/2014	06/11/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**895**	-	**420**	-	-	-	**2100**	-	268	-	**536**	-	**1200**	-
Iron	ug/L	Y	300	-	**567**	-	213	-	**1700**	-	**1800**	-	95.5 J	-	43.0 U	-	114 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	1700	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	2900	-	3700	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 UJ	-	40 U	-	40 UJ	-	40 UJ	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	19800	-	14700 J	-	8000	-	16000 J	-	5500 J	-	31400	-	13900	-	26900

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-249	MW-250
			Field Sample ID	M249B4	M249B4X	M249B5	M249B5X	M249B6	M249B6X	M249B8	M249B8X	M249B9	M249B9X	M249C1	M249C1X	M249C2	M249C2X	M250C2
			Sample Date	10/01/2015	10/02/2015	03/03/2016	03/04/2016	03/01/2017	03/02/2017	08/27/2018	08/28/2018	08/28/2019	08/28/2019	07/24/2020	07/24/2020	03/31/2021	03/31/2021	04/29/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**27400**	-	**35300**	-	**35700**	-	**27200J**	-	**17100**	-	-	-	**14000**	-	**6800**
Iron	ug/L	Y	300	**26200**	-	**33700**	-	**36300**	-	**26400J**	-	**16400**	-	**14000**	-	**12000**	-	**6910**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	13000	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	220 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	29 J	-	41 J	-	36 J	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**632000**	-	**438000**	-	**354000**	-	**378000**	-	211000 J	-	150000 J	-	93000 J	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250
			Field Sample ID	M250C2X	M250C3	M250C3X	M250C5	M250C5X	M250C6	M250C6X	M250C7	M250C7X	M250C8	M250C8X	M250C9X	M250D1X	M250D2	M250D2X
			Sample Date	04/30/2013	10/06/2014	10/07/2014	05/25/2016	05/26/2016	05/16/2017	05/17/2017	11/22/2017	11/22/2017	01/26/2018	01/26/2018	07/25/2018	08/08/2018	02/13/2019	02/13/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	5900 J	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**6770**	-	**9070**	-	**7380**	-	**6220**	-	**5540**	-	-	-	**1020**	-
Iron	ug/L	Y	300	-	**6700**	-	**8980**	-	**7380**	-	**6000**	-	**5590**	-	-	-	**731**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	-	-	250 UJ	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	18 J	-	15 U	-	15 U	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2500 U	-	2500 U	-	2500 U	-	5000 U	-	7900	-	1500 U	3100 J	4200 J	-	27700 J

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-250	MW-251	MW-251	MW-251	MW-251
			Field Sample ID	M250D3	M250D3X	M250D4	M250D4X	M250D5	M250D5X	M250D6	M250D6X	D0514208	M250D7	M250D7X	M251A9	M251A9X	M251B1	M251B1X
			Sample Date	05/20/2019	05/20/2019	08/14/2019	08/14/2019	10/31/2019	10/31/2019	02/10/2020	02/10/2020	05/14/2020	05/14/2020	05/14/2020	06/19/2013	06/20/2013	09/15/2014	09/16/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**490**	-	**308**	-	72.2 J	-	40 U	-	**1130**	**594J**	-	**16800**	-	**753**	-
Iron	ug/L	Y	300	271	-	131 J	-	40 UJ	-	41.2 U	-	165 UJ	88.3 UJ	-	**15700**	-	112 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-	88 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	31100 J	-	16700	-	22100 J	-	**923000**	73800	-	73700	-	12500 U	-	207000

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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-251	MW-252	MW-252	MW-252
			Field Sample ID	M251B2	M251B2X	M251B3	M251B3X	M251B4X	M251B4	M251B5	M251B5X	M251B6	M251B6X	M251B7	M251B7X	M252B3	M252B4	M252B4X
			Sample Date	07/14/2015	07/15/2015	03/21/2016	03/22/2016	07/11/2016	07/12/2016	10/18/2016	10/19/2016	05/18/2017	05/19/2017	11/01/2017	11/02/2017	04/23/2012	11/12/2012	11/12/2012
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4150**	-	261	-	-	74.7 U	**658**	-	127 J	-	**2560**	-	**597**	231	-
Iron	ug/L	Y	300	**3290**	-	33.3 U	-	-	74.7 U	**317**	-	74.7 U	-	**1050**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	190	190	-	-	50 J	-	300	-	480	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	15 U	-	-	15 U	-	15 U	-	24 J	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	37900	-	21700	92500	-	-	65000	-	26100	-	33600	-	-	**1110000**

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R
			Field Sample ID	M252B5	M252B6X	M252B7	M252B7X	M252B8X	M252B9	M252B9X	M252C1X	M252C2X	M252C3X	M252RC4	M252RC5	M252RC6	M252RC6X	D0711178B
			Sample Date	01/28/2013	05/09/2013	07/09/2013	07/09/2013	10/15/2013	12/09/2013	12/09/2013	07/10/2014	01/09/2015	07/14/2015	07/25/2016	10/19/2016	01/18/2017	01/18/2017	07/11/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	80 J	150 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**439**	-	**388J**	-	-	93.6 J	-	-	-	-	74.7 U	74.7 U	74.7 U	-	140 J
Iron	ug/L	Y	300	33.3 U	-	43.0 U	-	-	43.0 U	-	-	-	-	74.7 U	74.7 U	74.7 U	-	80.5 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	250 U	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	51600	-	85700	16200	-	44500	37900	45800	46900	113000	119000	-	**382000**	180000

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R
			Field Sample ID	M252RC7	M252RC7X	M252RC8	M252RC8X	D0110188	M252RC9	M252RC9X	D0523188	D0523188X	M252RD1	M252RD1X	D0828188	M252RD2	M252RD2X	M252RD3
			Sample Date	07/11/2017	07/11/2017	10/18/2017	10/18/2017	01/10/2018	01/10/2018	01/10/2018	05/23/2018	05/23/2018	05/23/2018	05/23/2018	08/28/2018	08/28/2018	08/28/2018	11/13/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	141 J	-	98.5 J	-	**632J**	**998J**	-	**722**	-	**731**	-	40 U	40 U	-	**366**
Iron	ug/L	Y	300	80.5 U	-	80.5 U	-	80.5 U	80.5 U	-	80.5 U	-	80.5 U	-	40 U	40 U	-	40 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	192000	-	36900	36100	-	33800	-	59000	-	60000	150000 U	-	229000 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-252R	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253
			Field Sample ID	M252RD3X	M252RD6	M252RD6X	M252RD7	M252RD8	M252RD8X	M252RD9	M252RC1	M253B1	M253B1X	M253B2	M253B2X	D0923141	M253B3	M253B3X
			Sample Date	11/13/2018	08/02/2019	08/02/2019	09/02/2020	02/05/2021	02/05/2021	08/25/2021	02/09/2022	06/19/2012	06/20/2012	05/30/2013	05/31/2013	09/23/2014	09/23/2014	09/24/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	66.1 J	-	-	73 J	-	280	150 J	**363000**	-	**287000**	-	**225000**	**246000**	-
Iron	ug/L	Y	300	-	40 U	-	41 U	41 U	-	41 U	410 U	**390000**	-	**283000**	-	**231000**	**230000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	240	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	**30000**	-	40 U	-	46 J	-	-	200 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	830	-	79	-	-	260
Sulfate (SO4)	ug/L	N	250000	18600	-	65600	-	-	170000	**280000**	**340000**	-	**2780000**	-	**1990000**	-	-	**2420000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253
			Field Sample ID	M253B4	M253B4X	M253B5	M253B5X	M253B6	M253B6X	D0909168	M253B7	M253B7X	M253B8	M253B8X	M253B9	M253B9X	M253C1	M253C1X
			Sample Date	07/09/2015	07/10/2015	02/10/2016	02/11/2016	08/17/2016	08/18/2016	09/09/2016	09/09/2016	09/09/2016	12/27/2016	12/27/2016	03/08/2017	03/09/2017	09/12/2017	09/13/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	212000 J	199000 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**228000**	-	**269000**	-	**250000**	-	**217000**	**232000**	-	**241000**	-	**240000**	-	**330000**	-
Iron	ug/L	Y	300	**232000**	-	**258000**	-	**258000**	-	**186000**	**190000**	-	**257000**	-	**228000**	-	**326000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	-	-	-	-	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	59	-	15 U	-	29 J	-	-	-	-	-	-	33 J	-	85
Sulfate (SO4)	ug/L	N	250000	-	**2080000**	-	**1810000**	-	**2240000**	**2110000**	-	**2150000**	-	**1920000**	-	**1250000**	-	**1840000**

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253
			Field Sample ID	M253C4	M253C4X	M253C6	M253C6X	M253C7	M253C7X	M253C8	M253C9	D08221915	M253D1	M253D2	M253D2X	D04032035	M253D3	M253D4
			Sample Date	04/26/2018	04/27/2018	10/15/2018	10/15/2018	04/25/2019	04/25/2019	06/18/2019	07/15/2019	08/22/2019	08/22/2019	09/18/2019	09/19/2019	04/03/2020	04/03/2020	04/27/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**228000**	-	**214000**	-	**189000**	-	**199000**	**200000**	**152000**	**163000**	**280000**	-	**195000**	**214000**	**50600**
Iron	ug/L	Y	300	**208000**	-	**215000**	-	**192000**	-	**188000**	**212000**	**165000**	**165000**	**295000**	-	**200000**	**196000**	**50600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	-	-	-	-	40 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	140	-	73	-	-	-	-	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**1810000**	-	-	-	**975000**	**1190000**	**2830000**	**1120000**	**1210000**	-	**1850000J**	**1050000**	**898000**	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-253	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254
			Field Sample ID	M253D4X	M253D5	M253D6	M253D7	M253D7X	M253D8	M253D9	M253E1	M254B2	M254B2X	M254B3	M254B3X	M254B4	M254B4X	M254B5
			Sample Date	04/27/2020	05/27/2020	08/26/2020	09/15/2020	09/15/2020	12/01/2020	05/27/2021	09/21/2021	05/30/2013	05/31/2013	09/24/2014	09/25/2014	12/16/2015	12/17/2015	05/26/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**100000**	-	-	-	**92000**	**78000J**	**32000**	**38500**	-	**32800**	-	**33800**	-	**41000**
Iron	ug/L	Y	300	-	**101000**	**94000**	**70000**	-	**5600**	**74000**	**29000**	**36400**	-	**31900**	-	**34000**	-	**38100**
Iron, Total Recoverable	ug/L	N	NA	-	-	85000	86000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	290	100	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	40 UJ	-	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	160	-	25 J	15 UJ	-	44 J	-	56	-	39 J	-
Sulfate (SO4)	ug/L	N	250000	**675000J**	**987000**	**830000**	-	**1600000J**	**730000**	700000 UJ	**260000J**	-	10000 U	-	10000 U	-	10000 U	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254	MW-254
			Field Sample ID	M254B5X	M254B6	M254B6X	M254B7	M254B7X	M254B8	M254B8X	M254B9	M254B9X	M254C1X	M254C3	M254C3X	M254C8	M254C8X	M254D3
			Sample Date	05/27/2016	09/20/2016	09/20/2016	12/15/2016	12/15/2016	05/31/2017	06/01/2017	05/29/2018	05/30/2018	05/20/2019	03/31/2020	03/31/2020	02/17/2021	02/17/2021	02/22/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	250 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**37200**	-	**34600**	-	**34600**	-	**38400**	-	-	**34100**	-	**36000**	-	**48000**
Iron	ug/L	Y	300	-	**36900**	-	**34600**	-	**34300**	-	**34800**	-	-	**179000**	-	-	-	**46000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	40 U	-	40 U	40 U	-	40 U	-	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40 UJ
Nitrogen, Nitrite	ug/L	N	1000	64	-	-	-	-	-	45 J	-	15 U	15 U	-	84	-	15 U	15 UJ
Sulfate (SO4)	ug/L	N	250000	12500 U	-	1500 U	-	3900 J	-	10000 U	-	4000 U	4000 U	-	8000 UJ	-	20000 UJ	2800 UJ

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-255	MW-255	MW-255	MW-255	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256
			Field Sample ID	M255B7	M255B7X	M255B8	M255B8X	M256B2	M256B2X	M256B3	D0626141	M256B5	D0627141	M256B5X	D03041515	M256B6	M256B7	M256B8
			Sample Date	09/19/2016	09/19/2016	12/15/2016	12/15/2016	05/29/2013	05/30/2013	08/15/2013	06/26/2014	06/26/2014	06/27/2014	06/27/2014	03/04/2015	03/06/2015	07/02/2015	07/07/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	33200	-	-	-	-	-	25700	12300	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10000**	-	**12000**	-	**31600**	-	**31200**	**28100**	**26900**	-	-	**42700**	**24700**	**11300**	**11700**
Iron	ug/L	Y	300	**9630**	-	**10500**	-	**30000**	-	-	**27400**	**26500**	-	-	-	**24200**	**10700**	**11500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	17000	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 U	40 U	-	-	40 U	40 U	-	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	31 J	16 J	-	-	33 J	32 J	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	184000	-	40900	-	12500 U	1500 U	-	-	12500 U	12500 U	-	1500 U	24500	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256
			Field Sample ID	M256B8X	M256B9	M256C1	M256C2	M256C2X	M256C3	M256C4	M256C5	M256C6	M256C6X	M256C7	M256C7X	M256C8	M256C9	M256C9X
			Sample Date	07/08/2015	08/27/2015	10/27/2015	02/18/2016	02/19/2016	03/28/2016	06/30/2016	10/04/2016	02/21/2017	02/22/2017	08/28/2017	08/29/2017	11/02/2017	02/19/2018	02/20/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	24200	17400	-	-	21000	20700 J	18500 J	-	-	-	-	5800 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**24700**	**14500**	**10400**	-	**18800**	**19600**	**17800**	**18600**	-	**6380**	-	**4800**	**8090**	-
Iron	ug/L	Y	300	-	**19600**	**14500**	**9900**	-	**18700**	**19400**	**18100**	**18000**	-	**6370**	-	**4850**	**7400**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	250 U	250 UJ	-	40 U	340 J	250 U	250 UJ	-	40 U	-	40 U	250 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	15 U	-	-	250 UJ	-	44 J	-	15 U	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	13500 J	1500 U	1500 U	-	10000 U	1500 U	1500 U	1500 U	-	18100	-	2500 U	32300	-	4000 U

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256
			Field Sample ID	M256D1	M256D2	M256D2X	M256D3	M256D3X	M256D4	M256D5	M256D5X	D0828191	M256D6	M256D6X	M256D7	M256D7X	M256D8	M256D8X
			Sample Date	03/29/2018	05/24/2018	05/25/2018	08/20/2018	08/21/2018	10/02/2018	02/14/2019	02/14/2019	08/28/2019	08/28/2019	08/28/2019	01/30/2020	01/30/2020	08/20/2020	08/20/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	8900 J	-	-	-	-	5370 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7570**	**6490**	-	**5630J**	-	**5140**	**9050**	-	**8650**	**8920**	-	**10600**	-	-	-
Iron	ug/L	Y	300	**8900**	**6240**	-	**5180J**	-	**5540**	**8440**	-	**8790**	**8090**	-	**11000**	-	**7500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	7800	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	40 U	-	40 U	250 U	-	40 U	40 U	-	40 U	-	40 U	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	15 U	250 U	-	15 U	15 U	-	15 U	-	15 U	-	27 J
Sulfate (SO4)	ug/L	N	250000	70800	-	10200	-	2000 U	1500 U	-	1000 U	2000 UJ	-	4000 UJ	-	8000 UJ	-	2000 UJ

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-256	MW-256	MW-256	MW-256	MW-256	MW-256	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	M256D9	M256D9X	M256E1	M256E2	M256E3	M256E4	M257B2	M257B2X	M257B3	M257B3X	M257B4	M257B4X	M257B5	M257B7	M257B7X
			Sample Date	01/29/2021	01/29/2021	05/24/2021	09/17/2021	01/10/2022	03/22/2022	05/01/2012	05/07/2012	09/06/2012	09/07/2012	05/29/2013	05/30/2013	08/15/2013	10/03/2013	10/04/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	82900	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10000**	-	-	**11000**	**11000**	**11000**	**43400**	-	**38000**	-	**82100**	-	**80300**	**59400**	-
Iron	ug/L	Y	300	**9600**	-	-	**10000**	**10000**	**11000**	**42800**	-	**38600**	-	**81800**	-	-	**58600**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	17000	16000	21000	-	-	-	-	-	-	-	4200	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	210 J	57 J	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	17 J	15 U	15 U	-	74	-	72	-	62	70	-	17 J
Sulfate (SO4)	ug/L	N	250000	-	2000 UJ	2000 UJ	2000 UJ	2000 UJ	2000 UJ	-	12500 U	-	25000 U	-	25000 U	1500 U	-	12500 U

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	M257B8	M257B8X	D08151414	D08151414	M257B9	M257B9	M257B9X	M257C1	M257C1X	D11111415	M257C2	M257C6	D01221515	M257C7	M257C8
			Sample Date	06/18/2014	06/19/2014	08/15/2014	08/15/2014	08/15/2014	08/15/2014	08/15/2014	11/05/2014	11/06/2014	11/11/2014	11/11/2014	12/22/2014	01/22/2015	01/22/2015	03/04/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	45700	-	-	-	-	-	35900	-	-	-	43700
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**33300**	-	**43700**	-	**44000**	-	-	**27900**	-	**33700**	**34500**	**45800**	**46100**	**46200**	**43100**
Iron	ug/L	Y	300	**34200**	-	-	**42800**	-	**42900**	-	**26800**	-	-	**32400**	**44900**	-	**45000**	**40600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	4600	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	-	-	250 U	-	40 U	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	51	-	-	-	-	-	-	15 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	25000 U	-	-	-	-	2600 J	-	34100 J	-	17200	5300	-	5000 J	1500 U

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	D07011515	M257C9	M257D1	M257D1X	D10271515A	M257D2	D12151515	M257D3	M257D4	M257D4X	M257D5	D06281615	M257D6	M257D7	M257D8
			Sample Date	07/01/2015	07/01/2015	07/07/2015	07/08/2015	10/27/2015	10/27/2015	12/15/2015	12/15/2015	02/18/2016	02/19/2016	03/31/2016	06/28/2016	06/28/2016	10/04/2016	02/21/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	23500	-	-	-	32100 J	-	34200 J	-	-	40900	-	34600	29000 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**23000**	**23800**	**29100**	-	**22900**	**21900**	**31900**	**34200J**	**26400**	-	**42500**	**33700**	**33600**	**29100**	**35900**
Iron	ug/L	Y	300	-	**23300**	**29500**	-	-	**23900**	-	**30700**	**25800**	-	**38600**	-	**32400**	**28800**	**36300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	140	-	250 U	-	250 U	-	40 U	250 U	-	250 U	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	-	-	39 J	-	-	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	-	18600	-	25000 U	-	11400	-	9200	-	18500 J	4300 J	-	2900 J	4600 J	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	M257D8X	M257D9	M257D9X	M257E1	M257E2	M257E2X	M257E3	M257E3	M257E6	M257E6X	M257E7	M257E8	M257E8X	M257E9	M257E9X
			Sample Date	02/22/2017	08/28/2017	08/29/2017	10/30/2017	02/19/2018	02/20/2018	03/26/2018	03/26/2018	08/20/2018	08/21/2018	10/02/2018	02/15/2019	02/15/2019	08/28/2019	08/28/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	26000 J	-	-	35700 J	30100 J	-	-	32200 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**30900**	-	**24400**	**22700**	-	**34000**	**28400**	**27700J**	-	**30900**	**29600**	-	**27600**	-
Iron	ug/L	Y	300	-	**30900**	-	**23000**	**20600**	-	**38300**	**24900**	**27900J**	-	**22800**	**28700**	-	**26600**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	250 U	-	40 U	250 U	250 U	-	73 J	250 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	93	-	15 U	-	-	15 U	-	-	-	15 U	250 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	10000 U	-	25000 U	5100	-	21400	4300 J	8400	-	4200 J	3000 J	-	5000 U	-	10000 UJ

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257	MW-257
			Field Sample ID	M257F1	M257F1X	D0131201	D0131201X	M257F2	M257F2X	M257F3	M257F4	M257F5	M257F5X	M257F7	M257F8	M257F8X	M257F9	M257G1
			Sample Date	10/17/2019	10/17/2019	01/31/2020	01/31/2020	01/31/2020	01/31/2020	03/17/2020	06/10/2020	08/20/2020	08/20/2020	09/09/2020	01/27/2021	01/27/2021	05/25/2021	09/17/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**24900**	-	**31100**	-	**30400**	-	**30700**	-	-	-	-	**34000**	-	**30000**	**23000**
Iron	ug/L	Y	300	**23400**	-	**29800**	-	**29900**	-	**30200**	**29000**	**27000**	-	**26000**	**33000**	-	**29000**	**23000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	30000	28000	-	27000	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	1000	610
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	-	40 U	-	-	-	52 J	-	-	40 UJ	2700	1000 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 J	-	15 U	-	-	-	21 J	-	-	15 U	15 U	15 UJ
Sulfate (SO4)	ug/L	N	250000	-	6400	-	8000 UJ	-	8000 UJ	1500 U	3000 J	-	8000 UJ	2900 J	-	2000 UJ	8000 U	8000 UJ

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-257	MW-257	MW-257	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270
			Field Sample ID	D1020211B	M257G2	M257G3	M270B9	M270C3	M270C3X	M270C3X	M270D1	M270D1X	M270D4	M270D4X	D0920167	M270D5	M270D6	M270D8
			Sample Date	10/20/2021	10/20/2021	02/04/2022	03/28/2013	02/24/2014	02/24/2014	02/24/2014	07/22/2015	07/22/2015	04/15/2016	04/15/2016	09/20/2016	09/20/2016	01/31/2017	05/30/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	69700 J	86400 J	83600 J	84700 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**28000**	**28000**	**32000**	**85900**	**86800**	-	-	**83300**	-	**86200**	-	**85100**	**85100**	**73100**	**76500**
Iron	ug/L	Y	300	**26000**	**27000**	-	-	**84100**	-	-	**83400**	-	**83100**	-	**81100**	**79500**	-	**74900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	240	250	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 UJ	790	-	40 U	-	-	40 U	-	83 J	250 U	250 U	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 UJ	15 U	110	-	92	-	-	100	-	49 J	2500 U	2500 U	-	-
Sulfate (SO4)	ug/L	N	250000	56000 J	40000 J	8000 UJ	10000 U	-	-	10000 U	-	25000 U	-	3300 J	1800 J	2000 J	2400 J	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270	MW-270
			Field Sample ID	M270D8X	M270D9	M270E1X	M270E2	M270E2X	M270E3	M270E3X	M270E5	M270E5X	M270E6	M270E6X	M270E7	M270E7X	M270E8	M270E8X
			Sample Date	05/31/2017	08/03/2017	10/30/2017	11/13/2017	11/14/2017	01/16/2018	01/16/2018	02/28/2019	02/28/2019	05/13/2019	05/13/2019	08/08/2019	08/08/2019	11/05/2019	11/05/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	78700 J	-	-	-	76400 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**77600**	-	**54400**	-	**77400**	-	**55700**	-	**3710**	-	**40900**	-	**77500**	-
Iron	ug/L	Y	300	-	-	-	**48500**	-	**78900**	-	**56200**	-	**1370**	-	**40400**	-	**79900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	360	250 U	-	-	40 U	-	250 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	20 J	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	50000 U	1500 U	1600 J	-	10000 U	-	2500 J	-	41800	-	3300 J	-	4900 J	-	7300

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-270	MW-270	MW-270	MW-270	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271
			Field Sample ID	M270E9	M270E9X	M270F1	M270F1X	M271D3	M271D4	M271D7	M271D8X	M271D9	M271D9X	M271E2	M271E2X	M271E3	M271E3X	M271E4
			Sample Date	02/06/2020	02/06/2020	05/12/2020	05/12/2020	09/21/2016	01/31/2017	08/03/2017	10/30/2017	01/25/2018	01/25/2018	02/27/2019	02/28/2019	05/07/2019	05/07/2019	08/08/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	15900 J	13100 J	22200 J	-	12700 J	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**76000**	-	**78800**	-	**15100**	**13700**	**21100**	-	**13900**	-	**546**	-	**1630**	-	**1090**
Iron	ug/L	Y	300	**76700**	-	**80700**	-	**16500**	-	-	-	-	-	40 U	-	34.2 U	-	**465**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	490 J	250 U	-	-	250 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	12300	-	**647000**	1500 U	1500 U	1500 U	1500 U	-	1500 U	-	**2810000**	-	**3130000**	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-271	MW-275
			Field Sample ID	M271E4X	M271E5	M271E5X	M271E6	M271E6X	M271E7	M271E7X	M271E8X	M271E9X	M271F1X	M271F1	M271F3	M271F4	M271F5	M275C3
			Sample Date	08/08/2019	11/05/2019	11/05/2019	02/12/2020	02/12/2020	05/12/2020	05/12/2020	08/20/2020	11/18/2020	02/10/2021	04/30/2021	08/19/2021	10/13/2021	02/15/2022	11/22/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1930**	-	**15000**	-	**1390**	-	-	-	-	-	-	-	-	**2770**
Iron	ug/L	Y	300	-	**338**	-	**12600**	-	**711**	-	-	-	-	-	-	-	-	**2670**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**10900000**	-	**9870000**	-	**8850000**	-	**7190000**	**5600000**	**2600000**	**7600000**	**8800000**	**1100000**	**2100000**	**930000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275
			Field Sample ID	M275C3X	M275C4	M275C4X	M275C5	M275C5X	M275C6	M275C6X	M275C7	M275C7X	M275C8	M275C8X	M275C9	M275C9X	M275D1	M275D1X
			Sample Date	11/22/2017	01/31/2018	02/01/2018	03/06/2019	03/06/2019	05/17/2019	05/20/2019	08/15/2019	08/15/2019	10/28/2019	10/28/2019	02/10/2020	02/10/2020	05/14/2020	05/14/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**2610**	-	**2280**	-	**1570**	-	**4680**	-	**1160**	-	78.5 J	-	**7650**	-
Iron	ug/L	Y	300	-	**2300**	-	200 U	-	**1120**	-	**4350**	-	**957**	-	41.2 U	-	**6370**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	7900	-	4800 J	-	**12800000J**	-	**2640000**	-	**351000J**	-	**257000**	-	**6810000**	-	**253000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-275	MW-275	MW-275	MW-275	MW-275	MW-275	MW-276	MW-276	MW-276	MW-276	MW-276	MW-276	MW-276	MW-276	MW-276
			Field Sample ID	M275D2X	M275D3X	M275D4X	M275D4	M275D6	M275D7	M276B1	M276B1X	D0915141	M276B2	M276B2X	M276B3	M276B3X	M276B4	M276B4X
			Sample Date	08/24/2020	11/11/2020	01/26/2021	05/03/2021	08/17/2021	10/11/2021	06/19/2013	06/20/2013	09/15/2014	09/15/2014	09/16/2014	05/23/2016	05/24/2016	05/18/2017	05/19/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	**8360**	-	**10500**	**10700**	-	**4160**	-	**2440**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	**7800**	-	**10500**	**10100**	-	**4090**	-	**4210**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	40 U	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	-	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	**320000J**	170000	130000	57000	**4300000**	**4200000**	-	2500 U	-	-	5000 U	-	5000 U	-	2500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-276	MW-276	MW-276	MW-276	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277
			Field Sample ID	M276B5	M276B5X	M276B6	M276B6X	M277B1	M277B1X	M277B2	M277B2X	M277B4	M277B4X	M277B5	M277B5X	M277B6	M277B6X	M277B7
			Sample Date	03/12/2019	03/12/2019	05/22/2019	05/22/2019	06/19/2013	06/20/2013	06/19/2014	06/20/2014	03/10/2016	03/11/2016	03/29/2017	03/30/2017	03/14/2018	03/15/2018	02/26/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**12100**	-	**11700**	-	**9360**	-	**12600**	-	**8840**	-	**1030**	-	**3010**	-	**5110**
Iron	ug/L	Y	300	**10300**	-	**10200**	-	43.0 U	-	62.0 J	-	**5430**	-	88.1 J	-	**1410**	-	95.1 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	810	-	860	-	40 U	-	590	-	450	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	-	33 J	-	78	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	2700 J	-	1500 U	-	22800	-	36300	-	75600	-	26900	-	113000	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-277	MW-282	MW-282	MW-282	MW-282
			Field Sample ID	M277B7X	M277B8	M277B8X	M277B9	M277B9X	D0306201	M277C1	M277C1X	M277C2	M277C2X	M277C3	M282D2X	M282D3	M282D4	M282D4X
			Sample Date	02/26/2019	03/14/2019	03/14/2019	05/16/2019	05/16/2019	03/06/2020	03/06/2020	03/06/2020	03/05/2021	03/05/2021	02/04/2022	11/01/2017	11/17/2017	02/01/2018	02/01/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**515**	-	**386**	-	**1150**	**1140**	-	**3400**	-	**1900**	-	**12700**	**14600**	-
Iron	ug/L	Y	300	-	40 U	-	98.1 J	-	41.2 U	41.2 U	-	41 U	-	41 U	-	**11600**	**14900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	880	-	-	40 U	-	40 U	-	290 J	40 UJ	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	-	15 U	-	15 U	-	18 J	24 J	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	115000 J	-	22800	-	17900	124000 J	-	123000 J	-	120000 J	210000 J	49700	-	-	19700

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282
			Field Sample ID	D0301198	M282D6	M282D6X	M282D7	M282D7X	M282D8	M282D8X	M282D9	M282D9X	M282E1	M282E1X	M282E2	M282E2X	D0824208	M282E3X
			Sample Date	03/01/2019	03/01/2019	03/01/2019	05/17/2019	05/17/2019	08/14/2019	08/14/2019	10/30/2019	10/30/2019	02/10/2020	02/10/2020	05/11/2020	05/11/2020	08/24/2020	08/24/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**12200**	**12700**	-	**942**	-	**1470**	-	**1300**	-	**31700J**	-	**997**	-	-	-
Iron	ug/L	Y	300	40 U	84.4 J	-	40 U	-	40 U	-	231	-	**958**	-	59.6 J	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**344000**	-	**326000**	-	24900	-	117000	-	34100	-	48700	-	29500	35000	33000

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-282	MW-282	MW-282	MW-282	MW-282	MW-282	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283
			Field Sample ID	M282E4X	M282E5X	M282E5	M282E7	M282E8	M282E9	D1101177X	M283D1X	D1117178A	M283D2	D0201188	M283D3	M283D3X	M283D5	M283D6X
			Sample Date	11/18/2020	01/27/2021	04/28/2021	08/19/2021	10/11/2021	03/17/2022	11/01/2017	11/01/2017	11/17/2017	11/17/2017	02/01/2018	02/01/2018	02/01/2018	07/25/2018	08/08/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**770J**	-	-	**6860**	**7180**	**5770**	**5990**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	82 U	-	-	**6810**	**6830**	**5340**	**5670**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	3 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	450 J	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	64000	30000	65000	57000	52000	33000 J	1500 U	1500 U	-	-	2800 J	-	3400 J	1500 U	3500 J

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-283	MW-284
			Field Sample ID	M283D7	M283D7X	M283D8	M283D8X	M283D9	M283D9X	M283E1	M283E1X	M283E2	M283E2X	M283E3	M283E3X	D0215228	M283F1	M284B8
			Sample Date	02/13/2019	02/13/2019	05/20/2019	05/20/2019	08/14/2019	08/14/2019	10/30/2019	10/30/2019	02/11/2020	02/11/2020	05/11/2020	05/11/2020	02/15/2022	02/15/2022	11/20/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8770**	-	**19300**	-	**28600**	-	**305**	-	**37800**	-	**21800**	-	**1400**	**1600**	**81000**
Iron	ug/L	Y	300	255 J	-	**15800**	-	**27900**	-	40 U	-	**23300**	-	**10600**	-	-	-	**81000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**279000**	-	90200	-	127000	-	27600	-	131000	-	185000	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-284	MW-284	MW-284	MW-285	MW-285	MW-285	MW-285	MW-285	MW-285	MW-285	MW-285	MW-286	MW-286	MW-286	MW-286
			Field Sample ID	M284B8X	M284B9	M284B9X	M285B6	M285B6X	M285B7	M285B7X	M285B8	M285B8X	M285B9	M285B9X	M286B7	M286B7X	M286B8	M286B8X
			Sample Date	11/20/2017	01/29/2018	01/29/2018	11/20/2017	11/21/2017	01/29/2018	01/29/2018	03/06/2019	03/06/2019	05/09/2019	05/09/2019	11/15/2017	11/16/2017	02/02/2018	02/02/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**36500**	-	**1660**	-	**660**	-	**446**	-	**564**	-	**28000**	-	**39700**	-
Iron	ug/L	Y	300	-	**36700**	-	**939**	-	**494**	-	287	-	232	-	**24000**	-	**38400**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	15100	-	15200	-	151000	-	147000	-	163000	-	156000	-	2700 J	-	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287	MW-287
			Field Sample ID	M287B6	M287B6X	M287B7	M287B7X	M287B8	M287B8X	M287B9	M287B9X	M287C1	M287C1X	M287C2	M287C2X	M287C3	M287C3X	M287C4
			Sample Date	11/16/2017	11/17/2017	02/02/2018	02/02/2018	03/11/2019	03/11/2019	05/10/2019	05/10/2019	08/14/2019	08/14/2019	11/01/2019	11/01/2019	02/11/2020	02/11/2020	05/15/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**391**	-	204	-	**676**	-	87.9 J	-	49.4 J	-	**1310**	-	145 J	-	**335**
Iron	ug/L	Y	300	**365**	-	**331**	-	**957**	-	34.2 U	-	46 U	-	**1110**	-	41.2 U	-	263
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	26700	-	26500	-	29200	-	27300	-	26700 J	-	26000 J	-	30400	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-287	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288	MW-288
			Field Sample ID	M287C4X	M288B3	M288B3X	M288B4	M288B4X	M288B5	M288B5X	M288B6	M288B6X	D0516171	M288B7	D0517171	M288B7X	M288B8	M288B8X
			Sample Date	05/15/2020	05/29/2013	05/30/2013	10/07/2014	10/08/2014	12/15/2015	12/16/2015	05/25/2016	05/26/2016	05/16/2017	05/16/2017	05/17/2017	05/17/2017	11/27/2017	11/27/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4800**	-	102 J	-	**440**	-	**4200**	-	**4400**	**4380**	-	-	**1540**	-
Iron	ug/L	Y	300	-	**4570**	-	33.4 U	-	**361**	-	**3930**	-	**4290**	**4290**	-	-	**581**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	110	-	110	-	40 U	-	-	40 U	40 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	28500	-	59200	-	62000	-	70100	-	79500	-	-	126000	120000	-	46300

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-288	MW-288	MW-288	MW-288	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289
			Field Sample ID	M288B9	M288B9X	M288C1	M288C2	M289B4	M289B4X	M289B5	M289B5X	M289B6	M289B6X	M289B7	M289B7X	M289B8	M289B8X	M289B9
			Sample Date	01/31/2018	01/31/2018	06/29/2021	10/21/2021	05/29/2013	05/30/2013	10/07/2014	10/08/2014	05/23/2016	05/24/2016	05/17/2017	05/18/2017	11/15/2017	11/15/2017	01/25/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13100 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	275	-	**10000**	**7200**	**1010**	-	**9710**	-	**4220**	-	**1920**	-	**1990**	-	**13600**
Iron	ug/L	Y	300	198 J	-	**8300**	**7600**	**565**	-	**8360**	-	**1820**	-	**756**	-	**3870**	-	**7540**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	380	1200	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	470 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-	40 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	15 UJ	-	15 U	-	17 J	-	15 U	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	58400	13000 J	2900 J	-	4100 J	-	2500 U	-	2500 U	-	8400	-	2900 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289
			Field Sample ID	M289B9X	M289C1	M289C1X	D0522198	M289C2	M289C2X	M289C3	M289C3X	D1029198	M289C4	M289C4X	M289C5	M289C5X	M289C6	M289C6X
			Sample Date	01/26/2018	03/07/2019	03/07/2019	05/22/2019	05/22/2019	05/22/2019	08/16/2019	08/16/2019	10/29/2019	10/29/2019	10/29/2019	02/11/2020	02/11/2020	05/12/2020	05/12/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**24200**	-	**1840**	**2180**	-	**3800**	-	**5670**	**5410**	-	**16300**	-	**7040**	-
Iron	ug/L	Y	300	-	**1770**	-	266	297	-	**2640**	-	**3770**	**3910**	-	**13500**	-	**6460**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	26600	-	8600	20800	-	17700 J	-	6500	2400 J	-	4600 J	-	4800 J	-	3600 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-289	MW-290	MW-290	MW-290	MW-290	MW-290	MW-290	MW-291
			Field Sample ID	M289C7X	M289C8X	M289C9X	D0503218	M289D1	M289D2	D1015218	M289D3	M290C2	M290C3	M290C6	M290C7X	M290C8	M290C8X	M291E5X
			Sample Date	08/07/2020	11/18/2020	01/26/2021	05/03/2021	05/03/2021	08/17/2021	10/15/2021	10/15/2021	09/13/2016	01/26/2017	07/26/2017	10/27/2017	01/24/2018	01/25/2018	10/27/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	12 J	42 J	15 UJ	-	88 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	74.7 U	74.7 U	85.3 J	-	133 UJ	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	74.7 U	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	1000	1000	810	-	-	1600	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2000 UJ	2100 j	2900 J	1600 J	1500 J	1800 J	2700 J	3600 J	202000	248000 J	210000	194000	-	206000	99900

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-292R	MW-293R	MW-294	MW-294	MW-294	MW-294	MW-294
			Field Sample ID	M292RA3	M292RA4	M292RA9	M292RB6	M292RB7	M292RB9	M292RC1X	M292RC2	M292RC2X	M293RC7X	M294A7	M294A8	M294A8X	M294A9	M294A9X
			Sample Date	01/15/2013	05/16/2013	10/24/2014	09/15/2016	01/30/2017	08/01/2017	10/20/2017	01/23/2018	01/23/2018	10/20/2017	04/30/2012	08/27/2012	08/28/2012	05/22/2013	05/23/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	3200 J	3300 UJ	3600 J	-	4000 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7290**	**43100**	**454J**	**2500**	**2680**	**3400**	-	**3700**	-	-	**67700**	**38000**	-	**39800**	-
Iron	ug/L	Y	300	-	-	256 J	**2550**	-	-	-	-	-	-	-	**33900**	-	**38700**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	250 U	250 U	-	-	250 U	-	-	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	46 J	-	56
Sulfate (SO4)	ug/L	N	250000	-	-	-	1500 U	6900	2600 J	1500 J	-	2600 J	3700 J	-	-	10000 U	-	12500 U

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294	MW-294
			Field Sample ID	M294B2	M294B2X	M294B3	M294B3X	D020316HS9	M294B4	D0210161	M294B4X	M294B5	M294B5X	M294B6	M294B6X	M294B7	M294B7X	M294B8
			Sample Date	06/16/2014	06/17/2014	11/17/2015	11/23/2015	02/03/2016	02/09/2016	02/10/2016	02/10/2016	02/20/2017	02/21/2017	02/12/2018	02/13/2018	02/22/2019	02/22/2019	02/07/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**54100**	-	**10000**	-	-	**72600**	-	-	**40000**	-	**62300**	-	**28600**	-	**13100**
Iron	ug/L	Y	300	**49000**	-	**9400**	-	-	**66900**	-	-	**35000**	-	**53600**	-	**27500**	-	**12100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	-	-	-	40 U	-	40 U	-	73 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	68	-	-	-	-	-	40 J	-	71	-	22 J	-	32 J	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	46700	25000 U	-	12500 U	12500 U	-	15400 J	-	16500	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-294	MW-294	MW-294	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295
			Field Sample ID	M294B8X	M294B9	M294B9X	M295A7	M295A8	M295A8X	M295A9	M295A9X	M295B1	M295B1X	M295B2	M295B2X	M295B3	M295B3X	M295B4
			Sample Date	02/07/2020	01/21/2021	01/21/2021	04/30/2012	08/27/2012	08/28/2012	05/22/2013	05/23/2013	06/16/2014	06/17/2014	11/16/2015	11/23/2015	02/09/2016	02/10/2016	02/20/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**20000**	-	**62900**	**25100**	-	**30300**	-	**32600**	-	**26700**	-	**27900**	-	**27700**
Iron	ug/L	Y	300	-	**23000**	-	-	**24900**	-	**28200**	-	**30900**	-	**23700**	-	**27400**	-	**26400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 UJ	-	-	40 U	-	40 U	-	40 U	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	62	-	81	-	67	-	-	-	55	-
Sulfate (SO4)	ug/L	N	250000	4000 UJ	-	4000 UJ	-	-	122000	-	110000	-	101000	-	108000	-	117000	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-295	MW-295	MW-295	MW-295	MW-295	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R
			Field Sample ID	M295B4X	M295B5	M295B5X	M295B6	M295B6X	M295RB7X	M295RB8	M295RB8X	D0529201	M295RB9	M295RB9X	M295RC1X	D0303218	M295RC5	M295RC5X
			Sample Date	02/21/2017	02/12/2018	02/13/2018	04/18/2018	04/19/2018	11/13/2019	12/06/2019	12/06/2019	05/29/2020	05/29/2020	05/29/2020	08/26/2020	03/03/2021	03/03/2021	03/03/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**28500**	-	**28400**	-	-	**41900**	-	**36500J**	**20900J**	-	-	-	**4200**	-
Iron	ug/L	Y	300	-	**28300**	-	**28700**	-	-	**42900**	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	-	-	40 U	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	82	-	58	-	-	-	-	130 J	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	103000	-	101000	-	107000	17000	-	**574000J**	8000 UJ	-	21300 J	68000	56000	-	75000 J

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-295R	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296
			Field Sample ID	M295RC6	M295RC6X	D0513218	M295RC7	M295RC8	M295RC9	M295RD1	M295RD2	M296A7	M296A8	M296A8X	M296A9	M296A9X	M296B3	M296B3X
			Sample Date	03/29/2021	03/29/2021	05/13/2021	05/13/2021	08/24/2021	11/09/2021	02/01/2022	02/02/2022	04/30/2012	08/27/2012	08/28/2012	04/29/2013	04/30/2013	06/16/2014	06/17/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**12000J**	-	**20000**	**19000J**	**6300**	**23000**	**21000**	**30000**	**56100**	**56700**	-	**77500**	-	**67600**	-
Iron	ug/L	Y	300	**12000J**	-	-	-	-	-	-	-	-	**53800**	-	**72400**	-	**66000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	90 UJ	-	-	-	-	-	-	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	-	-	-	-	-	86	-	47 J	-	93
Sulfate (SO4)	ug/L	N	250000	-	140000 J	88000	78000	**530000**	120000	110000 J	200000	-	-	10000 U	-	12500 U	-	12500 U

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296
			Field Sample ID	M296B4	M296B4X	D1116158	M296B5	M296B5X	M296B6	M296B6X	M296B7	M296B7X	M296B8	M296B8X	M296B9	M296B9X	M296C1	M296C1X
			Sample Date	08/06/2015	08/07/2015	11/16/2015	11/16/2015	11/23/2015	02/09/2016	02/10/2016	08/18/2016	08/19/2016	02/20/2017	02/21/2017	08/30/2017	08/31/2017	02/12/2018	02/13/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**61900**	-	**49100**	**48400**	-	**42100**	-	**47300**	-	**49600**	-	**32300**	-	**42300**	-
Iron	ug/L	Y	300	**57400**	-	**49600**	**50000**	-	**42000**	-	**46100**	-	**48500**	-	**30400**	-	**42800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	-	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	110	-	-	-	-	69	-	15 U	-	91	-	33 J	-	40 J
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	-	2300 J	-	12500 U	-	10000 U	-	10000 U	-	10000 U	-	4000 U

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296
			Field Sample ID	M296C2	M296C2X	D0829181	M296C3	D0830181	M296C3X	M296C4	M296C4X	M296C5	M296C5X	M296C6	M296C6X	M296C7X	M296C8	M296C8X
			Sample Date	04/18/2018	04/19/2018	08/29/2018	08/29/2018	08/30/2018	08/30/2018	02/04/2019	02/04/2019	04/23/2019	04/23/2019	09/17/2019	09/17/2019	11/13/2019	05/28/2020	05/28/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**46600**	-	**30800**	**32600**	-	-	**32300**	-	**42000**	-	**11300**	-	-	**13900**	-
Iron	ug/L	Y	300	**45000**	-	**30200**	**31800**	-	-	**31700**	-	**34700**	-	**9350**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	40 U	-	40 U	-	40 U	-	40 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	15 U	-	22 J	-	15 U	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	-	1000 U	1000 U	-	4000 U	-	10000 U	-	28700 J	48000	-	18500 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-296	MW-297	MW-297	MW-297	MW-297	MW-297
			Field Sample ID	M296C9X	M296D1	M296D1X	M296D2	M296D2X	M296D3	M296D4	D1109218	M296D5	M296D6	M297A7	M297A8	M297A8X	M297A9	M297A9X
			Sample Date	08/28/2020	11/06/2020	11/06/2020	03/02/2021	03/02/2021	05/12/2021	08/24/2021	11/09/2021	11/09/2021	02/02/2022	05/02/2012	08/30/2012	08/31/2012	05/22/2013	05/23/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**8600**	-	**7500J**	**5600**	**9200**	**8700**	**9500**	**2650**	**8350**	-	**836**	-
Iron	ug/L	Y	300	-	**13000**	-	-	-	-	-	-	-	-	-	**5530**	-	**394**	-
Iron, Total Recoverable	ug/L	N	NA	-	12000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 UJ	-	-	-	-	-	-	-	-	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	-	-	-	-	-	-	-	-	26 J	-	52
Sulfate (SO4)	ug/L	N	250000	2500 J	-	30000 J	-	36000	15000	34000	21000 J	16000 J	18000	-	-	5000 U	-	7500 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297
			Field Sample ID	M297B1	M297B1X	M297B2	M297B2X	M297B3	M297B3X	M297B4	M297B4X	M297B5	M297B5X	M297B6	M297B6X	M297B7	M297B7X	M297B8
			Sample Date	09/22/2014	09/23/2014	02/23/2015	02/24/2015	11/19/2015	11/20/2015	01/04/2016	01/05/2016	02/20/2017	02/21/2017	02/12/2018	02/13/2018	04/18/2018	04/19/2018	02/04/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**28900**	-	**1050**	-	**2120J**	-	**1030**	-	**1510**	-	**1220**	-	80.5 U	-	**2400**
Iron	ug/L	Y	300	**28400**	-	205	-	92.1 UJ	-	33.3 U	-	**1040**	-	**521**	-	**787**	-	**2030**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	260	-	84 J	-	-	-	1000	-	480	-	1000	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	53	-	-	-	33 J	-	38 J	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	25000 U	-	4500 J	-	8000	-	5000 U	-	2000 U	-	4000 U	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297	MW-297
			Field Sample ID	M297B8X	D0424191	M297B9	M297B9X	M297C1X	D0528201	M297C2	M297C2X	D0828208	M297C3X	M297C4	M297C4X	M297C5	M297C5X	M297C6
			Sample Date	02/04/2019	04/24/2019	04/24/2019	04/24/2019	11/13/2019	05/28/2020	05/28/2020	05/28/2020	08/28/2020	08/28/2020	11/09/2020	11/09/2020	03/02/2021	03/02/2021	03/30/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1750**	**1440**	-	-	**2440**	**2620**	-	-	-	-	-	**3200**	-	**990**
Iron	ug/L	Y	300	-	55 J	67.6 J	-	-	85.4 J	104 J	-	-	-	**770**	-	-	-	41 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	3000	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	320	290	-	290	-	-	-	500 J	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	15 UJ	-	-	-	31 J	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3300	3400	-	3500	10300	-	-	12100 J	3100 J	2500 J	-	7500	-	7300	-

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Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-297	MW-297	MW-297	MW-297	MW-297	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R
			Field Sample ID	M297C6X	M297C7	D0820218A	M297C8	M297C9	M305RA1	D0516137	M305RA3	M305RA8	M305RA8	M305RB5	M305RB6	M305RB8	M305RB9X	M305RC1
			Sample Date	03/30/2021	05/14/2021	08/20/2021	08/20/2021	11/09/2021	01/21/2013	05/16/2013	05/16/2013	10/27/2014	10/27/2014	09/20/2016	01/27/2017	07/27/2017	10/23/2017	01/11/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	91 J	95 J	69 J	-	30 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1500J**	**15000**	**14000**	**6600**	**364**	**14100**	**13600**	-	144 J	251	119 J	**474**	-	131 J
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	180 J	-	74.7 U	-	-	-	80.5 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	830 J	-	-	-	-	-	-	-	-	-	3100	2000	1300	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2000 UJ	4600 J	5700	5800 J	8900	-	-	-	-	-	28900	28900	24500	24100	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R
			Field Sample ID	M305RC1X	D0221198	M305RC3	D0222198A	M305RC3X	D0521198	M305RC4	M305RC4X	M305RC5	M305RC5X	D1104198	M305RC6	M305RC6X	D0206208	M305RC7
			Sample Date	01/15/2018	02/21/2019	02/21/2019	02/22/2019	02/22/2019	05/21/2019	05/21/2019	05/21/2019	08/12/2019	08/12/2019	11/04/2019	11/04/2019	11/04/2019	02/06/2020	02/06/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	145 J	92.6 J	-	-	**987**	**1110**	-	**939**	-	**1620**	**1600**	-	294	846 UJ
Iron	ug/L	Y	300	-	40 U	40 U	-	-	164 J	247 J	-	40 U	-	40 U	40 U	-	41.2 U	61.3 UJ
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	2400 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	33900 J	-	-	**3990000J**	**4130000J**	**4700000**	-	**5090000J**	-	**3980000**	**2110000**	-	**2550000J**	**1940000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-305R	MW-315	MW-316R	MW-316R	MW-316R	MW-316R
			Field Sample ID	M305RC7X	M305RC8	M305RC8X	M305RC9X	D1113208B	M305RD1X	M305RD2X	M305RD2	M305RD4	M305RD5	M315A3	M316RA2	M316RA3	M316RA8	M316RB5
			Sample Date	02/06/2020	05/12/2020	05/13/2020	08/14/2020	11/13/2020	11/13/2020	02/10/2021	04/28/2021	08/18/2021	10/12/2021	03/20/2012	01/15/2013	05/14/2013	10/23/2014	09/15/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7800 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	265	-	-	-	-	-	-	-	-	**4060**	**61100**	**26200**	**6880**	**5150**
Iron	ug/L	Y	300	-	41.2 U	-	-	-	-	-	-	-	-	-	-	-	**6670**	**5110**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1860000**	-	**2390000**	**2100000**	**1800000**	**1700000**	**1600000**	**2100000**	**1700000**	**4100000**	-	-	-	-	1500 U

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-316R	MW-316R	MW-316R	MW-316R	MW-316R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R
			Field Sample ID	M316RB6	M316RB8	M316RB9X	M316RC1	M316RC1X	M317RA2	D03281310	M317RA3	D1027147	D1027147	M317RA8	M317RA8	M317RB5	M317RB6	M317RB8
			Sample Date	01/24/2017	07/24/2017	10/23/2017	01/23/2018	01/23/2018	01/22/2013	03/28/2013	03/28/2013	10/27/2014	10/27/2014	10/27/2014	10/27/2014	09/20/2016	01/27/2017	07/27/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	370 J	5300 J	-	5700 J	-	-	-	-	-	-	-	-	7900 J	160 J	2200 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4590**	**1850J**	-	**11200**	-	**38400**	**65200**	**62100**	-	**1200J**	-	**1180J**	**7290**	**2830**	**2720**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	**1110**	-	**1120**	-	**6610**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	560 J	600	-	-	420 J	-	-	-	-	-	-	-	250 U	400 J	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	6700	11000	3800 J	-	12800	-	-	-	-	-	-	-	2100 J	15500	10700

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R
			Field Sample ID	D1024177	M317RB9X	M317RC1	M317RC1X	M317RC3	M317RC3X	M317RC4	M317RC4X	M317RC5	M317RC5X	M317RC6	M317RC6X	M317RC7	M317RC7X	M317RC8
			Sample Date	10/24/2017	10/24/2017	01/11/2018	01/16/2018	02/19/2019	02/19/2019	05/21/2019	05/21/2019	08/07/2019	08/07/2019	11/04/2019	11/04/2019	02/05/2020	02/05/2020	05/13/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	6000 J	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**7590**	-	**22400**	-	**18400**	-	**10600**	-	**3240**	-	**8620**	-	**4530**
Iron	ug/L	Y	300	-	-	**5540**	-	63.1 J	-	75.5 J	-	44.9 J	-	179 J	-	197 J	-	208
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	450 J	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2100 J	2300 J	-	79500	-	**4130000**	-	**936000**	-	**816000**	-	**863000**	-	**1560000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R	MW-317R
			Field Sample ID	M317RC8X	D0813208	M317RC9	M317RC9X	D11202008	M317RD1	M317RD1X	D0211218	M317RD2	M317RD2X	M317RD3	D0819218	M317RD4	M317RD5	M317RD6
			Sample Date	05/13/2020	08/13/2020	08/13/2020	08/13/2020	11/20/2020	11/20/2020	11/20/2020	02/11/2021	02/11/2021	02/11/2021	04/29/2021	08/19/2021	08/19/2021	10/13/2021	02/14/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**1600**	**1700**	-	**3200**	**3800J**	-	**6500**	**1500J**	**2100J**	**5100**	-
Iron	ug/L	Y	300	-	**410**	**390**	-	41 U	98 UJ	-	41 U	41 U	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	12000	13000	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	141000 J	75000	-	77000	-	-	**2500000**	**750000J**	-	**1500000J**	**430000**	**760000**	**900000J**	**2100000**	86000

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-318R	MW-318R	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR
			Field Sample ID	M318RA1	M318RA2	M318RRA9	M318RRB1	M318RRB3	M318RRB4X	M318RRB5	M318RRB5X	M318RRB7	M318RRB7X	M318RRB8	M318RRB8X	M318RRB9	M318RRB9X
			Sample Date	01/07/2013	05/16/2013	09/20/2016	01/26/2017	07/28/2017	10/24/2017	01/18/2018	01/18/2018	02/19/2019	02/19/2019	05/21/2019	05/21/2019	08/07/2019	08/07/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	17900 J	120 J	1100 J	-	2200 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**24700**	**58600**	**16900**	**664**	**1560**	-	**3100**	-	**7720**	-	**1930**	-	**16100**	-
Iron	ug/L	Y	300	-	-	**16200**	-	-	-	**1840**	-	**3700**	-	40 U	-	**16800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	250 U	250 U	-	-	250 U	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	9600	10400	12000	4700 J	-	45100	-	**920000**	-	**521000**	-	**1190000**

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-318RR	MW-319R
			Field Sample ID	M318RRC1	M318RRC1X	M318RRC2	M318RRC2X	M318RRC3	M318RRC3X	M318RRC4X	M318RRC5X	M318RRC6X	M318RRC4	M318RRC8	M318RRC9	M318RRD1	M319RA1
			Sample Date	11/04/2019	11/04/2019	02/05/2020	02/05/2020	05/13/2020	05/13/2020	08/14/2020	11/20/2020	02/11/2021	04/29/2021	08/19/2021	10/13/2021	03/01/2022	01/17/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**990**	-	**4960**	-	**1210**	-	-	-	-	-	-	-	-	**4750**
Iron	ug/L	Y	300	56.9 J	-	**4890**	-	**722**	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**392000**	-	**1320000**	-	**1250000**	**330000**	**440000**	**2500000**	**320000**	**380000**	**420000**	74000	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-319R	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321	MW-321
			Field Sample ID	M319RA2	M319RA6	M319RB3	M319RB4	M319RB6	M319RB7X	M321B5	M321B6	M321B8	M321B9X	M321C1	M321C1X	M321C2	M321C2X	M321C3
			Sample Date	05/14/2013	10/23/2014	09/14/2016	01/30/2017	08/01/2017	10/23/2017	09/13/2016	01/24/2017	07/24/2017	10/25/2017	01/16/2018	01/16/2018	02/21/2019	02/21/2019	08/20/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	100 J	35 J	29 J	-	10 UJ	15 UJ	49 J	-	15 U	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6190**	52.5 J	**3140**	**5990**	**1130**	-	**334**	118 J	**379**	-	**3450**	-	**3310**	-	**2440**
Iron	ug/L	Y	300	-	33.4 U	74.7 U	-	-	-	74.7 U	-	-	-	80.5 U	-	40 U	-	46 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	800	2700	-	250 U	2800 J	310 J	-	-	650	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	16000	11100	11400	9500	45600	58200	41000	41000	-	40300	-	10500	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-321	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329	MW-329
			Field Sample ID	M321C3X	M329A1	D0621123	M329A2	M329A3	M329A3X	M329A4	M329A5X	M329A6	M329A6X	M329A7X	M329A8	M329A8X	M329A9X	M329B1X
			Sample Date	08/20/2019	04/23/2012	06/21/2012	06/21/2012	11/14/2012	11/14/2012	01/28/2013	05/09/2013	07/01/2013	07/02/2013	10/15/2013	12/18/2013	12/18/2013	07/09/2014	03/10/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**39100**	**41700**	**41300**	**34300**	-	**44300**	-	**38700**	-	-	**35400**	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	**39000**	-	**35900**	-	-	**34700**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	19900	-	-	-	-	50000	-	15600	-	2400 J	3400 J	-	9000	4500 J	16400

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-329	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R
			Field Sample ID	M329B2X	M329RB4	M329RB5	M329RB5X	M329RB6	M329RB7	M329RB7X	M329RB8	M329RB8X	M329RB9	M329RB9X	M329RC1	M329RC1X	M329RC2	M329RC2X
			Sample Date	07/14/2015	07/27/2016	08/31/2016	08/31/2016	10/17/2016	12/07/2016	12/07/2016	01/20/2017	01/20/2017	04/18/2017	04/18/2017	07/10/2017	07/10/2017	10/18/2017	10/18/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	22100 J	-	-	4800 J	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**38500**	**7230**	-	**4270**	**3600**	-	**2610**	-	**2210**	-	**2430**	-	**2400**	-
Iron	ug/L	Y	300	-	**34400**	**8030**	-	**4240**	**3570**	-	**2160**	-	**2040**	-	**2200**	-	**674**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	-	250 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3400 J	**640000**	-	**442000**	**715000**	-	**906000**	-	**1110000**	-	**1290000**	-	**574000**	-	**268000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R
			Field Sample ID	M329RC3	M329RC3X	M329RC4	M329RC4X	M329RC5	M329RC5X	M329RC6	M329RC6X	M329RC7	M329RC7X	M329RC8	M329RC8X	D0806198	M329RC9	M329RC9X
			Sample Date	01/09/2018	01/09/2018	05/22/2018	05/22/2018	08/28/2018	08/28/2018	11/21/2018	11/21/2018	02/11/2019	02/11/2019	05/16/2019	05/16/2019	08/06/2019	08/06/2019	08/06/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2380**	-	**1780**	-	**17600**	-	**689**	-	**353**	-	179 J	-	**13100**	**12800**	-
Iron	ug/L	Y	300	**990**	-	**1580**	-	**15400**	-	60 J	-	80.1 J	-	47.3 J	-	**14300**	**15100**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**275000**	-	**312000**	-	180000	-	148000	-	140000	-	167000	4100 J	-	4100 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-329R	MW-329R	MW-329R	MW-329R	MW-329R	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330
			Field Sample ID	M329RD1	M329RD2	M329RD2X	M329RD3	M329RD4	M330B3	M330B4	M330B6	M330B7X	D01221815	M330B8	M330B8X	M330C1	M330C3	M330C3X
			Sample Date	09/08/2020	02/05/2021	02/05/2021	08/25/2021	02/04/2022	09/21/2016	01/31/2017	08/03/2017	10/31/2017	01/22/2018	01/22/2018	01/22/2018	07/25/2018	02/27/2019	02/27/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	5500 J	220 J	2500 J	-	5400 J	5500 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**25000**	-	**29000**	**16000**	**5190**	**333**	**2560**	-	**5100**	**5070**	-	-	**725**	-
Iron	ug/L	Y	300	**27000**	**24000**	-	**26000**	**13000**	**3260**	-	-	-	-	-	-	-	183 UJ	-
Iron, Total Recoverable	ug/L	N	NA	37000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	250 U	250 U	250 U	-	250 U	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**310000J**	27000	200000	12300	**302000**	58000	76300	17500	-	17800 J	30600	-	**5770000**

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-330	MW-331	MW-331	MW-331	MW-331
			Field Sample ID	M330C4	M330C4X	D0808198	M330C5	M330C5X	M330C6	M330C6X	M330C7	M330C7X	M330C8	M330C8X	M331B3	M331B4	M331B6	M331B7X
			Sample Date	05/07/2019	05/07/2019	08/08/2019	08/08/2019	08/08/2019	11/05/2019	11/05/2019	02/06/2020	02/06/2020	05/11/2020	05/12/2020	09/19/2016	01/25/2017	07/28/2017	10/25/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	77500 J	17300 J	9500 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1350000**	-	**1610**	**1760**	-	**4170**	-	**2070**	-	**5300**	-	**77300**	**15000**	**8970**	-
Iron	ug/L	Y	300	95.2 J	-	98.8 J	74.5 J	-	**2650**	-	**409**	-	**4120**	-	**74300**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	250 U	250 U	250 UJ	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**1040000**	43000 J	-	67100 J	-	11200	-	13100	-	175000 J	1500 U	4700 J	7400	4600 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-331	MW-332
			Field Sample ID	M331B8	M331B8X	M331C1	M331C1X	M331C2	M331C2X	M331C3	M331C3X	M331C4	M331C4X	M331C5	M331C5X	M331C6	M331C6X	M332B3
			Sample Date	01/11/2018	01/16/2018	02/19/2019	02/19/2019	05/13/2019	05/13/2019	08/12/2019	08/12/2019	11/04/2019	11/04/2019	02/05/2020	02/05/2020	05/13/2020	05/13/2020	09/14/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	170 J	-	-	-	-	-	-	-	-	-	-	-	-	-	430 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1130**	-	**3060**	-	**4180**	-	**17900**	-	**1310**	-	**1390**	-	**1930**	-	**507**
Iron	ug/L	Y	300	103 UJ	-	**754**	-	64.3 J	-	**15600**	-	105 J	-	**658**	-	**551**	-	230
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	330 J	-	-	-	-	-	-	-	-	-	-	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	11000	-	11700	-	24800	-	27500	-	27400	-	21300	-	22800	32800

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-332	MW-332	MW-332	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341	MW-341
			Field Sample ID	M332B4	M332B5	M332B6X	M341A1	M341A2	M341A7	M341B4	M341B5	M341B7	M341B8X	M341B9	M341B9X	M341C2	M341C2X	D0807198
			Sample Date	01/26/2017	07/26/2017	10/25/2017	01/21/2013	05/16/2013	10/24/2014	09/15/2016	01/25/2017	07/25/2017	10/20/2017	01/11/2018	01/15/2018	03/08/2019	03/08/2019	08/07/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	75 J	440 J	-	-	-	-	5900 J	7100 UJ	6100 J	-	5200 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**783**	**2000**	-	**12300**	**17500**	**654J**	**4460**	**6600**	**5100**	-	**5620**	-	**2840**	-	**2520**
Iron	ug/L	Y	300	-	-	-	-	-	**643J**	**3810**	-	-	-	**5270**	-	**1270**	-	**1780**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	660	260 J	-	-	-	-	250 U	250 U	350 J	-	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	10400	12400	31500	-	-	-	2500 J	2800 J	2800 J	2000 J	-	27200	-	7700 J	3000 J

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-341	MW-341	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342	MW-342
			Field Sample ID	M341C3	M341C3X	M342A1	M342A2	M342A2X	M342A7	M342B4	M342B5	M342B7	M342B8X	M342B9	M342B9X	M342C2	M342C2X	M342C3
			Sample Date	08/07/2019	08/07/2019	01/22/2013	03/28/2013	03/28/2013	10/24/2014	09/16/2016	01/30/2017	08/01/2017	10/26/2017	01/18/2018	01/18/2018	03/08/2019	03/08/2019	08/13/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	3100 UJ	6500 J	10700 J	-	3600 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2530J**	-	**4600**	**8170**	**14200**	**478J**	**2580**	**5980**	**10500**	-	**4320**	-	**8990**	-	**8150**
Iron	ug/L	Y	300	**2000**	-	-	-	-	**426J**	**2350**	-	-	-	**3780**	-	**1390**	-	**8630**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	250 U	250 U	250 U	-	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	4600 J	-	-	-	-	1500 U	2500 J	2000 J	1500 UJ	-	1500 U	-	32000	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-342	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-343	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	M342C3X	D0116137	M343A1	M343A2	M343A7	M343B4	M343B5	M343B7	M343B8X	D0423138	D0423138	M347A1	M347A1	M347A1X	D1029138
			Sample Date	08/13/2019	01/16/2013	01/16/2013	05/15/2013	10/24/2014	09/15/2016	01/24/2017	07/25/2017	10/20/2017	04/23/2013	04/23/2013	04/23/2013	04/23/2013	04/23/2013	10/29/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	8000 J	8400 J	8700 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**62900**	**60300**	**34700**	**2470J**	**4360**	**7920**	**8220**	-	**26600**	-	**24600**	-	-	**18000**
Iron	ug/L	Y	300	-	-	-	-	**2390J**	**4300**	-	-	-	-	**22000**	-	**21500**	-	**15600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	250 U	250 UJ	250 U	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	60800	-	-	-	-	1500 U	1500 U	1700 J	1500 U	2800 J	-	-	-	2900 J	1800 J

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	M347A3	M347A3X	M347A4	M347A4X	D0112168	M347A5	M347A5X	D0211168	M347A7	M347A7X	D0613168	M347A8	M347A8X	D0913168	M347A9
			Sample Date	10/29/2013	10/29/2013	07/14/2015	07/15/2015	01/12/2016	01/12/2016	01/12/2016	02/11/2016	02/11/2016	02/11/2016	06/13/2016	06/13/2016	06/13/2016	09/13/2016	09/13/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	47800 J	48200 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**22500**	-	**17800**	-	**986000J**	**1280000J**	-	**235000**	**250000**	-	**94700**	**90200**	-	**41300**	**41200**
Iron	ug/L	Y	300	**22100**	-	**17400**	-	**750000**	**728000**	-	**247000**	**237000J**	-	**104000**	**99500**	-	**44000**	**46000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	-	-	-	-	-	40 U	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	-	-	34 J	-	-	-	42 J	-
Sulfate (SO4)	ug/L	N	250000	-	2000 J	-	2500 U	**6020000**	-	**5460000J**	**4660000**	-	**4590000**	**399000**	-	**388000**	**1480000J**	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	M347A9X	D1208168B	D1208168BX	M347B1	M347B1X	D0228178B	M347B2	M347B2X	M347B3	M347B3X	D0605178	M347B4	M347B4X	M347B5	M347B5X
			Sample Date	09/13/2016	12/08/2016	12/08/2016	12/08/2016	12/08/2016	02/28/2017	02/28/2017	02/28/2017	03/08/2017	03/09/2017	06/05/2017	06/05/2017	06/05/2017	09/12/2017	09/13/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**16700**	-	**17100**	-	**19300**	**19500**	-	**15100**	-	**14100**	**13400**	-	**5370**	-
Iron	ug/L	Y	300	-	**16400**	-	**16900**	-	**19200**	**19000**	-	**14800**	-	**13400**	**12400**	-	**5140**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	-	-	40 U	-	-	-	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	43 J	-	-	-	-	-	-	-	-	33 J	-	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	**708000J**	-	69800	-	104000	75700 J	-	89300 J	-	60700	35100	-	32300	-	42800

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	M347B7	M347B7X	M347B8	M347B8X	M347B9	M347B9X	D10121815	M347C1	M347C2	M347C2X	M347C3	M347C3X	M347C4	M347C4X	M347C5
			Sample Date	02/16/2018	02/16/2018	06/07/2018	06/08/2018	10/04/2018	10/04/2018	10/12/2018	10/12/2018	12/05/2018	12/05/2018	03/18/2019	03/18/2019	06/17/2019	06/17/2019	09/16/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	3750 J	3870 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**11400**	-	**4620**	-	**4210**	-	**3320**	**3380**	**2990**	-	**1420**	-	**1980**	-	**9220**
Iron	ug/L	Y	300	-	-	**4540**	-	**3670**	-	**3380**	**3370**	**2660**	-	-	-	**2210**	-	**6130**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	5700	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	170	-	-	-	110	250 UJ	250 UJ	-	-	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	15 U	-	-	-	-	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	37300	-	13800	-	1900 J	1500 U	1500 U	-	7500	-	41500	-	12800 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347	MW-347
			Field Sample ID	M347C5X	M347C6	M347C6X	M347C7	M347C7X	M347C8	M347C8X	D0914201	M347C9	M347C9X	M347D1	M347D1X	M347D2	M347D2X	D0505211
			Sample Date	09/16/2019	12/11/2019	12/11/2019	03/19/2020	03/20/2020	06/15/2020	06/15/2020	09/14/2020	09/14/2020	09/14/2020	12/11/2020	12/11/2020	03/10/2021	03/10/2021	05/05/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**6400**	-	**2400**	-	-	-	-	-	-	**460**	-	**1800**	-	**430**
Iron	ug/L	Y	300	-	**6540**	-	**2490**	-	76 J	-	47 J	41 U	-	170 J	-	**1900**	-	**410**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	710	-	120 J	88 J	-	-	-	-	-	-
Methane	ug/L	N	NA	6200	-	6300	-	4100	-	4900	7300	-	7700	-	9100	-	10000	11000
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	250 U	-	250 U	-	250 U	-	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	15 U	-	-	-	-	-	-	-	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	4000 J	-	2400 UJ	-	2000 UJ	-	14000	**300000J**	-	34000 J	-	41000 J	-	26000 J	25000 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-347	MW-347	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348
			Field Sample ID	M347D3	M347D4	M348A1	M348A1X	D0109148	M348A2X	M348A2	M348A2	M348A3X	M348A4	M348A4X	M348A5	M348A5X	M348A6	M348A6X
			Sample Date	05/05/2021	10/28/2021	10/29/2013	10/30/2013	01/09/2014	01/09/2014	01/10/2014	01/10/2014	01/12/2016	02/17/2016	02/19/2016	06/14/2016	06/14/2016	09/12/2016	09/12/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**440**	**5600**	**17900**	-	-	-	**17700**	-	-	**19400**	-	**9500**	-	**2340**	-
Iron	ug/L	Y	300	**360**	**5000**	**15700**	-	-	-	-	**15300**	-	**17600**	-	**8170**	-	**1330**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	9900	8700 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	24000 J	3500 J	-	2500 J	1500 U	1500 U	-	-	40000	-	244000	-	**1100000**	-	205000

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348
			Field Sample ID	M348A7	M348A7X	M348A8	M348A8X	M348A9	M348A9X	D0831178B	M348B1	M348B1X	D0216188	M348B3	M348B3X	M348B4	M348B4X	D1001181
			Sample Date	12/08/2016	12/08/2016	02/27/2017	02/27/2017	06/06/2017	06/06/2017	08/31/2017	08/31/2017	08/31/2017	02/16/2018	02/16/2018	02/16/2018	06/07/2018	06/08/2018	10/01/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	276	-	140 J	-	**682**	-	**366**	**601J**	-	145 J	130 J	-	**352**	-	**729**
Iron	ug/L	Y	300	241	-	74.7 U	-	74.7 U	-	80.5 U	80.5 U	-	80.5 U	80.5 U	-	80.5 U	-	40.0 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**943000**	-	**393000J**	-	127000	120000 J	-	225000 J	**402000**	-	**428000**	-	**269000**	128000

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348	MW-348
			Field Sample ID	M348B5	M348B5X	M348B6	M348B6X	D0318191	M348B7X	M348B8X	M348B9X	M348C1X	D0311211	M348C2X	M348C3	M348C4	M348C6	M348C7
			Sample Date	10/01/2018	10/01/2018	12/05/2018	12/05/2018	03/18/2019	03/18/2019	09/05/2019	03/20/2020	09/04/2020	03/11/2021	03/11/2021	05/05/2021	08/18/2021	11/22/2021	03/18/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**781**	-	**2160**	-	-	-	-	-	-	-	-	**540**	220	**740**	**750**
Iron	ug/L	Y	300	40.0 U	-	62.4 J	-	-	-	-	-	-	-	-	120 J	210	**320**	290
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	5000	7400	9300	9300
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	40 UJ	40 UJ	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 U	15 U	22 J	15 U
Sulfate (SO4)	ug/L	N	250000	-	**424000**	-	**334000**	111000	126000	92100 J	**380000J**	14000	22000 J	22000 J	30000 J	2000 UJ	13000	9300 J

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381
			Field Sample ID	M381A1	M381A1X	M381A2	M381A2X	M381A3	M381A3X	M381A4	M381A4X	M381A5	M381A5X	M381A6	M381A6X	M381A7	M381A7X	M381A8
			Sample Date	01/13/2014	01/14/2014	04/17/2014	04/18/2014	07/14/2014	07/15/2014	04/14/2015	04/15/2015	06/24/2015	06/25/2015	09/02/2015	09/03/2015	11/04/2015	11/05/2015	05/12/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**26900**	-	**37900**	-	**52300**	-	**14100**	-	**27800**	-	**30100**	-	**16500**	-	**38900**
Iron	ug/L	Y	300	**18100**	-	**25800**	-	**47100**	-	**13900**	-	**25100**	-	**27900**	-	**15400**	-	**38800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	990	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	32 J	-	81	-	15 U	-	64	-	31 J	-	27 J	-	27 J	-
Sulfate (SO4)	ug/L	N	250000	-	130000	-	135000	-	12500 U	-	108000	-	103000	-	105000	-	108000	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-381	MW-382	MW-382	MW-382	MW-382	MW-382
			Field Sample ID	M381A8X	M381A9	M381A9X	M381B1	M381B1X	M381B2	M381B2X	M381B3	D1025211A	M381B4	M382A1	M382A1X	M382A2	M382A2X	M382A3
			Sample Date	05/13/2016	11/07/2016	11/08/2016	06/12/2017	06/13/2017	12/06/2017	12/07/2017	05/12/2021	10/25/2021	10/25/2021	01/13/2014	01/14/2014	04/17/2014	04/18/2014	07/14/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**45700**	-	**19700**	-	**26300**	-	**18000**	**23000J**	**29000J**	**29200**	-	**32400**	-	**33400**
Iron	ug/L	Y	300	-	**43000**	-	**16100**	-	**23600**	-	11000 UJ	**26000**	**28000**	**28700**	-	**31000**	-	**32200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	62	21	37 J	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	40 UJ	40 UJ	40 UJ	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	29 J	-	17 J	-	25 J	-	15 U	15 J	15 UJ	15 UJ	-	35 J	-	160	-
Sulfate (SO4)	ug/L	N	250000	117000	-	115000	-	86500	-	110000	97000 J	8400 J	8400 J	-	5000 U	-	5000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382	MW-382
			Field Sample ID	M382A3X	M382A4	M382A4X	D0624151	M382A5	D0625151	M382A5X	M382A6	M382A6X	M382A7	M382A7X	M382A8	M382A8X	M382A9	M382A9X
			Sample Date	07/15/2014	04/14/2015	04/15/2015	06/24/2015	06/24/2015	06/25/2015	06/25/2015	08/31/2015	09/01/2015	11/02/2015	11/03/2015	05/12/2016	05/13/2016	11/08/2016	11/09/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1230**	-	**1810**	**1600**	-	-	**6240**	-	**43100**	-	**38700**	-	**28300**	-
Iron	ug/L	Y	300	-	**680**	-	**1060**	**1240**	-	-	**8020**	-	**42500**	-	**38000**	-	**27500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	47 J	-	-	290	290	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	25 J	-	27 J	-	-	15 U	15 U	-	15 U	-	38 J	-	42 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	2500 U	-	5800 J	-	-	15900	17400	-	3500 J	-	189000	-	2500 U	-	5300

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-382	MW-382	MW-382	MW-382	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384
			Field Sample ID	M382B1	M382B1X	M382B2	M382B2X	M384A1	M384A1X	M384A2	M384A2X	M384A3	M384A3X	M384A4	M384A4X	M384A5	M384A5X	D1102151
			Sample Date	06/05/2017	06/06/2017	12/06/2017	12/07/2017	01/13/2014	01/14/2014	04/17/2014	04/18/2014	07/14/2014	07/15/2014	06/24/2015	06/25/2015	08/31/2015	09/01/2015	11/02/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**37700**	-	**57700**	-	**1920**	-	**1170**	-	**6760**	-	**940**	-	**17500**	-	**5400**
Iron	ug/L	Y	300	**25100**	-	**55500**	-	68.5 J	-	43.0 U	-	**5340**	-	**902**	-	**16300**	-	**5910**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	4500	-	40 U	-	2500	-	530	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	19500	-	2500 U	-	146000	-	91700	-	21600 J	-	74000	-	5000 U	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-384	MW-385	MW-385	MW-385	MW-385
			Field Sample ID	M384A6	D1103151	M384A6X	M384A7	M384A7X	M384A8	M384A8X	M384A9	M384A9X	M384B1	M384B1X	M385A1	M385A1X	M385A2X	M385A2
			Sample Date	11/02/2015	11/03/2015	11/03/2015	05/12/2016	05/13/2016	11/08/2016	11/09/2016	06/05/2017	06/06/2017	12/06/2017	12/07/2017	10/28/2013	10/28/2013	01/08/2014	01/10/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5790**	-	-	50.8 J	-	**17300**	-	**674**	-	**6750**	-	**30000**	-	-	**25200**
Iron	ug/L	Y	300	**5590**	-	-	33.3 U	-	**18400**	-	74.7 U	-	**7520**	-	**23800**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	40 U	-	2300	-	40 U	-	440	-	40 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	36 J	31 J	-	15 U	-	15 U	-	15 U	-	36 J	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	47600	40600	-	53700	-	36100	-	34500	-	48800	-	67200	26200	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-385	MW-386	MW-386
			Field Sample ID	M385A2	M385A3X	M385A4	M385A4X	M385A5X	M385A6X	M385A7X	M385A9X	M385B1X	M385B3X	M385B4	M385B5X	M385B6	M386A1	M386A1X
			Sample Date	01/10/2014	01/12/2016	02/17/2016	02/17/2016	06/14/2016	09/13/2016	12/08/2016	06/05/2017	08/31/2017	02/16/2018	06/08/2018	10/02/2018	12/07/2018	11/07/2013	11/07/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**4790**	-	-	-	-	-	-	-	-	-	-	**43700**	-
Iron	ug/L	Y	300	**24400**	-	**2820**	-	-	-	-	-	-	-	-	-	-	**44200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	4900 J	-	22000	2500 J	8700	**301000**	1500 U	1500 U	31300	10200	14100	1000 U	-	6200

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386	MW-386R	MW-386R	MW-386R
			Field Sample ID	M386A2	M386A2X	M386A4	M386A5	M386A6	M386A6	M386A6X	M386A7	M386A8	M386A8X	M386A9	M386A9X	M386RB1	M386RB1X	M386RB2
			Sample Date	12/20/2013	12/20/2013	03/16/2015	06/29/2015	07/20/2015	07/20/2015	07/20/2015	10/05/2015	10/29/2015	10/29/2015	12/01/2015	12/01/2015	06/06/2016	06/07/2016	09/06/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	41400	129000	-	-	-	82100 J	-	-	-	-	97100 J	-	34500 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**43500**	-	**37900**	**137000**	**132000**	-	-	**91400J**	**81600**	-	**76900**	-	**73500**	-	**27700**
Iron	ug/L	Y	300	**42200**	-	-	-	-	**133000**	-	-	**80500**	-	**78200**	-	**72200**	-	**25900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	20000	22000	-	-	-	16000 J	-	-	-	-	7730 J	-	5700
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	250 U	-	-	-	250 UJ	-	-	-	-	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	3500 J	2000 J	**4810000**	-	-	**530000**	**7350000J**	-	**5340000**	-	**1750000**	-	**3610000J**	**4080000**

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R
			Field Sample ID	M386RB4	M386RB4X	M386RB5	M386RB5X	M386RB6	M386RB6X	M386RB7	M386RB7X	M386RB8	M386RB8X	D1205188A	M386RB9	M386RB9X	D0325191	M386RC1
			Sample Date	12/02/2016	12/02/2016	03/06/2017	03/06/2017	06/08/2017	06/08/2017	12/05/2017	12/05/2017	06/05/2018	06/05/2018	12/05/2018	12/05/2018	12/05/2018	03/25/2019	03/25/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3060**	-	**11500**	-	**4020**	-	**2880**	-	**6560**	-	**1130**	**1210**	-	**1460J**	**1860J**
Iron	ug/L	Y	300	**2140**	-	**9850**	-	**1600**	-	**2480**	-	**1310**	-	**816**	**812**	-	**651**	**661**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	290	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**3310000J**	-	**2070000**	-	**1400000**	-	**1140000**	-	**987000**	**671000**	-	**652000J**	**556000**	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R
			Field Sample ID	M386RC1X	D0610191	M386RC2	M386RC2X	D1204191	M386RC3	M386RC3X	D0317201	M386RC4	M386RC4X	M386RC5	M386RC5X	M386RC6	M386RC6X	M386RC7
			Sample Date	03/25/2019	06/10/2019	06/10/2019	06/10/2019	12/04/2019	12/04/2019	12/04/2019	03/17/2020	03/17/2020	03/17/2020	06/09/2020	06/09/2020	09/11/2020	09/11/2020	12/15/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1680**	**1770**	-	265	300	-	-	**1600**	-	**710**	-	-	-	**870**
Iron	ug/L	Y	300	-	**1030**	**1080**	-	**365J**	294 J	-	-	**1280**	-	**700**	-	**540**	-	**400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	750	-	-
Methane	ug/L	N	NA	340	-	-	-	-	-	-	890	-	820	-	440	-	170	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	250 U	-	250 U	-	250 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**517000**	**786000**	-	**786000**	**998000J**	-	**986000J**	**765000J**	-	**650000J**	-	**640000J**	-	**370000J**	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-386R	MW-386R	MW-386R	MW-386R	MW-386R	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387
			Field Sample ID	M386RC7X	M386RC8	M386RC8X	M386RC9	M386RD1	M387A1	M387A1X	D1219138	D1219138	M387A2	M387A2	M387A2X	D0720158	D0720158	M387A4
			Sample Date	12/15/2020	03/10/2021	03/10/2021	05/28/2021	10/29/2021	11/07/2013	11/07/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	12/19/2013	07/20/2015	07/20/2015	07/20/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**930**	-	**2200**	**3900**	**14700**	-	**3990**	-	**3820**	-	-	**1410**	-	**714J**
Iron	ug/L	Y	300	-	**470**	-	**2100**	100 J	**11800**	-	-	**3080**	-	**3060**	-	-	**327**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	480	-	380	340	47	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	40 UJ	40 UJ	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	15 U	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**550000J**	-	**500000**	**470000J**	**860000J**	-	179000	133000	-	-	-	141000	**39900000**	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R
			Field Sample ID	M387A4	M387A4X	D1030158A	M387A5	M387A5X	M387A6	M387A6X	D0607168	M387RA7	M387RA7X	D0907168	M387RA8	M387RB1	M387RB1X	M387RB2
			Sample Date	07/20/2015	07/20/2015	10/30/2015	10/30/2015	10/30/2015	11/30/2015	11/30/2015	06/07/2016	06/07/2016	06/07/2016	09/07/2016	09/07/2016	12/05/2016	12/05/2016	03/02/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	230 J	250 J	-	11600 J	11200 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**25700**	**16300**	-	**40800**	-	270 J	256 J	-	**10300**	**10200**	**1170**	-	**2060**
Iron	ug/L	Y	300	**347**	-	**498**	**500**	-	**6320J**	-	142 J	152 J	-	**10700**	**10400**	**588**	-	**1580**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	100 J	73 J	-	1300	1300	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 UJ	-	250 UJ	250 U	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**43400000**	**44700000**	-	**40500000J**	-	**43700000**	**2130000J**	-	**2000000J**	**1450000**	**1460000**	-	**960000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R	MW-387R
			Field Sample ID	M387RB2X	D0607178	M387RB3	M387RB3X	M387RB4	M387RB4X	D0606188	M387RB5	M387RB5X	M387RB6	M387RB6X	M387RB7	M387RB7X	M387RB8	M387RB8X
			Sample Date	03/02/2017	06/07/2017	06/07/2017	06/07/2017	12/06/2017	12/06/2017	06/06/2018	06/06/2018	06/06/2018	12/04/2018	12/04/2018	06/24/2019	06/24/2019	12/12/2019	12/12/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1250**	**1030**	-	**5270**	-	**504J**	**4310J**	-	**1580**	-	**1760**	-	278	-
Iron	ug/L	Y	300	-	74.7 U	101 UJ	-	**4330**	-	80.5 U	80.5 U	-	40 U	-	40.0 U	-	40 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	22 J	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	94300	104000 J	-	124000 J	-	**421000**	125000	-	118000 J	-	34000	-	151000 J	-	47600 J

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388
			Field Sample ID	M388A1	M388A1X	M388A2	M388A2	M388A2X	M388A3	M388A4	M388A5X	M388A6	M388A7X	D1130158	M388A8	M388A9	M388A9X	M388B1
			Sample Date	11/07/2013	11/07/2013	12/19/2013	12/19/2013	12/19/2013	03/17/2015	06/29/2015	07/20/2015	10/05/2015	10/29/2015	11/30/2015	11/30/2015	06/07/2016	06/07/2016	09/07/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	4900	12600	-	11400 J	-	-	-	7000 J	-	15900 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**17700**	-	**14800**	-	-	**5260**	**13800**	-	**8810J**	-	**14600**	**12700**	**7790J**	-	**13900**
Iron	ug/L	Y	300	**15900**	-	-	**12500**	-	-	-	-	-	-	**12100**	**12600**	**6120J**	-	**13900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	12000	16000	-	15000 J	-	-	-	11000 J	-	10000
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	540 J	250 U	-	250 UJ	-	-	-	-	560 J	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	1500 U	-	-	9100	24600	11900	3500 J	35200 J	7900	15700	-	-	45200 J	7500

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388
			Field Sample ID	M388B3	M388B3X	M388B4	M388B4X	M388B5	M388B5X	M388B6	M388B6X	M388B7	M388B7X	D0605191	M388B8	M388B8X	M388B9	M388B9X
			Sample Date	11/30/2016	11/30/2016	03/02/2017	03/02/2017	06/08/2017	06/08/2017	12/05/2017	12/05/2017	06/04/2018	06/04/2018	06/05/2019	06/05/2019	06/05/2019	12/12/2019	12/12/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4400**	-	**11000J**	-	**6010**	-	**8160**	-	**1770**	-	**972**	**1300**	-	**1550**	-
Iron	ug/L	Y	300	**4060**	-	**10300J**	-	**4290**	-	**6410**	-	80.5 U	-	294 J	**413J**	-	44.8 UJ	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	22900 J	-	25300	-	26200	-	4800 J	-	28100	28400 J	-	29300 J	-	30600

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-388	MW-388	MW-388	MW-388	MW-388	MW-388	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389
			Field Sample ID	M388C1X	M388C2X	M388C3	M388C4	M388C5	M388C6	M389A1	M389A1X	M389A2	M389A2X	M389A3	M389A4	M389A5X	M389A6	M389A7X
			Sample Date	06/03/2020	12/10/2020	05/20/2021	09/23/2021	12/28/2021	03/18/2022	11/05/2013	11/05/2013	12/20/2013	12/20/2013	03/18/2015	06/30/2015	07/20/2015	10/06/2015	10/28/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	52000	73800	-	153000	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**6500**	**3500**	**3100**	**400**	**57900**	-	**74200**	-	**59300**	**72700**	-	**302000**	-
Iron	ug/L	Y	300	-	-	**750**	**2900**	**2500**	80 U	**52900**	-	**73700**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	250	2000	9600	37	-	-	-	-	21000	20000	-	12000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	400 J	2000 J	48 J	1200 J	-	-	-	-	250 U	250 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	34 J	15 U	15 U	15 U	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	8000	26000	17000 J	21000 J	6300 J	23000 J	-	3600 J	-	2000 J	1500 U	**605000**	201000	**11700000**	**8430000**

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389
			Field Sample ID	M389A8	M389A8X	M389A9	M389A9X	M389B1	M389B3	M389B3X	M389B4	M389B4X	M389B5	M389B5X	M389B6	M389B6X	M389B7	M389B7X
			Sample Date	12/01/2015	12/01/2015	06/08/2016	06/08/2016	09/07/2016	12/02/2016	12/02/2016	03/06/2017	03/06/2017	06/09/2017	06/09/2017	12/06/2017	12/07/2017	06/05/2018	06/05/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	67900 J	-	64400 J	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**273000**	-	**69200**	-	**67000**	**15100**	-	**34200**	-	**34700**	-	**29500**	-	**29500**	-
Iron	ug/L	Y	300	**293000**	-	**66800**	-	**69600**	**14800**	-	**34800**	-	**35300**	-	**28500**	-	**30700**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	21000	-	14000	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	250 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**10700000**	-	**510000**	**646000**	-	122000 J	-	25800	-	9900	-	32500	-	1500 U

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-389	MW-399	MW-399	MW-399	MW-399
			Field Sample ID	M389B8	M389B8X	D1212198	M389B9	M389B9X	M389C1X	M389C2X	M389C3	M389C4	M389C5	M389C6	M399A1	M399A1X	M399A2	M399A2X
			Sample Date	06/05/2019	06/05/2019	12/12/2019	12/12/2019	12/12/2019	06/03/2020	12/10/2020	05/19/2021	09/24/2021	12/27/2021	03/17/2022	12/16/2015	12/16/2015	12/29/2016	12/29/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**33400**	-	**21900**	**21800**	-	-	-	**46000**	**35000**	**38000**	**46000**	**60500**	-	**42500**	-
Iron	ug/L	Y	300	**32100**	-	**22700**	**21600**	-	-	-	**43000**	**36000**	**37000**	**42000**	**60700**	-	**42700**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	17000	13000	19000	19000	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	40 UJ	40 UJ	40 UJ	40 UJ	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	20 J	15 U	15 U	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	2000 UJ	22300	-	23000 J	2000 U	20000 U	20000 UJ	8000 UJ	10000 UJ	10000 UJ	-	4100 J	-	1700 J

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-399	MW-399	MW-399	MW-399	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R
			Field Sample ID	M399A3	M399A3X	M399A9	D0910198	M399RA4	M399RA4X	D0905188C	M399RA5X	D1203188	M399RA6	M399RA6X	D0314198	M399RA7	M399RA7X	D0605198
			Sample Date	02/02/2017	02/02/2017	04/12/2019	09/10/2019	06/07/2018	06/07/2018	09/05/2018	09/05/2018	12/03/2018	12/03/2018	12/03/2018	03/14/2019	03/14/2019	03/14/2019	06/05/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	164	-	-	-	2800 J	2400 J	63.3 J	25.8 J	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	15 UJ	290 J	-	-	-	-	-	-	77.9 J	28.4 J	-	15 UJ
Iron	ug/L	N	300	**47300**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	**48000**	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	40 U	250 UJ	250 UJ	5000 J	-	6400 J	-	-	520	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	250 UJ	-	15 U	250 UJ	250 UJ	250 U	-	250 UJ	-	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	-	3900 J	-	**520000**	-	**923000**	**989000J**	**1000000J**	**895000**	-	**868000J**	-	-	**454000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R	MW-399R
			Field Sample ID	M399RA8	M399RA8X	M399RA9	M399RA9X	D1211198	M399RB1	M399RB1X	D0311208	M399RB2	M399RB2X	M399RB3	M399RB3X	M399RB4	M399RB4X	M399RB5X
			Sample Date	06/05/2019	06/05/2019	09/10/2019	09/10/2019	12/11/2019	12/11/2019	12/11/2019	03/11/2020	03/11/2020	03/11/2020	06/16/2020	06/16/2020	09/10/2020	09/10/2020	02/19/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	15 UJ	-	15 UJ	-	-
Ferrous Iron	ug/L	Y	NA	15 UJ	-	15 UJ	-	85.5 J	110 J	-	16.3 J	19.4 J	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	3 U	-	3 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	250 UJ	390 J	-	440 J	250 U	-	250 U	-	250 U	-	250 UJ	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	-	250 UJ	250 U	-	250 U	250 U	-	250 U	-	250 U	-	250 UJ	-
Sulfate (SO4)	ug/L	N	250000	-	**400000**	-	**534000**	48200	-	48400 J	504000 U	-	**535000**	-	**390000**	-	**480000**	170000

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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-399R	MW-399R	MW-399R	MW-399R	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400
			Field Sample ID	M399RB6	M399RB7	M399RB8	M399RB9	M400A3	M400A3X	D0201178B	M400A2	M400A2X	D0219188	M400A4	M400A4X	D0417188	M400A5	M400A5X
			Sample Date	05/19/2021	09/24/2021	01/10/2022	03/24/2022	12/28/2016	12/28/2016	02/01/2017	02/01/2017	02/01/2017	02/19/2018	02/19/2018	02/19/2018	04/17/2018	04/17/2018	04/17/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	20700 J	20400 J	-	20200 J	20500 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	40 U	120 J	120 J	80 U	**33800**	-	**24300**	**24200**	-	-	-	-	**21200**	**19700**	-
Iron	ug/L	Y	300	41 U	41 U	41 U	82 U	**32500**	-	**23200**	**22900**	-	-	-	-	**20500**	**22100**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	16	7.3	5.6 J	7.3	-	-	-	-	-	-	-	-	11000	-	9700
Nitrogen, Nitrate as N	ug/L	N	10000	76 J	3300 J	260 J	130 J	-	-	-	-	-	96 J	-	100 J	290	-	270
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	15 U	15 U	-	-	-	-	-	94	-	98 J	26 J	-	39 J
Sulfate (SO4)	ug/L	N	250000	220000 J	200000 J	140000 J	130000 J	-	17200 J	4400 J	-	4000 J	**611000**	-	**523000J**	88000	-	101000

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400
			Field Sample ID	M400A6	M400A6X	M400A7	M400A7X	M400A8	M400A8X	M400A9	M400A9X	M400B1	M400B1X	D0909198	M400B2	M400B2X	M400B3	M400B3X
			Sample Date	06/12/2018	06/12/2018	09/04/2018	09/04/2018	12/03/2018	12/03/2018	03/15/2019	03/15/2019	06/04/2019	06/04/2019	09/09/2019	09/09/2019	09/09/2019	12/10/2019	12/12/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**15800**	-	**18000**	-	**26800**	-	**22000**	-	**30300**	-	**27200**	**26200**	-	**36000**	-
Iron	ug/L	Y	300	**15600**	-	**16900**	-	**25500**	-	**17000**	-	**28500**	-	**26800**	**28000**	-	**35500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	9600	-	5500	-	12000	-	10000	-	11000 J	7400	-	8700	-	15000
Nitrogen, Nitrate as N	ug/L	N	10000	-	1600	-	250 U	-	250 UJ	-	250 U	-	250 U	270 J	-	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	**1400**	-	-	-	250 UJ	-	250 U	-	250 U	250 U	-	250 UJ	-	250 U
Sulfate (SO4)	ug/L	N	250000	-	44000	-	157000	-	41500 J	-	49200	-	13900	10200	-	6300 J	-	64300

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-400	MW-401
			Field Sample ID	M400B4	M400B4X	M400B5	M400B5X	M400B6	M400B6X	D0301218C	D0301218XC	M400B7	M400B7X	M400B8	M400B9	M400C2	M400C3	M401A2
			Sample Date	03/16/2020	03/16/2020	06/17/2020	06/17/2020	09/10/2020	09/10/2020	03/01/2021	03/01/2021	03/01/2021	03/01/2021	05/26/2021	09/24/2021	12/15/2021	03/24/2022	07/14/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1230000**	-	-	-	-	-	**16000**	-	**16000**	-	**9600**	**10000**	**5900**	**8900**	**1410**
Iron	ug/L	Y	300	**31100J**	-	**21000**	-	**13000**	-	**16000**	-	**16000**	-	**8300**	**9500**	**12000**	**5800**	**1790**
Iron, Total Recoverable	ug/L	N	NA	-	-	24000	-	13000	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	8400	-	11000	-	12000	-	13000	-	13000	11000	3000	12000	15000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	250 UJ	-	250 UJ	-	280 UJ	-	360 UJ	52 UJ	73 J	40 UJ	40 UJ	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	-	250 UJ	-	250 UJ	-	250 U	-	420 J	15 U	15 U	20 J	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**277000**	-	33000	-	26000	-	99000 J	-	78000 J	40000 J	51000 J	73000 J	160000 J	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-401	MW-401	MW-401	MW-401	MW-401	MW-401	MW-401R	MW-401R	MW-401R	MW-408	MW-408	MW-408	MW-408	MW-408	MW-408
			Field Sample ID	M401A2X	D1228168X	M401A3	M401A3X	M401A4	M401A4X	M401RB9	M401RC1	M401RC2	M408A1	M408A1X	D0413188	M408A3	M408A3X	D0611188B
			Sample Date	07/14/2016	12/28/2016	12/28/2016	12/28/2016	02/01/2017	02/01/2017	05/27/2021	09/01/2021	12/15/2021	11/18/2015	11/19/2015	04/13/2018	04/13/2018	04/13/2018	06/11/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**834**	-	**4930**	-	**25000**	**11000**	**29000**	**49300**	-	**20500**	**20600**	-	**21400**
Iron	ug/L	Y	300	-	-	74.7 U	-	**4340**	-	**25000**	**11000**	**26000**	**47300**	-	**20400**	**19400**	-	**20900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	12 J	7.6 UJ	15	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	40 UJ	40 UJ	40 UJ	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	15 U	15 U	15 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	239000	148000 J	-	149000	-	**253000**	**1500000J**	**1500000J**	**1600000J**	-	2000 J	5600 J	-	5400 J	4600 J

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-408	MW-408	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R	MW-408R
			Field Sample ID	M408A4	M408A4X	D1114198	M408RA5X	M408RA6	M408RA6X	M408RA7X	M408RA8	M408RA8X	M408RA9	M408RA9X	M408RB1	M408RB2	M408RB3	M408RB4
			Sample Date	06/11/2018	06/11/2018	11/14/2019	11/14/2019	05/20/2020	05/20/2020	08/26/2020	11/10/2020	11/10/2020	03/02/2021	03/02/2021	05/13/2021	08/20/2021	11/09/2021	02/01/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**22200**	-	-	-	**333000**	-	-	**190000**	-	**14000**	-	**89000**	**92000**	**63000**	**92000**
Iron	ug/L	Y	300	**20500**	-	-	-	-	-	-	**150000**	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	5000	**23000000**	**26600000J**	-	**20000000**	**20000000**	-	**13000000**	-	**2700000**	**9100000**	**7800000J**	**6100000**	**10000000J**

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-409	MW-409	MW-409	MW-409	MW-409	MW-409R	MW-409R	MW-409R	MW-409R	MW-410	MW-410	MW-410	MW-410	MW-410	MW-410
			Field Sample ID	M409A1X	M409A1	M409A2X	M409A3	M409A3X	M409RB1	M409RB1X	M409RB2	M409RB2X	M410A1	M410A1X	M410A2	D12231415	M410A6	M410A8
			Sample Date	12/03/2014	11/18/2015	11/24/2015	02/10/2016	02/10/2016	02/20/2018	02/20/2018	04/13/2018	04/17/2018	08/19/2014	08/19/2014	11/10/2014	12/23/2014	12/23/2014	01/21/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	37000	-	43600	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**57700**	-	**23500**	-	**3730**	-	80.5 U	-	**39200**	-	**41800**	**41100**	**40700**	**37600**
Iron	ug/L	Y	300	-	**42300**	-	**23000**	-	80.5 U	-	80.5 U	-	-	-	**41000**	**40500**	**39700**	**38100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	10000	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	250 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	98100	-	22100	-	28000	-	181000	-	**445000**	-	1500 U	1500 U	1500 U	1500 U	1500 U

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-410	MW-410	MW-410	MW-410	MW-410	MW-410	MW-410	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411
			Field Sample ID	M410A9	M410B2	M410B4	M410B5	M410B6	M410B7	M410B8	M411A1	M411A1	M411A1X	M411A2	M411A6	M411A7	M411A8	M411A9
			Sample Date	03/10/2015	12/16/2015	09/29/2016	10/26/2017	03/29/2018	06/04/2018	10/09/2018	08/18/2014	08/18/2014	08/18/2014	11/11/2014	12/22/2014	01/23/2015	03/06/2015	07/01/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	24500	39300 J	42000 J	37500 J	38300 J	39200 J	34200 J	-	52800	-	37900	-	-	55900	47800
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**22900**	**40500**	**40700**	**41000**	**39700**	**38200**	**35900**	-	**48100**	-	**34300**	**135000**	**70600**	**59700**	**46800**
Iron	ug/L	Y	300	**17300**	**38100**	**39500**	**39300**	**39500**	**38000**	**22300**	**48000**	-	-	**34200**	**139000**	**71300**	**61600**	**47100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	1400	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	250 U	250 U	250 U	250 U	250 U	-	-	250 U	-	-	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	8300	1500 U	1500 U	1500 U	1500 U	1500 U	1500 U	-	-	5200	3600 J	**261000**	19300	6100	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411	MW-411	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412
			Field Sample ID	M411B1	M411B2	M411B3	M411B4	M411B5	D03261815	M411B6	M411B7	M411B8	M412A1	M412A1	M412A1X	M412A2	M412A7	M412A8
			Sample Date	10/27/2015	03/31/2016	06/28/2016	10/05/2016	10/31/2017	03/26/2018	03/26/2018	05/31/2018	10/03/2018	08/18/2014	08/18/2014	08/18/2014	11/11/2014	12/22/2014	01/23/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	64100 J	44000	42500	41000 J	35300 J	-	42100 J	36300 J	34500 J	-	41300	-	22800	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**42500**	**41400**	**39800**	**40300**	**34600**	**39500**	**38900**	**34800**	**37100**	-	**36800**	-	**21000**	**64500**	**49700**
Iron	ug/L	Y	300	**39900**	**40000**	**39200**	**40700**	**34900**	**39300**	**39300**	**35700**	**35600**	**35200**	-	-	**21400**	**82900**	**45800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	250 U	250 U	250 U	250 U	-	250 U	250 U	250 U	-	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1800 J	2200 J	1500 U	1500 U	1500 U	-	23400	1800 J	1500 U	-	-	2200 J	4300 J	182000	28300

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-412	MW-413	MW-413	MW-413
			Field Sample ID	M412A9	M412B1	M412B2	M412B3	D03311615	M412B4	M412B5	M412B6	M412B7	M412B8	M412B9	M412C1	M413A1	M413A1	M413A1X
			Sample Date	03/11/2015	07/01/2015	10/26/2015	12/14/2015	03/31/2016	03/31/2016	06/28/2016	10/05/2016	10/31/2017	03/23/2018	05/30/2018	10/10/2018	08/18/2014	08/18/2014	08/18/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	11400	48000	44300	39400 J	-	34300	37000	36200 J	35200 J	29800 J	32900 J	37000 J	-	43400	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**12000**	**46700**	**45400**	**36900J**	**33900**	**33900**	**35000**	**35700**	**36400**	**26700**	**31800**	**33000**	-	**43200**	-
Iron	ug/L	Y	300	**10100**	**43800**	**42900**	**36900J**	-	**33900**	**34400**	**35500**	**34900**	**28000**	**31000**	**39800**	**38500**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9000
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	250 U	250 UJ	-	250 U	250 U	250 U	250 U	250 U	250 U	250 U	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	15500	1500 U	1500 U	-	-	2300 J	1500 U	1500 U	3000 J	3600 J	1500 U	1500 U	-	-	2900 J

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413	MW-413
			Field Sample ID	M413A2	M413A6	M413A7	M413A8	M413A9	M413B1	M413B2	M413B3	M413B4	M413B5	M413B6	M413B7	M413B8	M413B9	M413B9X
			Sample Date	11/11/2014	12/22/2014	01/23/2015	03/11/2015	07/01/2015	10/26/2015	03/31/2016	06/28/2016	10/05/2016	10/30/2017	03/23/2018	05/30/2018	10/10/2018	11/05/2019	11/05/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	40100	-	-	60200	46400	38700	41200	42700	40600 J	36600 J	27700 J	28300 J	38500 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**37700**	**131000**	**92100**	**56700**	**44200**	**44300**	**43700**	**38900**	**38700**	**33100**	**29200**	**28100**	**34100**	**30300**	-
Iron	ug/L	Y	300	**37200**	**135000**	**89600**	**54900**	**39900**	**42400**	**43500**	**38700**	**38900**	**32800**	**25100**	**26900**	**18700**	**28300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1500 U	**279000**	156000	15300	3000 J	1500 U	2300 J	1500 U	1500 U	1500 U	6600	3600 J	1500 U	-	10000 UJ

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-413	MW-413	MW-413	MW-413	MW-425	MW-425	MW-425	MW-425	MW-425	MW-425	MW-425	MW-425	MW-425	MW-425	MW-425
			Field Sample ID	M413C1	D06102015	M413C2	M413C3	M425A1	M425A2	M425A3	M425A4	M425A5	M425A6	M425A7	M425A8	M425A9	D10161915	M425B1
			Sample Date	03/17/2020	06/10/2020	06/10/2020	09/09/2020	08/26/2015	10/27/2015	03/30/2016	06/28/2016	09/28/2016	10/24/2017	03/28/2018	06/05/2018	10/11/2018	10/16/2019	10/16/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	21500	17800	17500	17600	18400 J	16700 J	19600 J	17100 J	14900 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**23300**	-	-	-	**20400**	**15600**	**16300**	**16800**	**16300**	**15300**	**17800**	**17000**	**13300**	**14400**	**14700**
Iron	ug/L	Y	300	**21800**	**13000**	**13000**	**19000**	**19900**	**15200**	**16200**	**16400**	**16200**	**14900**	**19300**	**17600**	**11100**	**15300**	**14400**
Iron, Total Recoverable	ug/L	N	NA	-	13000	14000	24000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	250 UJ	250 U	250 U	250 U	250 U	250 U	250 U	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1500 U	19000 J	15000 J	**1900000J**	19600	1500 U	1500 U	1500 U	1500 J	1500 U	3700 J	1500 U	1500 U	3900 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-425	MW-425	MW-425	MW-425	MW-426	MW-426	MW-426	MW-426	MW-426	MW-426	MW-427	MW-427	MW-427	MW-427	MW-427
			Field Sample ID	M425B1X	M425B2	M425B3	M425B4	M426A1	M426A2	M426A3	M426A4	M426A5	M426A6	M427A1	M427A2	M427A3	M427A4	M427A5
			Sample Date	10/16/2019	03/17/2020	06/12/2020	09/11/2020	08/28/2015	10/27/2015	03/30/2016	06/27/2016	09/29/2016	10/24/2017	08/24/2015	10/29/2015	03/28/2016	06/30/2016	10/04/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	12800	13200	3300	3600	4000 J	12600 J	4900	7300	8900	9300 J	6600 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**18600**	-	-	**13000**	**14000**	**3130**	**3120**	**4630**	**15300**	**6150**	**5540**	**9210**	**9020**	**6340**
Iron	ug/L	Y	300	-	**17700**	**15000**	**15000**	**10100**	**10300**	**2510**	**2900**	**3670**	**13900**	**4720**	**5030**	**7660**	**8620**	**5590**
Iron, Total Recoverable	ug/L	N	NA	-	-	16000	15000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	4700 J	1500 U	930 J	1500 U	43400	5100	37000	1900 J	4400 J	1800 J	22600	12900	3000 J	2400 J	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-427	MW-427	MW-427	MW-427	MW-427	MW-427	MW-427	MW-427	MW-427	MW-427	MW-428	MW-428	MW-428	MW-428	MW-428
			Field Sample ID	M427A6	M427A7	D06051815	M427A8	M427A9	M427B1	M427B1X	M427B2	M427B3	M427B4	M428A1	M428A2	M428A3	M428A4	M428A5
			Sample Date	11/02/2017	04/11/2018	06/05/2018	06/05/2018	10/10/2018	10/16/2019	10/16/2019	03/16/2020	06/11/2020	09/09/2020	08/28/2015	10/29/2015	03/28/2016	06/30/2016	10/03/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	16300 J	13800 J	-	10900 J	15500 J	-	-	-	-	-	24800	26800	29400	27400 J	43400
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**15500**	**12700**	**10100**	**11200**	**14900**	**6680**	-	**11800**	-	-	**25500**	**23900**	**26400**	**26900**	**36300**
Iron	ug/L	Y	300	**13900**	**10700**	**10100**	**10100**	**11900**	**5720**	-	**11500J**	**9000**	**7800**	**23500**	**23800**	**25000**	**26300**	**35500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	9500	8800	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	250 U	-	250 U	250 U	-	-	-	-	-	280 J	250 U	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1900 J	2700 J	-	2100 J	1500 U	-	6900	3900 J	1500 U	9600	8400	1500 U	1500 U	1500 U	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-428	MW-429	MW-429	MW-430	MW-430	MW-430	MW-431	MW-431	MW-431	MW-431	MW-431	MW-431	MW-431	MW-431	MW-432
			Field Sample ID	M428A6	M429A1	M429A2	D08251515	M430A1	M430A2	M431A1	M431A2	M431A3	M431A4	M431A5	M431A6	M431A7	M431A8	M432A1
			Sample Date	11/03/2017	08/26/2015	10/26/2015	08/25/2015	08/25/2015	10/29/2015	08/27/2015	10/26/2015	03/30/2016	06/27/2016	09/30/2016	10/23/2017	03/27/2018	06/04/2018	08/24/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	21800 J	34900	38700	-	20900	18500	49600	47900	52500	50800	49300 J	51700 J	42200 J	48800 J	31000
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**19500**	**33400**	**39600**	**21700**	**21700**	**17700**	**49700**	**50400**	**49600**	**48900**	**47000**	**45900**	**42700**	**49900**	**32100**
Iron	ug/L	Y	300	**20100**	**30800**	**38200**	**21800**	**21000**	33.3 U	**47900**	**50500**	**50500**	**48200**	**48600**	**45900**	**42700**	**48000**	**30600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	250 U	250 U	-	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2100 J	3500 J	1500 U	-	3400 J	1500 U	2400 J	1500 U	3400 J	1500 U	1500 U	1500 U	129000	8600	19300

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-432	MW-442	MW-442	MW-442	MW-442	MW-442	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443
			Field Sample ID	M432A2	M442A1	D1124158	M442A1X	M442A2	M442A2X	M443A1	M443A1X	M443A2	M443A2X	M443A9	M443A9X	M443B1	M443B1X	M443C1
			Sample Date	10/29/2015	11/16/2015	11/24/2015	11/24/2015	02/09/2016	02/10/2016	11/17/2015	11/23/2015	02/10/2016	02/10/2016	02/19/2018	02/19/2018	04/12/2018	04/12/2018	07/30/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	33600	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**35100**	**624**	-	-	**978**	-	**14800**	-	**18300**	-	**10800**	-	**12000**	-	-
Iron	ug/L	Y	300	**32600**	**526**	-	-	**884**	-	**15100**	-	**17900**	-	**9260**	-	**10700**	-	**11000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	9000	-	57600	58100	-	52000	-	48300	-	49300	-	76900	-	92900	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-443	MW-443	MW-443	MW-443	MW-443	MW-443	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444
			Field Sample ID	M443C1X	M443C2	M443C2X	M443C4	M443C5	M443C7	M444A1	M444A1X	M444A2	M444A2X	M444A3	M444A3X	M444A4X	D0521208	M444A5
			Sample Date	07/30/2020	10/28/2020	10/28/2020	04/14/2021	10/05/2021	03/25/2022	11/18/2015	11/19/2015	02/20/2018	02/20/2018	04/18/2018	04/18/2018	11/15/2019	05/21/2020	05/21/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**11000**	-	**10000**	**8400**	**12000**	**45500**	-	**29700**	-	**40100**	-	-	**14600**	**13200**
Iron	ug/L	Y	300	-	**12000**	-	**9500**	**7600**	**11000**	**42100**	-	**28800**	-	**41500**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	880	2400	880	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	250 U	250 U	40 UJ	40 UJ	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	15 U	15 UJ	15 U	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	93000 J	-	52000 J	190000 J	97000 J	**270000J**	-	2300 J	-	1500 U	-	1500 U	84100	**1240000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-444	MW-445	MW-445	MW-445	MW-445	MW-446
			Field Sample ID	M444A5X	M444A6X	M444A7	M444A7X	M444A8	M444A8X	M444A9	M444B1	M444B2	M444B3	M445A1	M445A1X	M445A2	M445A2X	M446A1
			Sample Date	05/21/2020	08/26/2020	11/10/2020	11/10/2020	03/02/2021	03/02/2021	05/13/2021	08/20/2021	11/09/2021	02/08/2022	11/16/2015	11/23/2015	02/10/2016	02/10/2016	11/17/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**15000J**	-	**430**	-	**9900**	**5600**	**3000**	**2000**	**3080**	-	**52500**	-	**8940**
Iron	ug/L	Y	300	-	-	**13000**	-	-	-	-	-	-	-	33.3 U	-	**51600**	-	**8150**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1110000**	70000	-	**330000**	-	92000	86000	22000	150000	86000	-	52400	-	31700	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-446	MW-446	MW-446	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-446R	MW-447	MW-447	MW-447	MW-447	MW-447	MW-447
			Field Sample ID	M446A1X	M446A2	M446A2X	M446RC1	M446RC1X	M446RC2	M446RC2X	M446RC4	M446RC5	M447A1	M447A1X	D0221188	M447A2	M447A2X	M447A3
			Sample Date	11/24/2015	02/09/2016	02/09/2016	07/30/2020	07/30/2020	10/28/2020	10/28/2020	04/15/2021	12/30/2021	11/16/2015	11/24/2015	02/21/2018	02/21/2018	02/21/2018	04/18/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4920**	-	-	-	**4200**	-	**13000**	**8700**	**16700**	-	**18400**	**17000**	-	**32100**
Iron	ug/L	Y	300	-	**4930**	-	**3800**	-	**4300**	-	**12000**	**5600**	**16800**	-	**18300**	**18300**	-	**31100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	4400	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	1600	1900	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	250 U	250 U	40 UJ	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	-	15 U	15 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	17600	-	66000	-	60000 J	-	40000 UJ	180000 J	19000 J	-	17300	28900	-	28600	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-447	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-447R	MW-448	MW-448
			Field Sample ID	M447A3X	M447RA4X	M447RA5	M447RA5X	M447RA6X	M447RA7	M447RA7X	M447RA8	M447RA8X	M447RA9	M447RB1	M447RB2	M447RB3	M448A1	M448A1X
			Sample Date	04/18/2018	11/14/2019	05/19/2020	05/19/2020	08/28/2020	11/09/2020	11/09/2020	03/03/2021	03/03/2021	05/12/2021	08/25/2021	11/09/2021	02/01/2022	12/08/2015	01/11/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**19400**	-	-	-	-	**38000**	-	**40000**	**13000**	**23000**	**26000**	**32700**	-
Iron	ug/L	Y	300	-	-	-	-	-	**34000**	-	-	-	-	-	-	-	**34900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	120000	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	14300	**503000**	-	**1410000**	**3900000**	-	**260000**	-	**450000**	**1200000**	**1100000J**	**900000**	**2000000J**	-	13500

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448
			Field Sample ID	M448A2	M448A2X	M448A3	M448A3X	M448A4	M448A4X	M448A5	M448A5X	M448A6	M448A6X	M448A7	M448A7X	M448A8	M448A8X	M448A9
			Sample Date	07/05/2016	07/05/2016	07/26/2017	07/26/2017	01/19/2018	01/19/2018	04/10/2018	04/10/2018	07/13/2018	07/13/2018	10/10/2018	10/10/2018	01/24/2019	01/24/2019	04/02/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**40900**	-	**43600**	-	**51600**	-	**3380**	-	**38700**	-	**8600**	-	**23200**	-	**6650**
Iron	ug/L	Y	300	**36700**	-	**42300**	-	**51100**	-	**1530**	-	**40900**	-	**7810**	-	137 J	-	245
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	3100 J	-	6700	-	**1390000**	-	**533000**	-	**1280000**	-	222000	-	9700	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448	MW-448
			Field Sample ID	M448A9X	M448B1	M448B1X	M448B2	M448B2X	M448B3	M448B3X	D0728208	M448B4	M448B4X	M448B5	M448B5X	M448B6	M448B6X	M448B7
			Sample Date	04/03/2019	08/01/2019	08/01/2019	01/24/2020	01/24/2020	04/06/2020	04/06/2020	07/28/2020	07/28/2020	07/28/2020	10/23/2020	10/23/2020	01/19/2021	01/19/2021	04/05/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**21800J**	-	**3860**	-	**8640**	-	-	-	-	-	-	**4900**	-	**7200**
Iron	ug/L	Y	300	-	**20500J**	-	**334**	-	**8050**	-	**15000**	**14000**	-	**8300**	-	**3400**	-	**4000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	580000 J	26000 J	-	8500	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	179000	-	**514000J**	-	171000	-	**326000**	140000	-	140000	-	230000	-	120000 J	71000

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-448	MW-448	MW-448	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449
			Field Sample ID	M448B8	M448B9	M448C1	M449A1	M449A1X	M449A2	M449A2X	M449A3	M449A3X	M449A4X	M449A5	M449A5X	M449A6	M449A6X	M449A7
			Sample Date	07/16/2021	10/14/2021	01/25/2022	04/14/2016	04/14/2016	07/11/2016	07/14/2016	07/27/2017	07/27/2017	09/07/2017	01/30/2018	01/30/2018	04/10/2018	04/10/2018	07/12/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**21000**	**11000**	**3100**	**65300**	-	**7530**	-	**52600**	-	-	250	-	**777**	-	**1090**
Iron	ug/L	Y	300	**15000**	**7700**	**970**	**65500**	-	**7230**	-	**46100**	-	-	80.5 U	-	205	-	191 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	34000	14000	32000 J	-	1500 U	-	19600	-	2300 J	**8230000**	-	**30500000**	-	**7150000**	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449
			Field Sample ID	M449A7X	M449A8	M449A8X	M449A9	D0402198	M449B1	D0403198	M449B1X	M449B2	M449B2X	M449B3	M449B3X	M449B4	M449B4X	M449B5
			Sample Date	07/12/2018	10/10/2018	10/10/2018	02/11/2019	04/02/2019	04/02/2019	04/03/2019	04/03/2019	08/01/2019	08/01/2019	02/20/2020	02/20/2020	04/06/2020	04/06/2020	08/25/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**7580**	-	**20800**	**13000J**	**5170J**	-	-	**76800J**	-	**57200**	-	**4300**	-	-
Iron	ug/L	Y	300	-	40 U	-	60.5 J	40 U	40 U	-	-	73 J	-	147 J	-	**547**	-	**12000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2100000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**6060000**	-	**792000**	-	-	-	**891000**	**856000**	-	114000 J	-	151000	-	166000	-

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-449	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450
			Field Sample ID	M449B5X	M449B6	M449B6X	M449B7	M449B7X	M449B8	M449B9	M449C1	M449C2	M450A1	M450A1X	D0707168	M450A2	M450A2X	D0727178
			Sample Date	08/26/2020	10/21/2020	10/22/2020	01/19/2021	01/20/2021	04/05/2021	07/16/2021	10/14/2021	01/25/2022	12/08/2015	12/09/2015	07/07/2016	07/07/2016	07/07/2016	07/27/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	70 J	-	**11000**	**10000**	**20000**	**21000**	**12800**	-	**17400**	**16900**	-	**13400**
Iron	ug/L	Y	300	-	42 J	-	**1100J**	-	41 U	41 U	120 J	56 J	**9460**	-	**16700**	**17200J**	-	**13100**
Iron, Total Recoverable	ug/L	N	NA	-	19000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1200000**	-	79000	-	70000	92000	63000	140000	29000	-	108000	122000	-	122000	129000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450
			Field Sample ID	M450A3	M450A3X	M450A4	M450A4X	M450A5	M450A5X	D0713188	M450A6	M450A6X	M450A7	M450A7X	D0122198	M450A8	M450A8X	M450A9
			Sample Date	07/27/2017	07/27/2017	01/19/2018	01/19/2018	04/09/2018	04/09/2018	07/13/2018	07/13/2018	07/13/2018	10/11/2018	10/12/2018	01/22/2019	01/22/2019	01/22/2019	04/05/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	8300 J	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**13600**	-	**7510**	-	**10600**	-	**34700**	**36300**	-	**42300J**	-	**11600**	**9750**	-	**46300**
Iron	ug/L	Y	300	**12500**	-	**7550**	-	**8880**	-	**30100**	**32200**	-	**23500**	-	**341**	**325**	-	**36700**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	125000	-	245000	-	**483000**	**290000**	-	**288000**	-	15500 J	247000	-	232000 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450	MW-450
			Field Sample ID	M450A9X	M450B1	M450B1X	M450B2	M450B2X	M450B3X	M450B4	M450B4X	M450B5	M450B5X	M450B6	M450B6X	M450B7	M450B8	M450B9
			Sample Date	04/05/2019	07/24/2019	07/24/2019	01/23/2020	01/23/2020	04/07/2020	07/22/2020	07/22/2020	10/26/2020	10/26/2020	01/21/2021	01/21/2021	04/06/2021	07/19/2021	10/15/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**38700J**	-	**38800**	-	-	-	-	-	-	**14000**	-	**35000**	**31000**	**37000**
Iron	ug/L	Y	300	-	**35000J**	-	**6030**	-	-	**18000**	-	**1300**	-	**9100**	-	**33000**	**23000**	**31000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	29000	-	1700	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**388000**	-	140000 J	-	**914000**	**516000**	-	**330000**	-	58000	-	**260000**	**260000**	86000	110000

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-450	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451
			Field Sample ID	M450C1	D1208158B	M451A1	M451A1X	M451A2	M451A2X	M451A3	M451A3X	D0118188	M451A4	M451A4X	M451A5	M451A5X	M451A6	M451A6X
			Sample Date	01/24/2022	12/08/2015	12/08/2015	01/11/2016	07/06/2016	07/06/2016	07/25/2017	07/25/2017	01/18/2018	01/18/2018	01/18/2018	04/10/2018	04/10/2018	07/13/2018	07/13/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**28000**	**7150**	**7340**	-	**7230**	-	**9370**	-	**3320**	**3000J**	-	**5510**	-	**7280**	-
Iron	ug/L	Y	300	**14000**	**6880**	**7420**	-	**7250**	-	**9170**	-	**3100**	**2960**	-	**5170**	-	**6800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	35000	-	-	13300	-	58400	-	7700	17100	-	16900	-	15500	-	39000

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451
			Field Sample ID	M451A7	M451A7X	M451A8	M451A8X	M451A9	M451A9X	M451B1	M451B1X	M451B2	M451B2X	M451B3X	M451B4	M451B4X	M451B5	M451B5X
			Sample Date	10/10/2018	10/10/2018	01/23/2019	01/23/2019	04/04/2019	04/04/2019	07/31/2019	08/01/2019	01/24/2020	01/24/2020	04/07/2020	07/27/2020	07/27/2020	10/23/2020	10/23/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**12000**	-	**21800**	-	**10300**	-	**14400**	-	**11800**	-	-	-	-	-	-
Iron	ug/L	Y	300	**12100**	-	**21300**	-	**9690**	-	**13800**	-	**10700**	-	-	**13000**	-	**18000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	24000	-	18000	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	22100 J	-	20600	-	23300	-	21400 J	-	8700	14700	-	16000	-	13000

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-451	MW-451	MW-451	MW-451	MW-451	MW-451	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452
			Field Sample ID	M451B8	M451B8X	M451B9	M451C1	M451C2	M451C3	M452A1	M452A1X	M452A2	M452A2X	M452A3	M452A3X	M452A5	M452A5X	M452A6
			Sample Date	01/20/2021	01/20/2021	04/05/2021	07/21/2021	10/14/2021	01/24/2022	12/08/2015	01/07/2016	07/11/2016	07/11/2016	07/25/2017	07/25/2017	01/19/2018	01/19/2018	04/10/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	15 UJ	-	-
Iron	ug/L	N	300	**31000**	-	**15000**	**43000**	**46000**	**24000**	**35200**	-	**24700**	-	**14000**	-	**11600**	-	**332**
Iron	ug/L	Y	300	**33000**	-	**14000**	**48000**	**42000**	**21000**	**30000**	-	**17100**	-	**10900**	-	80.5 U	-	106 UJ
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	19000	24000	31000	46000	16000	-	9300	-	42400	-	8500	-	**1210000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452
			Field Sample ID	M452A6X	M452A7	M452A7X	M452A9	D1010188	M452A9X	M452B1	M452B1X	M452B2	M452B2X	M452B3	M452B3X	M452B4	M452B4X	M452B5	M452B5X
			Sample Date	04/10/2018	07/12/2018	07/12/2018	10/09/2018	10/10/2018	10/10/2018	01/23/2019	01/23/2019	04/03/2019	04/03/2019	07/30/2019	07/30/2019	03/02/2020	03/02/2020	04/07/2020	04/07/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**465**	-	**529**	-	-	**6600**	-	**9310**	-	**8530**	-	**2700**	-	**1500J**	-
Iron	ug/L	Y	300	-	**1180**	-	**632**	-	-	**651**	-	**9690**	-	**1590**	-	41.2 U	-	41.2 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**3360000**	-	**2290000**	-	**6460000J**	**4780000J**	-	**1260000**	-	**5280000**	-	**418000**	-	**32500000J**	-	**12900000**

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-452	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453
			Field Sample ID	M452B6	M452B6X	M452B7	M452B7X	M452B8	M452B8X	M452B9	M452C1	M452C2	M452C3	M453A1	M453A1X	M453A2	M453A2X	M453A3	M453A3X
			Sample Date	07/27/2020	07/27/2020	10/22/2020	10/22/2020	01/21/2021	01/21/2021	04/06/2021	07/19/2021	10/14/2021	01/25/2022	12/08/2015	01/07/2016	07/08/2016	07/08/2016	07/26/2017	07/26/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	270	-	**1400**	**6700**	**6400J**	**5500**	98.6 UJ	-	**302**	-	**1060**	-
Iron	ug/L	Y	300	41 U	-	41 U	-	76 J	-	41 U	41 U	180 UJ	200 UJ	33.3 U	-	74.7 U	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	9600	-	460	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**12000000**	-	**990000**	-	**700000**	**4900000**	**3300000**	**2100000**	**3300000**	-	68000	-	56800	-	40100

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453
			Field Sample ID	M453A4	M453A4X	M453A5	M453A5X	M453A6	M453A6X	M453A7	M453A7X	M453A8	M453A8X	M453A9	M453A9X	M453B1	M453B1X	M453B2	M453B2X
			Sample Date	01/19/2018	01/19/2018	04/09/2018	04/09/2018	07/12/2018	07/13/2018	10/12/2018	10/12/2018	01/23/2019	01/23/2019	04/04/2019	04/04/2019	07/31/2019	07/31/2019	02/03/2020	02/03/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1360**	-	150 J	-	53.4 J	-	44 J	-	**737**	-	**2460**	-	**2230**	-	**30500**	-
Iron	ug/L	Y	300	80.5 U	-	80.5 U	-	40 U	-	40 U	-	141 J	-	86.9 J	-	40 U	-	**826**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	199000	-	**374000**	-	**723000**	-	**17700000**	-	**352000**	-	**500000**	-	**569000**	-	**13400000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453	MW-453
			Field Sample ID	D0407208	M453B3	M453B3X	M453B4	M453B4X	D1022208	M453B5	M453B5X	D0120218	M453B6	M453B6X	M453B7	M453B8	M453B9	D0124228A
			Sample Date	04/07/2020	04/07/2020	04/07/2020	08/31/2020	08/31/2020	10/22/2020	10/22/2020	10/22/2020	01/20/2021	01/20/2021	01/20/2021	04/02/2021	07/16/2021	10/12/2021	01/24/2022
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7090J**	**20300**	-	-	-	-	-	-	**640J**	**500J**	-	**800**	**1100**	400 U	**940J**
Iron	ug/L	Y	300	41.2 U	41.2 U	-	41 U	-	41 U	41 U	-	120 J	41 U	-	41 U	41 U	41 U	51 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	220	-	760	580 J	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1640000**	-	**1490000J**	-	**16000000J**	**630000**	-	**690000J**	**480000**	-	**450000J**	**25000000**	**21000000**	**21000000**	**24000000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-453	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455
			Field Sample ID	M453C1	M455A1	M455A2	M455A3	M455A3X	M455A4	M455A4X	M455A5	M455A5X	D0411188	M455A6	M455A6X	M455A7	M455A7X	M455A8
			Sample Date	01/24/2022	12/08/2015	12/16/2015	07/18/2016	07/18/2016	07/26/2017	07/26/2017	01/19/2018	01/19/2018	04/11/2018	04/11/2018	04/11/2018	07/13/2018	07/13/2018	10/09/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**400J**	**9170**	-	**15300**	-	**24600**	-	**30900**	-	**51800**	**50200**	-	**31100**	-	**17800**
Iron	ug/L	Y	300	42 J	**8710**	-	**14300**	-	**23600**	-	**30200**	-	**53100**	**53500**	-	**29300**	-	**13800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**23000000**	-	39200	-	2200 J	-	1500 J	-	1500 U	2400 J	-	1900 J	-	1500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455
			Field Sample ID	M455A8X	M455A9	M455A9X	M455B1	M455B1X	D0724198	M455B2	M455B2X	M455B3	M455B3X	M455B4X	M455B5	M455B5X	M455B6	M455B6X
			Sample Date	10/09/2018	01/23/2019	01/23/2019	04/05/2019	04/05/2019	07/24/2019	07/24/2019	07/24/2019	03/03/2020	03/03/2020	04/06/2020	07/22/2020	07/22/2020	10/26/2020	10/26/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**29600**	-	**26800**	-	**24100J**	**23100J**	-	**18400**	-	-	-	-	-	-
Iron	ug/L	Y	300	-	**28400**	-	**25800**	-	**23500J**	**16500J**	-	**18200**	-	-	**18000**	-	**13000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	15000	-	13000	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2100 J	-	1500 U	-	1500 U	1500 UJ	-	1500 UJ	-	1500 U	1500 U	-	1500 U	-	160 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-455	MW-455	MW-455	MW-455	MW-455	MW-455	MW-456	MW-456	MW-456	MW-456	MW-456	MW-457	MW-457	MW-457	MW-458
			Field Sample ID	M455B7	M455B7X	M455B8	M455B9	M455C1	M455C2	M456A1	M456A2	M456A2X	M456A3	M456A3X	M457A1	M457A2	M457A2X	D10271515B
			Sample Date	01/22/2021	01/22/2021	04/06/2021	07/21/2021	10/15/2021	01/26/2022	10/29/2015	07/14/2016	07/14/2016	10/19/2016	10/20/2016	10/27/2015	07/14/2016	07/14/2016	10/27/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	490	-	-	-	-	14700	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**16000**	-	**14000**	**14000**	**20000**	**20000**	**3860**	**10000**	-	**9180**	-	**14200**	**15900**	-	**29800**
Iron	ug/L	Y	300	**17000**	-	**14000**	**16000**	**20000**	**18000**	**355**	**10100**	-	**8650**	-	**13900**	**12200**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	250 U	-	40 U	-	42 J	250 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	15 U	-	-	-	-	25 J	-
Sulfate (SO4)	ug/L	N	250000	-	1500 J	1500 U	1500 U	1500 U	1900 J	55300	-	50000 U	-	13600 J	38900	-	125000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458
			Field Sample ID	M458A1	M458A2	M458A2X	M458A3	M458A3X	M458A4	M458A4X	M458A5	M458A5X	M458A6	M458A6X	M458A7	M458A7X	M458A8	M458A8X
			Sample Date	10/27/2015	07/13/2016	07/14/2016	09/01/2016	09/01/2016	10/19/2016	10/20/2016	12/07/2016	12/07/2016	01/25/2017	01/25/2017	04/20/2017	04/20/2017	07/12/2017	07/12/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	28100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**29900**	**10800**	-	**18500**	-	**22000**	-	**30300**	-	**24800**	-	**28000**	-	**27800**	-
Iron	ug/L	Y	300	**24400**	**9190**	-	**9940**	-	**17500**	-	**22600**	-	**22100**	-	**24700**	-	**24200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	40 U	-	-	-	40 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**454000**	-	82000	-	114000	-	210000	-	**370000J**	-	143000	-	132000	-	130000

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458	MW-458
			Field Sample ID	D1020178	D1020178X	M458A9	M458A9X	M458B1	M458B1X	M458B2	M458B2X	M458B3	M458B3X	M458B4	M458B4X	M458B7	M458B7X	M458B8
			Sample Date	10/20/2017	10/20/2017	10/20/2017	10/20/2017	01/10/2018	01/10/2018	05/24/2018	05/24/2018	08/28/2018	08/28/2018	11/19/2018	11/19/2018	08/05/2019	08/05/2019	09/09/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**41200**	-	**40800**	-	**49300**	-	**28200**	-	**30700**	-	**61300**	-	**23500**	-	-
Iron	ug/L	Y	300	**35800**	-	**35700**	-	**40200**	-	**26700**	-	**26400**	-	**55700**	-	**20900**	-	**38000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	37000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	177000	-	192000	-	151000	-	55600	-	78900	-	80500	-	12900	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-458	MW-458	MW-458	MW-458	MW-458	MW-459	MW-459	MW-459	MW-459	MW-459	MW-460	MW-460	MW-460	MW-460	MW-460
			Field Sample ID	M458B9	M458B9X	D0824218	M458C4	M458C2	M459A1	M459A2X	M459A2	M459A3	M459A3X	M460A1	M460A2	M460A2X	M460A3	M460A3X
			Sample Date	02/03/2021	02/03/2021	08/24/2021	08/24/2021	02/09/2022	10/27/2015	07/11/2016	07/12/2016	10/18/2016	10/19/2016	10/28/2015	07/13/2016	07/14/2016	10/20/2016	10/21/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	12700	-	-	-	-	7100	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**35000**	-	**48000**	**47000**	**61000**	**12200**	-	**12900**	**12700**	-	**8090**	**1030**	-	**1580**	-
Iron	ug/L	Y	300	**32000**	-	**42000**	**43000**	**62000**	**12300**	-	**12800**	**12600**	-	**6250**	**835**	-	**1380**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	300 J	250 U	40 U	-	-	40 U	250 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	15 U	-	-	15 U	-	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	89000 J	**1200000**	220000 J	150000	14800	10000 U	-	-	25000 U	33300	-	13900 J	-	47700

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-461	MW-461	MW-461	MW-461	MW-461	MW-461	MW-461	MW-462	MW-462	MW-462	MW-462	MW-462	MW-463	MW-463	MW-463
			Field Sample ID	M461A1	M461A2	M461A2X	D1019161	M461A3	D1020161	M461A3X	M462A1	M462A2X	M462A2	M462A3	M462A3X	M463A2	M463A3	M463A3X
			Sample Date	10/29/2015	07/18/2016	07/19/2016	10/19/2016	10/19/2016	10/20/2016	10/20/2016	10/27/2015	07/11/2016	07/12/2016	10/18/2016	10/19/2016	10/28/2015	07/13/2016	07/14/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	18400	-	-	-	-	-	-	12200	-	-	-	-	7200	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**16600**	**20100**	-	**6620**	**6480**	-	-	**9960**	-	**15000**	**6330**	-	**7040**	**908**	-
Iron	ug/L	Y	300	**15900**	**11100**	-	**6590**	**6320**	-	-	**9680**	-	**14500**	**6700**	-	**5790**	**827**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	40 U	-	-	40 U	40 U	250 U	40 U	-	-	40 U	250 U	-	90 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	19 J	-	-	-	-	-	15 U	-	-	15 U	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	27500	-	25000 U	-	-	25000 U	25000 U	15800	12500 U	-	-	25000 U	49900	-	66200

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-463	MW-463	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464	MW-464
			Field Sample ID	M463A4	M463A4X	M464A1	M464A1X	D0208168	M464A2	M464A2X	M464A9	M464A9X	M464B1	M464B1X	M464C3	M464C4	D1229218	M464C5
			Sample Date	10/20/2016	10/21/2016	11/16/2015	11/23/2015	02/08/2016	02/08/2016	02/08/2016	02/19/2018	02/19/2018	04/13/2018	04/13/2018	04/14/2021	10/01/2021	12/29/2021	12/29/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2570**	-	**59800**	-	**55600**	**54500**	-	**51300**	-	**48200**	-	**41000**	**36000**	**24000**	**24000**
Iron	ug/L	Y	300	**2450**	-	**59900**	-	**53300**	**54600**	-	**47000**	-	**41000**	-	**32000**	**33000**	**21000**	**22000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	3300	6100	4900	4900
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	-	-	-	-	-	-	-	250 U	40 UJ	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	-	-	-	-	-	-	82 J	20 J	15 U	15 UJ
Sulfate (SO4)	ug/L	N	250000	-	65800	-	1600 J	1600 J	-	1600 J	-	6500	-	17200	27000 J	2000 UJ	78000 J	84000 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-464	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465	MW-465
			Field Sample ID	M464C6	M465A1	M465A1X	M465A2	M465A2X	M465A3	M465A3X	M465A4X	M465A5	M465A5X	M465A6X	D1110208	M465A7	M465A7X	M465A8
			Sample Date	03/25/2022	11/19/2015	11/19/2015	02/21/2018	02/21/2018	04/19/2018	04/19/2018	11/15/2019	05/20/2020	05/20/2020	08/31/2020	11/10/2020	11/10/2020	11/10/2020	03/03/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**37000**	**87700J**	-	**91600**	-	**44700**	-	-	**81100**	-	-	**48000J**	**52000J**	-	**15000**
Iron	ug/L	Y	300	**29000**	**84900J**	-	**90600**	-	**46700**	-	-	-	-	-	**49000**	**50000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	3700	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	13000 J	-	5300	-	1500 U	-	3300 J	1500 U	-	3600 J	4800 UJ	4900 J	-	36000 J	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-465	MW-465	MW-465	MW-465	MW-465	MW-468	MW-468	MW-468	MW-468	MW-468	MW-468	MW-468	MW-469	MW-469	MW-469
			Field Sample ID	M465A8X	M465A9	M465B1	M465B2	M465B3	M468A1	M468A2	M468A3	M468A4	M468A5	M468A6	M468A7	M469A1	M469A2	M469A3
			Sample Date	03/03/2021	05/14/2021	08/20/2021	11/09/2021	02/03/2022	12/15/2015	03/30/2016	06/27/2016	10/03/2016	10/23/2017	03/23/2018	06/04/2018	12/17/2015	03/29/2016	06/29/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	39300 J	45500	42800	44400	47200 J	66300 J	46000 J	21300 J	23600	24400 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**65000J**	**80000**	**44000**	**67000**	**39100**	**45400**	**43100**	**44400**	**46900**	**61700**	**44600**	**20400**	**20000**	**22700**
Iron	ug/L	Y	300	-	-	-	-	-	**37900**	**43600**	**43700**	**44900**	**46800**	**61500**	**45500**	**20700**	**19800**	**22700**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	250 U	250 U	250 U	250 U	250 U	250 UJ	250 U	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	42000	2800 J	1500 U	1500	7300	105000	26300	8900	2900 J	1500 U	45100	7800	6200	43600	23300

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-469	MW-469	MW-469	MW-469	MW-469	MW-470	MW-470	MW-470	MW-470	MW-470	MW-470	MW-470	MW-470	MW-471	MW-471
			Field Sample ID	M469A4	M469A5	M469A6	M469A7	M469A8	M470A1	M470A2	M470A3	M470A4	M470A5	M470A6	M470A7	M470A8	M471A1	M471A2
			Sample Date	10/07/2016	10/30/2017	03/29/2018	06/04/2018	10/04/2018	12/18/2015	03/29/2016	06/29/2016	10/06/2016	10/27/2017	03/19/2018	06/06/2018	10/04/2018	12/16/2015	03/29/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	17500 J	5100 J	6400 J	3400 J	7670 J	6100 J	3700	370 J	12500 J	12700 J	54 J	51 J	15 UJ	6600 J	8600
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**13600**	**9700**	**3870**	**2120**	**8260**	**6170**	**3850**	**428**	**11700**	**12600**	80.5 U	83.1 J	74.4 J	**6460**	**9580**
Iron	ug/L	Y	300	**13000**	**3960**	**1140**	**3730**	**13200**	**6360**	**4120**	**308**	**11700**	**13000**	80.5 U	80.5 U	40 U	**6020**	**8600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	320 J	600	550	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1500 U	15600	146000	139000	124000	47400	45000	48100	22100	14100	200000	247000	155000	2100 J	2100 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-471	MW-471	MW-471	MW-471	MW-471	MW-471	MW-472	MW-472	MW-472	MW-472	MW-472	MW-472	MW-472	MW-472	MW-472
			Field Sample ID	M471A3	D10061615	M471A4	M471A5	M471A6	M471A7	M472A1	M472A2	M472A3	M472A4	D1101175	M472A5	M472A6	M472A7	M472A8
			Sample Date	06/29/2016	10/06/2016	10/06/2016	10/27/2017	03/19/2018	05/29/2018	12/21/2015	04/08/2016	06/29/2016	10/07/2016	11/01/2017	11/01/2017	03/20/2018	05/29/2018	10/03/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	660 J	-	10200 J	11700 J	77 J	29 J	17100	10600	9400 J	21200 J	-	11100	7200 J	7100 J	5940 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**976**	**10400**	**10000**	**10500**	223	289	**16300**	**27000**	**7760**	**20200**	**10000**	**10700**	**7090**	**7200**	**6990**
Iron	ug/L	Y	300	**599**	-	**10200**	**10100**	80.5 U	80.5 U	**14700**	**9610**	**10000**	**21000**	-	**9580**	**7570**	**10100**	**6870**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	250 U	500	1200	250 U	250 U	250 U	250 U	-	250 U	250 U	430 J	3800
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	27400	-	1500 U	1500 U	85900	51900	**565000**	228000	61400	151000	-	66900	73500	73500	69000

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473
			Field Sample ID	M473A1	M473A1X	D0715168	M473A2	M473A2X	D1228168	M473A3	M473A3X	M473A4	M473A4X	D0611188A	M473A7	M473A7X	M473A8	M473A8X
			Sample Date	12/16/2015	12/16/2015	07/15/2016	07/15/2016	07/15/2016	12/28/2016	12/28/2016	12/28/2016	01/27/2017	01/27/2017	06/11/2018	06/11/2018	06/11/2018	09/04/2018	09/04/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	49.5 J	-	180 J	158 J	-	**352**	**346**	-	**1640**	-	**1220J**	**860J**	-	**3100**	-
Iron	ug/L	Y	300	33.3 U	-	117 J	164 J	-	130 UJ	103 UJ	-	74.7 U	-	80.5 U	80.5 U	-	**1120**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	200	-	200	-	180
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	81 J	-	40 UJ	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	40 J	-	29 J	-	-
Sulfate (SO4)	ug/L	N	250000	-	119000	62600	-	65700	-	-	73500	-	66100	22400	-	25600	-	42100

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473
			Field Sample ID	M473A9X	M473B2	M473B2X	D0603198	M473B3	M473B3X	M473B4	M473B4X	D1210198	M473B5	D1211198A	M473B5X	D0312208	M473B6	M473B6X
			Sample Date	12/04/2018	03/18/2019	03/18/2019	06/03/2019	06/03/2019	06/03/2019	09/09/2019	09/09/2019	12/10/2019	12/10/2019	12/11/2019	12/11/2019	03/12/2020	03/12/2020	03/12/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1090**	-	**373J**	88.8 J	-	**8330**	-	**3500**	**2860**	-	-	**9030**	**8790**	-
Iron	ug/L	Y	300	-	40 U	-	44.6 J	69.3 J	-	**4510**	-	**2860**	**2600**	-	-	**7360**	**5590**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	100	-	3 U	100 J	-	61 J	-	350	-	-	66	51 J	390	-	370
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	820	290 J	-	250 U	-	250 U	-	-	250 U	250 U	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 U	-	250 U	250 U	-	250 U	-	250 U	-	-	250 U	250 U	250 U	-	250 U
Sulfate (SO4)	ug/L	N	250000	71900	-	34400	21600	-	21500	-	44000	-	-	16200 J	16300	47500	-	46100

Notes:
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Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-473	MW-475	MW-475	MW-475	MW-475	MW-476	MW-476	MW-476	MW-476
			Field Sample ID	D0605208	M473B7	M473B7X	D0911208	M473B8	M473B8X	M473B9	M475A1	M475A2	M475A3	M475A3X	D0724188	M476A1	M476A1X	M476A2
			Sample Date	06/05/2020	06/05/2020	06/05/2020	09/11/2020	09/11/2020	09/11/2020	03/24/2022	01/31/2017	08/02/2017	01/22/2018	01/22/2018	07/24/2018	07/24/2018	07/24/2018	02/19/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	50000 J	43300 J	12900 J	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	**15000**	**52000**	**41600**	**44400**	-	**1630J**	**101000J**	-	**2130**
Iron	ug/L	Y	300	**5400J**	**6600J**	-	52 J	80 J	-	**11000**	-	-	-	-	280 J	**374J**	-	40 U
Iron, Total Recoverable	ug/L	N	NA	6600	6500	-	430 J	230 J	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	160	-	220 J	44	-	43	1300	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	-	360 UJ	40 UJ	250 U	250 U	-	250 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 U	-	250 UJ	-	-	250 U	15 U	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	45000	-	45000 J	-	-	25000	46000 J	1500 U	15000	-	2400 J	14900	-	16800	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-476	MW-478	MW-478	MW-478
			Field Sample ID	M476A2X	M476A3	M476A3X	M476A4	M476A4X	M476A5	M476A5X	D0205208	M476A6	M476A6X	M476A7	M476A7X	M478A1	M478A2	M478A3
			Sample Date	02/19/2019	05/21/2019	05/21/2019	08/12/2019	08/12/2019	11/05/2019	11/05/2019	02/05/2020	02/05/2020	02/05/2020	05/13/2020	05/13/2020	04/07/2016	06/28/2016	09/30/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	33500	38200	36800 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**979**	-	**3750**	-	**839**	-	**816**	**762**	-	**4830**	-	**31600**	**35000**	**34800**
Iron	ug/L	Y	300	-	40 U	-	63.8 UJ	-	40 U	-	43.4 J	101 J	-	**2610**	-	**32400**	**34900**	**36200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	31500	-	13000	-	20700	-	149000	71300	-	70400 J	-	**567000**	32700	58800	7400

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-478	MW-478	MW-478	MW-479	MW-479	MW-479	MW-479	MW-479	MW-479	MW-479	MW-479	MW-479	MW-480	MW-480	MW-480
			Field Sample ID	M478A4	M478A5	M478A6	M479A1	M479A2	M479A3	M479A4	M479A5	M479A6	D10081815	M479A7	M473A9	M480A1	M480A2	M480A3
			Sample Date	10/23/2017	03/27/2018	06/04/2018	04/07/2016	06/27/2016	10/03/2016	10/26/2017	03/27/2018	06/05/2018	10/08/2018	10/08/2018	12/04/2018	04/08/2016	06/27/2016	09/28/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	20300 J	34900 J	1200 J	12000	13300	16300	24900 J	1200 J	6300 J	45000 J	13000 J	-	6400	3200	3800 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**20500**	**46300**	**1450**	**11500**	**14800**	**14000**	**27400**	**2300**	**5550**	**23800**	**28100**	**2700**	**5360**	**3170**	**3760**
Iron	ug/L	Y	300	**15800**	**43200**	**1020**	**13000**	**13400**	**14300**	**26900**	236	**6330**	**5160**	**6870**	**357**	**5520**	**2770**	**3350**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U	410 J	460 J	-	250 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3000 J	73100	18500	26100	6800	1500 U	2200 J	15100	4700 J	7400	8100	-	11600	1500 U	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-480	MW-480	MW-480	MW-481	MW-481	MW-481	MW-481	MW-481	MW-482	MW-482	MW-490	MW-490	MW-491	MW-491	MW-494
			Field Sample ID	M480A4	M480A5	M480A6	M481A1	M481A2	M481A3	M481A4	M481A5	M482A1	M482A2	M490A1	M490A2	M491A1	M491A2	M494A1
			Sample Date	10/24/2017	03/28/2018	06/05/2018	09/28/2016	10/25/2017	03/28/2018	06/04/2018	10/09/2018	09/28/2016	10/25/2017	06/17/2016	09/08/2016	06/17/2016	09/08/2016	09/14/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	3500 J	8700 J	7300 J	22100 J	8600 J	9100 J	9700 J	12200 J	44800 J	44300 J	28100 J	45400 J	14700 J	17300 J	156000 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3020**	**8760**	**6970**	**16100**	**8120**	**9150**	**9380**	**12600**	**38000**	**40800**	**28400**	**60700**	**12600**	**14600**	**142000**
Iron	ug/L	Y	300	**3000**	**8660**	**6770**	**16800**	**8120**	**8640**	**9480**	**11900**	**39300**	**40700**	-	-	-	-	**135000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	540	2100	6800	9900	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	250 U	250 U	250 U	250 UJ	250 U	250 U	250 U	250 U	250 UJ	250 U	250 U	250 U	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2400 J	14100	1500 U	**360000**	135000 J	22300	69900	1500 U	104000	3800 J	32100	16800	31300	5000	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-494	MW-494	MW-494	MW-494	MW-494	MW-494	MW-494	MW-494	MW-494	MW-494	MW-495	MW-495	MW-495	MW-495	MW-495
			Field Sample ID	M494A1X	M494A2	M494A2X	M494A3	M494A4	M494A5	M494A6	D08272015	M494A7	M494A8	M495A1	M495A1X	M495A2	M495A2X	M495A3
			Sample Date	09/14/2016	12/27/2016	12/27/2016	06/18/2019	07/15/2019	08/22/2019	05/26/2020	08/27/2020	08/27/2020	12/03/2020	09/15/2016	09/15/2016	12/21/2016	12/21/2016	06/18/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	54600 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**55800**	-	**71600**	**70900**	**59600**	**124000**	-	-	**26000**	**41400**	-	**54600**	-	**63200**
Iron	ug/L	Y	300	-	**32100**	-	**56200**	**60000**	**57300**	**103000**	**40000**	**39000**	**16000**	**46900**	-	**56400**	-	**59300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	54000	54000	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**474000**	-	51500	25900	19500 J	8700	13400	22000	26000	6900	-	9300	-	4900 J	1800 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-495	MW-495	MW-495	MW-495	MW-495	MW-495	MW-496	MW-496	MW-496	MW-496	MW-496	MW-496	MW-499	MW-499	MW-499
			Field Sample ID	M495A4	M495A5	M495A6	M495A7	M495A8	M495A9	M496A1	M496A1X	D1221168	D1221168X	M496A2	M496A2X	M499A1	M499A1X	M499A2
			Sample Date	07/16/2019	08/22/2019	04/02/2020	05/27/2020	08/28/2020	12/02/2020	09/15/2016	09/15/2016	12/21/2016	12/21/2016	12/21/2016	12/21/2016	11/27/2017	11/27/2017	01/31/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**52500**	**45400**	**64000**	**60300**	-	**57000**	**26300**	-	**30700**	-	**29400**	-	142 UJ	-	80.5 U
Iron	ug/L	Y	300	**51500**	**45300**	**60200**	**57000**	**50000**	**52000**	**27400**	-	**30300**	-	**30200**	-	80.5 U	-	80.5 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	49000	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1500 U	1500 U	2500 J	4000 J	3100 J	2500 J	-	1900 J	-	3700 J	-	3000 J	-	24500	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-499	MW-499	MW-499	MW-499	MW-499	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500	MW-500
			Field Sample ID	M499A2X	M499A3	M499A3X	M499A4	M499A4X	M500A1	M500A1X	M500A2	M500A2X	M500A3	M500A3X	M500A4	M500A4X	M500A6	M500A7
			Sample Date	01/31/2018	03/14/2019	03/14/2019	05/22/2019	05/22/2019	11/16/2017	11/16/2017	01/30/2018	01/30/2018	03/11/2019	03/11/2019	05/10/2019	05/10/2019	06/02/2021	09/24/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**680**	-	**302**	-	84.9 J	-	**1480**	-	**3270**	-	198	-	**3400**	**2800**
Iron	ug/L	Y	300	-	40 U	-	40 U	-	80.5 U	-	80.5 U	-	90 J	-	34.2 U	-	41 U	56 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	3 U	4.5 J
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	1400 J	900 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	20500	-	6300	-	30900	-	41400	-	36600	-	214000	-	24800	160000 J	**260000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-500	MW-500	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501	MW-501
			Field Sample ID	D0331221B	M500A9	M501A1	D1117178	M501A1X	M501A2	M501A3	M501A3X	M501A4	M501A4X	M501A5	M501A5X	M501A6	M501A6X	M501A7
			Sample Date	03/31/2022	03/31/2022	11/16/2017	11/17/2017	11/17/2017	01/30/2018	03/12/2019	03/12/2019	05/22/2019	05/22/2019	08/16/2019	08/16/2019	10/31/2019	10/31/2019	02/11/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**440**	**430**	**677**	-	-	**469**	**3010**	-	**360**	-	**433**	-	**1100J**	-	**1530**
Iron	ug/L	Y	300	82 U	82 U	80.5 U	-	-	**391**	40 U	-	**377**	-	67.3 J	-	40 UJ	-	112 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	12	7.3 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	42 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	260000 UJ	**260000J**	-	33400 J	53000 J	24400	-	81200	-	9200	-	15500	-	15200 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-501	MW-501	MW-501	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504
			Field Sample ID	M501A7X	M501A8	M501A8X	M504A1	M504A2	M504A2X	M504A3	M504A4	M504A4X	M504A9	M504A5	M504A5X	M504A6	M504A6X	M504A7
			Sample Date	02/11/2020	05/15/2020	05/15/2020	07/28/2016	08/31/2016	08/31/2016	10/17/2016	12/07/2016	12/07/2016	01/09/2017	01/20/2017	01/20/2017	04/18/2017	04/18/2017	07/12/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	14300 J	-	-	19300 J	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1090**	-	**13800**	**16200**	-	**16200**	**15900**	-	**11600**	**28300**	-	**24000**	-	**8230**
Iron	ug/L	Y	300	-	261	-	**11600**	**11400**	-	**14500**	**17600**	-	**7410**	**25300**	-	**23900**	-	**4980**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	-	250 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1600000**	-	44600	7900	-	1800 J	1700 J	-	1500 U	-	-	118000	-	**290000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504	MW-504
			Field Sample ID	M504A7X	M504A8	M504A8X	M504A9X	M504B1	M504B1X	M504B2	M504B2X	M504B3	M504B3X	M504B6	M504B6X	M504B7	M504B8	M504B8X
			Sample Date	07/12/2017	10/18/2017	10/18/2017	01/09/2018	05/25/2018	05/25/2018	08/17/2018	08/17/2018	11/15/2018	11/15/2018	08/06/2019	08/06/2019	09/04/2020	02/03/2021	02/03/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**9550**	-	-	**4140**	-	**5610**	-	**10100**	-	**6380**	-	-	**2500**	-
Iron	ug/L	Y	300	-	**8110**	-	-	**3410**	-	**3340**	-	**8340**	-	**3800**	-	**6500**	**1900J**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	11000	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	31900	-	2600 J	132000	-	**324000**	-	4500 J	-	68900	-	37300	-	-	48000 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-504	MW-504	MW-506	MW-506	MW-506	MW-506	MW-506	MW-506	MW-506	MW-506	MW-508	MW-508	MW-508	MW-508	MW-508
			Field Sample ID	M504B9	M504C1	M506A1	M506A2	M506A3	M506A4	M506A4X	M506A7	M506A8	M506B1	M508A1	M508A2	M508A3	M508A4	M508A4X
			Sample Date	08/24/2021	02/04/2022	09/19/2016	01/25/2017	07/26/2017	01/24/2018	01/25/2018	06/03/2021	09/24/2021	03/23/2022	09/19/2016	01/23/2017	07/24/2017	01/24/2018	01/24/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	52600 J	8900 J	35500 J	24600 J	-	-	-	-	33000 J	150 J	32400	2600 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1500**	**25000**	**35500**	**8860**	**39900**	**24100**	-	**1700**	**22000**	**6000**	**30400**	127 J	**30600**	**2490**	-
Iron	ug/L	Y	300	**770**	**20000**	**22900**	-	-	-	-	**620**	**2000**	300	**31200**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	1200	2700	740	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	600	250 U	-	250 U	650 J	40 UJ	88 J	250 U	350 J	280 J	-	620
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	15 U	15 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	38000	200000	**366000**	193000	109000	-	118000	**280000J**	67000	13000 J	6800	86500	38200	-	90900

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510
			Field Sample ID	M510A1	M510A1X	M510A2	M510A2X	M510A3	M510A3X	M510A4	M510A4X	M510A5	M510A5X	D0315198	M510A6	M510A6X	M510A7	M510A7X
			Sample Date	12/29/2016	12/29/2016	02/02/2017	02/02/2017	06/12/2018	06/12/2018	09/04/2018	09/04/2018	12/03/2018	12/03/2018	03/15/2019	03/15/2019	03/15/2019	06/06/2019	06/06/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**918**	-	**747**	-	**38000**	-	**33200**	-	**10300**	-	**7790**	**7470**	-	**8110**	-
Iron	ug/L	Y	300	74.7 U	-	74.7 U	-	**606**	-	50.3 J	-	**622**	-	40 U	40 U	-	63.8 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	98	-	130	-	200	30 U	-	30 U	-	560 J
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	200	-	250 U	-	250 U	1400	-	1500	-	720
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	-	-	-	250 U	250 U	-	250 U	-	250 U
Sulfate (SO4)	ug/L	N	250000	-	65200	-	52100	-	42800	-	44400	-	44800	29700	-	34000 J	-	41300

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510	MW-510
			Field Sample ID	M510A8	M510A8X	M510A9	M510A9X	M510B1	M510B1X	M510B2	M510B2X	M510B3	M510B3X	M510B4X	D0602211	M510B5	M510B6	M510B7
			Sample Date	09/10/2019	09/10/2019	12/10/2019	12/11/2019	03/12/2020	03/12/2020	06/15/2020	06/15/2020	09/10/2020	09/10/2020	02/26/2021	06/02/2021	06/02/2021	09/24/2021	12/17/2021
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4800**	-	**206000**	-	**1640**	-	-	-	-	-	-	**11000**	**10000J**	**2300**	**1800**
Iron	ug/L	Y	300	155 UJ	-	**1650**	-	41.2 U	-	**690**	-	120 UJ	-	-	270 J	**2100J**	93 UJ	67 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	2200	-	890	-	-	-	-	-	-
Methane	ug/L	N	NA	-	100	-	21	-	5.3	-	60	-	430	-	28	30 J	75	75
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	250 U	-	1800	-	250 UJ	-	250 UJ	-	72 J	40 UJ	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 UJ	-	250 U	-	250 U	-	250 UJ	-	250 UJ	-	15 U	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	35100	-	41100	-	147000	-	84000 J	-	92000	52000	50000 J	45000 J	83000	50000 J

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-510	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511
			Field Sample ID	M510B8	M511A1	M511A1X	M511A2	M511A2X	M511A3	M511A3X	D0905188A	M511A4	M511A4X	D1204188	M511A5	M511A5X	M511A6	M511A6X
			Sample Date	03/22/2022	12/29/2016	12/29/2016	01/27/2017	01/27/2017	06/08/2018	06/08/2018	09/05/2018	09/05/2018	09/07/2018	12/04/2018	12/04/2018	12/04/2018	03/18/2019	03/18/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2300**	**8810**	-	**450**	-	**62400**	-	**10300J**	**27900J**	-	**1210**	**1630J**	-	41 UJ	-
Iron	ug/L	Y	300	82 U	**6860**	-	74.7 U	-	**346**	-	40 UJ	43.3 UJ	-	40 U	40 U	-	**982**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	6	-	-	-	-	-	13	-	-	3 U	14	-	3.5 J	-	3 U
Nitrogen, Nitrate as N	ug/L	N	10000	110 J	-	-	-	-	-	1000 U	-	-	**21400**	**22900**	-	**24300J**	-	**16100**
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	430	-	-	250 U	250 U	-	250 UJ	-	250 U
Sulfate (SO4)	ug/L	N	250000	43000 J	-	38100	-	90200	-	**278000**	-	-	**265000**	**276000**	-	**293000J**	-	249000

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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-511	MW-512	MW-512	MW-512
			Field Sample ID	M511A7	M511A7X	M511A8	M511A8X	M511A9	M511A9X	M511B1	M511B1X	M511B2	M511B2X	M511B3	M511B3X	M512A1X	M512A1	M512A2
			Sample Date	06/04/2019	06/04/2019	09/10/2019	09/10/2019	12/10/2019	12/13/2019	03/12/2020	03/12/2020	06/17/2020	06/17/2020	09/09/2020	09/09/2020	03/13/2017	03/16/2017	05/04/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**49600**	-	**443**	-	**4480**	-	**2920**	-	-	-	-	-	-	**4800**	**926**
Iron	ug/L	Y	300	57.4 J	-	40 U	-	40 U	-	41.2 U	-	41 U	-	41 U	-	-	**2420**	74.7 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	550	-	40 U	-	-	-	-
Methane	ug/L	N	NA	-	4.1 UJ	-	46	-	280	-	3 U	-	3 U	-	3 U	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	4200	-	390 J	-	610	-	3000	-	860 J	-	780 UJ	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	-	250 UJ	-	250 U	-	250 U	-	250 UJ	-	250 UJ	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	189000	-	**284000**	-	221000	-	**289000**	-	**390000**	-	**390000**	4700 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512
			Field Sample ID	M512A2X	M512A3	M512A3X	M512A4	M512A4X	M512A5	M512A5X	M512A6	M512A6X	M512A7	M512A7X	M512A8	M512A8X	M512A9	M512A9X
			Sample Date	05/05/2017	06/08/2018	06/08/2018	09/20/2018	09/20/2018	12/05/2018	12/05/2018	03/07/2019	03/07/2019	06/05/2019	06/05/2019	09/10/2019	09/10/2019	12/11/2019	12/11/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	754	-	-	-	1130 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	180 J	-	51 J	-	52.1 UJ	-	-	-	114 UJ	-	527 J	-	651 J	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	830
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	250 U	-	250 U	-	40 U	-	250 U	-	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	250 U	-	250 U	-	89	-	250 U	-	250 UJ	-	250 U
Sulfate (SO4)	ug/L	N	250000	11400	-	4800 J	-	1500 U	-	3300 J	-	2000 J	-	4200 J	-	4700 J	-	5200

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-512	MW-523	MW-523	MW-523	MW-523
			Field Sample ID	M512B1	M512B1X	D0616208	M512B2	M512B2X	D0908208	M512B3	M512B3X	M512B4X	M512B5	M512B6	M523A1	M523A2	M523A3	M523A4
			Sample Date	03/12/2020	03/12/2020	06/16/2020	06/16/2020	06/16/2020	09/08/2020	09/08/2020	09/08/2020	02/19/2021	06/01/2021	10/25/2021	10/31/2017	03/20/2018	05/30/2018	10/03/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	2100 J	2200 J	-	1400 J	1400 J	-	-	-	-	53 J	100 J	67 J	113 J
Ferrous Iron	ug/L	Y	NA	31200	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	-	**8000**	**4500**	**2280**	**1330**	**1030**	**666**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	**2100**	**4300**	80.5 U	80.5 U	80.5 U	55.5 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	120	1400	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	250 U	-	250 U	250 U	-	250 U	-	40 UJ	40 UJ	840	250 U	990	470 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	250 U	-	250 U	250 U	-	250 U	-	15 U	15 UJ	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	8700	2700 J	-	2700 J	11000	-	17000 J	50000	4000 UJ	2000 UJ	29300	69900	48700	32100

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-524	MW-524	MW-524	MW-524	MW-524	MW-524	MW-524	MW-524	MW-524	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525
			Field Sample ID	M524A1	M524A2	M524A3	M524A4	M524A5	M524A5X	M524A6	M524A7	M524A8	M525A1X	M525A2	M525A2X	M525A3	M525A3X	M525A4
			Sample Date	11/02/2017	03/20/2018	05/31/2018	10/04/2018	10/17/2019	10/17/2019	03/17/2020	06/09/2020	09/11/2020	11/27/2017	01/29/2018	01/29/2018	03/01/2019	03/01/2019	05/17/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	21600 J	16600 J	21100 J	23100 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**19700**	**15600**	**20000**	**23000**	**14000**	-	**13200**	-	-	**324**	**2610**	-	**6110**	-	**381**
Iron	ug/L	Y	300	**19900**	**14800**	**19700**	**22800**	**14500**	-	**12400**	**12000**	**9900**	233	**2070**	-	114 J	-	178 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	15000	11000	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	250 U	250 U	250 U	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2100 J	1500 U	1500 U	1500 U	-	2200 J	1500 U	7300	10000	31100	-	12200	-	232000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
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			Location ID	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-525	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526
			Field Sample ID	M525A4X	M525A5	M525A5X	M525A6	M525A6X	M525A7	M525A7X	M525A8	M525A8X	M526A1X	M526A2	M526A2X	M526A3	M526A3X	M526A4
			Sample Date	05/20/2019	08/14/2019	08/14/2019	10/29/2019	10/29/2019	02/04/2020	02/04/2020	05/11/2020	05/11/2020	11/27/2017	01/29/2018	01/29/2018	03/05/2019	03/05/2019	05/16/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**362**	-	**2330**	-	**6190**	-	**16300**	-	156 UJ	80.5 U	-	195 J	-	63.7 J
Iron	ug/L	Y	300	-	40 U	-	**1600**	-	**6150**	-	**12700**	-	80.5 U	80.5 U	-	40 U	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	77500	-	28500 J	-	26100	-	38000 J	-	37300	98100	-	93700	-	107000	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
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			Location ID	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-526	MW-545
			Field Sample ID	M526A4X	M526A5	M526A5X	M526A6	M526A6X	M526A7	M526A7X	M526A8	M526A8X	M526A9	D0526218	D092220211C	M526B1	M526B3	M545A1
			Sample Date	05/16/2019	08/14/2019	08/14/2019	10/28/2019	10/28/2019	02/04/2020	02/04/2020	05/14/2020	05/14/2020	04/30/2021	05/26/2021	09/22/2021	09/22/2021	03/21/2022	04/12/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	201	-	**584**	-	**1480**	-	**994**	-	**460**	-	**1800**	**1600**	**2000**	**70800**
Iron	ug/L	Y	300	-	190 J	-	**593**	-	**1600**	-	**799**	-	180 J	-	**1500**	**1600**	**350**	**65100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	11	-	3 U	100 J	43	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	40 UJ	-	40 UJ	40 UJ	200 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	15 U	-	140	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	**340000**	-	171000 J	-	135000	-	238000	-	**535000**	**360000J**	4100 J	**560000J**	**600000J**	**330000J**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-545	MW-545	MW-545	MW-547	MW-548	MW-548	MW-548	MW-548	MW-548	MW-549	MW-549	MW-549	MW-549	MW-549	MW-559
			Field Sample ID	M545A1X	M545A2	M545A2X	M547A1	D1016188	M548A1	M548A1X	M548A2	M548A2X	M549A1	M549A1X	D1206188	M549A2	M549A2X	D06191915
			Sample Date	04/13/2018	06/12/2018	06/12/2018	10/04/2018	10/16/2018	10/16/2018	10/16/2018	12/06/2018	12/06/2018	10/17/2018	10/17/2018	12/06/2018	12/06/2018	12/06/2018	06/19/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	10500 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**78800**	-	**9930**	**805**	**1980J**	-	**433**	-	**4480**	-	**3180**	**3390**	-	**2650**
Iron	ug/L	Y	300	-	**78200**	-	**8520**	**445**	**546**	-	40 U	-	**2980**	-	148 J	44.4 J	-	**1600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	3 U	-	3 U	-	3 U	-	1600	31	-	23	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	1600	-	1400	-	1400	-	250 U	640	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	9200 J	-	8100	66000	111000	-	120000	-	31600	-	31400	12400	-	10100 J	63500

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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			Location ID	MW-559	MW-559	MW-559	MW-559	MW-559	MW-559	MW-559	MW-560	MW-560	MW-560	MW-560	MW-560	MW-560	MW-560	MW-561
			Field Sample ID	M559A1	M559A2	M559A3	M559A4	M559A5	M559A6	M559A7	M560A1	M560A2	M560A3	M560A4	M560A5	M560A6	M560A7	M561A1
			Sample Date	06/19/2019	07/15/2019	08/21/2019	04/03/2020	05/27/2020	08/25/2020	12/01/2020	06/19/2019	07/15/2019	08/21/2019	04/03/2020	05/26/2020	08/26/2020	12/03/2020	06/19/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2750J**	**984**	**1590**	272	**420**	-	**350**	**8800**	**10000**	**19800**	**9530**	**12700**	-	**18000**	**335**
Iron	ug/L	Y	300	**1590J**	68.6 J	**835**	41.2 U	168 J	41 U	41 U	**7690**	**10100**	**36300**	**8600**	**10100**	**14000**	**16000**	40 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	1300	-	-	-	-	-	-	13000	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	64000	64300	86500	44700	114000	160000 UJ	30000	25600	15300	8900	9100	1500 U	**260000**	1600 J	33000

Notes:
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5. U - Not detected

Appendix B2 East Yard
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			Location ID	MW-561	MW-561	MW-561	MW-561	MW-561	MW-590	MW-590	MW-590	MW-591	MW-591	MW-591	MW-592	MW-592	MW-592	MW-593
			Field Sample ID	M561A2	M561A3	M561A4	M561A5	M561A6	M590A1	M590A2	M590A3	M591A1	M591A2	M591A3	M592A1	M592A2	M592A3	M593A1
			Sample Date	07/16/2019	08/22/2019	04/02/2020	05/27/2020	08/28/2020	03/16/2020	06/12/2020	09/11/2020	03/16/2020	06/11/2020	09/11/2020	03/17/2020	06/10/2020	09/09/2020	03/20/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10800**	**19700**	**556**	**54800**	-	**850**	-	-	137 J	-	-	**329**	-	-	221
Iron	ug/L	Y	300	**16000**	**84800**	41.2 U	**13700**	**240000**	293 J	41 U	41 U	41.2 U	41 U	41 U	41.2 J	41 U	41 U	43.1 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	54000	-	100 J	110 J	-	170 J	86 J	-	54 J	270	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	111000	240000	26100	**436000J**	**430000J**	63100	11000	35000	57300	85000	2000 J	131000	150000 J	3900 J	116000

Notes:
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5. U - Not detected

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			Location ID	MW-593	MW-593	MW-595	MW-595	MW-595	MW-596	MW-596	MW-596	MW-597	MW-597	MW-597	MW-599	MW-599	MW-599	MW-600
			Field Sample ID	M593A2	M593A3	M595A1	M595A2	M595A3	M596A1	M596A2	M596A3	M597A1	M597A2	M597A3	M599A1	M599A2	M599A3	M600A1
			Sample Date	06/09/2020	09/08/2020	03/16/2020	06/12/2020	09/11/2020	03/16/2020	06/11/2020	09/11/2020	03/17/2020	06/09/2020	09/08/2020	05/29/2020	08/28/2020	12/02/2020	05/28/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**1870**	-	-	**15300**	-	-	**13300**	-	-	40 U	-	64 J	**2140**
Iron	ug/L	Y	300	41 U	41 U	**1690J**	**14000**	**7500**	**14400J**	**2700**	**15000**	**13000**	**15000**	**13000**	41.2 U	41 U	41 U	**937**
Iron, Total Recoverable	ug/L	N	NA	360	140 J	-	16000	7500	-	3200	16000	-	17000	13000	-	40 U	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	170000	61000	1500 U	13000	1500 U	129000	2600 J	25000	19700	91000 J	73000	230000	**270000J**	59000	**477000J**

Notes:
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5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-600	MW-601	MW-601	MW-602	MW-602	MW-602	RW-61	RW-61	RW-61	RW-61	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R
			Field Sample ID	M600A2	M601A1	M601A2	M602A1	M602A2	M602A3	R061D2	R061D2X	R061D3	R061D3X	R061RD4	R061RD4X	R061RD5	R061RD5X	R061RD6
			Sample Date	08/25/2020	05/28/2020	08/27/2020	05/28/2020	08/26/2020	12/01/2020	05/07/2012	05/08/2012	04/29/2013	04/30/2013	09/26/2016	09/27/2016	03/06/2017	03/07/2017	03/27/2018
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**7520**	-	**4200**	-	89 J	**2430**	-	**2430**	-	**84800**	-	**105000**	-	**38700**
Iron	ug/L	Y	300	41 U	**8010**	42 J	41.2 U	41 U	41 U	48.0 J	-	**912**	-	**85300**	-	**105000**	-	**39300**
Iron, Total Recoverable	ug/L	N	NA	300	-	440	-	98 J	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	1200	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	-	20 J	-	35 J	-	160	-
Sulfate (SO4)	ug/L	N	250000	**470000J**	66000	2800 UJ	**432000J**	**290000**	110000	-	7100	-	61300	-	62600	-	98400	-

Notes:
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5. U - Not detected

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			Location ID	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-61R	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81
			Field Sample ID	R061RD6X	R061RD7	R061RD7X	R061RD8	R061RD8X	R061RD9	R061RE1	R061RE2	R081B2	R081B2X	R081B3	R081B3X	R081B5	R081B5X	R081B6
			Sample Date	03/28/2018	03/20/2019	03/20/2019	06/09/2020	06/09/2020	06/24/2021	09/16/2021	11/23/2021	07/10/2013	07/11/2013	09/24/2014	09/25/2014	06/20/2016	06/21/2016	09/19/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**22100**	-	**58000**	-	**46000**	**66000**	**79000**	**4310**	-	**3270**	-	**5970**	-	**10400**
Iron	ug/L	Y	300	-	**39900**	-	**60000**	-	**51000**	**65000**	**78000**	**3500**	-	**2630**	-	**5540**	-	**10300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	3800	9800	12000	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	70 J	-	330 J	40 UJ	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	75	-	15 U	-	58	15 U	15 U	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	67300	-	72600	-	230000 J	130000 J	53000 J	28000 J	-	2500 U	-	2500 U	-	2500 U	-

Notes:
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5. U - Not detected

Appendix B2 East Yard
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Chevron Perth Amboy Facility

			Location ID	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81	RW-81	RW-82	RW-82	RW-82	RW-82	RW-83
			Field Sample ID	R081B6X	R081B7	R081B7X	R081B8	R081B8X	R081B9	R081B9X	R081C1	R081C1X	R081C2	R082B6	R082B6X	R082B7	R082B7X	R083B4
			Sample Date	09/19/2016	12/19/2016	12/19/2016	06/07/2017	06/08/2017	02/04/2020	02/04/2020	09/10/2020	09/10/2020	02/07/2022	09/21/2016	09/21/2016	12/19/2016	12/20/2016	05/28/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**6920**	-	**1250**	-	**6650**	-	-	-	**7600**	**2000**	-	229	-	**2250**
Iron	ug/L	Y	300	-	**7030**	-	**681**	-	**5680**	-	**8600**	-	**6800**	**1250**	-	74.7 U	-	146 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	7400	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	40 U	-	40 UJ	40 UJ	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	15 U	-	15 U	15 UJ	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3400 J	-	2600 J	-	8100	-	4000 UJ	-	8000 UJ	2000 UJ	-	9000	-	120000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83	RW-83R	RW-83R	RW-83R	RW-83R
			Field Sample ID	R083B4X	R083B5	R083B5X	R083B6	R083B6X	R083B7	R083B7X	R083B8	R083B8X	R083B9	R083B9X	R083RC1	R083RC1X	D0530191	R083RC5
			Sample Date	05/29/2013	09/24/2014	09/25/2014	06/02/2016	06/03/2016	09/20/2016	09/20/2016	12/16/2016	12/20/2016	06/07/2017	06/08/2017	05/24/2018	05/25/2018	05/30/2019	05/30/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	110 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4100**	-	**1100**	-	**995**	-	265	-	**1460**	-	**34700**	-	**29400**	**29500**
Iron	ug/L	Y	300	-	**1030**	-	**320**	-	74.7 U	-	74.7 U	-	74.7 U	-	**35900**	-	**29200**	**29200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	670	-	40 U	-	630	-	-	-	-	-	330	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	-	-	-	15 U	-	15 U	21 J	-
Sulfate (SO4)	ug/L	N	250000	13000	-	19200	-	17100	-	18600	-	10300	-	12000	-	17400	5200 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-83R	RW-91	RW-91	RW-91	RW-91	RW-91	RW-91	RW-92	RW-92	RW-92
			Field Sample ID	R083RC5X	D04022035	R083RC9	R83RD1	R083D4	R083RD6	R091B3	R091B4	R091B4X	R091B5	R091B7	R091B9	R092B2	R092B2X	D0110148
			Sample Date	05/30/2019	04/02/2020	04/02/2020	05/29/2020	08/25/2020	12/02/2020	06/18/2013	11/04/2013	11/05/2013	11/30/2015	02/28/2017	03/26/2019	10/30/2013	10/30/2013	01/10/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**31100**	**31100**	**29800**	-	**27000**	**17200**	**4220**	-	**9160**	**5460**	**6650**	**2420**	-	**10900**
Iron	ug/L	Y	300	-	**29400**	**30100**	**30000**	**27000**	**25000**	-	**307**	-	-	-	-	**1590**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	28000	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	16 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	4000 U	1800 J	1500 U	2900 J	1700 J	2300 J	-	-	39100	-	-	-	-	27200	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-92	RW-92	RW-92	RW-92	RW-93	RW-93	RW-93	RW-93	RW-93	RW-94	RW-94	RW-94	RW-94	RW-94	RW-94
			Field Sample ID	D0110148	R092B3	R092B3	R092B3X	D1130151	R093B2	R093B3	R093B5	R093B6	R094B6	D03202035	R094C4	R094C5	D09112015	R094C6
			Sample Date	01/10/2014	01/10/2014	01/10/2014	01/13/2014	11/30/2015	11/30/2015	02/28/2017	03/26/2019	02/19/2021	08/16/2013	03/20/2020	03/20/2020	06/11/2020	09/11/2020	09/11/2020
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	22900	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**10600**	-	-	**2200**	**1880**	**8430**	**5620**	**590**	**25400**	**18600**	**18800**	-	-	-
Iron	ug/L	Y	300	**9240**	-	**9580**	-	-	-	-	-	-	-	**15100**	**14500**	**20000**	**26000**	**27000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	24000	35000	34000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	12000	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	40 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	20 J	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	2100 J	-	-	-	-	-	1700 J	2100 J	1500 U	4500 J	1500 U	7500

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-10	SB-10	SB-10	SB-10	SB-10	SB-10	SB-10	SB-10	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15
			Field Sample ID	SB10212	SB10412	D1113132	SB10413	SB10214	SB10414	SB10215	SB10415	SB15A1	SB15A1X	SB15A2	SB15A3X	SB15A4	SB15A4X	SB15A5
			Sample Date	04/12/2012	10/01/2012	11/13/2013	11/13/2013	05/14/2014	10/02/2014	04/30/2015	10/05/2015	11/12/2012	11/12/2012	01/29/2013	05/10/2013	07/01/2013	07/03/2013	12/09/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**777**	**683**	**7090**	**6920**	**3020**	**2280**	**643**	256	**7680**	-	**5670**	-	**28300**	-	**32300**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	**640**	-	**27100**	-	**32500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	51800	-	79800	-	45800	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-15	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-15R	SB-16
			Field Sample ID	SB15A5X	SB15RA6X	SB15RA8X	SB15RA9X	SB15RB1	SB15RB2	SB15RB4X	SB15RB5X	SB15RB6	SB15RB6X	SB15RB7	SB15RB7X	SB15RB8	SB15RB9	SB16115
			Sample Date	12/09/2013	07/10/2014	02/12/2015	07/14/2015	07/28/2016	10/19/2016	09/24/2019	02/17/2020	08/19/2020	08/19/2020	02/03/2021	02/03/2021	08/25/2021	02/09/2022	01/15/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	30100 J	23300 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**27700**	**23100**	-	-	-	-	**16000**	-	**13000**	**15000**	**31000**
Iron	ug/L	Y	300	-	-	-	-	**31900**	**24900**	-	-	**14000**	-	**22000**	-	**7700**	**15000**	**29200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	15000	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	250 U	250 U	-	660	-	530	-	1100	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	40 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	27000	50300	13700	28300	**258000**	41500	52700	**271000**	-	190000 J	-	140000 J	90000	170000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16
			Field Sample ID	SB16115X	SB16315	SB16315X	SB16A1	D1209158A	SB16A1X	SB16116	SB16116X	SB16A2	SB16A2X	SB16A3	SB16A3X	SB16A4	SB16A4X	SB16A5
			Sample Date	01/16/2015	07/20/2015	07/21/2015	12/08/2015	12/09/2015	12/09/2015	03/16/2016	03/17/2016	07/06/2016	07/06/2016	07/26/2017	07/27/2017	09/13/2017	09/14/2017	12/07/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1230**	-	**14300**	-	-	**29900**	-	**23600**	-	**2260**	-	**37700**	-	**44600**
Iron	ug/L	Y	300	-	34.4 J	-	**11200**	-	-	**30100**	-	**16800**	-	203	-	**35400**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	-	-	170	-	-	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	20 J	-	56	-	-	-	-	35 J	-	-	-	-	-	32 J	-
Sulfate (SO4)	ug/L	N	250000	12500 U	-	46200	-	14300	15100	-	170000	-	6000	-	56000	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16	SB-16
			Field Sample ID	SB16A5X	SB16A6	SB16A6X	SB16118	SB16118X	SB16218	SB16218X	SB16318	SB16318X	SB16418	SB1641X	D1213181	SB16A7	SB16A7X	D0130191
			Sample Date	12/08/2017	01/12/2018	01/12/2018	03/28/2018	03/29/2018	04/26/2018	04/27/2018	07/24/2018	07/25/2018	10/15/2018	10/15/2018	12/13/2018	12/13/2018	12/13/2018	01/30/2019
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	27900	8150 J	-	7900 J	4780 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**18800**	-	**7740**	-	**34900**	-	**2380**	-	**21000**	-	**8740**	**8900**	-	**8750**
Iron	ug/L	Y	300	-	**19100**	-	-	-	**33900**	-	**1530**	-	**17300**	-	**5330**	**5140**	-	**4650**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	40 U	-	-	-	77 J	-	40 U	1200	-	1200	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	34 J	-	-	-	17 J	-	-	-	15 U	-	30 J	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	25000 U	-	42600	-	35100	-	27500	-	80300	-	23900 J	146000 J	-	179000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B2 East Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	SB-16	SB-16	SB-16	SB-16	SB-17
			Field Sample ID	D0201191A	D0822191	SB16B1	SB16B1X	SB17A2
			Sample Date	02/01/2019	08/22/2019	08/22/2019	08/22/2019	10/17/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-
Iron	ug/L	N	300	-	**3420**	**3550**	-	**2600**
Iron	ug/L	Y	300	-	**2280**	**2320**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	21 J	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	5000 U	99200 J	-	87500 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to (
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05
			Field Sample ID	04/24/2013	04/24/2013	06/19/2013	06/19/2013	03/13/2014	03/13/2014	06/26/2014	07/30/2014	07/31/2014	01/06/2015	01/06/2015	12/10/2015	12/10/2015	12/12/2016	12/13/2016
			Sample Date	MP05A1	MP05A1X	MP05A2	MP05A2X	MP05A4	MP05A4X	MP05A5X	MP05A6	MP05A6X	MP05A7	MP05A7X	MP05A8	MP05A8X	MP05A9	MP05B1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**14800**	-	**6770**	-	**29100**	-	-	**18000**	-	**59100**	-	**22200**	-	**42700**	-
Iron	ug/L	Y	300	**2520**	-	**4080**	-	**7220**	-	-	**8930**	-	**4980**	-	**29100**	-	**30300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	5100	-	3000 J	-	8400	1800 J	-	3000 J	-	12100	-	4500 J	-	18100

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Criteria
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-05	MP-06
			Field Sample ID	05/09/2017	05/09/2017	11/27/2017	11/27/2017	01/07/2019	01/07/2019	10/14/2019	10/14/2019	09/24/2020	09/25/2020	12/21/2020	12/22/2020	03/23/2021	03/24/2021	05/06/2013
			Sample Date	MP05B2	MP05B2X	MP05B3	MP05B3X	MP05B4	MP05B4X	MP05B5	MP05B5X	MP05B6	MP05B6X	MP05B7	MP05B7X	MP05B8	MP05B8X	MP06A1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	4100 J	2600 UJ	-	640 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	3240 J	-	65700 UJ	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3900**	-	**58200**	-	**17700**	-	**62200**	-	**15000**	-	**2500**	-	**1400**	-	**161000**
Iron	ug/L	Y	300	**16400**	-	-	-	**5100**	-	**102000**	-	**63000**	-	**2700**	-	**1400**	-	**97900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	100	-	1000	-	3400	-	130	-	18 J	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 U	-	250 U	-	250 U	-	250 J	-	280 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	40 UJ	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	-	250 UJ	-	250 U	-	250 U	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	-	8100 J	-	22200	-	16200	-	10600	-	5000	-	13000 J	-	12000	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06
			Field Sample ID	05/07/2013	06/17/2013	06/18/2013	03/12/2014	03/12/2014	03/12/2014	06/27/2014	06/27/2014	07/29/2014	07/29/2014	01/06/2015	01/06/2015	07/07/2015	07/07/2015	12/09/2015
			Sample Date	MP06A1X	MP06A2	MP06A2X	MP06A3	MP06A3	MP06A3X	MP06A4	MP06A4X	MP06A5	MP06A5X	MP06A6	MP06A6X	MP06A7	MP06A7X	MP06A8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**95300**	-	-	**33000**	-	**817000**	-	**253000**	-	**35300**	-	**13900**	-	**19300**
Iron	ug/L	Y	300	-	**89900**	-	**5090**	-	-	**3260**	-	**1880**	-	**38700**	-	**5490**	-	**10700**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	16700	-	4700 J	-	-	6000 U	-	**2740000**	-	**1770000**	-	**1520000**	-	**426000**	-

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			Location ID	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06	MP-06
			Field Sample ID	12/14/2015	06/10/2016	06/10/2016	12/13/2016	12/14/2016	05/10/2017	05/11/2017	11/27/2017	11/27/2017	07/06/2018	07/09/2018	01/09/2019	01/09/2019	10/11/2019	10/11/2019
			Sample Date	MP06A8X	MP06A9	MP06A9X	MP06B1	MP06B1X	MP06B2	MP06B2X	MP06B3	MP06B3X	MP06B4	MP06B4X	MP06B5	MP06B5X	MP06B6	MP06B6X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	6700 J	-	18100 J	-
Iron	ug/L	N	300	-	**13800**	-	**13800**	-	**13800**	-	**20000**	-	**26900**	-	**13100**	-	**19200**	-
Iron	ug/L	Y	300	-	**13200**	-	**10700**	-	**8920**	-	**6510**	-	**25200**	-	**6120**	-	**8840**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	16000	-	5600
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-	250 U
Sulfate (SO4)	ug/L	N	250000	236000	-	28300	-	30200	-	**1600000**	-	**879000**	-	10200	-	43800	-	14300

Notes:
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5. U - Not detected

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			Location ID	MP-06	MP-06	MP-06R	MP-06R	MP-06R	MP-06R	MP-06R	MP-06R	MP-06R	MP-06R	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024
			Field Sample ID	03/23/2021	03/23/2021	09/25/2020	09/25/2020	01/06/2021	01/06/2021	06/09/2021	09/08/2021	12/06/2021	03/16/2022	04/04/2013	04/05/2013	05/29/2014	05/30/2014	02/18/2015
			Sample Date	MP06RC1	MP06RC1X	MP06RB8	MP06RB8X	MP06RB9	MP06RB9X	MP06RC2	MP06RC3	MP06RC4	MP06RC5	M024B9	M024B9X	M024C1	M024C1X	M024C2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	52 J	-	-	21000 J	85 J	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1100**	-	**15000**	-	**470**	-	**3000**	**7000**	**3500**	**2000**	**518**	-	**463**	-	279
Iron	ug/L	Y	300	41 U	-	**16000**	-	41 U	-	-	-	-	-	35.5 J	-	43.0 U	-	33.4 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	3 U	-	1500	-	25	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	250 U	-	250 U	-	250 U	-	-	-	-	-	1100	-	240	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 UJ	-	250 U	-	250 U	-	-	-	-	-	15 U	-	37 J	-
Sulfate (SO4)	ug/L	N	250000	-	13000	-	230000	-	20000	10000 J	3000	20000 J	170000	-	196000	-	57500	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024	MW-0024
			Field Sample ID	02/19/2015	06/15/2016	06/16/2016	05/02/2017	05/02/2017	05/03/2017	05/03/2017	05/15/2018	05/16/2018	05/08/2019	06/01/2020	06/01/2020	06/01/2020	06/01/2020	06/01/2020
			Sample Date	M024C2X	M024C3	M024C3X	D0502171	M024C4	D0503171	M024C4X	M024C5	M024C5X	M024C6X	D0601201	D0601201	M024C7	M024C7	M024C7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	101 J	-	238	**304**	-	-	**503**	-	-	-	-	-	-	-
Iron	ug/L	Y	300	-	33.3 U	-	74.7 U	74.7 U	-	-	80.5 U	-	-	41 U	41 U	41 U	41 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	58 J	58 J	82 J	82 J	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	310	-	2300	-	-	430	440	-	260	980	40 UJ	40 UJ	-	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	15 U	15 U	-	15 U	15 UJ	15 U	15 U	-	-	15 UJ
Sulfate (SO4)	ug/L	N	250000	35900	-	25900	-	-	23800	24400	-	22800	12600 J	12000 J	12000 J	-	-	12000 J

Notes:
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5. U - Not detected

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			Location ID	MW-0024	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0029R
			Field Sample ID	06/25/2021	11/20/2017	02/14/2018	05/21/2018	08/29/2018	11/13/2018	02/22/2019	02/22/2019	09/04/2019	09/05/2019	04/16/2020	04/16/2020	10/07/2020	10/07/2020	02/16/2021
			Sample Date	M024C8	M029A5	M029A6	M029A7	M029A8	M029A9	M029B1	M029B1X	M029B2	M029B2X	M029RB3	M029RB3X	M029RB4	M029RB4X	D0216218
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	71 J	**127000**	**99000**	**65400**	**113000**	**132000**	**100000**	-	**113000J**	-	**29500**	-	-	-	-
Iron	ug/L	Y	300	41 U	-	**102000**	**60800**	**116000**	**131000**	**101000**	-	**133000J**	-	**27000**	-	**27000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	31000	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	880 J	-	-	-	-	-	-	250 UJ	-	250 U	-	250 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	2500 UJ	-	2500 UJ	-	-	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	17000 J	-	-	-	-	-	-	2800 J	-	6700	-	**1780000**	-	**390000**	37000 J

Notes:
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5. U - Not detected

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			Location ID	MW-0029R	MW-0029R	MW-0029R	MW-0029R	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030
			Field Sample ID	02/16/2021	05/21/2021	09/03/2021	11/23/2021	02/13/2012	08/06/2012	03/04/2013	03/05/2013	09/23/2013	09/24/2013	06/02/2014	06/03/2014	11/06/2014	11/07/2014	06/29/2015
			Sample Date	M029RB5X	M029RB6	M029RB7	M029RB8	M030D5	M030D6	M030D7	M030D7X	M030D8	M030D8X	M030D9	M030D9X	M030E1	M030E1X	M030E2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**47000**	-	**400**	**5880**	**2340**	-	**5940**	-	**5360**	-	**1100**	-	**4830**
Iron	ug/L	Y	300	-	-	-	-	-	-	**1860**	-	**5460**	-	**4690**	-	97.5 J	-	**3810**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	43 J	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	39000 J	84000	**760000**	38000	-	-	-	**1060000**	-	**819000**	-	**957000**	-	**1280000**	-

Notes:
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			Location ID	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030
			Field Sample ID	06/30/2015	09/29/2015	09/30/2015	03/09/2016	03/10/2016	08/25/2016	08/25/2016	08/26/2016	08/26/2016	09/08/2017	09/08/2017	04/30/2018	05/01/2018	11/26/2018	11/26/2018
			Sample Date	M030E2X	M030E3	M030E3X	M030E4	M030E4X	D0825161	M030E5	D0826161	M030E5X	M030E7	M030E7X	M030E8	M030E8X	M030E9	M030E9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**6100**	-	**2200**	-	**5960**	**6040**	-	-	**4850**	-	**1260**	-	**9120**	-
Iron	ug/L	Y	300	-	**5180**	-	**2330**	-	**3790**	**3940**	-	-	**4140**	-	**813**	-	**7560**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	-	40 J	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	**827000**	-	**1450000**	-	**1340000**	-	-	**1370000**	**1420000**	-	**851000**	-	**715000**	-	**570000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0030	MW-0031R	MW-0031R	MW-0031R
			Field Sample ID	04/30/2019	04/30/2019	11/20/2019	11/20/2019	11/21/2019	11/21/2019	05/06/2020	05/07/2020	12/29/2020	12/30/2020	06/25/2021	12/27/2021	04/24/2013	04/25/2013	09/23/2013
			Sample Date	M030F1	M030F1X	D1120191	M030F2	D112119X	M030F2X	M030F5	M030F5X	M030F7	M030F7X	M030F8	M030F9	M031RA1	M031RA1X	M031RA2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1690**	-	**5580**	**5330**	-	-	**4240**	-	**1400**	-	**1700**	**5900**	**17400**	-	**9620**
Iron	ug/L	Y	300	**375**	-	**3540**	**3320**	-	-	**359**	-	**1200**	-	**1900**	**4500**	**17300**	-	**6280**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	98 J	-	-	40 U	42 J	-	260	-	40 UJ	500 J	190 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	15 U	15 U	-	15 U	-	15 U	15 U	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**551000**	-	-	**959000J**	**1040000J**	-	**323000J**	-	**630000J**	**370000J**	**870000J**	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R
			Field Sample ID	09/24/2013	06/04/2014	06/05/2014	11/06/2014	11/07/2014	02/12/2015	02/13/2015	09/29/2015	09/30/2015	03/09/2016	03/10/2016	08/25/2016	08/26/2016	09/08/2017	09/08/2017
			Sample Date	M031RA2X	M031RA3	M031RA3X	M031RA4	M031RA4X	M031RA5	M031RA5X	M031RA6	M031RA6X	M031RA7	M031RA7X	M031RA8	M031RA8X	M031RB1	M031RB1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**14800**	-	**9640**	-	**14900**	-	**8740**	-	**10200**	-	**6870**	-	**6260**	-
Iron	ug/L	Y	300	-	**12900**	-	**6060**	-	**13900**	-	**5220**	-	**6130**	-	**5810**	-	**4470**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	12500 U	-	10000 U	-	10000 U	-	12500 U	-	5000 U	-	10000 U	-	2500 U	-	5000 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R	MW-0031R
			Field Sample ID	04/30/2018	05/01/2018	11/26/2018	11/26/2018	04/30/2019	04/30/2019	11/20/2019	11/20/2019	05/06/2020	05/06/2020	05/06/2020	05/06/2020	12/29/2020	12/29/2020	06/25/2021
			Sample Date	M031RB2	M031RB2X	M031RB3	M031RB3X	M031RB4	M031RB4X	M031RB5	M031RB5X	D0506201	D0506201X	M031RB6	M031RB6X	M031RB8	M031RB8X	M031RC1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**9120**	-	**5270**	-	**8150**	-	**7860**	-	**6980**	-	**7010**	-	**4000**	-	**5700**
Iron	ug/L	Y	300	**9260**	-	**4460**	-	**6550**	-	**8050**	-	**5920**	-	**5860**	-	**1100**	-	**5700**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	94 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	1000 U	-	1000 U	-	1400 UJ	-	2000 UJ	-	4000 UJ	-	4000 UJ	-	4000 UJ	2000 UJ

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0031R	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032
			Field Sample ID	11/23/2021	03/14/2013	03/15/2013	09/24/2013	09/25/2013	06/04/2014	06/05/2014	11/06/2014	11/07/2014	02/12/2015	02/13/2015	09/30/2015	10/01/2015	03/09/2016	03/10/2016
			Sample Date	M031RC2	M032D6	M032D6X	M032D7	M032D7X	M032D8	M032D8X	M032D9	M032D9X	M032E1	M032E1X	M032E2	M032E2X	M032E3	M032E3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5500J**	**9800**	-	**3720**	-	**22900**	-	**3380**	-	**5620**	-	**5540**	-	**6290**	-
Iron	ug/L	Y	300	**5100**	**8990**	-	**1480**	-	**21400**	-	**1330**	-	**2910**	-	**3490**	-	**5290**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	42 J	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	2000 UJ	-	19100	-	2500 U	-	2500 U	-	2500 U	-	3300 J	-	**2220000**	-	14100

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032
			Field Sample ID	08/25/2016	08/26/2016	03/21/2017	03/22/2017	09/08/2017	09/08/2017	04/30/2018	05/01/2018	11/27/2018	11/27/2018	03/26/2019	03/26/2019	11/01/2019	11/01/2019	03/24/2020
			Sample Date	M032E4	M032E4X	M032E5	M032E5X	M032F6	M032F6X	M032E7	M032E7X	M032E8	M032E8X	M032E9	M032E9X	M032F1	M032F1X	M032F5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7590**	-	**2480**	-	**2000**	-	**5350**	-	**3270**	-	**27700**	-	**9920**	-	**10500**
Iron	ug/L	Y	300	**6180**	-	**426**	-	80.5 U	-	**5160**	-	**1720**	-	**14600**	-	**9910**	-	**15200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	2500 U	-	2500 U	-	2500 U	-	1000 U	-	2000 U	-	2900 UJ	-	1000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

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			Location ID	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0032	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033
			Field Sample ID	03/24/2020	09/15/2020	09/15/2020	12/22/2020	03/09/2021	03/09/2021	06/01/2021	08/26/2021	12/09/2021	02/15/2012	02/15/2012	03/19/2013	04/10/2013	06/04/2014	06/04/2014
			Sample Date	M032F5X	M0032F7	M0032F7X	M032F8X	M032F9	M032F9X	M0032G1	M032G2	M032G3	D0215121	M033C7	M033C8X	M033D1	D0604141	M033D2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**11000**	-	**5600**	**16000**	**12000**	**33900**	**32700**	-	**17100**	**25400**	**25200**
Iron	ug/L	Y	300	-	**7400**	-	-	**11000**	-	**3300**	**14000**	**13000**	-	-	-	**17600**	**25400**	**24800**
Iron, Total Recoverable	ug/L	N	NA	-	8600	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 UJ	-	-	40 UJ	-	40 UJ	-	-	-	64 J	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	40 U	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	15 U	-	15 U	-	-	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	6400 J	-	8000 UJ	2000 UJ	-	28000 J	5300	7700	6500	-	-	**1660000**	-	-	-

Notes:
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5. U - Not detected

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			Location ID	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033
			Field Sample ID	06/05/2014	06/05/2014	02/12/2015	02/13/2015	03/09/2016	03/10/2016	03/23/2017	03/24/2017	03/29/2018	03/30/2018	03/28/2019	03/28/2019	03/13/2020	11/19/2020	02/24/2021
			Sample Date	D0605141	M033D2X	M033D3	M033D3X	M033D4	M033D4X	M033D5	M033D5X	M033D7	M033D7X	M033D9	M033D9X	M033E1	M033E2X	M033E3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**53700**	-	**12200**	-	**43500**	-	**14100**	-	**5230**	-	**14300**	-	**16000**
Iron	ug/L	Y	300	-	-	**52200**	-	**12000**	-	**44900**	-	**14600**	-	**3310**	-	**15300**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	28 J	-	45 J	-	120	-	15 U	-	21 J	-	-	-
Sulfate (SO4)	ug/L	N	250000	2500 U	2500 U	-	10000 U	-	10000 U	-	25000 U	-	1000 U	-	4200	-	1400	-

Notes:
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0033	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034
			Field Sample ID	02/25/2021	05/10/2021	08/05/2021	08/05/2021	11/12/2021	02/11/2022	02/15/2012	02/16/2012	08/06/2012	08/07/2012	03/11/2013	03/11/2013	09/24/2013	09/25/2013	06/23/2014
			Sample Date	M033E3X	M033E4	D0805218	M033E5	M033E6	M033E7	M034D6	M034D6X	M034D7	M034D7X	M034D8	M034D8X	M034D9	M034D9X	M034E1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**59000**	-	-	**51000**	**36000**	30.7 J	-	33.3 U	-	74.8 J	-	87.5 J	-	33.4 U
Iron	ug/L	Y	300	-	**55000**	-	-	-	**37000**	32.0 J	-	33.3 U	-	33.3 U	-	43.0 U	-	33.4 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	570	-	-	-	130 J	-	40 U	-	190	-	530	-	210	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	130	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	-	-	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	6100	1500 J	1500 U	1500 U	2600	11000	-	**1140000**	-	**1270000**	-	**1280000**	-	**1660000**	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034
			Field Sample ID	06/24/2014	11/06/2014	11/07/2014	02/18/2015	02/19/2015	09/30/2015	10/01/2015	02/15/2016	02/16/2016	08/16/2016	08/17/2016	03/23/2017	03/24/2017	09/05/2017	09/06/2017
			Sample Date	M034E1X	M034E2	M034E2X	M034E3	M034E3X	M034E4	M034E4X	M034E5	M034E5X	M034E6	M034E6X	M034E7	M034E7X	M034E8	M034E8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	33.4 U	-	33.4 U	-	65.0 J	-	33.3 U	-	74.7 U	-	74.7 U	-	80.5 U	-
Iron	ug/L	Y	300	-	33.4 U	-	33.4 U	-	33.3 U	-	33.3 U	-	74.7 U	-	74.7 U	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	230	-	190	-	720	-	690	-	40 U	-	40 U	-	50 J	-	83 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	89	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	**1180000**	-	**1680000**	-	**1340000**	-	2500 U	-	**1260000**	-	**1500000**	-	**1260000**	-	**1020000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034	MW-0034
			Field Sample ID	03/29/2018	03/30/2018	10/17/2018	10/17/2018	03/27/2019	03/27/2019	08/26/2019	08/26/2019	08/05/2020	08/05/2020	03/02/2021	03/02/2021	05/28/2021	07/30/2021	12/27/2021
			Sample Date	M034E9	M034E9X	M034F1	M034F1X	M034F4	M034F4X	M034F5	M034F5X	M034F7	M034F7X	M034F8	M034F8X	M034F9	M034G1	M034G2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	80.5 U	-	170 J	-	115 J	-	121 J	-	-	-	**3700**	-	160 UJ	130 J	59 J
Iron	ug/L	Y	300	80.5 U	-	**584**	-	191 J	-	98 J	-	41 U	-	64 J	-	84 UJ	72 J	59 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	40 U	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	44	670	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	68 J	-	40 U	-	82 J	-	42 J	-	150 J	-	270 J	220 J	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	**596000**	-	**1030000**	-	**798000**	-	1290000 UJ	-	**1200000J**	-	**960000J**	**1000000J**	**840000J**	**1400000J**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0034	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039
			Field Sample ID	02/01/2022	04/10/2013	04/11/2013	09/04/2014	09/05/2014	04/15/2015	04/16/2015	02/03/2016	02/08/2016	02/08/2016	02/09/2016	02/14/2017	02/15/2017	03/01/2018	03/01/2018
			Sample Date	M034G3	M039B8	M039B8X	M039B9	M039B9X	M0039C1	M0039C1X	D020316HS4	D0208161	M039C2	M039C2X	M039C3	M039C3X	M039C4	M039C4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	66 J	**564**	-	**735**	-	38.1 J	-	-	-	157 J	-	74.7 U	-	80.5 U	-
Iron	ug/L	Y	300	48 J	38.9 J	-	**575**	-	33.4 U	-	33.3 U	33.3 U	33.3 U	-	89.4 J	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	140	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	97 J	-	2600	-	40 U	-	41 J	-	-	-	40 U	-	40 U	-	490
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	-	-	15 U	-	18 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	**870000J**	-	25200	-	2500 U	-	16400	-	-	-	20400	-	17900	-	22200

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0039	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057
			Field Sample ID	03/08/2019	03/08/2019	02/07/2020	02/07/2020	01/27/2021	01/27/2021	03/12/2012	05/23/2012	07/25/2012	11/20/2012	11/20/2012	02/20/2013	06/12/2013	09/09/2013	09/09/2013
			Sample Date	M039C5	M039C5X	M039C6	M039C6X	M039C7	M039C7X	M057B3	M057B4	M057B5	D1120121	M057B6	M057B7	M057B8	D0909131	M057B9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	98.5 J	-	42.3 UJ	-	210	-	**5850**	**11000**	**4330**	**28700**	**29800**	**3400**	**7090**	**15100**	**15100**
Iron	ug/L	Y	300	40 U	-	41.2 U	-	41 U	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	47 J	-	680	-	65 J	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10900	-	17600 J	-	2700 J	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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Monitored Natural Attenuation Annual Report
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			Location ID	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057
			Field Sample ID	11/06/2013	03/05/2014	08/05/2014	08/05/2014	10/23/2014	03/03/2015	05/29/2015	09/16/2015	11/13/2015	01/08/2016	04/12/2016	07/19/2016	10/17/2016	01/11/2017	04/26/2017
			Sample Date	M057C1	M057C2	D0805141	M057C4	M057C5	M057C6	M057C7	M057C8	M057C9	M057D1	M057D2	M057D3	M057D4	M057D5	M057D6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**31600**	**6170**	**38400**	**38800**	**25800**	**9990**	**2210**	**22800**	**15200**	**22800**	**3060**	**3700**	**12900**	**6170**	**4870**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057	MW-0057
			Field Sample ID	07/18/2017	10/09/2017	01/22/2018	04/09/2018	07/12/2018	10/23/2018	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/08/2020	04/08/2020	07/13/2020	10/12/2020	01/12/2021
			Sample Date	M057D7	M057D8	M057D9	M057E1	M057E2	M057E3	M057E4	M057E5	M057E6	M057E7	M057E8	M057E9	M057F1	M057F2	M057F3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3600**	**1200**	**2720**	**3470**	**1150**	**129000**	**11000**	**4100**	**3890**	**8850**	**6160**	**2500**	-	-	**14000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	3600	8000	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0057	MW-0057	MW-0057	MW-0057	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058
			Field Sample ID	04/07/2021	07/02/2021	10/06/2021	01/18/2022	11/20/2017	11/20/2017	02/16/2018	05/21/2018	08/29/2018	11/13/2018	02/22/2019	02/22/2019	09/05/2019	09/05/2019	04/14/2020
			Sample Date	M057F4	M057F5	M057F6	M0057F7	D1120179	M058A7	M058A8	M058A9	M058B1	M058B2	M058B3	M058B3X	M058B4	M058B4X	M058B5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**15000**	**17000**	**15000**	**17000**	**13500**	**15200**	**1270**	**4770**	**18200**	**17000**	**7770**	-	**22100**	-	**1170**
Iron	ug/L	Y	300	-	-	-	-	-	-	**986**	**4140**	**16500**	**10500**	**2700**	-	**19700**	-	244
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	250 UJ	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	250 UJ	-	2500 UJ	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	67500	-	18200	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0058	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060
			Field Sample ID	04/14/2020	10/07/2020	10/07/2020	02/16/2021	05/26/2021	09/02/2021	09/02/2021	11/19/2021	03/28/2012	03/26/2013	03/27/2013	02/10/2014	02/11/2014	06/13/2016	06/14/2016
			Sample Date	M058B5X	M058B6	M058B6X	M058B7X	M058B8	D0902218A	M058B9	M058C1	M060A8	M060A9	M060A9X	M060B1	M060B1X	M060B2	M060B2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	**6130**	**4400**	-	**3800**	-	**1640**	-
Iron	ug/L	Y	300	-	**56000**	-	-	-	-	-	-	-	**3740**	-	**2250**	-	**678**	-
Iron, Total Recoverable	ug/L	N	NA	-	59000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	-	-	-	-	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	250 U	-	-	-	-	-	-	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	**358000**	-	27000	10000 J	37000 J	13000	13000 J	7000 J	-	-	15900	-	19400	-	43600

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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Chevron Perth Amboy Facility

			Location ID	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060
			Field Sample ID	05/11/2017	05/12/2017	11/21/2017	02/14/2018	05/21/2018	05/22/2018	08/30/2018	11/12/2018	02/27/2019	02/27/2019	05/14/2019	05/14/2019	09/04/2019	09/05/2019	04/22/2020
			Sample Date	M060B3	M060B3X	M060B4	M060B5	M060B6	M060B6X	M060B7	M060B8	M060B9	M060B9X	M060C1	M060C1X	M060C2	M060C2X	M060C3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**587**	-	**3730**	**4540**	**2890**	-	**7510**	**6350**	**5910**	-	**5630**	-	**11800**	-	**1340**
Iron	ug/L	Y	300	192 J	-	-	**1360**	**2210**	-	**5280**	**5130**	**4830**	-	**5000**	-	**4890**	-	**444**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	-	40 U	-	-	-	250 U	-	40 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	15 U	-	-	-	250 U	-	15 U	-	250 UJ	-
Sulfate (SO4)	ug/L	N	250000	-	23400	-	-	-	45400	-	-	-	6300	-	1000 U	-	33900 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0060	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061
			Field Sample ID	04/22/2020	10/07/2020	10/08/2020	03/02/2021	03/02/2021	03/23/2022	11/21/2017	02/14/2018	05/16/2018	08/30/2018	11/12/2018	11/12/2018	02/21/2019	02/21/2019	09/09/2019
			Sample Date	M060C3X	M060C4	M060C4X	M060C5	M060C5X	M060C6	M061A4	M061A5	M061A6	M061A7	D1112189	M061A8	M061A9	M061A9X	M061B1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**1200**	**2400**	**4750**	**2610**	**15200**	**2820**	**3440J**	**1360**	-	**12400**
Iron	ug/L	Y	300	-	**9900**	-	180 J	-	**900**	-	**4100**	**1740**	**10100**	**1270**	**1310J**	**1000**	-	**12500**
Iron, Total Recoverable	ug/L	N	NA	-	11000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	5000	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	40 UJ	40 UJ	-	-	-	-	-	-	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	250 U	-	15 U	15 U	-	-	-	-	-	-	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	8300 J	-	**930000**	-	71000 J	54000 J	-	-	-	-	-	-	-	6900	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0061	MW-0062	MW-0062	MW-0062	MW-0062
			Field Sample ID	09/09/2019	04/22/2020	04/22/2020	04/22/2020	04/22/2020	10/09/2020	10/09/2020	02/17/2021	05/19/2021	09/02/2021	11/19/2021	11/22/2017	02/15/2018	05/16/2018	08/31/2018
			Sample Date	M061B1X	D0422201	D0422201X	M0061B2	M0061B2X	M061B3	M061B3X	M061B4X	M061B5	M061B6	M061B7	M062A4	M062A5	M062A6	M062A7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**736**	-	**773**	-	-	-	-	3200 UJ	-	-	**27800**	**13400**	**19000**	**29100**
Iron	ug/L	Y	300	-	117 J	-	111 J	-	**26000**	-	-	**3200**	-	-	-	**12800**	**16900**	**29500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	26000	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	250 U	-	250 U	-	40 UJ	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	40 U	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 U	-	15 U	-	15 U	-	250 UJ	-	15 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3700 J	-	**380000J**	-	**491000J**	-	2200	94000	4500 J	**840000**	**470000J**	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0062	MW-0063
			Field Sample ID	11/14/2018	02/25/2019	02/25/2019	09/06/2019	09/09/2019	04/15/2020	04/15/2020	10/13/2020	10/13/2020	02/17/2021	05/25/2021	09/02/2021	11/19/2021	02/25/2022	11/20/2017
			Sample Date	M062A8	M062A9	M062A9X	M062D1	M062B1X	M062B2	M062B2X	M062B3	M062B3X	M062B4X	M062B5	M062B6	M062B7	M062B8	M063A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**27300**	**16100**	-	**30700**	-	**4700**	-	-	-	-	-	-	-	-	**10500**
Iron	ug/L	Y	300	**26500**	**15900**	-	**30300**	-	**5820**	-	**3100**	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	5000	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	-	250 U	-	250 U	-	950 J	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	250 U	-	250 U	-	-	-	250 UJ	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	2900 J	-	1800 J	-	**385000**	-	170000	20000	38000	170000	97000 J	21000 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063	MW-0063
			Field Sample ID	02/09/2018	05/16/2018	08/31/2018	11/15/2018	02/25/2019	02/25/2019	09/05/2019	09/05/2019	04/10/2020	04/10/2020	10/13/2020	10/13/2020	02/17/2021	05/26/2021	09/02/2021
			Sample Date	M063A3	M063A4	M063A5	M063A6	M063A7	M063A7X	M063A8	M063A8X	M0063A9	M063A9X	M063B1	M063B1X	M063B2X	M063B3	M063B2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1910**	**6410**	**14000**	**8780**	**2030**	-	**16700**	-	**5590**	-	-	-	-	-	-
Iron	ug/L	Y	300	**1700**	**5810**	**13600**	**7770**	**1180**	-	**16100**	-	**2920**	-	**2300**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2900	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	250 U	-	250 U	-	250 U	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	250 U	-	2500 UJ	-	-	-	250 UJ	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	4400 J	-	1500 U	-	**599000**	-	120000	130000	4300 J	2100 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0063	MW-0063	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065	MW-0065
			Field Sample ID	11/19/2021	03/01/2022	11/21/2017	02/12/2018	05/16/2018	08/30/2018	11/19/2018	02/26/2019	02/26/2019	09/03/2019	09/03/2019	04/09/2020	04/10/2020	10/06/2020	10/06/2020
			Sample Date	M063B5	M063B6	M065B8	M065B9	M065C1	M065C2	M065C3	M065C4	M065C4X	M065C5	M065C5X	M0065C6	M0065C6X	M065C7	M065C7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**4380**	**4490**	**6530**	**10500**	**7520**	**4560**	-	**10300**	-	**5980**	-	-	-
Iron	ug/L	Y	300	-	-	-	**3530**	**5830**	**8920**	**3910**	**2240**	-	**8760**	-	**5600**	-	280	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	1600	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	250 U	-	330 J	-	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	250 U	-	250 U	-	-	-	250 UJ
Sulfate (SO4)	ug/L	N	250000	12000	54000	-	-	-	-	-	-	9000	-	6600	-	2900 J	-	14000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0065	MW-0065	MW-0071R	MW-0071R	MW-0071R	MW-0071R	MW-0071R	MW-0071R	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR	MW-0071RR
			Field Sample ID	03/22/2022	03/22/2022	09/02/2014	09/03/2014	11/05/2015	11/06/2015	02/22/2016	02/23/2016	11/23/2020	02/22/2021	02/22/2021	05/06/2021	08/04/2021	11/10/2021
			Sample Date	D032220221A	M065C9	M071RA9	M071RA9X	M071RB1	M071RB1X	M071RB2	M071RB2X	M071RRB7X	M071RRB8	M071RRB8X	M071RRB9	M071RRC1	M071RRC2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**640**	**670**	**8180**	-	**856**	-	**892**	-	-	**23000**	-	**34000**	-	**38000**
Iron	ug/L	Y	300	**570**	**570**	**7770**	-	**599**	-	70.1 J	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	4500	4500	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	15 U	-	15 U	-	15 U	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	23000 J	22000 J	-	55000	-	322000	-	88500	**2900000**	-	**1900000**	**3300000**	**3100000J**	**1500000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-0072	MW-2	MW-2	MW-2	MW-2	MW-2
			Field Sample ID	04/19/2013	04/19/2013	08/28/2014	08/29/2014	04/16/2015	04/17/2015	06/07/2016	06/08/2016	05/15/2017	05/16/2017	03/15/2012	02/25/2013	02/26/2013	03/31/2014	04/01/2014
			Sample Date	M072B1	M072B1X	M072B2	M072B2X	M072B3	M072B3X	M072B4	M072B4X	M072B5	M072B5X	M002B1	M002B2	M002B2X	M002B3	M002B3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**31300**	-	**31200**	-	**6920**	-	**10000**	-	**7370**	-	14.1 U	135 J	-	122 J	-
Iron	ug/L	Y	300	**31300**	-	**30300**	-	**6710**	-	**9880**	-	**6910**	-	-	33.3 U	-	43.0 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	19000	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40U	-	40 U	-	40 U	-	-	52 J	-	46 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	53	-	24 J	-	28J	-	15 U	-	15 J	-	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	65100	-	10000 U	-	6400	-	2500 U	-	2500 U	-	-	73900	-	117000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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Monitored Natural Attenuation Annual Report
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			Location ID	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
			Field Sample ID	12/09/2015	12/10/2015	09/08/2016	02/07/2017	02/08/2017	03/05/2018	03/06/2018	01/08/2019	01/08/2019	03/07/2019	03/07/2019	10/15/2019	10/15/2019	03/05/2020	03/05/2020
			Sample Date	M002B4	M002B4X	M002B5	M002B6	M002B6X	M002B7	M002B7X	M002B8	M002B8X	M002B9	M002B9X	M002C1	M002C1X	M002C2	M002C2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	15 UJ	-	-	-	15 UJ	-	-	-
Iron	ug/L	N	300	125 J	-	74.7 U	74.7 U	-	80.5 U	-	122 J	-	**537**	-	258	-	40 U	-
Iron	ug/L	Y	300	88.3 J	-	74.7 U	74.7 U	-	80.5 U	-	40 U	-	40.5 J	-	40 U	-	178 UJ	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	3 U	-	-	-	7.7	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	40 U	-	40 U	-	680	-	40 U	-	40 U	-	250 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	250 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	90100	77500	-	95600	-	133000	-	136000	-	136000	-	165000	-	141000 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
			Field Sample ID	02/26/2013	02/27/2013	03/31/2014	04/01/2014	12/28/2015	12/29/2015	09/20/2016	09/21/2016	02/15/2017	02/16/2017	03/05/2018	03/06/2018	03/20/2019	03/20/2019	02/14/2020
			Sample Date	M003B7	M003B7X	M003B8	M003B8X	M003B9	M003B9X	M003C1	M003C1X	M003C2	M003C2X	M003C3	M003C3X	M003C4	M003C4X	M003C5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4800**	-	**14200**	-	**8340**	-	**14100**	-	**3970**	-	**4110**	-	**9020**	-	**9160**
Iron	ug/L	Y	300	**1340**	-	**10000**	-	**6170**	-	**13000**	-	**1670**	-	**323**	-	**1150**	-	**2490**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	9800	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	16 J	-	15 U	-	20 J	-	44 J	-	17 J	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	70400	-	74400	-	80600	-	69100	-	76300	-	74100	-	73200	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-3	MW-3	MW-3	MW-5	MW-5	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
			Field Sample ID	02/14/2020	01/22/2021	01/22/2021	05/27/2021	12/22/2021	03/10/2017	09/13/2017	09/13/2017	12/05/2017	06/14/2018	12/10/2018	06/07/2019	06/07/2019	12/09/2019	12/09/2019
			Sample Date	M003C5X	M003C6	M003C6X	M005C6	M005C7	M013A4	D0913178A	M013A5	M013A6	M013A8	M013B1	D0607198	M013B3	D1209198	M013B5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**7600**	-	**2600**	**3000**	**14700**	**46000**	**45900**	**37600**	**23100**	**10900**	**15000**	**12400**	**10600**	**9640**
Iron	ug/L	Y	300	-	**4600**	-	**2400**	**3100**	**4180**	**44700**	**44700**	**30900**	**19400**	**3660**	**18200**	**19100**	**7630**	**7470**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	7600	14000	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 UJ	57 J	40 UJ	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	15 U	15 U	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	71300 J	-	70000 J	2000 UJ	17000 J	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
			Field Sample ID	06/19/2020	06/19/2020	12/21/2020	03/11/2021	05/28/2021	08/27/2021	02/11/2022	03/09/2017	03/09/2017	09/06/2017	12/04/2017	06/11/2018	12/13/2018	03/20/2019	09/04/2019
			Sample Date	D0619208	M013B7	M013B9	M013C1	M013C2	M013C3	M013C5	D0309178B	M020B9	M020C1	M020C2	M020C4	M020C6	M020C7	M020C9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**9600**	**1300**	**20000**	-	**7900**	**26600**	**26500**	**31400**	**12300**	**25700**	**32000**	**21100**	**18300**
Iron	ug/L	Y	300	**27000**	**22000**	**8600**	49 J	**15000**	-	**3100**	**23800**	**23400**	**30900**	**11600**	**24700**	**31600**	**1140**	**15900**
Iron, Total Recoverable	ug/L	N	NA	28000	31000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	110	46	110	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 UJ	40 UJ	140 J	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	15 U	15 U	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	140000 J	250000 J	100000 J	-	-	-	-	-	-	-	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
			Field Sample ID	12/10/2019	06/18/2020	12/18/2020	03/10/2021	05/19/2021	09/30/2021	02/04/2022	02/04/2022	03/07/2017	06/13/2018	12/11/2018	06/07/2019	12/09/2019	06/18/2020	12/16/2020
			Sample Date	M020D1	M020D3	M020D5	M020D6	M020D7	M020D8	D0204221	M020E1	M021B7	M021C2	M021C4	M021C6	M021C8	M021D1	M021D3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5140**	-	**3900**	**16000**	**12000J**	**29000**	**3100**	**2900**	**12000**	**28400**	**18500**	**27900J**	**23800**	-	**22000**
Iron	ug/L	Y	300	**1900**	**17000**	**1600**	**14000**	**10000**	**22000**	86 J	110 J	**8240**	**28500**	**19300**	**25700J**	**23700**	**25000**	**18000**
Iron, Total Recoverable	ug/L	N	NA	-	17000	-	-	-	-	-	-	-	-	-	-	-	25000	-
Methane	ug/L	N	NA	-	-	-	-	5600	14000	9100	8900	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 UJ	40 UJ	180 J	230 J	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	15 U	15 U	15 UJ	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	2000 UJ	10000 UJ	2000 UJ	3400 J	-	-	-	-	-	-	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-21	MW-21	MW-21	MW-21	MW-21	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114
			Field Sample ID	03/12/2021	06/30/2021	09/29/2021	12/27/2021	02/17/2022	03/15/2012	05/14/2012	07/24/2012	11/19/2012	02/19/2013	06/10/2013	09/03/2013	11/04/2013	03/05/2014	05/19/2014
			Sample Date	M021D4	M021D5	M021D6	M021D7	M021D8	M114B6	M114B7	M114B8	M114B9	M114C1	M114C2	M114C3	M114C4	M114C5	M114C6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**21000**	**24000**	**19000**	**18000**	**18000**	52.7 J	**710**	89.0 J	51.3 J	159 J	**382**	43.0 U	75.1 J	120 J	161 J
Iron	ug/L	Y	300	**21000**	**22000**	**18000**	**17000**	**17000**	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	14000	14000	14000	7600 J	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	40 UJ	40 UJ	40 UJ	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	34 J	15 U	15 U	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	8000 UJ	8000 UJ	2000 UJ	8000 UJ	-	-	-	-	-	-	-	-	-	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114
			Field Sample ID	08/04/2014	10/22/2014	03/24/2015	05/27/2015	09/14/2015	11/13/2015	01/05/2016	04/06/2016	07/18/2016	10/11/2016	01/11/2017	04/18/2017	07/17/2017	10/09/2017	04/09/2018
			Sample Date	M114C7	M114C8	M114C9	M114D1	M114D2	M114D3	M114D4	M114D5	M114D6	M114D7	M114D8	M114D9	M114E1	M114E2	M114E4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	82.2 J	208	**303**	**807**	228	169 J	100 J	81.1 J	130 J	93.5 J	**307**	181 J	**3330**	228	80.5 U
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
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5. U - Not detected

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			Location ID	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114	MW-114
			Field Sample ID	07/12/2018	10/18/2018	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/08/2020	04/08/2020	04/08/2020	07/14/2020	10/13/2020	01/05/2021	04/07/2021	04/07/2021	07/12/2021
			Sample Date	M114E5	M114E6	M114E7	M114E8	M114E9	M114F1	M114F2	M114F3	M114F3	M114F4	M114F5	M114F6	D0407211	M114F7	M114F8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	89.1 J	**313**	**11100**	**3680**	**2770**	**333**	**1120**	218	**351**	-	-	**310**	140 J	140 J	210
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	41 U	-	41 U	41 U	42 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	1800	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	3 U	3.3 J	3 U
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	620	730	90 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	220000 J	170000 J	-

Notes:
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			Location ID	MW-114	MW-114	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115
			Field Sample ID	10/06/2021	01/20/2022	03/15/2012	05/14/2012	07/24/2012	11/19/2012	02/19/2013	06/12/2013	09/03/2013	11/04/2013	03/05/2014	05/19/2014	08/04/2014	10/22/2014	03/02/2015
			Sample Date	M114F9	M114G1	M115B1	M115B2	M115B3	M115B4	M115B5	M115B6	M115B7	M115B8	M115B9	M115C1	M115C2	M115C3	M115C4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**560**	**960**	**314**	32.2 J	182 J	33.3 U	110 J	44.5 J	43.0 U	43.0 U	43.0 U	103 J	101 J	**625**	287
Iron	ug/L	Y	300	-	23 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	3 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	410 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	200000 J	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115
			Field Sample ID	05/27/2015	09/14/2015	11/13/2015	01/05/2016	04/06/2016	07/18/2016	10/11/2016	01/11/2017	04/18/2017	07/17/2017	10/09/2017	01/23/2018	04/09/2018	07/12/2018	10/18/2018
			Sample Date	M115C5	M115C6	M115C7	M115C8	M115C9	M115D1	M115D2	M115D3	M115D4	M115D5	M115D6	M115D7	M115D8	M115D9	M115E1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2040**	180 J	**466**	**796**	**2240**	**1190**	**425**	**10300**	**7080**	**11300**	**823**	**13200**	**2750**	**767**	**8180**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-115	MW-117	MW-117
			Field Sample ID	01/08/2019	04/08/2019	07/08/2019	10/04/2019	01/09/2020	04/08/2020	07/14/2020	10/13/2020	01/05/2021	04/07/2021	07/02/2021	10/06/2021	01/20/2022	D0326131	D0327131
			Sample Date	M115E2	M115E3	M115E4	M115E5	M115E6	M115E7	M115E8	M115E9	M115F1	M115F2	M115F3	M115F4	M115F5	03/26/2013	03/26/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	68.7 J	-	-	512 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**760**	**765**	**719**	**781**	**327**	**1960**	-	-	**3100**	**530**	140 J	160 J	**1700**	**6790**	-
Iron	ug/L	Y	300	40 U	-	-	246	-	-	-	74 J	-	-	-	-	-	**5700**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	2500	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	3 U	-	-	230	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	1500	-	-	2100	-	-	-	-	-	-	-	-	-	-	400 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	15 U	-	-	-	-	-	-	-	-	-	-	75 U
Sulfate (SO4)	ug/L	N	250000	23300	-	-	93000 J	-	-	-	-	-	-	-	-	-	-	92700

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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Monitored Natural Attenuation Annual Report
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			Location ID	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-117	MW-118	MW-118
			Field Sample ID	M117B6	M117B6X	M117B7	M117B7X	M117HS	M117B8	M117B8X	M117HS2	D0217163	M117B9	M117B9X	M117C1	M117C1X	08/12/2013	08/13/2013
			Sample Date	03/26/2013	03/27/2013	05/27/2014	05/28/2014	08/05/2015	08/06/2015	08/07/2015	02/03/2016	02/17/2016	02/17/2016	02/18/2016	02/06/2017	02/07/2017	M118B7	M118B7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7270**	-	**2570**	-	**94500**	**5130**	-	**13300**	**15200**	**30800**	-	**2480**	-	**25200**	-
Iron	ug/L	Y	300	**5750**	-	118 J	-	**1760**	**3940**	-	**9170**	-	**1180**	-	74.7 U	-	**22900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	550 J	-	800 U	40 U	-	40 U	40 U	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	75 U	-	380 U	15 U	-	75 U	15 U	-	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	45100	-	3700 J	5000 U	-	5000 U	5000 U	-	-	20400	-	128000	-	69200

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118
			Field Sample ID	09/30/2013	10/01/2013	08/26/2014	08/27/2014	10/22/2015	10/23/2015	02/23/2016	02/24/2016	02/02/2017	02/03/2017	02/01/2018	02/02/2018	02/15/2019	02/15/2019	01/29/2020
			Sample Date	M118B8	M118B8X	M118B9	M118B9X	M118C1	M118C1X	M118C2	M118C2X	M118C6	M118C6X	M118D9	M118D9X	M118D5	M118D5X	M118D6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**29900**	-	**18800**	-	**7390**	-	**7070**	-	**7390**	-	**8860**	-	**6640**	-	**7140**
Iron	ug/L	Y	300	**25800**	-	**18000**	-	**4040**	-	**5640**	-	**915**	-	**7820**	-	-	-	**3230**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	25 J	-	34 J	-	23 J	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	27000	-	61300	-	5000 U	-	147000	-	189000	-	42500	-	2000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-118	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	01/29/2020	11/23/2020	02/23/2021	02/23/2021	05/04/2021	08/04/2021	11/10/2021	03/13/2012	05/29/2012	07/31/2012	09/06/2013	11/11/2013	03/06/2014	05/21/2014	08/06/2014
			Sample Date	M118D6X	M118D7X	M118E2	M118E2X	M118E3	M118E4	M118E5	M120B6	M120B7	M120B8	M120C2	M120C3	M120C4	M120C5	M120C6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**19000**	-	-	-	**12000**	**18300**	**3120**	**2160**	**2490**	**2300**	**3050**	**3430**	**2950**
Iron	ug/L	Y	300	-	-	**8100**	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	40 UJ	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	15 U	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	10000 UJ	13000	-	10000 UJ	18000	2100 J	710	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	10/23/2014	03/23/2015	06/01/2015	09/15/2015	11/16/2015	01/13/2016	04/08/2016	07/25/2016	10/21/2016	01/20/2017	04/18/2017	07/21/2017	10/12/2017	01/22/2018	04/10/2018
			Sample Date	M120C7	M120C8	M120C9	M120D1	M120D2	M120D3	M120D4	M120D5	M120D6	M120D7	M120D8	M120D9	M120E2	M120E3	M120E4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**14600**	**32200**	**2510**	**4670**	**6420**	**3970**	**11900**	**9690**	**3370**	**21500**	**4580**	**4070**	**4070**	**28000**	**12300**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120	MW-120
			Field Sample ID	07/16/2018	10/30/2018	01/03/2019	04/03/2019	07/01/2019	12/16/2019	01/03/2020	04/07/2020	07/14/2020	10/12/2020	01/08/2021	04/06/2021	07/02/2021	10/07/2021	01/20/2022
			Sample Date	M120E5	M120E6	M120E7	M120E8	M120E9	M120F2	M120F3	M120F4	M120F5	M120F6	M120F7	M120F8	M120F9	M120G1	M120G2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5670**	**20700**	**15100**	**95500**	**9520**	**9270**	**18100**	**5940**	-	-	**10000**	**29000**	**2300**	**4700**	**9700**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	4500	7000	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R	MW-121R
			Field Sample ID	04/27/2017	04/27/2017	08/31/2017	11/30/2017	06/14/2018	06/14/2018	12/10/2018	12/10/2018	06/10/2019	12/09/2019	06/18/2020	12/16/2020	12/16/2020	03/10/2021	05/28/2021
			Sample Date	D0427178	M121RC1	M121RC2	M121RC3	D0614188	M121RC5	D1210188	M121RC7	M121RC9	M121RD2	M121RD4	D1216208	M121RD6	M121RD7	M121RD8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**22300**	**22200**	**52100**	**28200**	**12000**	**12200**	**15400**	**16200**	**7470**	**25500**	-	**24000**	**24000**	**20000**	**17000**
Iron	ug/L	Y	300	**21000**	**20700**	**54500**	**25400**	**9650**	**10500**	**14700**	**14200**	**5810**	**24200**	**15000**	**21000**	**21000**	**18000**	**17000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	16000	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13000
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4000 UJ

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-121R	MW-121R	MW-121R	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-122	MW-123	MW-123
			Field Sample ID	09/24/2021	12/13/2021	03/30/2022	04/08/2013	04/08/2013	04/09/2013	04/09/2013	05/28/2014	05/29/2014	04/16/2015	04/17/2015	12/18/2019	12/18/2019	08/19/2013	09/23/2014
			Sample Date	M121RD9	M121RE1	M121RE2	D0408131	M122B7	D0409131	M122B7X	M122B8	M122B8X	M122C4	M122C4X	M122C5	M122C5X	M123B6	M123B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	5700	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**30000**	**26000**	**18000**	**30200**	**29800**	-	-	**19200**	-	**6770**	-	**4910**	-	**5380**	**4550**
Iron	ug/L	Y	300	**30000**	**26000**	**19000**	**30300**	**32100**	-	-	**17900**	-	**6300**	-	**2650**	-	-	**3100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	10000	17000	18000	-	-	-	-	-	-	-	-	-	-	16000	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	40 UJ	-	-	40 U	40 U	-	40 U	-	40U	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	15 U	-	-	20 J	26 J	-	94	-	73	-	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	20000 UJ	10000 UJ	8000 UJ	-	-	5000 U	5000 U	-	10000 U	-	5000U	-	2000 UJ	127000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-123	MW-123	MW-123	MW-123	MW-123	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R	MW-123R
			Field Sample ID	09/23/2014	10/13/2015	10/13/2015	02/17/2016	02/18/2016	11/13/2017	11/14/2017	07/08/2019	07/10/2019	10/14/2020	10/14/2020	10/14/2020	01/08/2021	01/08/2021	04/12/2021
			Sample Date	M123B8X	M123C1	M123C1X	M123C2	M123C2X	M123RC3	M123RC3X	M123RC5	M123RC5X	D1014208	M123RC6	M123RC6X	M123RC7	M123RC7X	D0412218
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**3150**	-	**3920**	-	**13600**	-	**2290**	-	-	-	-	**4300**	-	**5900**
Iron	ug/L	Y	300	-	**2770**	-	**3820**	-	-	-	**1890**	-	**3300**	**3200**	-	**2300**	-	**6300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	4200	4100	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	40 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	31 J	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	3100 J	-	5200	-	43800	-	73600	-	124000	**380000**	-	**350000**	-	170000	190000 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-123R	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124	MW-124
			Field Sample ID	04/12/2021	03/14/2013	03/15/2013	06/04/2014	06/05/2014	02/12/2015	02/13/2015	02/16/2016	02/17/2016	02/15/2017	02/16/2017	03/14/2019	03/14/2019	02/03/2020	02/03/2020
			Sample Date	M123RC8	M124C2	M124C2X	M124C3	M124C3X	M124C4	M124C4X	M124C5	M124C5X	M124C6	M124C6X	M124C8	M124C8X	M124C9	M124C9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6300**	**2180**	-	**10400**	-	**3140**	-	**4240**	-	**4330**	-	**3490**	-	**616**	-
Iron	ug/L	Y	300	**6200**	33.3 U	-	**9710**	-	**437**	-	**1920**	-	**1450**	-	**321**	-	272	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	180	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	20 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	250000 J	-	49200	-	17900	-	2500 U	-	5200	-	2500 U	-	7900	-	6100 J

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-124	MW-124	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125
			Field Sample ID	01/26/2021	01/26/2021	03/27/2013	03/28/2013	02/12/2014	02/12/2014	10/22/2015	10/23/2015	02/22/2016	02/23/2016	01/24/2017	01/25/2017	02/01/2018	02/02/2018	01/30/2019
			Sample Date	M124D1	M124D1X	M125B7	M125B7X	M125B8	M125B8X	M125B9	M125B9X	M125C1	M125C1X	M125C5	M125C5X	M125C9	M125C9X	M125D4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2400**	-	**16500**	-	**3790**	-	**3280**	-	**6970**	-	**36000**	-	**6130**	-	**21700**
Iron	ug/L	Y	300	**1400**	-	**17100**	-	**988**	-	296	-	**5170**	-	**33500**	-	**1670**	-	**20400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	-	48 J	-	400 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	24 J	-	18 J	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	2000 UJ	-	69700	-	35500	-	88100	-	21300	-	12800	-	1000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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Monitored Natural Attenuation Annual Report
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			Location ID	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-125	MW-126	MW-126	MW-126	MW-126	MW-126	MW-126
			Field Sample ID	01/30/2019	01/28/2020	01/28/2020	11/23/2020	02/23/2021	02/23/2021	05/04/2021	08/04/2021	11/10/2021	11/18/2020	01/29/2021	01/29/2021	05/07/2021	08/05/2021	11/11/2021
			Sample Date	M125D4X	M125D5	M125D5X	M125D6X	M125D8	M125D8X	M125D9	M125E1	M125E2	M126D4X	M126D5	M126D5X	M126D6	M126D7	M126D8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**26600J**	-	-	**12000**	-	**10000**	-	**12000**	-	**580**	-	250	-	**390**
Iron	ug/L	Y	300	-	**25400**	-	-	**12000**	-	**10000**	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	61 J	-	-	40 UJ	1700	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	30 J	-	15 U	-	-	15 U	250 UJ	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2000 U	-	37400 J	220000	-	130000 J	15000	70000	7300	150000	-	**510000**	**1300000**	**1200000**	**860000J**

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-126	MW-127	MW-127	MW-127	MW-127	MW-127	MW-127	MW-127	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128	MW-128
			Field Sample ID	02/11/2022	M127C1X	M127C3	M127C3X	M127C4	M127C4X	M127C5	M127C5X	12/03/2015	12/03/2015	07/19/2016	07/20/2016	07/11/2018	10/24/2018	01/16/2019
			Sample Date	M126D9	05/26/2011	03/11/2013	03/11/2013	06/23/2014	06/24/2014	02/18/2015	02/19/2015	M128B9	M128B9X	M128C2	M128C2X	M128C5X	M128C6X	M128C7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**1480**	-	**2430**	-	**2030**	-	**9340**	-	**11400J**	-	-	-	-
Iron	ug/L	Y	300	-	-	33.3 U	-	**2220**	-	**1690**	-	**9000**	-	**10300J**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	15000	12000
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	-	-	-	40 U	250 U	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	-	-	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	**1200000**	64700	-	137000	-	12500 U	-	2500 U	-	2700 J	-	1500 U	1600 J	3200 J	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-133	MW-134	MW-134
			Field Sample ID	04/03/2013	04/04/2013	09/09/2014	09/10/2014	04/16/2015	04/17/2015	06/08/2016	06/09/2016	05/09/2017	05/10/2017	06/28/2021	10/04/2021	02/07/2022	05/20/2013	05/21/2013
			Sample Date	M133B5	M133B5X	M133B6	M133B6X	M133B7	M133B7X	M133B8	M133B8X	M133B9	M133B9X	M133C1	M133C2	M133C4	M134B6	M134B6X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**25600**	-	**22300**	-	**19500**	-	**20300**	-	**19100**	-	**16000**	**15000**	**18000J**	**2160**	-
Iron	ug/L	Y	300	**24300**	-	**22000**	-	**18500**	-	**19700**	-	**17800**	-	**15000**	**14000**	**16000**	**1030**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	18000	19000	23000	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40U	-	40 U	-	40 U	40 UJ	40 UJ	40 UJ	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	18 J	-	21 J	-	28J	-	15 U	-	25 J	15 U	18 J	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	5000 U	-	11300	-	9800J	-	10000 U	-	2500 U	55000 J	2000 UJ	8000 UJ	-	15700

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134	MW-134
			Field Sample ID	06/24/2014	06/25/2014	12/08/2015	12/09/2015	06/02/2016	06/03/2016	06/05/2017	06/06/2017	02/22/2018	02/23/2018	02/28/2019	02/28/2019	05/14/2020	05/14/2020	05/20/2021
			Sample Date	M134B7	M134B7X	M134B8	M134B8X	M134B9	M134B9X	M134C1	M134C1X	M134C2	M134C2X	M134C6	M134C6X	M134D1	M134D1X	M134D2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6260**	-	**4450U**	-	**2690**	-	**11900**	-	**5690**	-	**1820**	-	**6000**	-	**5500**
Iron	ug/L	Y	300	**5960**	-	**1210U**	-	**1110**	-	**12100**	-	**5190**	-	**1060**	-	**4980**	-	**4100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	72 UJ	-	40 U	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	13700	-	24700	-	14100	-	16300	-	8900	-	1900 J	-	2000 UJ	6600 J

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-134	MW-134	MW-134	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135
			Field Sample ID	09/17/2021	12/16/2021	03/31/2022	05/20/2013	05/21/2013	06/24/2014	06/25/2014	12/08/2015	12/09/2015	02/03/2016	02/11/2016	02/11/2016	02/12/2016	02/23/2017	02/24/2017
			Sample Date	M134D3	M134D4	M134D5	M135B6	M135B6X	M135B7	M135B7X	M135B8	M135B8X	D020316HS6	D0211161	M135B9	M135B9X	M135C1	M135C1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**36000**	**3000**	**3100**	**21800**	-	**13600**	-	**125000**	-	**128000**	**114000**	**116000**	-	**54700**	-
Iron	ug/L	Y	300	**1400**	**1300**	**2600**	**9270**	-	**6170**	-	**125000**	-	-	-	**109000**	-	**53800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	4600	9100	1900	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	480 J	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-	-	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 UJ	15 U	-	72	-	56	-	29 J	-	-	-	23 J	-	21 J
Sulfate (SO4)	ug/L	N	250000	20000 UJ	2700 J	5100 J	-	25000 U	-	12500 U	-	10000 U	-	-	-	7800 J	-	10000 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-135	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136
			Field Sample ID	02/22/2018	02/23/2018	02/28/2019	02/28/2019	05/14/2020	05/15/2020	06/16/2021	09/17/2021	03/25/2022	03/04/2013	03/05/2013	06/02/2014	06/03/2014	09/29/2015	09/30/2015
			Sample Date	M135C2	M135C2X	M135C6	M135C6X	M135D1	M135D1X	M135D3	M135D4	M135D6	M136C2	M136C2X	M136C3	M136C3X	M136C4	M136C4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**52400**	-	**21300**	-	**19500**	-	**14000**	**37000**	**18000**	**66900**	-	**40500**	-	**9580**	-
Iron	ug/L	Y	300	**51900**	-	294	-	**3490**	-	**1700**	**35000**	**5100**	**68500**	-	**33700**	-	**4720**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	19000	2200	19000	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	48 UJ	-	40 U	40 UJ	40 UJ	40 UJ	-	400 U	-	40 U	-	480
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	15 U	15 U	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	24800	-	4000 U	-	8000 UJ	4000 UJ	10000 UJ	2000 UJ	-	134000	-	53400	-	**594000**

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-136	MW-137	MW-137	MW-137	MW-137
			Field Sample ID	02/15/2016	02/16/2016	03/29/2018	03/30/2018	03/21/2019	03/21/2019	02/04/2020	02/05/2020	01/26/2021	01/27/2021	03/25/2022	04/02/2013	04/03/2013	09/04/2014	09/05/2014
			Sample Date	M136C5	M136C5X	M136C7	M136C7X	M136C8	M136C8X	M136C9	M136C9X	M136D1	M136D1X	M136D2	M137B6	M137B6X	M137B7	M137B7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8050**	-	**11400**	-	**4510**	-	**23400**	-	**2800**	-	**2000**	**11400**	-	**35100**	-
Iron	ug/L	Y	300	**8170**	-	**10800**	-	93.2 J	-	**17700**	-	**1500**	-	120 J	**10300**	-	**33200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 J	230 J	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	30 U	-	15 U	-	15 U	15 U	-	20 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	**462000**	-	**309000**	-	32700	-	**336000J**	-	**360000J**	190000 J	-	5000 U	-	15100

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-137	MW-138	MW-138	MW-138
			Field Sample ID	09/30/2015	10/01/2015	09/13/2016	09/14/2016	02/13/2017	02/14/2017	02/26/2018	02/27/2018	02/19/2019	02/19/2019	02/03/2020	02/04/2020	04/02/2013	04/03/2013	09/08/2014
			Sample Date	M137B8	M137B8X	M137B9	M137B9X	M137C1	M137C1X	M137C2	M137C2X	M137C3	M137C3X	M137C4	M137C4X	M138B5	M138B5X	M138B6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1680**	-	**20900**	-	**360**	-	230	-	**681**	-	**2390**	-	**1500**	-	**6860**
Iron	ug/L	Y	300	**5650**	-	**19600**	-	74.7 U	-	80.5 U	-	96.4 J	-	**1830**	-	80.5 J	-	**6460**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	79 J	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	39000	-	4200 J	-	3800 J	-	6600	-	2400 J	-	5000 J	-	2500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138	MW-138
			Field Sample ID	09/09/2014	09/30/2015	10/01/2015	09/13/2016	09/14/2016	02/13/2017	02/13/2017	02/14/2017	02/14/2017	02/26/2018	02/27/2018	02/19/2019	02/19/2019	02/03/2020	02/04/2020
			Sample Date	M138B6X	M138B7	M138B7X	M138B8	M138B8X	D0213171	M138B9	D0214171	M138B9X	M138C1	M138C1X	M138C2	M138C2X	M138C3	M138C3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**457**	-	**787**	-	236	240	-	-	**400**	-	**401**	-	**727**	-
Iron	ug/L	Y	300	-	139 J	-	81.5 J	-	74.7 U	74.7 U	-	-	80.5 U	-	40 U	-	41.2 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	510	-	15 U	-	15 U	-	-	15 U	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	**251000**	-	**427000**	-	19800	-	-	66700	62800	-	31400	-	32500	-	53700 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-138	MW-138	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139	MW-139
			Field Sample ID	03/30/2021	03/31/2021	04/02/2013	04/03/2013	09/08/2014	09/09/2014	04/15/2015	04/16/2015	02/08/2016	02/09/2016	02/13/2017	02/14/2017	02/26/2018	02/27/2018	02/15/2019
			Sample Date	M138C4	M138C4X	M139B6	M139B6X	M139B7	M139B7X	M139B8	M139B8X	M139B9	M139B9X	M139C1	M139C1X	M139C2	M139C2X	M139C3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1300**	-	**6140**	-	**31200**	-	**73900**	-	**7990**	-	**28700**	-	**13100**	-	**4180**
Iron	ug/L	Y	300	210	-	**5950**	-	**30400**	-	**75000**	-	**6850**	-	**30100**	-	**13100**	-	**3070**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	18 J	-	50 J	-	140	-	29 J	-	31 J	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	45000 J	-	16700	-	10000 U	-	10000 U	-	3800 J	-	10000 U	-	1000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-139	MW-139	MW-139	MW-139	MW-139	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154
			Field Sample ID	02/15/2019	01/27/2020	01/27/2020	01/28/2021	01/28/2021	08/15/2012	08/16/2012	04/03/2013	04/04/2013	09/19/2013	10/29/2013	03/27/2014	03/28/2014	11/12/2014	11/13/2014
			Sample Date	M139C3X	M139C4	M139C4X	M139C5	M139C5X	M154B4	M154B4X	M154B5	M154B5X	M154B6	M154B7X	M154B8	M154B8X	M154B9	M154B9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**3860**	-	**12000**	-	**68100**	-	**38900**	-	**29800**	-	**7860**	-	**13900**	-
Iron	ug/L	Y	300	-	**3380**	-	**11000**	-	**60700**	-	**31300**	-	**18600**	-	**3910**	-	**9870**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 UJ	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	59	-	28 J	-	15 U	-	22 J	-	30 J
Sulfate (SO4)	ug/L	N	250000	1800 J	-	2000 UJ	-	2000 UJ	-	12500 U	-	5000 U	-	25000 U	-	10000 U	-	5000 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154
			Field Sample ID	04/15/2015	04/16/2015	02/08/2016	02/09/2016	08/15/2016	08/16/2016	02/14/2017	02/15/2017	08/21/2017	08/22/2017	08/22/2018	08/23/2018	03/14/2019	03/14/2019	08/23/2019
			Sample Date	M154C1	M154C1X	M154C2	M154C2X	M154C3	M154C3X	M154C4	M154C4X	M154C5	M154C5X	M154C7	M154C7X	M154C8	M154C8X	M154C9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4610**	-	**5070**	-	**8700**	-	**791**	-	**10800**	-	**25100**	-	**14300**	-	**14600**
Iron	ug/L	Y	300	**3690**	-	246	-	**4320**	-	**4360**	-	**7770**	-	**23500**	-	**1240**	-	**12600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	110	-	35 J	-	15 U	-	30 J	-	46 J	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	5000 U	-	10000 U	-	10000 U	-	21800	-	5000 U	-	2000 U	-	2000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-154	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158
			Field Sample ID	08/23/2019	02/03/2020	02/04/2020	08/12/2020	08/13/2020	01/26/2021	01/27/2021	06/06/2012	09/04/2012	09/05/2012	05/20/2013	05/21/2013	10/01/2013	10/02/2013	06/24/2014
			Sample Date	M154C9X	M154D1	M154D1X	M154D2	M154D2X	M154D3	M154D3X	M158C1	M158C2	M158C2X	M158C3	M158C3X	M158C4	M158C4X	M158C5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**8210**	-	-	-	**6700**	-	**60200**	**31800**	-	**50400**	-	**54700**	-	**80100**
Iron	ug/L	Y	300	-	**786**	-	**21000**	-	**1600**	-	-	**30800**	-	**46900**	-	**53600**	-	**79400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	21000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 UJ	-	120 J	-	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	4000 UJ	-	49100 J	-	20000 UJ	-	2000 UJ	-	-	85400	-	37000	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158
			Field Sample ID	06/25/2014	11/05/2014	11/06/2014	07/14/2015	07/15/2015	03/17/2016	03/18/2016	09/12/2016	09/13/2016	03/28/2017	03/29/2017	08/29/2017	08/30/2017	05/10/2018	05/15/2018
			Sample Date	M158C5X	M158C6	M158C6X	M158C7	M158C7X	M158C8	M158C8X	M158C9	M158C9X	M158D1	M158D1X	M158D2	M158D2X	M158D3	M158D3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**8590**	-	**51100**	-	**9330**	-	**5920**	-	**10600**	-	**9640**	-	**8120**	-
Iron	ug/L	Y	300	-	**3860**	-	**43500**	-	**5540**	-	**5850**	-	**6170**	-	**6970**	-	**6100**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	120	-	380	-	40 U	-	590	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	24 J	-	15 U	-	15 U	-	15 U	-	15 U	-	33 J	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	12500 U	-	83100	-	36200	-	**491000**	-	39300	-	**370000**	-	**281000**	-	148000

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-158	MW-159
			Field Sample ID	11/21/2018	11/21/2018	05/08/2019	05/08/2019	05/08/2019	11/12/2019	11/13/2019	02/24/2020	02/25/2020	08/14/2020	08/18/2020	02/26/2021	02/26/2021	08/16/2021	09/10/2014
			Sample Date	M158D4	M158D4X	M158D5	M158D5	M158D5X	M158D9	M158D9X	M158E1	M158E1X	M158E3	M158E3X	M158E5	M158E5X	M158E7	M159B4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**17500**	-	**11300**	-	-	**10700**	-	**8950**	-	-	-	**17000**	-	**13000**	**61700**
Iron	ug/L	Y	300	**15600**	-	-	**8240**	-	**9980**	-	**5750**	-	**7200**	-	**17000**	-	**8700**	**55000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	8600	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	67 J	-	-	40 U	-	40 U	-	40 U	-	250 U	-	40 UJ	40 UJ	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	15 UJ	-	15 U	-	15 U	-	15 U	-	15 U	60	-
Sulfate (SO4)	ug/L	N	250000	-	31300	-	-	1000 UJ	-	**471000J**	-	162000 J	-	**510000J**	-	130000 J	62000	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-159	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164
			Field Sample ID	09/11/2014	08/13/2012	08/14/2012	02/21/2013	02/22/2013	09/19/2013	10/29/2013	04/02/2014	04/03/2014	12/11/2014	12/12/2014	06/26/2015	06/26/2015	03/15/2016	08/31/2016
			Sample Date	M159B4X	M164B9	M164B9X	M164C1	M164C1X	M164C2	M164C2X	M164C3	M164C3X	M164C4	M164C4X	M164C5	M164C5X	M164C6	M164C7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**602**	-	**402**	-	**649**	-	**344**	-	174 J	-	**1040**	-	**2410**	237
Iron	ug/L	Y	300	-	**498**	-	33.3 U	-	**585**	-	43.0 U	-	33.4 U	-	**1080**	-	**2240**	218
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	18 J	-	15 U	-	15 U	-	15 U	-	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	10000 U	-	101000	-	114000	-	90100	-	58300	-	115000	-	151000	160000	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164
			Field Sample ID	09/01/2016	03/27/2017	03/28/2017	09/13/2017	09/14/2017	12/14/2017	03/30/2018	03/30/2018	06/11/2018	10/04/2018	10/04/2018	12/11/2018	03/21/2019	03/21/2019	09/04/2019
			Sample Date	M164C7X	M164C9	M164C9X	M164D1	M164D1X	M164D2	M164D4	M164D4X	M164D5	M164D6	M164D6X	M164D7	M164D8	M164D8X	M164E1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	94.9 J	-	167 J	-	**678**	80.5 U	-	80.5 U	195 J	-	178 J	192 J	-	**1200**
Iron	ug/L	Y	300	-	74.7 U	-	117 J	-	80.5 U	80.5 U	-	80.5 U	71.3 J	-	62.8 UJ	40 U	-	**1090**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	45 J	-	250	-	40 U	-	-	300	-	-	40 U	-	-	61 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	15 U	-	-	15 U	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	93600	-	246000	-	95400	-	-	180000	-	-	130000	-	-	100000	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164	MW-164
			Field Sample ID	12/10/2019	03/19/2020	03/19/2020	03/19/2020	06/22/2020	06/22/2020	09/01/2020	09/01/2020	09/02/2020	09/02/2020	12/18/2020	03/09/2021	03/09/2021	05/26/2021	08/27/2021
			Sample Date	M164E2	D0319201	M164E3	M164E3X	D0622201	M164E4	D0901201	M164E5	D0902201X	M164E5X	M164E6	M164E7	M164E7X	M164E8	M164E9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**460**	168 J	155 J	-	-	-	-	-	-	-	80 J	40 U	-	**700**	**580**
Iron	ug/L	Y	300	**344**	41.2 U	41.2 U	-	**2200**	**2000**	270	**330**	-	-	41 U	41 U	-	**590**	**580J**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	2100	2200	380	310	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	1500	120
Nitrogen, Nitrate as N	ug/L	N	10000	-	41 J	-	56 J	-	-	-	-	40 UJ	40 UJ	-	-	40 UJ	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 UJ	-	15 U	-	-	-	-	15 U	15 U	-	-	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	248000 J	-	241000 J	-	-	-	-	86000 J	93000 J	-	-	110000 J	95000 J	72000 J

Notes:
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5. U - Not detected

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Historical Groundwater MNA Data
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			Location ID	MW-164	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R
			Field Sample ID	02/15/2022	04/26/2017	09/06/2017	11/30/2017	11/30/2017	06/11/2018	06/11/2018	12/11/2018	03/21/2019	06/04/2019	12/09/2019	06/02/2020	12/23/2020	12/23/2020	03/11/2021
			Sample Date	M164F2	M165RA5	M165RA6	D1130178	M165RA7	D0611181	M165RA9	M165RB2	M165RB3	M165RB4	M165RB6	M165RB8	M165RC1	M165RC1	D0311218
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	66 J	**3620**	**18700**	**16000**	**15600**	**37000**	**38100**	**42400**	**56500**	**59800**	**67600**	-	**53000**	**35000**	**60000**
Iron	ug/L	Y	300	41 U	**2900**	**19100**	**14800**	**14200**	**33500**	**35600**	**41000**	**52600**	**59000**	**71600**	**65000**	**51000**	**28000**	**61000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	66000	-	-	-
Methane	ug/L	N	NA	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	110 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	140000 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-165R	MW-165R	MW-165R	MW-165R	MW-165R	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166
			Field Sample ID	03/11/2021	05/26/2021	08/03/2021	10/21/2021	02/15/2022	08/13/2012	08/14/2012	02/21/2013	02/22/2013	09/19/2013	09/19/2013	10/29/2013	04/02/2014	04/03/2014	12/11/2014
			Sample Date	M165RC2	M165RC3	M165RC4	M165RC5	M165RC6	M166C1	M166C1X	M166C2	M166C2X	D0919131	M166C3	M166C4X	M166C5	M166C5X	M166C6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**60000**	**78000**	**66000**	**44000**	**37000**	**65900**	-	**18000**	-	**77800**	**76500**	-	**5330**	-	**30500**
Iron	ug/L	Y	300	**61000**	**68000**	**60000**	**46000**	**37000**	**67200**	-	**17700**	-	**75400**	**76900**	-	**5260**	-	**30600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	15000	8100	13000	16000	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	40 UJ	40 UJ	40 UJ	-	400 U	-	40 U	-	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	21 J	15 U	-	42 J	-	18 J	-	-	18 J	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**440000J**	**430000J**	20000 UJ	250000 J	-	25000 U	-	15300 J	-	-	12500 U	-	74400	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R
			Field Sample ID	12/12/2014	07/13/2015	07/14/2015	03/15/2016	03/16/2016	08/31/2016	09/01/2016	04/26/2017	09/13/2017	09/14/2017	12/14/2017	03/30/2018	03/30/2018	06/11/2018	10/03/2018
			Sample Date	M166C6X	M166C7	M166C7X	M166C8	M166C8X	M166C9	M166C9X	M166RD1	M166RD2	M166RD2X	M166RD3	M166RD5	M166RD5X	M166RD6	D1003181
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**14600**	-	97.8 J	-	**27700**	-	**129000**	**173000**	-	**89500**	**4400**	-	**7990**	**9060**
Iron	ug/L	Y	300	-	**13100**	-	35.3 J	-	**29200**	-	**135000**	**172000**	-	**90600**	**940**	-	**7040**	**10900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	-	-	110	-	40U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	25 J	-	310	-	15 U	-	19 J	-	-	43 J	-	-	15 U	-	15U
Sulfate (SO4)	ug/L	N	250000	10000 U	-	25000 U	-	39300	-	10000 U	-	-	155000	-	-	**871000**	-	**1070000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R
			Field Sample ID	10/03/2018	10/03/2018	12/11/2018	03/20/2019	03/20/2019	03/20/2019	06/04/2019	09/04/2019	09/04/2019	09/04/2019	09/04/2019	12/09/2019	03/18/2020	03/18/2020	06/02/2020
			Sample Date	M166RD7	M166RD7X	M166RD8	D0320191	M166RD9	M166RD9X	M166RC1	D0904191	D0904191X	M166RE2	M166RE2X	M166RE3	M166RE4	M166RE4X	M166RE5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10300**	-	**3860**	**3740**	**3910**	-	**2350**	**6910J**	-	**5410J**	-	**1780**	**799**	-	-
Iron	ug/L	Y	300	**11300**	-	**5020**	**2890**	**3180**	-	**2950**	**4310**	-	**3830**	-	**1850**	**324**	-	130 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	440
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40U	-	85 J	-	80 J	-	-	40 U	-	40 U	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15U	-	15 U	-	15 U	-	-	15 U	-	15 U	-	-	160	-
Sulfate (SO4)	ug/L	N	250000	-	**988000**	-	**1200000**	-	**1240000**	-	-	**1110000J**	-	**1310000J**	-	-	**1090000J**	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-166R	MW-179	MW-187	MW-187	MW-187	MW-187
			Field Sample ID	09/02/2020	09/02/2020	12/23/2020	03/12/2021	03/12/2021	03/12/2021	05/26/2021	08/03/2021	10/21/2021	02/15/2022	12/09/2020	09/23/2014	09/23/2014	12/05/2014	12/05/2014
			Sample Date	M166RE6	M166RE6X	M166RE7	D0312211	M166RE8	M166RE8X	M166RE9	M166RF1	M166RF2	M166RF3	D1209201	M187B5	M187B5X	M187B6	M187B6X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**660**	170 J	240 J	-	**2800**	**1500**	**610**	**2300**	**2300**	**21400**	-	**23700**	-
Iron	ug/L	Y	300	**1300**	-	**370**	55 J	53 J	-	**2200**	**2100**	**930**	**630**	250	**20100**	-	**24000**	-
Iron, Total Recoverable	ug/L	N	NA	1400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	400	2200	14000	1900	8100	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	-	40 UJ	-	40 UJ	51 J	40 UJ	180 J	40 UJ	40 UJ	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	92	-	15 U	15 U	15 U	15 UJ	15 U	15 U	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**1100000J**	-	**1100000J**	-	**1100000J**	**1200000J**	**1100000J**	**980000J**	**950000J**	2000 UJ	-	1500 U	-	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-187	MW-192	MW-192	MW-192	MW-192	MW-192
			Field Sample ID	07/10/2019	07/10/2019	10/15/2020	10/15/2020	01/13/2021	01/13/2021	04/08/2021	07/15/2021	10/08/2021	01/26/2022	03/19/2012	03/20/2012	02/25/2013	02/26/2013	09/04/2014
			Sample Date	M187C3	M187C3X	M187C5	M187C5X	M187C6	M187C6X	M187C7	M187C8	M187C9	M187D1	M192B1	M192B1X	M192B2	M192B2X	M192B3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**23800**	-	-	-	**4600**	-	**7900**	**4900**	**9500**	**15000**	**32800**	-	**16500**	-	**36500**
Iron	ug/L	Y	300	**23800**	-	**8300**	-	**4100**	-	**4100**	-	-	**15000**	**32300**	-	**10300**	-	**31900**
Iron, Total Recoverable	ug/L	N	NA	-	-	9000	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	71	-	33 J	-
Sulfate (SO4)	ug/L	N	250000	-	1500 U	-	17000	-	35000	35000	17000	2000 UJ	200000	-	10000 U	-	25000 U	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-192	MW-192	MW-192	MW-192	MW-192	MW-192	MW-192	MW-200	MW-200	MW-200	MW-200	MW-201	MW-201	MW-201	MW-201
			Field Sample ID	09/05/2014	09/22/2016	09/23/2016	09/11/2020	09/11/2020	03/19/2021	03/19/2021	04/15/2020	04/16/2020	10/12/2020	10/12/2020	05/21/2021	09/14/2021	02/01/2022	02/01/2022
			Sample Date	M192B3X	M192B4	M192B4X	M192B5	M192B5X	M192B7	M192B7X	M200G2	M200G2X	M200G4	M200G4X	M201G4	M201G5	D0201221A	M201G7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**33500**	-	-	-	**3300**	-	**5040**	-	-	-	**4400**	**5500**	**7600**	**7900J**
Iron	ug/L	Y	300	-	**32600**	-	**21000**	-	**2600J**	-	**1860**	-	53 J	-	**4600**	**6100**	**8400**	**7400J**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	20000	-	-	-	-	-	430	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	210	1900	8900	8900
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 UJ	-	40 UJ	-	250 U	-	250 U	40 UJ	99 J	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	50	-	28 J	-	15 U	-	15 U	-	-	-	2500 UJ	15 U	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	10000 U	-	2500 U	-	8000 UJ	-	25000 J	-	**290000**	-	100000	2600 J	2000 UJ	2000 UJ	2000 UJ

Notes:
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-203	MW-203	MW-203	MW-203	MW-207	MW-207	MW-207	MW-207	MW-207	MW-207	MW-210	MW-211	MW-211	MW-211	MW-211
			Field Sample ID	05/24/2021	09/15/2021	09/15/2021	01/28/2022	11/20/2017	02/09/2018	05/22/2018	05/24/2021	08/18/2021	10/27/2021	M210B6	M211B7	M211B7X	M211B8	M211B9
			Sample Date	M203G4	D0915211	M203G5	M203G6	M207A2	M207A3	M207A4	M207A5	M207A6	M207A7	03/13/2012	06/26/2013	06/26/2013	05/22/2014	07/01/2014
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**720**	**1000**	**1000**	**1400**	**13000**	**23100**	**15000**	**25000**	**16000**	**16000**	**11400**	**29800**	-	**71500**	**42000**
Iron	ug/L	Y	300	**520**	**670**	**700**	**330**	-	**18100**	**14100**	**19000**	**16000**	**15000**	-	**20500**	-	-	**37000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	480	1200	1100	4200	-	-	-	14000	11000	15000	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	170 J	40 UJ	40 UJ	40 UJ	-	-	-	250 J	40 UJ	40 UJ	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	15 UJ	15 U	-	-	-	15 U	15 U	37 J	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	27000 J	11000 J	11000 J	14000 J	-	-	-	4000 UJ	2000 UJ	42000 J	-	-	1500 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211	MW-211
			Field Sample ID	M211B9X	M211C1	M211C1X	M211C2	M211C3	M211C4	M211C4X	M211C5	M211C6	M211C7	M211C8	M211C9	M211C9X	M211D1	M211D2
			Sample Date	07/02/2014	08/05/2014	08/05/2014	09/26/2014	10/30/2014	03/12/2015	03/12/2015	03/24/2015	06/08/2015	09/16/2015	11/16/2015	12/10/2015	12/17/2015	01/14/2016	04/08/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**16600**	-	**39900**	**44500**	**7570**	-	**23800**	**55400**	**57100**	**44100**	**43900**	-	**50000**	**60400**
Iron	ug/L	Y	300	-	**11200**	-	-	-	**6050**	-	-	-	-	-	**43600**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	45800	-	46000	-	-	-	57200	-	-	-	-	-	25900	-	-

Notes:
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5. U - Not detected

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			Location ID	MW-211	MW-211	MW-211	MW-211	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
			Field Sample ID	M211D3	M211D4	M211D5	M211D6	08/13/2012	08/14/2012	02/26/2013	02/27/2013	05/07/2013	05/07/2013	06/18/2013	06/18/2013	03/31/2014	04/01/2014	06/26/2014
			Sample Date	07/22/2016	12/08/2016	01/19/2017	04/18/2017	M212B2	M212B2X	M212B3	M212B3X	M212B4	M212B4X	M212B5	M212B5X	M212B6	M212B6X	M212B7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**54400**	**18300**	**13800**	**29100**	**1770**	-	**945**	-	**5250**	-	**9300**	-	**879**	-	-
Iron	ug/L	Y	300	-	**1610**	-	-	**594**	-	38.9 J	-	**532**	-	**1080**	-	140 J	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 U	-	40 U	-	-	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	-	15 U	-	-	-	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	-	-	40400	-	39200	-	61600	-	60200	-	82100	90600

Notes:
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5. U - Not detected

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			Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
			Field Sample ID	07/29/2014	07/29/2014	01/20/2015	01/20/2015	08/06/2015	08/07/2015	12/09/2015	12/15/2015	02/16/2016	02/17/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016	02/15/2017
			Sample Date	M212B8	M212B8X	M212B9	M212B9X	M212C1	M212C1X	M212C2	M212C2X	M212C3	M212C3X	D1213168B	D1213168BX	M212C4	M212C4X	M212C5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5450**	-	**3100**	-	**2160**	-	**11200**	-	**2810**	-	**7000**	-	**6090**	-	**636**
Iron	ug/L	Y	300	**1340**	-	**2230**	-	**548**	-	**2330**	-	**512**	-	**1490**	-	**1100**	-	258
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 U	-	-	-	40 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	15 U	-	-	-	15 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	78100	-	88800	-	78400	-	77000	-	87500	-	95500	-	95300	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212
			Field Sample ID	02/16/2017	11/27/2017	11/27/2017	03/05/2018	03/06/2018	12/12/2018	12/12/2018	12/12/2018	01/07/2019	01/07/2019	03/07/2019	03/07/2019	10/10/2019	10/10/2019	12/17/2019
			Sample Date	M212C5X	M212C6	M212C6X	M212C7	M212C7X	D1212181	M212C8	M212C8X	M212C9	M212C9X	M212D1	M212D1X	M212D2	M212D2X	M212D3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	17500 J	-	-	-	19700 J	-	-
Iron	ug/L	N	300	-	**4460**	-	**3400**	-	**8510**	**7760**	-	**8020**	-	**6160**	-	**17300**	-	**2800**
Iron	ug/L	Y	300	-	**3970**	-	**2440**	-	**5410**	**5570**	-	**7140**	-	**5680**	-	**14600**	-	**2190**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2200	-	-	-	1000	-
Nitrogen, Nitrate as N	ug/L	N	10000	310	-	-	-	700	-	-	-	-	40 U	-	40 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	15 U	-	-	-	-	15 U	-	15 U	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	109000	-	31600	-	39600	14700 J	-	18800 J	-	14700	-	14700	-	26200	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-212	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	12/17/2019	03/05/2020	03/05/2020	09/29/2020	09/29/2020	12/04/2020	12/04/2020	03/24/2021	03/24/2021	03/20/2012	05/24/2012	07/25/2012	04/25/2013	04/25/2013	06/17/2013
			Sample Date	M212D3X	M212D4	M212D4X	M212D5	M212D5X	M212D7	M212D7X	M212D8	M212D8X	M233B3	M233B4	M233B5	M233B6	M233B6X	M233B7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	13000 UJ	11000 J	-	9900 J	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**4390**	-	-	-	**11000**	-	**10000J**	-	**21000**	**17100**	**25000**	**22700**	-	**42500**
Iron	ug/L	Y	300	-	**3440**	-	**11000**	-	**9500**	-	**9000**	-	-	-	-	**22100**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	10000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	200	-	8600	-	2400 J	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	3400	-	250 U	-	250 J	-	460 J	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	40 UJ	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	250 U	-	250 U	-	290 J	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	24100 J	-	18700 J	-	20000	-	33000	-	50000	-	-	-	-	2100 J	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	06/25/2013	06/25/2013	09/10/2013	11/12/2013	03/14/2014	07/02/2014	07/02/2014	07/02/2014	08/04/2014	08/04/2014	08/08/2014	10/31/2014	01/16/2015	01/16/2015	03/11/2015
			Sample Date	M233B8	M233B8X	M233B9	M233C1	M233C2	D0702148	M233C4	M233C4X	M233C5	M233C5X	M233C6	M233C7	M233C8	M233C8X	M233C9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**23400**	-	**32700**	**21600**	**121000**	**37400**	**37300**	-	**15400**	-	**2560**	**8960**	**962**	-	**39400**
Iron	ug/L	Y	300	**23000**	-	-	-	-	**39800**	**35700**	-	**14600**	-	-	-	**553**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	2000 J	-	-	-	-	-	**806000**	-	**2960000**	-	-	-	**11700000**	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	06/09/2015	07/06/2015	07/07/2015	09/21/2015	11/19/2015	12/11/2015	12/11/2015	01/14/2016	04/14/2016	07/26/2016	12/08/2016	01/23/2017	04/28/2017	05/09/2017	05/09/2017
			Sample Date	M233D1	M233D2	M233D2X	M233D3	M233D4	M233D5	M233D5X	M233D6	M233D7	M233D8	M233D9	M233E1	M233E2	M233E4	M233E4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**365**	**1660**	-	**5050J**	**419**	149 UJ	-	140 J	131 J	74.7 U	107 J	286	138 J	127 J	-
Iron	ug/L	Y	300	-	**2170**	-	-	-	33.3 U	-	-	-	74.7 U	74.7 U	-	-	74.7 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**543000**	-	-	-	**7580000**	-	-	111000	**4030000**	-	-	-	**41500000**

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233
			Field Sample ID	07/24/2017	10/16/2017	01/26/2018	04/16/2018	07/19/2018	10/24/2018	01/07/2019	04/04/2019	07/03/2019	10/08/2019	01/07/2020	04/02/2020	07/07/2020	09/28/2020	09/28/2020
			Sample Date	M233E5	M233E6	M233E7	M233E8	M233E9	M233F1	M233F2	M233F3	M233F4	M233F5	M233F6	M233F7	M233F8	M233F9	M233F9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	1070 J	-	-	-	-	-	-	-	150 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	180 J	-	-	-	-	-
Iron	ug/L	N	300	**699**	**1950**	131 J	99.4 J	121 UJ	**5930**	**995**	**887**	**1560**	165 J	**1170**	112 J	-	210	-
Iron	ug/L	Y	300	-	-	-	-	69.8 UJ	-	192 UJ	-	-	40 U	-	-	-	81 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	530	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	8200 J	-	-	8000	-	-	-	-	5900
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	340	-	-	40 U	-	-	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	43 J	-	-	39 J	-	-	-	-	250 U
Sulfate (SO4)	ug/L	N	250000	-	**6690000**	-	-	**3710000**	-	**10100000**	-	-	**6270000J**	-	-	-	-	**920000**

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-233	MW-234R	MW-234R	MW-234R
			Field Sample ID	10/12/2020	12/03/2020	12/03/2020	01/05/2021	03/22/2021	03/22/2021	03/22/2021	04/02/2021	07/09/2021	10/07/2021	12/07/2021	01/21/2022	07/26/2013	07/26/2013	07/03/2014
			Sample Date	M233G1	M233G2	M233G2X	M233G3	D0322218	M233G4	M233G4X	M233G5	M233G6	M233G7	M233G8	M233G9	M234RA1	M234RA1X	M234RA2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	50 UJ	-	-	50 UJ	50 UJ	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	66 UJ	-	150 J	57 J	83 J	-	80 J	72 J	72 J	41 J	49 J	**23000**	-	**26200**
Iron	ug/L	Y	300	-	41 U	-	-	41 U	41 U	-	-	-	-	-	-	**17000**	-	**24500**
Iron, Total Recoverable	ug/L	N	NA	150 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	8300	-	8800	-	8100	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	250 U	-	250 U	-	250 U	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	250 UJ	-	250 U	-	250 U	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**4600000**	-	**3300000**	-	**3200000**	-	**950000J**	**1700000**	**2500000**	-	-	111000	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R	MW-234R
			Field Sample ID	07/03/2014	08/01/2014	08/01/2014	01/16/2015	01/16/2015	09/18/2015	11/19/2015	12/10/2015	12/15/2015	01/13/2016	04/14/2016	07/25/2016	12/06/2016	01/23/2017	04/28/2017
			Sample Date	M234RA2X	M234RA3	M234RA3X	M234RA5	M234RA5X	M234RA6	M234RA7	M234RA8	M234RA8X	M234RA9	M234RB1	M234RB2	M234RB3	M234RB4	M234RB7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**28200**	-	**29500**	-	**35400**	**18300**	**15600**	-	**23400**	**26400**	**32100**	**24300**	**52800**	**29700**
Iron	ug/L	Y	300	-	**25200**	-	**26000**	-	-	-	**12700**	-	-	-	-	**23500**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	36200	-	3600 J	-	16400	-	-	-	68800	-	-	-	10000 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR
			Field Sample ID	08/31/2017	10/16/2017	10/16/2017	01/26/2018	04/16/2018	07/19/2018	10/23/2018	01/07/2019	01/07/2019	04/04/2019	07/03/2019	10/01/2019	10/01/2019	01/07/2020
			Sample Date	M234RRC1	D1016171	M234RRC2	M234RRC3	M234RRC4	M234RRC5	M234RRC6	D0107191	M234RRC7	M234RRC8	M234RRC9	M234RRD1	M234RRD1X	M234RRD2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	10500 J	10500 J	-	-	-	16500 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7150**	**14100**	**14600**	**13700**	**14100**	**18800**	**16400**	**40600**	**40000**	**20400**	**26200**	**14600**	-	**8020**
Iron	ug/L	Y	300	-	-	-	-	-	**17700**	-	**18100**	**18100**	-	-	**12000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	8700	9100	-	-	-	7900 J	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	40 U	40 U	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	15 U	15 U	-	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	48300	50400	-	-	2000 U	-	4000 U	4000 U	-	-	-	5000 UJ	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR	MW-234RR
			Field Sample ID	04/02/2020	07/07/2020	09/25/2020	09/25/2020	10/13/2020	12/03/2020	12/03/2020	01/06/2021	03/25/2021	04/02/2021	07/09/2021	10/07/2021	12/03/2021	01/18/2022
			Sample Date	M234RRD3	M234RRD4	M234RRD5	M234RRD5X	M234RRD6	M234RRD7	M234RRD7X	M234RRD8	M234RRD9X	M234RRE1	M234RRE2	M234RRE3	M234RRE4	M234RRE5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	35000 J	-	9800 J	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**19100**	-	**20000**	-	-	**10000**	-	**14000**	-	**11000**	**19000**	**16000**	**9900**	**8500**
Iron	ug/L	Y	300	-	-	**19000**	-	41 U	**8300**	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	15000	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	11000	-	-	8800	-	13000	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	-	250 U	-	440 J	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	250 U	-	-	250 U	-	250 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	8400	-	-	6300	-	140000	-	4000 UJ	4000 U	5100	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237	MW-237
			Field Sample ID	03/04/2013	03/05/2013	06/02/2014	06/03/2014	09/29/2015	09/30/2015	02/15/2016	02/16/2016	03/23/2017	03/24/2017	03/29/2018	03/30/2018	03/22/2019	03/22/2019	06/24/2020
			Sample Date	M237B4	M237B4X	M237B5	M237B5X	M237B6	M237B6X	M237B7	M237B7X	M237B8	M237B8X	M237B9	M237B9X	M237C1	M237C1X	D0624201
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8060**	-	**11400**	-	**8230**	-	**8820**	-	**2920**	-	**5610**	-	**8530**	-	-
Iron	ug/L	Y	300	**4200**	-	**10300**	-	**8050**	-	**6530**	-	115 J	-	**3670**	-	**5570**	-	**4600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6100
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	110	-	200	-	40 U	-	40 U	-	40 U	-	72 J	-	40 U	52 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	22 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	5000 U	-	5000 U	-	10000 U	-	5000 U	-	10000 U	-	4000 U	-	4000 U	8000 UJ

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-237	MW-237	MW-237	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238	MW-238
			Field Sample ID	06/24/2020	06/24/2020	06/25/2021	M238B1	M238B1X	M238B2	M238B2X	M238B3	M238B3X	D020316HS2	M238HS	M238B4	D0218161	M238B4X	M238B5
			Sample Date	M237C2	M237C2X	M237C3	03/06/2012	03/07/2012	04/24/2013	04/25/2013	05/28/2014	05/29/2014	02/03/2016	02/03/2016	02/17/2016	02/18/2016	02/18/2016	02/06/2017
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**9300**	**3030**	-	**1710**	-	**4340**	-	-	**1160**	**1500**	-	-	**2140**
Iron	ug/L	Y	300	**4100**	-	**5800**	**2060**	-	**360**	-	**1420**	-	-	**1600**	**547**	-	-	260
Iron, Total Recoverable	ug/L	N	NA	6300	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	53 J	40 UJ	-	40 U	-	96 J	-	410	360	290	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	-	15 U	-	15 U	-	15 U	15 U	19 J	-	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	8000 UJ	2400 J	-	135000	-	150000	-	138000	-	92400 J	-	-	107000	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-238	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239
			Field Sample ID	M238B5X	03/20/2013	03/21/2013	09/09/2014	09/10/2014	12/07/2015	12/10/2015	06/08/2016	06/09/2016	07/28/2016	07/28/2016	05/10/2017	05/11/2017	06/06/2018	06/06/2018
			Sample Date	02/07/2017	M239B4	M239B4X	M239B5	M239B5X	M239B6	M239B6X	M239B7	M239B7X	M239B8	M239B8X	M239B9	M239B9X	D0606181	M239C1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**2990**	-	**4930**	-	**4880**	-	**8680**	-	**4030**	-	**3720**	-	**4480**	**4750**
Iron	ug/L	Y	300	-	**2990**	-	**4260**	-	**4160**	-	**3050**	-	**3420**	-	**3070**	-	**3890**	**3980**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	290	-	190	-	100	-	-	-	1800	-	-	-	84 J	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	20 J	-	15 U	-	15 U	-	-	-	15 U	-	-	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	37500	-	141000	-	137000	-	137000	-	131000	-	131000	-	125000	-	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-239	MW-240	MW-240	MW-240	MW-240	MW-240
			Field Sample ID	06/06/2018	06/07/2018	07/06/2018	10/22/2018	01/14/2019	06/12/2019	06/12/2019	08/25/2020	08/25/2020	09/29/2021	02/25/2013	02/26/2013	04/30/2013	04/30/2013	04/30/2013
			Sample Date	M239C1X	D0607181	M239C2X	M239C3X	M239C4X	M239C5	M239C5X	M239C6	M239C6X	M239C8	M240B1	M240B1X	M240B2	M240B2	M240B2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**9110**	-	-	-	**5100**	**1260**	-	-	**4850**	-
Iron	ug/L	Y	300	-	-	-	-	-	**3250**	-	**3700**	-	**3900**	**868**	-	219	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	5000	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	22	12	3.3 J	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	350	360	120	890	2100	-	40 U	-	40 U	65 J	-	1000	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	15 U	-	-	-	15 U	-	240 J	15 U	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	119000	116000	115000	116000	118000	-	141000 J	-	110000 J	150000 J	-	72300	-	-	56000

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240
			Field Sample ID	06/18/2013	06/19/2013	03/13/2014	03/13/2014	06/30/2014	07/30/2014	07/30/2014	09/10/2014	09/11/2014	01/19/2015	01/19/2015	12/09/2015	12/14/2015	12/28/2015	12/29/2015
			Sample Date	M240B3	M240B3X	M240B4	M240B4X	M240B5X	M240B6	M240B6X	M240B7	M240B7X	M240B8	M240B8X	M240B9	M240B9X	M240C1	M240C1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1390**	-	**2030**	-	-	**2770**	-	**3990**	-	**9010**	-	**14300**	-	**3640**	-
Iron	ug/L	Y	300	245	-	72.7 J	-	-	**566**	-	**3250**	-	**7480**	-	**6250**	-	94.0 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	56 J	-	-	-	-	-	340
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	15 U	-	-	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	97400	-	62200	50700	-	167000	-	113000	-	59000	-	30700	-	18400 J

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240	MW-240
			Field Sample ID	12/05/2016	12/06/2016	11/29/2017	11/29/2017	01/08/2019	01/08/2019	10/10/2019	10/10/2019	09/23/2020	09/23/2020	12/04/2020	12/04/2020	12/04/2020	03/24/2021	03/24/2021
			Sample Date	M240C2	M240C2X	M240C3	M240C3X	M240C4	M240C4X	M240C5	M240C5X	M240C6	M240C6X	D1204208	M240C7	M240C7X	M240C8	M240C8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	4400 UJ	1700 J	3300 J	-	400 J	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	2120 J	-	7590 J	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5440**	-	**14100**	-	**14900**	-	**10900**	-	-	-	**13000**	**13000**	-	**4500J**	-
Iron	ug/L	Y	300	**2450**	-	**5940**	-	**2100**	-	**5340**	-	**2900**	-	120 J	110 J	-	**360**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	87000	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	3 U	-	3 U	-	3.3 J	4.8 J	-	4.9 J	-	21 J
Nitrogen, Nitrate as N	ug/L	N	10000	-	720	-	-	-	340	-	1100	-	460 J	250 U	-	250 U	-	580
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	190 J
Nitrogen, Nitrite	ug/L	N	1000	-	25 J	-	-	-	15 U	-	250 U	-	250 U	250 U	-	250 U	-	650
Sulfate (SO4)	ug/L	N	250000	-	48200	-	47400	-	189000	-	99500	-	60000 J	190000	-	200000	-	32000

Notes:
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Appendix B3 Main Yard
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			Location ID	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241
			Field Sample ID	03/26/2012	03/27/2012	08/08/2012	08/09/2012	04/03/2013	04/04/2013	09/25/2013	09/26/2013	06/18/2014	06/19/2014	11/11/2014	11/12/2014	06/29/2015	06/30/2015	02/17/2016
			Sample Date	M241B3	M241B3X	M241B4	M241B4X	M241B5	M241B5X	M241B6	M241B6X	M241B7	M241B7X	M241B8	M241B8X	M241B9	M241B9X	M241C1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**23200**	-	**20200**	-	**28600**	-	**21400**	-	**53000**	-	**21900**	-	**25100**	-	**9020**
Iron	ug/L	Y	300	**23000**	-	**21600**	-	**27200**	-	**21300**	-	**23800**	-	**21200**	-	**23700**	-	**6890**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	53	-	34 J	-	15 U	-	50 J	-	28 J	-	35 J	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	10000 U	-	5000 U	-	5000 U	-	12500 U	-	10000 U	-	10000 U	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241
			Field Sample ID	02/18/2016	08/16/2016	08/16/2016	02/15/2017	02/15/2017	08/21/2017	08/22/2017	03/01/2018	03/01/2018	08/08/2018	08/09/2018	03/08/2019	03/08/2019	08/22/2019	08/22/2019
			Sample Date	M241C1X	M241C2	M241C2X	M241C3	M241C3X	M241C4	M241C4X	M241C5	M241C5X	M241C6	M241C6X	M241C7	M241C7X	M241C8	M241C8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**19300**	-	**21900**	-	**19500**	-	**19200**	-	**18500**	-	**19900**	-	**18500**	-
Iron	ug/L	Y	300	-	**18900**	-	**21800**	-	**20200**	-	**18900**	-	**18200**	-	**18500**	-	**18200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40U	-	73 J	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	45 J	-	15 U	-	34 J	-	22 J	-	15 U	-	15U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	10000 U	-	10000 U	-	10000 U	-	10000 U	-	2000 U	-	2000U	-	2000 U	-	2000 UJ

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-241	MW-241	MW-241	MW-241	MW-241	MW-241	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242
			Field Sample ID	02/07/2020	02/07/2020	08/28/2020	08/28/2020	01/29/2021	01/29/2021	03/13/2012	03/14/2012	09/25/2013	09/26/2013	08/28/2014	08/29/2014	09/22/2016	09/23/2016	02/15/2017
			Sample Date	M241C9	M241C9X	M241D2	M241D2X	M241D3	M241D3X	M242B1	M242B1X	M242B2	M242B2X	M242B3	M242B3X	M242B4	M242B4X	M242B5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4830**	-	-	-	**17000**	-	**20400**	-	**1460**	-	**1460**	-	**1040**	-	**1720**
Iron	ug/L	Y	300	**2280**	-	**16000**	-	-	-	**1360**	-	**813**	-	**1230**	-	**983**	-	**1680**
Iron, Total Recoverable	ug/L	N	NA	-	-	16000	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	270	-	40 UJ	-	40 UJ	-	40 U	-	40 U	-	40 U	-	69 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	2000 UJ	-	4000 UJ	-	2000 UJ	-	74100	-	127000	-	97600	-	88000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-242	MW-243	MW-243	MW-243	MW-243	MW-243
			Field Sample ID	02/16/2017	01/10/2019	01/10/2019	03/19/2019	03/19/2019	04/12/2019	10/07/2019	10/08/2019	06/25/2020	06/25/2020	M243B3	M243B3X	M243B4	M243B4X	M243B5
			Sample Date	M242B5X	M242B7	M242B7X	M242B8	M242B8X	M242B9	M242C1	M242C1X	M242C2	M242C2X	03/27/2013	03/28/2013	08/26/2014	08/27/2014	10/16/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	1430	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	1310 UJ	-	-	-	-	2080 J	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1760**	-	**2200**	-	-	**2290**	-	-	-	**37700**	-	**37200**	-	**30600**
Iron	ug/L	Y	300	-	**1500**	-	**1030**	-	-	**1840**	-	**2800**	-	**35500**	-	**40200**	-	**28600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	5200	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	170	-	-	-	-	68	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	-	250 U	-	150 UJ	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	-	250 UJ	-	15 U	-	24 J	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	77100	-	56500	-	46500 J	-	-	54500	-	47000 J	-	5000 U	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-243	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R
			Field Sample ID	M243B5X	08/22/2016	08/23/2016	01/25/2017	01/26/2017	02/01/2018	02/02/2018	01/30/2019	01/30/2019	02/05/2020	02/05/2020	02/06/2020	02/06/2020	11/18/2020	02/24/2021
			Sample Date	10/20/2015	M243RB6	M243RB6X	M243RB5	M243RB5X	M243RC2	M243RC2X	M243RC6	M243RC6X	D0205201	M243RC7	D0206201X	M243RC7X	M243RC8X	M243RD1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**27400**	-	**15800**	-	**2100**	-	161 J	-	**1880**	**1870**	-	-	-	**25000**
Iron	ug/L	Y	300	-	**24200**	-	**15500**	-	**2840**	-	**3780**	-	**1730**	**1650**	-	-	-	**37000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	**713000**	-	**614000**	-	**306000**	-	52700	-	-	112000 J	115000 J	7000	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-243R	MW-243R	MW-243R	MW-243R	MW-243R	MW-244	MW-244	MW-244	MW-244	MW-244	MW-244	MW-258	MW-258	MW-258	MW-258
			Field Sample ID	02/24/2021	05/10/2021	08/05/2021	11/09/2021	02/14/2022	11/19/2020	02/24/2021	02/24/2021	05/10/2021	08/06/2021	11/09/2021	04/25/2012	04/26/2012	08/15/2012	08/16/2012
			Sample Date	M243RD1X	M243RD2	M243RD3	M243RD4	M243RD5	M244C1X	M244C3	M244C3X	M244C4	M244C5	M244C6	M258B3	M258B3X	M258B4	M258B4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**25000**	-	**5400**	**23000**	-	**5700J**	-	**9300**	-	**7900**	**8220**	-	**7920**	-
Iron	ug/L	Y	300	-	-	-	-	**22000**	-	-	-	-	-	-	**7320**	-	**7500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	-	-	40 UJ	-	-	-	-	-	-	-	410 J	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	40 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	15 U	-	-	-	-	-	-	-	15 U	-	22 J
Sulfate (SO4)	ug/L	N	250000	41000 J	30000	2600 J	780	74000	31000	-	40000 J	46000	9400	44000	-	2500 U	-	10000 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258	MW-258
			Field Sample ID	04/18/2013	04/19/2013	08/19/2013	09/23/2013	09/24/2013	03/26/2014	03/27/2014	09/12/2014	09/12/2014	12/05/2014	12/05/2014	01/13/2015	01/14/2015	03/02/2016	03/03/2016
			Sample Date	M258B5	M258B5X	M258B6	M258B7	M258B7X	M258B8	M258B8X	M258B9	M258B9X	M258C1	M258C1X	M258C2	M258C2X	M258C3	M258C3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	14400	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8500**	-	**31400**	**7550**	-	**15600**	-	**8500**	-	**42200**	-	**5070**	-	**12100**	-
Iron	ug/L	Y	300	**7920**	-	-	**6000**	-	**14200**	-	**7220**	-	**41300**	-	**2180**	-	**11100**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	16000	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	40 U	-	40 U	-	40 U	-	-	-	-	-	40U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	-	15 U	-	15 U	-	-	-	-	-	15U	-	30 J
Sulfate (SO4)	ug/L	N	250000	-	5000 U	1500 U	-	2900 J	-	15000 J	-	2500 J	-	126000	-	205000	-	144000

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R
			Field Sample ID	05/15/2018	05/16/2018	11/30/2018	11/30/2018	02/19/2019	02/19/2019	02/19/2019	07/08/2019	07/08/2019	07/08/2019	08/14/2019	08/14/2019	08/14/2019	02/18/2020	02/18/2020
			Sample Date	M258RC5	M258RC5X	M258RC7	M258RC7X	D0219191	M258RC8	M258RC8X	D0708198	M258RD1	M258RD1X	D0814191	M258RD2	M258RD2X	D0218201	D0218201X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6380**	-	**7580**	-	**1650**	**1540**	-	**5590**	**6820**	-	**1730**	**1670**	-	**1900**	-
Iron	ug/L	Y	300	**5220**	-	**5920**	-	160 J	98.4 J	-	**5210**	**4070**	-	**1240**	**1050**	-	41.2 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	40 U	-	40 U	-	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	29 J	-	15 U	15 U	-	15 U	-	-	-	15 U	-	15 UJ	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	212000	-	244000	**1140000**	-	**1030000**	**540000**	-	**561000**	**331000J**	-	**345000J**	-	243000 J

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-258R	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259
			Field Sample ID	02/18/2020	02/18/2020	10/15/2020	10/15/2020	01/12/2021	01/12/2021	04/08/2021	M259B3	M259B3X	M259B4	M259B4X	M259B5	M259B5X	M259B6	M259B7
			Sample Date	M258RD3	M258RD3X	M258RD4	M258RD4X	M258RD5	M258RD5X	M258RD6	04/25/2012	04/26/2012	08/08/2012	08/09/2012	04/18/2013	04/19/2013	08/19/2013	09/23/2013
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	3700	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2300**	-	-	-	**880**	-	**920**	**5660**	-	**2970**	-	**3670**	-	**5030**	**3400**
Iron	ug/L	Y	300	41.2 U	-	**620**	-	41 U	-	96 J	**5350**	-	**2990**	-	**3660**	-	-	**2770**
Iron, Total Recoverable	ug/L	N	NA	-	-	1400	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	7500	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 UJ	-	270 J	-	-	40 U	-	40 U	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	250 U	-	-	15 U	-	15 U	-	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**252000J**	-	**1100000J**	-	**330000**	**360000J**	-	2500 U	-	2500 U	-	2500 U	1500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259	MW-259
			Field Sample ID	M259B7X	M259B8	M259B8X	M259B9	M259B9X	M259C1	M259C1X	M259C2	M259C2X	M259C3	M259C3X	M259C4	M259C4X	M259C5	M259C5X
			Sample Date	09/24/2013	03/26/2014	03/27/2014	08/18/2014	08/18/2014	12/05/2014	12/05/2014	01/13/2015	01/14/2015	09/15/2015	09/15/2015	03/02/2016	03/03/2016	12/19/2016	12/20/2016
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**10600**	-	**4900**	-	**9520**	-	**8970**	-	**8670**	-	**10300**	-	**9320**	-
Iron	ug/L	Y	300	-	**9720**	-	**3790**	-	**9280**	-	**8640**	-	**7470**	-	**9610**	-	**8800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	-	-	-	40U	-	-	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	-	-	-	15U	-	-	-	22 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	2500 U	-	6500	-	1500 U	-	37200	-	2500U	-	1500 U	-	2500 U	-	21500

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

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Chevron Perth Amboy Facility

			Location ID	MW-259	MW-259	MW-259	MW-259	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260
			Field Sample ID	M259C6	M259C6X	M259C7	M259C7X	03/06/2012	03/07/2012	08/20/2012	08/20/2012	08/21/2012	08/21/2012	03/26/2013	04/10/2013	09/26/2013	09/27/2013	05/27/2014
			Sample Date	02/07/2017	02/08/2017	08/21/2017	08/22/2017	M260A9	M260A9X	D0820121	M260B1	D0821121	M260B1X	M260B2X	M260B3	M260B4	M260B4X	M260B5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8870**	-	**5560**	-	**4000**	-	**1290**	**1670**	-	-	-	**3110**	**2190**	-	**2750**
Iron	ug/L	Y	300	**8300**	-	**4930**	-	**2960**	-	**320**	**386**	-	-	-	97.6 J	**1790**	-	**2120**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	4000 U	-	-	5000 U	5000 U	1000 U	-	-	1000 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	20 J	-	28 J	-	1900 U	-	-	300 U	300 U	750 U	-	-	110	-
Sulfate (SO4)	ug/L	N	250000	-	45100	-	43200	-	80400	-	-	93500	97800	120000	-	-	94800	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260	MW-260R	MW-260R	MW-260R	MW-260R
			Field Sample ID	05/28/2014	07/01/2015	07/02/2015	03/07/2016	03/08/2016	09/07/2016	09/07/2016	09/08/2016	09/08/2016	02/06/2017	02/07/2017	05/21/2019	05/21/2019	05/21/2019	11/04/2019
			Sample Date	M260B5X	M260B6	M260B6X	M260B7	M260B7X	D0907161	M260B8	M260B8X	D0908161	M260B9	M260B9X	D0521191	M260RC3	M260RC3X	D1104191
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1300**	-	**2100**	-	**1120**	**1170**	-	-	**821**	-	**4280**	**4610**	-	**6690**
Iron	ug/L	Y	300	-	**620**	-	**458**	-	**581**	**672**	-	-	**543**	-	**3160**	**3140**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	800 U	-	1000 U	-	400 U	-	-	400 U	40 U	-	40 U	40 U	-	40 U	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	**1400J**	-	750 U	-	150 U	-	-	750 U	750 U	-	300 U	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	98900	-	88400	-	78500	-	-	95400	102000	-	57500	168000	-	155000	1900 UJ

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260R	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-260RR	MW-260RR
			Field Sample ID	11/04/2019	11/04/2019	02/28/2020	02/28/2020	02/28/2020	02/28/2020	12/29/2020	12/29/2020	01/06/2021	03/31/2021	03/31/2021	03/31/2021	07/12/2021	10/07/2021	01/21/2022
			Sample Date	M260RC5	M260RC5X	D0228201	D0228201X	M260RC6	M260RC6X	M260RC9	M260RC9X	M260RRC8X	D0331218	M260RRD1	M260RRD1X	M260RRD2	M260RRD3	M260RRD4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6480**	-	**13100**	-	**14600**	-	**450J**	-	-	**760**	**550J**	-	250	400 U	-
Iron	ug/L	Y	300	-	-	**12300**	-	**12800**	-	77 UJ	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 UJ	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	24 J	-	130 J	-	190 J	-	300 U	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	2000 UJ	-	29100 J	-	5700 J	-	**87000000J**	**52000000**	**58000000J**	-	**46000000J**	**38000000**	**75000000**	**53000000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-261R	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262
			Field Sample ID	01/07/2021	01/07/2021	03/31/2021	03/31/2021	07/12/2021	10/07/2021	01/21/2022	05/06/2013	05/06/2013	06/20/2013	06/20/2013	07/02/2014	07/02/2014	07/31/2014	07/31/2014
			Sample Date	D0107218	M261RB3X	M261RB4	M261RB4X	M261RB5	M261RB6	M261RB7	M262B3	M262B3X	M262B4	M262B4X	M262B6	M262B6X	M262B7	M262B7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**350**	-	290	**530**	-	**925**	-	**808**	-	**2970**	-	**2400**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	**685**	-	**561**	-	**386**	-	**1230**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	25000 J	36000 J	-	240000	**540000**	**290000**	**590000**	-	133000	-	70900	-	**774000**	-	**300000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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Monitored Natural Attenuation Annual Report
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			Location ID	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262
			Field Sample ID	01/16/2015	01/16/2015	12/10/2015	12/15/2015	12/05/2016	12/06/2016	11/28/2017	11/28/2017	01/08/2019	01/08/2019	10/11/2019	10/11/2019	09/28/2020	09/28/2020	12/02/2020
			Sample Date	M262B9	M262B9X	M262C1	M262C1X	M262C2	M262C2X	M262C3	M262C3X	M262C4	M262C4X	M262C5	M262C5X	M262C6	M262C6X	M262C7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	3700 J	390 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	243 J	-	746 J	-	-	-	-
Iron	ug/L	N	300	**1430**	-	**1800**	-	**495**	-	**423**	-	**890**	-	**1070**	-	**760**	-	**1000**
Iron	ug/L	Y	300	**416**	-	**493**	-	200 J	-	164 J	-	231	-	**357**	-	**450**	-	230
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2500	-	990	-	1800	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	40 U	-	250 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	15 U	-	250 U	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	-	**317000**	-	214000	-	**504000**	-	**272000**	-	178000	-	205000	-	180000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-262	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263
			Field Sample ID	12/02/2020	03/18/2021	03/18/2021	06/08/2021	09/03/2021	12/08/2021	03/16/2022	10/18/2018	01/18/2019	04/08/2019	07/11/2019	10/01/2019	01/14/2020	03/25/2020	03/25/2020
			Sample Date	M262C7X	M262C9	M262C9X	M262D1	M262D2	M262D3	M262D4	M263B7X	M263B8X	M263B9X	M263C1X	M263C2X	M263C3X	M263C4	M263C4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	380 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**610**	-	**530**	**920**	**760**	**740**	-	-	-	-	-	-	**38200**	-
Iron	ug/L	Y	300	-	**370**	-	-	-	-	-	-	-	-	-	-	-	**28300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	170	-	2300	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	**13000**	-	340 J	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 UJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	200000	-	110000	170000 J	160000	230000	160000	2900 J	1500 U	3100 J	2600 J	1500 U	1500 U	-	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-263	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-264	MW-265
			Field Sample ID	12/15/2020	12/15/2020	03/17/2021	03/17/2021	06/03/2021	08/30/2021	12/10/2021	12/03/2015	12/04/2015	07/22/2016	07/22/2016	07/10/2018	10/22/2018	01/15/2019	08/16/2013
			Sample Date	M263C5	M263C5X	M263C6	M263C6X	M263C7	M263C8	M263C9	M264B5	M264B5X	M264B7	M264B7X	M264C1X	M264C2X	M264C3X	M265B6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1500
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**23000**	-	**27000**	-	**31000**	**32000**	**13000**	**3630**	-	**2750**	-	-	-	-	**1580**
Iron	ug/L	Y	300	**15000**	-	**22000**	-	**26000**	**29000**	**11000**	**2840**	-	**2340**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	15000	28000	21000
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	40 U	250 U	250 U	800 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	19 J	-	-	150
Sulfate (SO4)	ug/L	N	250000	-	1500 U	-	1500 U	1500 U	1500 U	2500 J	-	54200	-	1900 J	2800 J	1500 U	1500 U	7500 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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Monitored Natural Attenuation Annual Report
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			Location ID	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265	MW-265R	MW-265R	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266
			Field Sample ID	12/07/2015	12/10/2015	08/01/2016	08/01/2016	07/09/2018	10/24/2018	01/16/2019	11/09/2020	11/09/2020	08/20/2013	08/14/2014	08/15/2014	12/04/2014	12/04/2014	12/04/2014
			Sample Date	M265C2	M265C2X	M265C4	M265C4X	M265C8X	M265C9X	M265D1X	M265RC2	M265RC2X	M266B5	M266B6	D0814148	D1204148	D1204148	M266B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	4600	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2840**	-	**1080**	-	-	-	-	-	-	**4220**	-	**6320**	**4880**	-	**4860**
Iron	ug/L	Y	300	**433**	-	**401**	-	-	-	-	**29000**	-	-	**4370**	**4260**	-	**5020**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	31000	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	18000	16000	-	-	14000	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	800 U	250 U	250 U	-	-	40 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	750 U	-	-	-	-	15 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	7000	-	3000 J	81100 J	11600	19900	-	**480000**	38400	-	1500 U	3700 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-266	MW-267	MW-267	MW-267	MW-267
			Field Sample ID	12/04/2014	12/04/2014	01/25/2019	07/10/2019	07/10/2019	10/21/2020	10/21/2020	01/11/2021	01/11/2021	01/11/2021	04/12/2021	03/06/2012	03/07/2012	08/20/2012	08/21/2012
			Sample Date	M266B8	M266B8X	D0125191A	M266D3	M266D3X	M266D5	M266D5X	D0111218	M266D6	M266D6X	M266D7	M267B4	M267B4X	M267B5	M267B5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**7810J**	**3350**	-	-	-	**1700**	**1700**	-	**2000**	**21000**	-	**4080**	-
Iron	ug/L	Y	300	**5090**	-	-	**3240**	-	**1900**	-	**1500**	**1400**	-	**1600**	**6440**	-	237	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	2100	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	3400 J	-	-	17200	-	100000	82000 J	-	29000 J	130000	-	9700	-	5000 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267	MW-267R
			Field Sample ID	03/25/2013	03/26/2013	09/26/2013	09/27/2013	05/27/2014	05/28/2014	07/22/2015	07/22/2015	03/07/2016	03/08/2016	09/07/2016	09/08/2016	02/06/2017	02/07/2017	12/19/2019
			Sample Date	M267B6	M267B6X	M267B7	M267B7X	M267B8	M267B8X	M267B9	M267B9X	M267C1	M267C1X	M267C2	M267C2X	M267C3	M267C3X	D1219191
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**9020**	-	**18600**	-	**24700**	-	**8240**	-	**9640**	-	**1450**	-	**9350**	-	**4200**
Iron	ug/L	Y	300	**5600**	-	**19500**	-	**21500**	-	**3280**	-	**6710**	-	**409**	-	**4530**	-	41.2 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	120 J
Sulfate (SO4)	ug/L	N	250000	-	23200	-	23000	-	7400	-	50000 U	-	2500 U	-	4300 J	-	5500	84800 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R	MW-267R
			Field Sample ID	12/19/2019	12/19/2019	03/02/2020	03/02/2020	03/02/2020	09/14/2020	09/14/2020	12/15/2020	01/07/2021	03/31/2021	03/31/2021	04/02/2021	07/12/2021	10/07/2021	12/09/2021
			Sample Date	M267RD1	M267RD1X	D0302201	M267RD2	M267RD2X	M267RD4	M267RD4X	M267RD5X	M267RD6X	M267RD7	M267RD7X	M267RD8	M267RD9	M267RE1	M267RE2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3820**	-	**8730**	**8640**	-	-	-	-	-	**7300**	-	-	**3100**	**1200**	**3100**
Iron	ug/L	Y	300	**2970**	-	**7540**	**7840**	-	-	-	-	-	-	-	**12000**	**2300**	**900**	**3600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	1300	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	48 J	-	40 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	24 UJ	15 U	-	15 U	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	92300 J	102000 J	-	91100 J	-	2500 J	210000 J	100000	-	42000	-	34000	30000	24000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-267R	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-268	MW-273	MW-273	MW-273
			Field Sample ID	01/28/2022	04/10/2013	04/11/2013	10/18/2013	08/15/2014	08/15/2014	12/10/2014	12/10/2014	07/07/2015	07/08/2015	03/21/2016	03/22/2016	03/06/2012	03/07/2012	08/08/2012
			Sample Date	M267RE3	M268B3	M268B3X	M268B5	M268B6	M268B6X	M268B8	M268B8X	M268B9	M268B9X	M268C1	M268C1X	M273B1	M273B1X	M273B2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**38100**	-	**23500**	**26100**	-	**27000**	-	**27100**	-	**28000**	-	**4210**	-	**5210**
Iron	ug/L	Y	300	-	**37400**	-	43.0 U	**25900**	-	**27100**	-	**26300**	-	**29400**	-	**3050**	-	50.7 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	-	-	-	-	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	21 J	-	-	-	-	-	-	20 J	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	55000	-	25000 U	-	-	2200 J	-	3000 J	-	10000 U	-	36000	-	2500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273	MW-273
			Field Sample ID	08/09/2012	03/26/2013	03/27/2013	09/26/2013	09/27/2013	05/27/2014	05/27/2014	05/28/2014	05/28/2014	07/01/2015	07/02/2015	03/07/2016	03/08/2016	09/07/2016	09/08/2016
			Sample Date	M273B2X	M273B3	M273B3X	M273B4	M273B4X	D0527141	M273B5	D0528141	M273B5X	M273B6	M273B6X	M273B7	M273B7X	M273B8	M273B8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**7640**	-	**2090**	-	**6550**	**6660**	-	-	**4250**	-	**8160**	-	**7420**	-
Iron	ug/L	Y	300	-	**2590**	-	206	-	196 J	236	-	-	78.5 U	-	**5260**	-	74.7 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	1600	-	-	40 U	400 U	-	400 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	150 U	-	15 U	-	15 U	-	-	380 U	380 U	-	150 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	2500 U	-	**658000**	-	27400	-	-	2500 U	2500 U	-	2500 U	-	2500 U	-	2500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-273	MW-273	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-273R	MW-274
			Field Sample ID	02/02/2017	02/03/2017	12/11/2019	12/11/2019	02/26/2020	02/26/2020	05/18/2020	05/18/2020	08/24/2020	08/24/2020	11/11/2020	11/11/2020	02/24/2021	02/24/2021	07/19/2016
			Sample Date	M273B9	M273B9X	M273RC6	M273RC6X	M273RC7	M273RC7X	M273RC8	M273RC8X	M273RC9	M273RC9X	M273RD1	M273RD1X	M273RD3	M273RD3X	M274A1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1980**	-	**9850**	-	**17800**	-	**11000**	-	-	-	**3600**	-	**7900**	-	-
Iron	ug/L	Y	300	**961**	-	**788**	-	**17000**	-	**13500**	-	**11000**	-	**5400**	-	**570**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	10000	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	-	40 UJ	-	250 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	10 U	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	18 J	-	-	-	15 U	-	15 UJ	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	30900	-	75300 J	-	**256000J**	-	208000 J	-	**330000J**	-	210000 J	-	250000 J	1500 UJ

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-274	MW-274	MW-281	MW-281	MW-281	MW-281	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314	MW-314
			Field Sample ID	10/11/2016	10/11/2016	05/04/2021	09/17/2021	10/20/2021	03/24/2022	03/27/2012	04/10/2013	04/11/2013	03/27/2014	03/28/2014	02/23/2016	02/24/2016	01/25/2017	01/26/2017
			Sample Date	M274A2	M274A2X	M281C2	M281C3	M281C4	M281C5	M314A3	M314A5	M314A5X	M314A6	M314A6X	M314A7	M314A7X	M314B2	M314B2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**48700**	-	**12000**	**5300**	**8800**	**8400**	**53200**	**87000**	-	**65100**	-	**53200**	-	**43100**	-
Iron	ug/L	Y	300	**45800**	-	**9700**	**5700**	**8400**	**4900**	-	**54400**	-	**59000**	-	**49500**	-	**39200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	5400	7200	8000	10000	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 UJ	40 UJ	40 UJ	40 UJ	-	-	67 J	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	15 UJ	15 U	15 U	-	-	45 J	-	27 J	-	31 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	1500 U	4000 UJ	31000 J	3500 J	2000 UJ	-	-	12500 U	-	12500 U	-	10000 U	-	25000 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-314	MW-314	MW-314	MW-314	MW-314	MW-315	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	01/29/2018	01/30/2018	05/04/2021	09/21/2021	03/24/2022	M315A3	03/14/2012	05/16/2012	07/30/2012	11/19/2012	02/19/2013	06/12/2013	09/05/2013	11/07/2013	03/12/2014
			Sample Date	M314B6	M314B6X	M314C1	M314C2	M314C4	03/20/2012	M322A1	M322A2	M322A3	M322A4	M322A5	M322A6	M322A7	M322A9	M322B1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**41600**	-	**41000**	**51000**	**29000**	**4060**	**55700**	**67300**	**91900**	**45100**	**80200**	**98400**	**89700**	**80100**	**29100**
Iron	ug/L	Y	300	**32000**	-	**37000**	**45000**	**22000**	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	18000	20000	20000	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	96 J	40 UJ	40 UJ	660 J	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	27 J	15 UJ	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	4000 U	20000 UJ	20000 UJ	10000 UJ	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	05/19/2014	08/04/2014	10/29/2014	03/03/2015	06/08/2015	09/14/2015	11/18/2015	01/07/2016	04/06/2016	07/20/2016	10/13/2016	01/17/2017	03/16/2017	04/27/2017	07/18/2017
			Sample Date	M322B2	M322B3	M322B4	M322B5	M322B6	M322B7	M322B8	M322B9	M322C1	M322C2	M322C3	M322C4	M322C5	M322C6	M322C7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**49200**	**63800**	**68600**	**33700**	**32700**	**39900**	**32200**	**46600**	**19800**	**31900**	**47300**	**30200**	**50300**	**49500**	**52800**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	**41100**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322
			Field Sample ID	09/11/2017	10/13/2017	12/01/2017	01/19/2018	04/13/2018	04/20/2018	07/13/2018	10/25/2018	01/02/2019	04/02/2019	04/02/2019	07/02/2019	07/02/2019	10/02/2019	10/02/2019
			Sample Date	M322C8	M322C9	M322D1	M322D2	M322D3	M322D4	M322D6	M322D7	M322D8	D0402191	M322D9	D0702191	M322E1	D1002191	M322E2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**57700**	**64100**	**57900**	**64700**	**61600**	**27000**	**60700**	**50400**	**51400**	**59000**	**58900**	**71500**	**70800**	**72400**	**73900**
Iron	ug/L	Y	300	**54800**	-	**50900**	-	-	-	**59700**	**57700**	**43400**	**47900**	**50100**	**71200**	**70200**	**54300**	**51900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-322	MW-323	MW-323	MW-323
			Field Sample ID	01/02/2020	01/02/2020	04/01/2020	07/06/2020	07/06/2020	10/13/2020	10/13/2020	01/06/2021	04/01/2021	07/09/2021	10/07/2021	01/19/2022	03/14/2012	05/16/2012	07/30/2012
			Sample Date	D0102201	M322E3	M322E4	D0706201	M322E5	D1013201	M322E6	M322E7	M322E8	M322E9	M322F2	M322F3	M323A1	M323A2	M323A3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**50900**	**51300**	**62000**	**70000**	**69000**	-	-	**69000**	**60000**	**71000**	**66000**	**40000**	**29500**	**29400**	**28600**
Iron	ug/L	Y	300	-	-	**54900**	**70000**	**70000**	**69000**	**70000**	-	**56000**	**73000**	**64000**	**41000**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	66000	64000	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	13000	12000	-	29000	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	1200	40 UJ	-	40 UJ	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	15 U	30 J	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	2000 U	10000 UJ	-	20000 UJ	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323
			Field Sample ID	11/20/2012	02/20/2013	06/12/2013	09/05/2013	11/05/2013	03/12/2014	08/05/2014	10/29/2014	03/03/2015	06/08/2015	09/15/2015	09/15/2015	11/18/2015	01/07/2016	07/22/2016
			Sample Date	M323A4	M323A5	M323A6	M323A7	M323A9	M323B1	M323B3	M323B4	M323B5	M323B6	D0915151	M323B7	M323B8	M323B9	M323C2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7800**	**20200**	**23000**	**19700**	**27900**	**25300**	**24900**	**42000**	**38900**	**42400**	**14600**	**14200**	**14200**	**23800**	**23300**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323
			Field Sample ID	10/13/2016	01/17/2017	03/17/2017	04/27/2017	07/18/2017	09/05/2017	10/13/2017	12/01/2017	01/19/2018	04/13/2018	04/13/2018	04/20/2018	07/13/2018	10/26/2018	01/02/2019
			Sample Date	M323C3	M323C4	M323C5	M323C6	M323C7	M323C8	M323C9	M323D1	M323D3	D0413181	M323D4	M323D5	M323D6	M323D7	M323D8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**47000**	**20400**	**20900**	**21700**	**20800**	**20900**	**22900**	177 J	**26600**	**23600**	**23300**	**22300**	**25100**	**22200**	**23200**
Iron	ug/L	Y	300	-	-	**9820**	-	-	**21400**	-	80.5 U	-	-	-	-	-	**22100**	**22900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-323	MW-324	MW-324
			Field Sample ID	04/09/2019	07/09/2019	10/07/2019	01/02/2020	04/01/2020	04/01/2020	07/06/2020	10/13/2020	01/06/2021	04/01/2021	07/14/2021	10/07/2021	01/19/2022	03/12/2012	05/17/2012
			Sample Date	M323D9	M323E1	M323E2	M323E3	D0401201	M323E4	M323E6	M323E7	M323E8	M323E9	M323F1	M323F2	M323F3	M324A1	M324A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**25500**	**17800**	**24100**	**26700**	**21900**	**21300**	**23000**	-	**6700**	**26000**	**31000**	**25000**	**35000**	**144000**	**292000**
Iron	ug/L	Y	300	**24100**	**23100**	**24100**	-	**19800**	**19900**	**24000**	**13000**	-	**8000**	**22000**	**25000**	**25000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	16000	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	10	16	26	29	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	250 U	40 UJ	40 UJ	40 UJ	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	15 U	15 U	17 J	15 UJ	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	240000	220000 J	190000 J	180000 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324
			Field Sample ID	07/30/2012	11/21/2012	02/21/2013	06/17/2013	09/09/2013	11/05/2013	03/11/2014	05/21/2014	08/07/2014	10/28/2014	03/10/2015	03/10/2015	05/28/2015	09/17/2015	11/17/2015
			Sample Date	M324A3	M324A4	M324A5	M324A6	M324A7	M324A8	M324A9	M324B1	M324B2	M324B3	D0310151	M324B4	M324B5	M324B6	D1117151
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**391000**	**375000**	**592000**	**483000**	**557000**	**499000**	**457000**	**403000**	**497000**	**478000**	**426000**	**434000**	**509000**	**568000**	**599000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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5. U - Not detected

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			Location ID	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324
			Field Sample ID	11/17/2015	01/12/2016	04/07/2016	07/21/2016	01/18/2017	04/26/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/24/2018	01/04/2019	04/09/2019	07/09/2019	10/07/2019
			Sample Date	M324B7	M324B8	M324B9	M324C1	M324C4	M324C5	M324C7	M324C8	M324C9	M324D1	M324D2	M324D3	M324D4	M324D5	M324D6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**610000**	**492000**	**458000**	**839000**	**559000**	**388000**	**586000**	**494000**	**204000**	**215000**	**362000J**	**41500**	**165000**	**263000**	**263000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
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5. U - Not detected

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			Location ID	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-324	MW-325	MW-325	MW-325	MW-325
			Field Sample ID	01/06/2020	04/03/2020	07/08/2020	10/12/2020	01/07/2021	01/07/2021	04/12/2021	07/14/2021	07/14/2021	10/07/2021	01/17/2022	03/12/2012	03/12/2012	05/17/2012	07/26/2012
			Sample Date	M324D7	M324D8	M324D9	M324E1	D0107211	M324E2	M324E3	D0714211	M324E4	M324E5	M324E6	D0312121	M325A1	M325A2	M325A3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**425000**	**475000**	-	-	**310000**	**300000**	**590000**	**740000**	**640000**	**540000**	**830000**	**3100**	**3160**	**3260**	**3600**
Iron	ug/L	Y	300	-	-	-	-	-	-	**610000**	**690000**	**720000**	-	**760000**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	160000	630000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	71	67	62	-	120	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	250 J	210 J	40 UJ	-	130 J	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	83	71	37 J	-	15 U	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	**1200000J**	**1200000J**	**1100000J**	-	**1200000J**	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325
			Field Sample ID	11/21/2012	02/21/2013	06/14/2013	09/09/2013	11/05/2013	11/05/2013	03/11/2014	05/21/2014	08/07/2014	10/28/2014	03/10/2015	05/28/2015	09/17/2015	11/17/2015	01/12/2016
			Sample Date	M325A4	M325A5	M325A6	M325A7	D1105131	M325A8	M325A9	M325B1	M325B2	M325B3	M325B4	M325B5	M325B6	M325B7	M325B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3990**	**4440**	**4400**	**5360**	**4630**	**4380**	**6160**	**1530**	**7750**	**15000**	**120000**	**4460**	**19500**	**18800**	**123000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325
			Field Sample ID	04/07/2016	07/21/2016	01/18/2017	04/26/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018	10/24/2018	01/04/2019	04/09/2019	07/09/2019	10/07/2019	01/06/2020	04/03/2020
			Sample Date	M325B9	M325C1	M325C3	M325C4	M325C6	M325C7	M325C8	M325C9	M325D1	M325D2	M325D3	M325D4	M325D5	M325D6	M325D7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10700**	**13300**	**10000**	**8290**	**6780**	**7570**	**10500**	**8710**	**15000**	**17600**	**16800**	**14800**	**12100**	**12000**	**7670**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-325	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326
			Field Sample ID	07/08/2020	10/12/2020	01/07/2021	04/12/2021	07/14/2021	10/08/2021	01/14/2022	03/12/2012	05/23/2012	07/26/2012	11/20/2012	02/20/2013	06/13/2013	09/05/2013	11/06/2013
			Sample Date	M325D8	M325D9	M325E1	M325E2	M325E5	M325E4	M325E6	M326A1	M326A2	M326A3	M326A4	M326A5	M326A6	M326A7	M326A9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**4900**	**10000**	**10000**	**7300**	290	**288000**	**367000**	**343000**	**331000**	**347000**	**396000**	**371000**	**363000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	9600	25000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326
			Field Sample ID	03/10/2014	08/05/2014	03/23/2015	05/29/2015	05/29/2015	09/18/2015	11/18/2015	01/11/2016	04/12/2016	07/19/2016	10/13/2016	01/17/2017	04/21/2017	07/19/2017	10/10/2017
			Sample Date	M326B1	M326B3	M326B5	D0529151	M326B6	M326B7	M326B8	M326B9	M326C1	M326C2	M326C3	M326C4	M326C5	M326C6	M326C8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**242000**	**318000**	**413000**	**287000**	**377000**	**298000**	**317000**	**138000**	**110000**	**294000**	**286000**	**56500**	**149000**	**279000**	**277000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326	MW-326
			Field Sample ID	01/23/2018	04/10/2018	07/16/2018	10/29/2018	01/03/2019	04/03/2019	07/02/2019	10/02/2019	01/03/2020	04/07/2020	07/13/2020	10/14/2020	01/12/2021	04/13/2021	07/13/2021
			Sample Date	M326C9	M326D1	M326D2	M326D3	M326D4	M326D5	M326D6	M326D7	M326D8	M326D9	M326E1	M326E2	M326E3	M326E4	M326E5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**211000**	**251000**	**315000**	**278000**	**206000**	**268000**	**322000**	**336000**	**101000**	**11100**	-	-	**3900**	**97000**	**84000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	170000	290000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-326	MW-326	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327
			Field Sample ID	10/06/2021	01/18/2022	03/13/2012	05/18/2012	07/31/2012	09/06/2013	11/11/2013	03/11/2014	08/07/2014	10/23/2014	03/23/2015	06/01/2015	09/15/2015	11/16/2015	01/11/2016
			Sample Date	M326E6	M326E7	M327A1	M327A2	M327A3	M327A5	M327A9	M327B1	M327B3	M327B4	M327B5	M327B6	M327B7	M327B8	M327B9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**88000**	**42000**	**765**	**1280**	**952**	**1180**	**1280**	**1430**	**1260**	**2750**	**2780**	**1250**	**1320**	**1630**	**1070**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327
			Field Sample ID	04/12/2016	10/21/2016	01/20/2017	04/18/2017	04/18/2017	07/21/2017	10/12/2017	01/22/2018	04/10/2018	07/16/2018	07/16/2018	10/29/2018	01/03/2019	04/03/2019	07/02/2019
			Sample Date	M327C1	M327C3	M327C4	D0418171	M327C5	M327C6	M327C8	M327C9	M327D1	D0716181	M327D2	M327D3	M327D4	M327D5	M327D6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2220**	**3030**	**2450**	**2750**	**2990**	**3030**	**1710**	**1720**	**19200**	**3880**	**3870**	**1900**	**1410**	**2720**	**2530**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-327	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	10/02/2019	01/03/2020	04/07/2020	07/10/2020	10/12/2020	01/08/2021	04/06/2021	07/13/2021	10/06/2021	01/14/2022	03/20/2012	05/23/2012	07/25/2012	04/25/2013	04/25/2013
			Sample Date	M327D7	M327D8	M327D9	M327E1	M327F2	M327E3	M327E4	M327E5	M327E7	M327E8	M328A1	M328A2	M328A3	M328A4	M328A4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2360**	**2090**	**9700**	-	-	**2000**	**5300**	**4300**	**5100**	**2400**	**13300**	**10700**	**12900**	**11700**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	**11200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	4200	2600	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	117000

Notes:
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	06/17/2013	06/25/2013	09/10/2013	11/12/2013	03/14/2014	07/02/2014	08/01/2014	08/01/2014	08/08/2014	10/29/2014	01/16/2015	01/16/2015	03/02/2015	06/01/2015	09/16/2015
			Sample Date	M328A5	M328A5X	M328A6	M328A7	M328A8	M328B1X	M328B2	M328B2X	M328B3	M328B4	M328B5	M328B5X	M328B6	M328B7	M328B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**18300**	**16700**	**17800**	**17700**	**4150**	-	**18200**	-	**18000**	**19100**	**19600**	-	**3380**	**15700**	**26000**
Iron	ug/L	Y	300	-	**16000**	-	-	-	-	**18300**	-	-	-	**17600**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	117000	-	-	-	164000	-	167000	-	-	-	197000	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	11/19/2015	12/10/2015	12/15/2015	01/13/2016	04/14/2016	07/25/2016	12/06/2016	01/23/2017	04/27/2017	07/24/2017	10/12/2017	01/25/2018	04/12/2018	07/18/2018	10/29/2018
			Sample Date	M328B9	M328C1	M328C1X	M328C2	M328C3	M328C4	M328C5	M328C6	M328C7	M328C9	M328D1	M328D2	M328D3	M328D4	M328D5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**16800**	**17200**	-	**19100**	**12300**	**14600**	**15700**	**15700**	**12500**	**15200**	**14200**	**14400**	**12800**	**15000**	**16400**
Iron	ug/L	Y	300	-	**16600**	-	-	-	-	**15900**	-	-	-	-	-	-	**15300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	234000	-	-	-	191000	-	-	-	174000	-	-	195000	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328	MW-328
			Field Sample ID	01/09/2019	04/05/2019	07/05/2019	10/03/2019	10/03/2019	01/09/2020	04/06/2020	07/09/2020	09/25/2020	09/25/2020	10/12/2020	12/02/2020	12/02/2020	01/05/2021	03/18/2021
			Sample Date	M328D6	M328D7	M328D8	D1003191	M328D9	M328E1	M328E2	M328E4	M328E5	M328E5X	M328E6	M328E7	M328E7X	M328E8	M328E9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	16400 J	-	-	16000 J	16000 J	-	-	-	-	280 J	-	14000 J	-	-	9700 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**17500**	**10900**	**14100**	**14500**	**14300**	**15900**	**6290**	-	**11000**	-	-	**17000**	-	**13000**	**12000**
Iron	ug/L	Y	300	**15200**	-	-	**14200**	**14500**	-	-	-	**13000**	-	-	**14000**	-	-	**8900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	2900	-	-	14000	-	-	-	-
Methane	ug/L	N	NA	41	-	-	31	30	-	-	-	-	3 U	-	-	20	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	40 U	40 UJ	-	-	-	-	250 U	-	-	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	15 U	15 U	-	-	-	-	250 U	-	-	250 UJ	-	-
Sulfate (SO4)	ug/L	N	250000	187000	-	-	216000 J	241000 J	-	-	-	-	210000	-	-	240000	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-328	MW-328	MW-328	MW-328	MW-328	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333	MW-333	MW-334	MW-334
			Field Sample ID	03/18/2021	04/13/2021	07/13/2021	10/06/2021	01/17/2022	M333A1	M333A2	M333A3	M333A4	M333A5	M333A6	M333A7	M333A8	05/17/2012	07/31/2012
			Sample Date	M328E9X	M328F1	M328F2	M328F3	M328F4	05/16/2012	07/24/2012	03/10/2014	05/22/2014	08/06/2014	10/30/2014	03/09/2015	06/03/2015	M334A1	M334A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**12000**	**13000**	**13000**	**18000**	**41600**	**27600**	**31900**	**26100**	**38100**	**53400**	**59100**	**59300**	**103000**	**71900**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	7.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	390 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	240000	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R
			Field Sample ID	03/10/2014	05/22/2014	08/06/2014	10/30/2014	03/09/2015	05/29/2015	01/15/2016	07/20/2016	10/17/2016	01/19/2017	04/21/2017	07/19/2017	07/19/2017	10/10/2017	01/25/2018
			Sample Date	M334A3	M334A4	M334A5	M334A6	M334B7	M334A8	M334RB1	M334RB3	M334RB4	M334RB5	M334RB6	D0719171	M334RB7	M334RB8	D0125181
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**76000**	**82200**	**71600**	**63200**	**73800**	**48600**	**176000**	**161000**	**114000**	**99600**	**89300**	**89700**	**93000**	**78200**	**82800**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R	MW-334R
			Field Sample ID	01/25/2018	04/12/2018	07/18/2018	10/26/2018	01/09/2019	04/05/2019	07/05/2019	10/03/2019	01/09/2020	04/06/2020	07/09/2020	10/14/2020	01/12/2021	04/13/2021	07/15/2021
			Sample Date	M334RB9	M334RC1	M334RC2	M334RC3	M334RC4	M334RC5	M334RC6	M334RC7	M334RC8	M334RC9	M334RD1	M334RD2	M334RD3	M334RD4	M334RD5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**82000**	**81000**	**92900**	**81300**	**105000**	**96100**	**122000**	**119000**	**97200**	**132000**	-	-	**110000**	**100000**	**130000**
Iron	ug/L	Y	300	-	-	-	**80300**	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	110000	120000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-334R	MW-334R	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336
			Field Sample ID	10/08/2021	01/17/2022	04/17/2013	04/17/2013	06/19/2013	06/19/2013	03/14/2014	06/26/2014	06/27/2014	07/29/2014	07/29/2014	01/20/2015	01/20/2015	07/06/2015	07/07/2015
			Sample Date	M334RD6	M334RD7	M336A1	M336A1X	M336A2	M336A2X	M336A3X	M336A4	M336A4X	M336A5	M336A5X	M336A6	M336A6X	M336A7	M336A7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**130000**	**110000**	**17000**	-	**16800**	-	-	**309000**	-	**260000**	-	**97100**	-	**45200**	-
Iron	ug/L	Y	300	-	-	**17300**	-	**15900**	-	-	**293000**	-	**282000**	-	**84300**	-	**44200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	6200	-	9700	**25600000**	-	**13400000**	-	**11100000**	-	**28000000**	-	**16000000**

Notes:
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5. U - Not detected

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			Location ID	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336
			Field Sample ID	12/09/2015	12/14/2015	06/15/2016	06/15/2016	12/12/2016	12/12/2016	05/10/2017	05/10/2017	11/27/2017	11/27/2017	07/03/2018	07/03/2018	01/07/2019	01/07/2019	10/11/2019
			Sample Date	M336A8	M336A8X	M336A9	M336A9X	M336B1	M336B1X	M336B2	M336B2X	M336B3	M336B3X	M336B4	M336B4X	M336B5	M336B5X	M336B6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	2240 J	-	5500 J
Iron	ug/L	N	300	**17300**	-	**7350**	-	**4400**	-	**4330**	-	**4530**	-	**1870**	-	**2310**	-	**5580**
Iron	ug/L	Y	300	**15100**	-	**2160**	-	**4100**	-	**3120**	-	**3070**	-	**343J**	-	**1800**	-	**1130**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	960	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	**18800000**	-	**553000**	-	**5730000**	-	**7990000**	-	**13300000**	-	**2220000**	-	**956000**	-

Notes:
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			Location ID	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-336	MW-337	MW-337	MW-337
			Field Sample ID	10/11/2019	09/25/2020	09/25/2020	12/02/2020	12/02/2020	03/17/2021	03/17/2021	06/08/2021	09/08/2021	12/06/2021	12/06/2021	03/16/2022	04/16/2013	04/16/2013	06/24/2013
			Sample Date	M336B6X	M336B7	M336B7X	M336B8	M336B8X	M336B9	M336B9X	M336C1	M336C2	D1206218A	M336C3	M336C4	M337A1	M337A1X	M337A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	2100 J	820 J	-	160 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1200**	-	**870**	-	300	-	**520**	**2200**	**870**	**970**	**1700**	**67900**	-	**57300**
Iron	ug/L	Y	300	-	81 U	-	**440**	-	140 J	-	-	-	-	-	-	**65200**	-	**56500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	7100	-	1800	-	1500	-	640	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	250 UJ	-	580 J	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 U	-	250 U	-	250 UJ	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1570000**	-	**1100000**	-	**320000**	-	130000	240000 J	170000	210000	210000 J	92000	-	55500	-

Notes:
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5. U - Not detected

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			Location ID	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337
			Field Sample ID	06/24/2013	03/13/2014	03/13/2014	07/01/2014	07/01/2014	07/30/2014	07/30/2014	03/11/2015	03/11/2015	07/06/2015	07/06/2015	12/10/2015	12/11/2015	06/16/2016	06/16/2016
			Sample Date	M337A2X	M337A3	M337A3X	M337A4	M337A4X	M337A5	M337A5X	M337A6	M337A6X	M337A7	M337A7X	M337A8	M337A8X	M337A9	M337A9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**819**	-	**4520**	-	**18700**	-	**22200**	-	**23200**	-	**16000**	-	**16000**	-
Iron	ug/L	Y	300	-	**444**	-	**11800**	-	**6300**	-	**21300**	-	**21700**	-	**12900**	-	**9640**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	1500 U	-	120000	-	**303000**	-	**1100000**	-	57900	-	**312000**	-	171000	-	54300

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337
			Field Sample ID	12/14/2016	12/14/2016	05/19/2017	05/19/2017	11/28/2017	11/28/2017	07/05/2018	07/05/2018	01/07/2019	01/07/2019	10/07/2019	10/07/2019	09/24/2020	09/24/2020	12/04/2020
			Sample Date	M337B1	M337B1X	M337B2	M337B2X	M337B3	M337B3X	M337B4	M337B4X	M337B5	M337B5X	M337B6	M337B6X	M337B7	M337B7X	M337B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	22000 J	9500 J
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	16900 J	-	4010 UJ	-	-	-	-
Iron	ug/L	N	300	**10200**	-	**7870**	-	**7750**	-	**13800**	-	**29200**	-	4070 UJ	-	**2400**	-	**10000**
Iron	ug/L	Y	300	**11300**	-	**4890**	-	**6970**	-	**11100**	-	**15100**	-	**3300J**	-	**1700**	-	**8200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	2200	-	2500 J	-	6200	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	250	-	250 UJ	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	15 U	-	250 UJ	-	**1100**	-
Sulfate (SO4)	ug/L	N	250000	-	**6250000**	-	117000	-	**527000**	-	250000	-	**1340000**	-	**347000J**	-	**660000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-337	MW-337	MW-337	MW-337	MW-337	MW-337	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338
			Field Sample ID	12/04/2020	03/30/2021	03/30/2021	06/04/2021	09/03/2021	12/08/2021	05/06/2013	05/06/2013	06/20/2013	06/20/2013	06/20/2013	03/11/2014	03/11/2014	06/30/2014	06/30/2014
			Sample Date	M337B8X	M337B9	M337B9X	M337C1	M337C2	M337C3	M338A1	M338A1X	D0620138	M338A2	M338A2X	M338A3	M338A3X	M338A4	M338A4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	14000 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**15000**	-	**9800**	**12000**	**8600**	**59400**	-	**57000**	**56700**	-	**63500**	-	**17300**	-
Iron	ug/L	Y	300	-	**13000**	-	-	-	-	**40000**	-	**52900**	**54300**	-	**59600**	-	**16700**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	1700	-	8800	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 J	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 U	-	250 UJ	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	150000	-	130000	**260000**	160000	**290000**	-	31100	66800	-	67100	-	**2300000**	-	**11300000**

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338
			Field Sample ID	07/31/2014	07/31/2014	01/15/2015	01/15/2015	07/07/2015	07/07/2015	12/10/2015	12/14/2015	06/15/2016	06/15/2016	12/13/2016	12/13/2016	05/10/2017	05/10/2017	11/28/2017
			Sample Date	M338A5	M338A5X	M338A6	M338A6X	M338A7	M338A7X	M338A8	M338A8X	M338A9	M338A9X	M338B1	M338B1X	M338B2	M338B2X	M338B3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8780**	-	**34500**	-	**12200**	-	**33200**	-	**8880**	-	**6670**	-	**2090**	-	**1350**
Iron	ug/L	Y	300	**1140**	-	**53800**	-	**11400**	-	**28300**	-	**8000**	-	**6380**	-	**1970**	-	**692**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**2550000**	-	**5170000**	-	229000	-	122000	-	**6540000**	-	223000	-	**2050000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338	MW-338
			Field Sample ID	11/28/2017	07/05/2018	07/05/2018	01/09/2019	01/09/2019	10/09/2019	10/09/2019	09/15/2020	09/15/2020	12/01/2020	12/01/2020	03/22/2021	03/23/2021	06/04/2021	09/03/2021
			Sample Date	M338B3X	M338B4	M338B4X	M338B5	M338B5X	M338B6	M338B6X	M338B7	M338B7X	M338B8	M338B8X	M338B9	M338B9X	M338C1	M338C2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	2300 UJ	2400 J	-	530 J	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	736 J	-	2980 J	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1800**	-	**1230**	-	**2660**	-	-	-	**2700**	-	**1300J**	-	**1700**	**1300**
Iron	ug/L	Y	300	-	**1760**	-	**990**	-	**2230**	-	**2400**	-	**1800**	-	**560**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	2600	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	4400	-	6700	-	7900	-	7200	-	2500	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	250 U	-	250 U	-	250 U	-	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	250 U	-	250 U	-	250 U	-	250 UJ	-	-
Sulfate (SO4)	ug/L	N	250000	**2700000**	-	**1310000**	-	**10800000**	-	**392000**	-	**3300000**	-	**2700000**	-	250000	**9600000**	**9300000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-338	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339
			Field Sample ID	12/08/2021	04/29/2013	04/29/2013	06/20/2013	06/20/2013	07/03/2014	07/03/2014	08/01/2014	08/01/2014	01/16/2015	01/16/2015	07/15/2015	07/15/2015	12/11/2015	12/11/2015
			Sample Date	M338C3	M339A1	M339A1X	M339A2	M339A2X	M339A3	M339A3X	M339A4	M339A4X	M339A5	M339A5X	M339A6	M339A6X	M339A7	M339A7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2200**	**20200**	-	**20700**	-	**237000**	-	**136000**	-	**9590**	-	**1660**	-	**4660J**	-
Iron	ug/L	Y	300	-	**20600**	-	**20200**	-	**226000**	-	**131000**	-	**9380**	-	**1550**	-	**804J**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**10000000**	-	26800	-	1800 J	-	199000	-	**1370000**	-	**3250000**	-	**27700000**	-	**462000**

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-339	MW-340	MW-340
			Field Sample ID	01/10/2019	01/10/2019	10/15/2019	10/15/2019	09/18/2020	09/18/2020	12/07/2020	12/07/2020	03/30/2021	03/30/2021	06/14/2021	09/08/2021	12/09/2021	04/29/2013	04/29/2013
			Sample Date	M339A8	M339A8X	M339B1	M339B1X	M339B2	M339B2X	M339B3	M339B3X	M339B4	M339B4X	M339B5	M339B6	M339B7	M340A1	M340A1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	12000 UJ	1300 J	-	50 UJ	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	38.9 UJ	-	1140 UJ	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**776**	-	**1810**	-	-	-	**4000**	-	**790**	-	**560**	**520**	**2200**	**30800**	-
Iron	ug/L	Y	300	40 U	-	**343**	-	**370**	-	41 U	-	41 U	-	-	-	-	**33500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	2300	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	17000	-	12000	-	8900	-	11000	-	11000 J	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	400	-	250 U	-	250 UJ	-	250 U	-	250 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	250 U	-	250 UJ	-	250 U	-	250 UJ	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	107000	-	**971000**	-	**1200000**	-	**1100000**	-	**4500000**	**970000J**	**1400000**	**1500000**	-	27400

Notes:
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4. J - Estimated value
5. U - Not detected

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Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340
			Field Sample ID	06/25/2013	06/25/2013	07/03/2014	07/03/2014	08/05/2014	08/05/2014	01/16/2015	01/16/2015	07/16/2015	07/16/2015	12/11/2015	12/11/2015	07/05/2018	07/05/2018	01/10/2019
			Sample Date	M340A2	M340A2X	M340A3	M340A3X	M340A4	M340A4X	M340A5	M340A5X	M340A6	M340A6X	M340A7	M340A7X	M340A9	M340A9X	M340B1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17 UJ
Iron	ug/L	N	300	**22600**	-	**21200**	-	**25500**	-	**5370**	-	**4210**	-	**2860J**	-	**5810**	-	**3090**
Iron	ug/L	Y	300	**22000**	-	**3450**	-	**4310**	-	**4710**	-	**2770**	-	**517J**	-	162 J	-	40 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	6700	-	**38000000**	-	**37500000**	-	**1580000**	-	**10900000**	-	**6640000**	-	**1910000**	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-340	MW-350	MW-350
			Field Sample ID	01/10/2019	04/11/2019	10/07/2019	10/07/2019	09/24/2020	09/24/2020	12/07/2020	12/07/2020	03/25/2021	03/25/2021	06/14/2021	09/08/2021	12/22/2021	04/17/2013	04/17/2013
			Sample Date	M340B1X	M340B2	M340B3	M340B3X	M340B4	M340B4X	M340B5	M340B5X	M340B6	M340B6X	M340B7	M340B8	M340B9	M350A1	M350A1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	26.3 J	-	-	-	890 J	310 J	-	50 UJ	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	129 UJ	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**330J**	-	**2200**	-	**1500**	-	**1000**	-	**1700**	**650**	170 J	**15800**	-
Iron	ug/L	Y	300	-	-	40 UJ	-	81 U	-	41 U	-	41 U	-	-	-	-	**14100**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	4700	-	-	4000 J	-	4200	-	6500	-	8000	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	250 UJ	-	250 U	-	250 UJ	-	660	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	78	-	-	250 UJ	-	700	-	250 UJ	-	250 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**3170000**	-	-	**4000000J**	-	**2200000**	-	**2300000**	-	**3800000**	**2700000**	**1700000**	**1700000J**	-	15400

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350
			Field Sample ID	06/24/2013	06/24/2013	03/11/2014	03/11/2014	06/27/2014	06/27/2014	07/30/2014	07/30/2014	01/15/2015	01/15/2015	07/07/2015	07/07/2015	12/09/2015	12/11/2015	06/09/2016
			Sample Date	M350A2	M350A2X	M350A3	M350A3X	M350A4	M350A4X	M350A5	M350A5X	M350A6	M350A6X	M350A7	M350A7X	M350A8	M350A8X	M350A9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**22700**	-	**19800**	-	**28300**	-	**68000**	-	**21800**	-	**17400**	-	**9730**	-	**462**
Iron	ug/L	Y	300	**21800**	-	**19200**	-	**30500**	-	**93400**	-	**21900**	-	**17700**	-	**8960**	-	151 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	1500 U	-	**284000**	-	**574000**	-	**13400000**	-	**10900000**	-	120000	-	77500	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350
			Field Sample ID	06/09/2016	12/12/2016	12/12/2016	05/18/2017	05/18/2017	05/18/2017	11/28/2017	11/28/2017	07/03/2018	07/03/2018	01/09/2019	01/09/2019	10/14/2019	10/14/2019	09/24/2020
			Sample Date	M350A9X	M350B1	M350B1X	D0518178	M350B2	M350B2X	M350B3	M350B3X	M350B4	M350B4X	M350B5	M350B5X	M350B6	M350B6X	M350B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	56.3 J	-	114 UJ	-	-
Iron	ug/L	N	300	-	**849**	-	**1120**	**1130J**	-	**3840**	-	**4920**	-	**2860**	-	**839**	-	**830**
Iron	ug/L	Y	300	-	100 J	-	**372**	**399**	-	**905**	-	**1100**	-	131 J	-	42 J	-	**690**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	13000	-	8100	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	400 U	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 U	-	250 UJ	-
Sulfate (SO4)	ug/L	N	250000	**1630000**	-	49000	113000	-	129000	-	97600	-	159000	-	**1160000**	-	201000	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-350	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351
			Field Sample ID	09/24/2020	12/02/2020	12/02/2020	03/17/2021	03/17/2021	06/08/2021	06/08/2021	09/03/2021	12/06/2021	04/30/2013	04/30/2013	04/30/2013	04/30/2013	04/30/2013	06/25/2013
			Sample Date	M350B8X	M350B9	M350B9X	M350C1	M350C1X	D0608211A	M350C2	M350C3	M350C4	D0430138	D0430138	M351A1	M351A1	M351A1X	M351A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	3300 J	210 J	-	75 J	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**850**	-	**620**	-	230	240	240	120 J	-	**16700**	-	**16900**	-	**18100**
Iron	ug/L	Y	300	-	56 J	-	51 J	-	-	-	-	-	**15200**	-	**15100**	-	-	**17400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	5400	-	6700	-	6400	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	500	-	250 U	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	540	-	250 UJ	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	83000	-	**3400000**	-	35000	**500000J**	**350000J**	**3000000**	**710000**	-	14500	-	-	11800	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351
			Field Sample ID	06/25/2013	03/11/2014	03/11/2014	06/30/2014	06/30/2014	06/30/2014	08/04/2014	08/04/2014	08/04/2014	01/15/2015	01/15/2015	01/15/2015	07/07/2015	07/07/2015	07/07/2015
			Sample Date	M351A2X	M351A3	M351A3X	D0630148	M351A4	M351A4X	D0804148	M351A5	M351A5X	D0115158A	M351A6	M351A6X	D0707158	M351A7	M351A7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**139000**	-	-	**14800J**	-	**24300**	**27900**	-	**4160**	**4350**	-	**5930**	**6190**	-
Iron	ug/L	Y	300	-	**103000**	-	-	**2240**	-	**17400**	**15200**	-	**3250**	**3330**	-	**5280**	**5470**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2300 J	-	**4520000**	**10300000J**	-	**19700000J**	**23000000**	-	**21300000J**	**2680000**	-	**2700000**	**309000**	-	**265000**

Notes:
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Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351
			Field Sample ID	12/10/2015	12/10/2015	12/11/2015	12/11/2015	06/10/2016	06/10/2016	06/10/2016	12/09/2016	12/09/2016	05/10/2017	05/10/2017	11/29/2017	11/29/2017	11/29/2017	07/05/2018
			Sample Date	D1210158	M351A8	D121115A8	M351A8X	D0610168	M351A9	M351A9X	M351B1	M351B1X	M351B2	M351B2X	D1129178	M351B3	M351B3X	M351B4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5080**	**5740**	-	-	**4020**	**4060**	-	**4010**	-	**7540**	-	**17700J**	**6380J**	-	**10600**
Iron	ug/L	Y	300	**3650**	**3800**	-	-	**3980**	**3850**	-	**4060**	-	**7180**	-	**5410J**	**7840J**	-	**10800**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	202000 J	**283000J**	113000 J	-	**704000J**	-	163000	-	**360000**	162000	-	95100	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351	MW-351
			Field Sample ID	07/05/2018	01/09/2019	01/09/2019	10/07/2019	10/07/2019	10/08/2019	09/15/2020	09/15/2020	12/01/2020	12/01/2020	03/25/2021	03/25/2021	06/08/2021	09/03/2021	09/03/2021
			Sample Date	M351B4X	M351B5	M351B5X	D1008198	M351B6	M351B6X	M351B7	M351B7X	M351B8	M351B8X	M351B9	M351B9X	M351C1	D090320218A	M351C2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	23000 UJ	9400 J	-	5000 J	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	6830 J	-	11900 J	4010 J	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**7380**	-	**13500J**	**27700J**	-	-	-	**9500**	-	**5800**	-	**9200**	**11000**	**11000**
Iron	ug/L	Y	300	-	**6610**	-	**2480**	**1990**	-	**9700**	-	**7800**	-	**5800**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	11000	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	3000	11000 J	-	7300 J	-	7400	-	7400	-	4000	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	250 U	-	250 U	-	250 U	-	250 U	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	16 J	250 UJ	-	5000 U	-	250 U	-	250 U	-	250 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	19100	-	78700	**1090000**	-	**478000J**	-	240000 J	-	**1600000**	-	110000	**570000J**	**720000**	**700000J**

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-351	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352	MW-352R	MW-352R	MW-352R	MW-352R
			Field Sample ID	12/07/2021	11/08/2013	11/08/2013	03/17/2014	03/17/2014	06/05/2014	06/05/2014	10/16/2017	10/16/2017	12/07/2017	12/08/2017	10/18/2018	01/17/2019	01/17/2019	04/08/2019
			Sample Date	M351C3	M352A1	M352A1X	M352A2	M352A2X	M352A3	M352A3X	M352A4	M352A4X	M352A5	M352A5X	M352RA6X	D0117198	M352RA7X	M352RA8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4100**	**30000**	-	**17200**	-	**7550**	-	**7440**	-	**7500**	-	-	-	-	-
Iron	ug/L	Y	300	-	**27600**	-	**11600**	-	**7340**	-	**7340**	-	**7040**	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1100000J**	-	1500 U	-	42800	-	40700	-	1800 J	-	4000 J	**779000**	**1330000**	**1250000J**	**964000**

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-352R	MW-353	MW-353	MW-353
			Field Sample ID	07/12/2019	09/30/2019	01/22/2020	03/26/2020	03/26/2020	12/10/2020	12/10/2020	03/15/2021	03/15/2021	06/02/2021	08/27/2021	12/10/2021	06/04/2013	06/05/2013	09/11/2013
			Sample Date	M352RA9X	M352B1X	M352RB2X	M352RB3	M352RB3X	M352RB4	M352RB4X	M352RB5	M352RB5X	M352RB6	M352RB7	M352RB8	M353A1	M353A1X	M353A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**1210**	-	**10000**	-	**56000**	-	**19000**	**27000**	**13000**	**21800**	-	**30400**
Iron	ug/L	Y	300	-	-	-	**1540**	-	**2100**	-	**5500**	-	**13000**	**22000J**	**9700**	**21300**	-	**35100**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	20 J	-
Sulfate (SO4)	ug/L	N	250000	**1290000**	**1080000**	**1130000**	-	**1170000**	-	**2500000**	-	**1200000**	**1800000**	**2800000**	**1800000J**	-	25000 U	-

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353
			Field Sample ID	09/12/2013	11/14/2013	11/15/2013	01/15/2014	01/16/2014	04/07/2014	04/08/2014	07/02/2014	07/03/2014	11/19/2014	11/20/2014	02/10/2015	02/10/2015	02/11/2015	02/11/2015
			Sample Date	M353A2X	M353A3	M353A3X	M353A4	M353A4X	M353A5	M353A5X	M353A6	M353A6X	M353A7	M353A7X	D0210151	M353A8	D0211151	M353A8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**27100**	-	**18900**	-	**21500**	-	**23100**	-	**77300**	-	**31300**	**31400**	-	-
Iron	ug/L	Y	300	-	**28800**	-	**18000**	-	**18300**	-	**18600**	-	**53100**	-	**29200**	**29400**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	37 J	-	52	-	39 J	-	41 J	-	57	-	15 U	-	-	41 J	38 J
Sulfate (SO4)	ug/L	N	250000	50000 U	-	50000 U	-	12500 U	-	10000 U	-	25000 U	-	50000 U	-	-	25000 U	25400 J

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353
			Field Sample ID	08/10/2015	08/11/2015	10/15/2015	10/16/2015	05/04/2016	05/05/2016	10/27/2016	10/27/2016	04/03/2017	04/04/2017	04/26/2017	09/14/2017	09/15/2017	04/17/2018	04/18/2018
			Sample Date	M353B1	M353B1X	M353B2	M353B2X	M353B3	M353B3X	M353B4	M353B4X	M353B5	M353B5X	M353B6	M353B7	M353B7X	M353B8	M353B8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**57700**	-	**15200**	-	**67100**	-	**49400**	-	**54300**	-	-	**63900**	-	**53000**	-
Iron	ug/L	Y	300	**55800**	-	**12200**	-	**66900**	-	**51700**	-	**54300**	-	-	**60200**	-	**52800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	39 J	-	24 J	-	15 U	-	24 J	-	-	84	-	15 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	12500 U	-	10000 U	-	50000 U	-	25000 U	-	-	5000 U	-	4000 U

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-353	MW-354	MW-354
			Field Sample ID	09/04/2018	09/05/2018	05/01/2019	05/01/2019	08/27/2019	08/27/2019	05/05/2020	05/05/2020	09/09/2020	09/09/2020	03/03/2021	03/03/2021	09/30/2021	06/04/2013	06/05/2013
			Sample Date	M353B9	M353B9X	M353C1	M353C1X	M353C2	M353C2X	M353C3	M353C3X	M353C4	M353C4X	M353C5	M353C5X	M353C6	M354A1	M354A1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**32500**	-	**31700**	-	**23500**	-	**35900**	-	-	-	**40000**	-	**23000**	**1030**	-
Iron	ug/L	Y	300	**30500**	-	**32300**	-	**23100**	-	**34400**	-	**24000**	-	**38000**	-	**22000**	113 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	24000	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	4400	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	-	40 J	40 UJ	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	24 J	-	90	-	15 U	-	15 U	-	15 U	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	2000 U	-	6600 UJ	-	4000 UJ	-	8000 UJ	-	2000 UJ	-	8000 UJ	4000 UJ	-	63800 J

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354
			Field Sample ID	09/11/2013	09/12/2013	11/14/2013	11/15/2013	01/15/2014	01/16/2014	04/07/2014	04/08/2014	07/02/2014	07/03/2014	11/19/2014	11/20/2014	02/10/2015	02/11/2015	08/10/2015
			Sample Date	M354A2	M354A2X	M354A3	M354A3X	M354A4	M354A4X	M354A5	M354A5X	M354A6	M354A6X	M354A7	M354A7X	M354A8	M354A8X	M354B1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	213	-	**435**	-	**5820**	-	**1380**	-	230	-	**314**	-	80.3 J	-	54.4 J
Iron	ug/L	Y	300	43.0 U	-	43.0 U	-	43.0 U	-	43.0 U	-	33.4 U	-	33.4 U	-	33.4 U	-	33.3 U
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	2800	-	76 J	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	125000 U	-	125000 U	-	50000 U	-	43600 J	-	50000 U	-	125000 U	-	50900 J	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354
			Field Sample ID	08/11/2015	10/15/2015	10/16/2015	05/04/2016	05/05/2016	10/27/2016	10/27/2016	04/03/2017	04/04/2017	09/14/2017	09/14/2017	09/15/2017	09/15/2017	04/17/2018	04/18/2018
			Sample Date	M354B1X	M354B2	M354B2X	M354B3	M354B3X	M354B4	M354B4X	M354B5	M354B5X	D0914171	M354B6	D0915171	M354B6X	M354B7	M354B7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**590**	-	33.3 U	-	**445**	-	**328**	-	**956**	**1080**	-	-	80.5 U	-
Iron	ug/L	Y	300	-	33.3 U	-	33.3 U	-	265	-	74.7 U	-	80.5 U	80.5 U	-	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	51 J	-	300	-	-	40 U	40 U	-	1200
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	125000 U	-	50000 U	-	25000 U	-	36600 J	-	42300 J	-	-	37500 J	49400 J	-	23900 J

Notes:
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5. U - Not detected

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			Location ID	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354	MW-354
			Field Sample ID	09/04/2018	09/05/2018	05/01/2019	05/01/2019	08/27/2019	08/27/2019	05/05/2020	05/05/2020	09/09/2020	09/09/2020	03/03/2021	03/03/2021	04/30/2021	09/01/2021	03/23/2022
			Sample Date	M354B8	M354B8X	M354B9	M354B9X	M354C1	M354C1X	M354C2	M354C2X	M354C3	M354C3X	M354C4	M354C4X	M354C5	M354C6	M354C8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	40.0 U	-	**2030**	-	81.7 J	-	142 J	-	-	-	**1300**	-	**1400**	**590**	**5300**
Iron	ug/L	Y	300	40.0 U	-	40 U	-	46 U	-	41.2 U	-	71 J	-	**350J**	-	160 J	47 J	**1600**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	150 J	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	5.5	4.9 UJ	23
Nitrogen, Nitrate as N	ug/L	N	10000	-	140	-	2100	-	870	-	620	-	40 UJ	-	460 J	660 J	54 J	270 J
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	43300 J	-	232000	-	161000 J	-	162000 J	-	58000 J	-	180000 J	200000 J	110000 J	170000 J

Notes:
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5. U - Not detected

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			Location ID	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355
			Field Sample ID	06/04/2013	06/05/2013	09/11/2013	09/12/2013	09/19/2013	11/14/2013	11/14/2013	11/15/2013	11/15/2013	01/15/2014	01/16/2014	04/09/2014	04/10/2014	07/02/2014	07/03/2014
			Sample Date	M355A1	M355A1X	M355A2	M355A2X	M355A5X	D1114131	M355A3	D1115131	M355A3X	M355A4	M355A4X	M355A6	M355A6X	M355A7	M355A7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**581**	-	**5240**	-	**84300**	**1520**	**1690**	-	-	**2020**	-	**347**	-	33.4 U	-
Iron	ug/L	Y	300	33.3 U	-	**1880**	-	**83000**	43.0 U	43.0 U	-	-	43.0 U	-	43.0 U	-	33.4 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1000	-	540	-	-	-	320	340	-	250	-	510	-	980
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	-	-	34 J	34 J	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	50000 U	-	**328000**	-	-	-	214000 J	125000 U	-	40200	-	45600	-	**368000**

Notes:
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5. U - Not detected

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			Location ID	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355
			Field Sample ID	11/19/2014	11/20/2014	02/10/2015	02/11/2015	08/12/2015	08/13/2015	10/15/2015	10/16/2015	05/04/2016	05/05/2016	10/27/2016	10/27/2016	04/03/2017	04/03/2017	04/04/2017
			Sample Date	M355A8	M355A8X	M355A9	M355A9X	M355B2	M355B2X	M355B3	M355B3X	M355B4	M355B4X	M355B5	M355B5X	D0403171	M355B6	D0404171
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	33.4 U	-	52.1 J	-	66.2 J	-	57.0 J	-	34.3 J	-	**975**	-	74.7 U	74.7 U	-
Iron	ug/L	Y	300	33.4 U	-	33.4 U	-	46.9 J	-	33.3 U	-	33.3 U	-	**924**	-	74.7 U	74.7 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	540	-	390	-	1100	-	800	-	460	-	590	-	-	1200
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	87400	-	88300	-	**548000**	-	122000	-	**327000**	-	**485000**	-	-	113000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355
			Field Sample ID	04/04/2017	09/14/2017	09/15/2017	04/17/2018	04/17/2018	04/18/2018	04/18/2018	09/04/2018	09/05/2018	03/27/2019	03/27/2019	09/03/2019	09/03/2019	02/21/2020	02/21/2020
			Sample Date	M355B6X	M355B7	M355B7X	D0417181	M355B8	D0418181	M355B8X	M355B9	M355B9X	M355C1	M355C1X	M355C2	M355C2X	M355C3	M355C3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	80.5 U	-	80.5 U	80.5 U	-	-	40.0 U	-	48.2 J	-	**1360**	-	48.5 J	-
Iron	ug/L	Y	300	-	80.5 U	-	80.5 U	80.5 U	-	-	40.0 U	-	40 U	-	46 U	-	41.2 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	1200	-	1800	-	-	760	770	-	1100	-	240	-	40 U	-	520
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	15 U	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	182000	-	245000	-	-	134000	122000	-	**262000**	-	179000	-	145000 J	-	74200 J

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-355	MW-355	MW-355	MW-355	MW-355	MW-355	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356
			Field Sample ID	08/31/2020	09/01/2020	02/08/2021	02/08/2021	07/29/2021	02/14/2022	06/04/2013	06/05/2013	09/11/2013	09/12/2013	11/14/2013	11/15/2013	01/16/2014	01/17/2014	04/09/2014
			Sample Date	M355C4X	M355C4	M355C5	M355C5X	M355C6	M355C7	M356A1	M356A1X	M356A2	M356A2X	M356A3	M356A3X	M356A4	M356A4X	M356A5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	40 U	-	40 U	91 J	**5300**	-	**13000**	-	**19000**	-	**4270**	-	**1840**
Iron	ug/L	Y	300	-	-	41 U	-	41 U	41 U	**2290**	-	**10400**	-	**15200**	-	**1750**	-	43.0 U
Iron, Total Recoverable	ug/L	N	NA	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	270 J	-	-	500 J	660 J	300 J	-	160	-	41 J	-	40 U	-	250	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 UJ	-	-	15 U	15 U	15 U	-	17 J	-	15 U	-	40 J	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	200000 J	-	-	160000 J	80000 J	77000 J	-	46200	-	12500 U	-	12500 U	-	7700	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356
			Field Sample ID	04/10/2014	07/01/2014	07/01/2014	11/19/2014	11/20/2014	02/10/2015	02/11/2015	08/12/2015	08/13/2015	10/15/2015	10/16/2015	05/04/2016	05/05/2016	10/27/2016	10/28/2016
			Sample Date	M356A5X	M356A6	M356A6X	M356A7	M356A7X	M356A8	M356A8X	M356B1	M356B1X	M356B2	M356B2X	M356B3	M356B3X	M356B4	M356B4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**9780**	-	**6810**	-	**558**	-	**25000**	-	**16300**	-	**17200**	-	**33100**	-
Iron	ug/L	Y	300	-	**8420**	-	**6480**	-	**476**	-	**23200**	-	**17300**	-	**9480**	-	**33300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	160	-	59 J	-	82 J	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	16 J	-	15 U	-	15 U	-	27 J	-	27 J	-	15 U	-	48 J
Sulfate (SO4)	ug/L	N	250000	19500 J	-	10000 U	-	10000 U	-	19000 J	-	10000 U	-	8700	-	5000 U	-	50000 U

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356	MW-356
			Field Sample ID	04/03/2017	04/04/2017	09/18/2017	09/19/2017	04/17/2018	04/18/2018	09/04/2018	09/05/2018	03/27/2019	03/27/2019	09/03/2019	09/03/2019	02/21/2020	02/21/2020	08/31/2020
			Sample Date	M356B5	M356B5X	M356B6	M356B6X	M356B7	M356B7X	M356B8	M356B8X	M356B9	M356B9X	M356C1	M356C1X	M356C2	M356C2X	M356C3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	74.7 U	-	**21900**	-	**2630**	-	**29300**	-	**10600**	-	**27000**	-	**12600**	-	-
Iron	ug/L	Y	300	144 J	-	**23300**	-	**3140**	-	**27000**	-	**7170**	-	**26800**	-	**13600**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	170	-	40 U	-	270	-	40 U	-	40 U	-	40 U	-	40 U	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	28100	-	10000 U	-	18400	-	4000 U	-	2700 UJ	-	5000 UJ	-	2000 UJ	2000 UJ

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-356	MW-356	MW-356	MW-356	MW-356	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357
			Field Sample ID	09/01/2020	02/08/2021	02/08/2021	07/29/2021	02/14/2022	06/05/2013	06/06/2013	09/12/2013	09/13/2013	11/18/2013	11/19/2013	01/16/2014	01/17/2014	05/05/2014	05/06/2014
			Sample Date	M356C3	M356C4	M356C4X	M356C5	M356C6	M357A1	M357A1X	M357A2	M357A2X	M357A3	M357A3X	M357A4	M357A4X	M357A5	M357A5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**20000**	-	**23000**	**5500**	**35900**	-	**24000**	-	**24500**	-	**23800**	-	**17200**	-
Iron	ug/L	Y	300	-	**26000**	-	**23000**	**4500**	**35100**	-	**21800**	-	**25400**	-	**21200**	-	**16200**	-
Iron, Total Recoverable	ug/L	N	NA	17000	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 UJ	40 UJ	290 J	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	15 U	15 U	-	15 U	-	18 J	-	15 U	-	17 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	-	40000 UJ	4000 UJ	6700 J	-	12500 U	-	12500 U	-	12500 U	-	40700	-	43900

Notes:
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357
			Field Sample ID	07/01/2014	07/01/2014	11/24/2014	11/25/2014	02/11/2015	02/12/2015	05/12/2015	05/13/2015	08/12/2015	08/13/2015	10/26/2015	10/27/2015	05/05/2016	05/06/2016	10/27/2016
			Sample Date	M357A6	M357A6X	M357A7	M357A7X	M357A8	M357A8X	M357A9	M357A9X	M357B1	M357B1X	M357B2	M357B2X	M357B3	M357B3X	M357B4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**16400**	-	**56200**	-	**14400**	-	**15200**	-	**13000**	-	**16600**	-	**18100**	-	**9560**
Iron	ug/L	Y	300	**16300**	-	**49500**	-	**14700**	-	**14800**	-	**12600**	-	**17100**	-	**17700**	-	**11900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	39 J	-	19 J	-	15 U	-	15 U	-	17 J	-	22 J	-
Sulfate (SO4)	ug/L	N	250000	-	5000 U	-	181000	-	**327000**	-	11200	-	5500	-	35200	-	2500 U	-

Notes:
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5. U - Not detected

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			Location ID	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357
			Field Sample ID	10/28/2016	10/28/2016	10/29/2016	04/04/2017	04/05/2017	09/18/2017	09/19/2017	04/24/2018	04/25/2018	10/03/2018	10/03/2018	05/03/2019	05/03/2019	08/29/2019	08/29/2019
			Sample Date	D1028161	M357B4X	D1027161	M357B5	M357B5X	M357B6	M357B6X	M357B7	M357B7X	M357B8	M357B8X	M357B9	M357B9X	M357C1	M357C1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**10100**	**15500**	-	**12900**	-	**20300**	-	**14500**	**34000**	**18300**	-	**13400**	-
Iron	ug/L	Y	300	-	-	**13400**	**15300**	-	**13000**	-	**18900**	-	**14500**	-	**18600**	-	**12800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	53 J	-	-	40 U	-	40 U	-	40 U	-	40U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	-	47 J	-	15 U	-	15 U	-	15U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	10000 U	25000 U	-	-	56500	-	2800 J	-	4000 U	-	10000U	-	10800	-	10000 UJ

Notes:
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4. J - Estimated value
5. U - Not detected

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			Location ID	MW-357	MW-357	MW-357	MW-357	MW-357	MW-357	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358
			Field Sample ID	05/01/2020	05/01/2020	11/24/2020	11/24/2020	06/25/2021	12/27/2021	06/26/2013	06/27/2013	09/12/2013	09/13/2013	11/18/2013	11/19/2013	11/19/2013	01/28/2014	01/29/2014
			Sample Date	M357C2	M357C2X	M357C3	M357C3X	M357C4	M357C5	M358A1	M358A1X	M358A2	M358A2X	M358A3	M358A3X	M358A3X	M358A4	M358A4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**18800**	-	**17000**	-	**18000**	**25000**	**3800**	-	**15700**	-	**18600**	-	-	**11100**	-
Iron	ug/L	Y	300	**18800**	-	**16000**	-	**18000**	**25000**	**1120**	-	86.0 J	-	**12400**	-	-	229	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	11000.00	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 UJ	40 UJ	40 UJ	-	530	-	460	-	-	40 U	-	860
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	12 J	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	15 U	15 U	-	15 U	-	15 U	-	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	2000 UJ	-	8000 UJ	4000 UJ	8000 UJ	-	73600	-	50000 U	-	-	162000	-	120000

Notes:
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5. U - Not detected

Appendix B3 Main Yard
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Chevron Perth Amboy Facility

			Location ID	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358
			Field Sample ID	05/05/2014	05/06/2014	07/02/2014	07/03/2014	08/28/2014	11/24/2014	11/25/2014	02/11/2015	02/12/2015	05/12/2015	05/13/2015	08/12/2015	08/13/2015	10/26/2015	10/27/2015
			Sample Date	M358A5	M358A5X	M358A6	M358A6X	M358A8X	M358A9	M358A9X	M358B1	M358B1X	M358B2	M358B2X	M358B3	M358B3X	M358B4	M358B4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	205000	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**1310**	-	**5740**	-	-	**2620**	-	**1680**	-	**4360**	-	**3190**	-	**6530**	-
Iron	ug/L	Y	300	109 J	-	33.4 U	-	-	72.6 J	-	171 J	-	34.8 J	-	**1810**	-	67.0 J	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	1600	-	1300	-	-	1000	-	810	-	820	-	930	-	650
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	19 J	-	17 J	-	-	16 J	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	89500 J	-	85300	1500 U	-	89700	-	108000	-	69200	-	93100	-	125000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358
			Field Sample ID	05/05/2016	05/06/2016	10/27/2016	10/28/2016	04/04/2017	04/05/2017	09/18/2017	09/19/2017	04/24/2018	04/25/2018	10/02/2018	10/02/2018	04/25/2019	04/25/2019	08/29/2019
			Sample Date	M358B5	M358B5X	M358B6	M358B6X	M358B7	M358B7X	M358B8	M358B8X	M358B9	M358B9X	M358C1	M358C1X	M358C2	M358C2X	M358C3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**9430**	-	**10700**	-	**3380**	-	**6570**	-	**3960**	-	**834**	-	**71200**	-	**15400**
Iron	ug/L	Y	300	68.1 J	-	**7120**	-	**1030**	-	**1730**	-	**1820**	-	**340J**	-	**2020**	-	**382**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	850	-	730	-	930	-	2000	-	1100	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	71	-	18 J	-	23 J	-	15 UJ	-
Sulfate (SO4)	ug/L	N	250000	-	123000	-	126000	-	178000	-	130000	-	111000	-	118000	-	88600	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-358	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373
			Field Sample ID	08/29/2019	04/28/2020	11/23/2020	11/24/2020	03/04/2021	03/05/2021	05/04/2021	10/27/2021	01/08/2014	01/09/2014	04/14/2014	04/15/2014	07/09/2014	07/10/2014	11/24/2014
			Sample Date	M358C3X	M358C4X	M358C5	M358C5X	M358C6	M358C6X	M358C7	M358C8	M373A1	M373A1X	M373A2	M373A2X	M373A3	M373A3X	M373A4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**15000**	-	**340000**	-	**2500**	**13000**	**22500**	-	**30500**	-	**20900**	-	**18800**
Iron	ug/L	Y	300	-	-	41 U	-	**580J**	-	**1100**	**720**	**21800**	-	**29500**	-	**20900**	-	**19300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	82	40	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	490	-	780 J	-	390 J	40 UJ	40 UJ	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	800	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	23 UJ	-	24 J	15 U	15 U	-	22 J	-	41 J	-	22 J	-
Sulfate (SO4)	ug/L	N	250000	60100 J	77100 J	-	65000 J	-	79000 J	69000 J	74000 J	-	11700	-	5000 U	-	5000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373
			Field Sample ID	11/25/2014	04/09/2015	04/10/2015	06/11/2015	06/12/2015	08/24/2015	08/25/2015	10/28/2015	10/29/2015	11/10/2016	11/11/2016	03/20/2017	03/21/2017	09/19/2017	09/20/2017
			Sample Date	M373A4X	M373A6	M373A6X	M373A7	M373A7X	M373A8	M373A8X	M373A9	M373A9X	M373B2	M373B2X	M373B3	M373B3X	M373B4	M373B4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**20800**	-	**18900**	-	**17900**	-	**16600**	-	**15100**	-	**16000**	-	**13700**	-
Iron	ug/L	Y	300	-	**20400**	-	**18500**	-	**22000**	-	**16500**	-	**15000**	-	**16000**	-	**13500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	22 J	-	15 U
Sulfate (SO4)	ug/L	N	250000	2500 U	-	5000 U	-	2500 U	-	2900 J	-	2500 U	-	2500 U	-	2500 U	-	2500 U

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373	MW-373
			Field Sample ID	03/26/2018	03/27/2018	08/08/2018	08/09/2018	03/25/2019	03/25/2019	08/20/2019	08/20/2019	08/20/2019	03/26/2020	03/26/2020	08/10/2020	08/11/2020	03/05/2021	03/05/2021
			Sample Date	M373B5	M373B5X	M373B6	M373B6X	M373B7	M373B7X	D0820191B	M373B8	M373B8X	M373B9	M373B9X	M373C1	M373C1X	M373C2	M373C2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**14500**	-	**13700**	-	**13400**	-	**12000**	**12900**	-	**13500**	-	-	-	**14000**	-
Iron	ug/L	Y	300	**14200**	-	**13200**	-	**12700**	-	**12400**	**10700**	-	**13600**	-	**8300**	-	**13000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	8400	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40U	-	40 U	40 U	-	40 U	-	40 U	-	40 UJ	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15U	-	15 U	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	1000 U	-	1000U	-	1900 UJ	50000 UJ	-	50000 UJ	-	2000 UJ	-	3000 J	-	20000 UJ

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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Chevron Perth Amboy Facility

			Location ID	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374
			Field Sample ID	04/10/2014	04/10/2014	07/09/2014	07/09/2014	07/10/2014	07/10/2014	08/15/2014	08/15/2014	11/17/2014	11/18/2014	12/04/2014	12/04/2014	12/04/2014	04/09/2015	04/10/2015
			Sample Date	M374A1	M374A1X	D0709141	M374A2	D0710141	M374A2X	M374A3	M374A3X	M374A5	M374A5X	M374A4	M374A4	M374A4X	M374A6	M374A6X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2860**	-	**4680**	**5060**	-	-	**2460**	-	**2460**	-	**2380**	-	-	**2520**	-
Iron	ug/L	Y	300	**2150**	-	**2080**	**2020**	-	-	**2300**	-	**2120**	-	-	**2410**	-	**2590**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	40 U	40 U	-	-	-	40 U	-	-	-	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	15 U	15 U	-	-	-	15 U	-	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	2500 U	-	-	25000 U	25000 U	-	1500 U	-	2500 U	-	-	2800 J	-	5200 J

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374
			Field Sample ID	06/11/2015	06/12/2015	08/24/2015	08/25/2015	10/29/2015	10/30/2015	05/10/2016	05/11/2016	11/03/2016	11/04/2016	01/30/2017	01/30/2017	01/31/2017	01/31/2017	07/26/2017
			Sample Date	M374A7	M374A7X	M374A8	M374A8X	M374A9	M374A9X	M374B1	M374B1X	M374B2	M374B2X	D0130171	M374B3	D0131171	M374B3X	M374B5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4800**	-	**2670**	-	**2660**	-	**1800**	-	**1920**	-	**1770**	**1790**	-	-	**2170**
Iron	ug/L	Y	300	**2210J**	-	**2510**	-	**2230**	-	**1820**	-	**1890**	-	**1680**	**1700**	-	-	**2020**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	5000 U	-	2500 U	-	2500 U	-	2500 U	-	-	2500 U	10000 U	-

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-374	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375
			Field Sample ID	07/27/2017	02/05/2018	02/06/2018	05/03/2021	09/28/2021	11/02/2021	03/18/2022	01/10/2014	01/10/2014	04/10/2014	04/10/2014	07/09/2014	07/10/2014	11/17/2014	11/17/2014
			Sample Date	M374B5X	M374B7	M374B7X	M374C2	M374C3	M374C4	M374C5	M375A1	M375A1X	M375A2	M375A2X	M375A3	M375A3X	D1117141	M375A4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**3360**	-	130 UJ	**1500**	**570**	**780**	**7370**	-	**10300**	-	**5850**	-	**2380**	**2380**
Iron	ug/L	Y	300	-	**2690**	-	41 U	**1200**	110 J	300	**6970**	-	**9270**	-	**5990**	-	**2150**	**2270**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	7900	3 U	5500	3400	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	40 UJ	40 UJ	40 UJ	40 UJ	-	73 J	-	40 U	-	40 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	22 J	26 J	18 J	15 U	15 U	-	15 U	-	23 J	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	3300 J	-	30700	**310000J**	**310000J**	**290000J**	230000 J	-	46300	-	16100 J	-	12500 U	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375	MW-375
			Field Sample ID	11/18/2014	11/18/2014	04/14/2015	04/15/2015	06/11/2015	06/12/2015	08/24/2015	08/25/2015	10/29/2015	10/30/2015	05/10/2016	05/11/2016	11/03/2016	11/04/2016	06/08/2017
			Sample Date	D1118141	M375A4X	M375A5	M375A5X	M375A6	M375A6X	M375A7	M375A7X	M375A8	M375A8X	M375A9	M375A9X	M375B1	M375B1X	D0608171
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**5670**	-	**6160**	-	**6150**	-	**7400**	-	**5150**	-	**4670**	-	**5460**
Iron	ug/L	Y	300	-	-	**4900**	-	**5440**	-	**5960**	-	**6310**	-	**5260**	-	**4460**	-	**4870**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	35 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	25000 U	25000 U	-	25000 U	-	10000 U	-	10000 U	-	25000 U	-	10000 U	-	12500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-375	MW-375	MW-375	MW-375	MW-375	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376
			Field Sample ID	06/08/2017	06/09/2017	06/09/2017	12/05/2017	12/06/2017	01/14/2014	01/15/2014	04/16/2014	04/17/2014	07/16/2014	07/16/2014	07/17/2014	07/17/2014	11/18/2014	11/19/2014
			Sample Date	M375B2	D0609171	M375B2X	M375B3	M375B3X	M376A1	M376A1X	M376A2	M376A2X	D0716141	M376A3	D0717141	M376A3X	M376A5	M376A5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**5400**	-	-	**4020**	-	**5550**	-	**6680**	-	**5430**	**5700**	-	-	**3720**	-
Iron	ug/L	Y	300	**4850**	-	-	**3460**	-	**2090**	-	**5140**	-	**5330**	**5270**	-	-	**1350**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	40 U	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	15 U	-	15 U	-	15 U	-	15 U	-	-	15 U	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	-	25000 U	25000 U	-	3100 J	-	25400	-	22500	-	-	25800	25500	-	25800

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376
			Field Sample ID	12/08/2014	12/08/2014	04/13/2015	04/14/2015	05/14/2015	05/15/2015	08/31/2015	09/01/2015	10/14/2015	10/14/2015	11/02/2015	11/03/2015	11/02/2016	11/03/2016	03/20/2017
			Sample Date	M376A4	M376A4X	M376A6	M376A6X	M376A7	M376A7X	M376A8	M376A8X	M376A9	M376A9X	M376B1	M376B1X	M376B3	M376B3X	M376B4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4180**	-	**7220**	-	**5160**	-	**5490**	-	**5220**	-	**5400**	-	**5110**	-	**8790**
Iron	ug/L	Y	300	**3660**	-	**3280**	-	**4750**	-	**4930**	-	**4860**	-	**4450**	-	**4300**	-	**6250**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	-	40 U	-	40 U	-	-	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	15 U	-	15 U	-	-	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	49200	-	26000	-	26000	-	23300	-	133000	-	50600	-	32300	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376
			Field Sample ID	03/21/2017	08/24/2017	08/25/2017	08/08/2018	08/09/2018	03/15/2019	03/15/2019	08/27/2019	08/27/2019	02/12/2020	02/14/2020	02/14/2020	02/14/2020	08/21/2020	08/21/2020
			Sample Date	M376B4X	M376B5	M376B5X	M376B7	M376B7X	M376B8	M376B8X	M376B9	M376B9X	M376C1	D0214201	D0214201X	M376C1X	M376C2	M376C2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**5190**	-	**5390**	-	**15100**	-	**8790**	-	**13500**	**12900**	-	-	-	-
Iron	ug/L	Y	300	-	**4630**	-	**4830**	-	**11300**	-	**7310**	-	**11300**	**11600**	-	-	**8900**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	9300	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40U	-	40 U	-	40 U	-	-	40 U	40 U	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	20 J	-	22 J	-	15U	-	15 U	-	49 J	-	-	15 U	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	94000	-	12100	-	14600	-	14500	-	21900 J	-	-	27300 J	29000 J	-	19000 J

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-376	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377
			Field Sample ID	03/29/2021	03/29/2021	05/25/2021	09/23/2021	11/02/2021	11/02/2021	03/18/2022	01/14/2014	01/15/2014	04/16/2014	04/17/2014	07/16/2014	07/17/2014	09/12/2014	09/12/2014
			Sample Date	M376C3	M376C3X	M376M4	M376C5	D1102211	M376C6	M376C7	M377A1	M377A1X	M377A2	M377A2X	M377A3	M377A3X	M377A4	M377A4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**12000J**	-	**9800**	**5800**	**4900**	**5500**	**14000**	**18600**	-	**17800**	-	**15200**	-	**4200**	-
Iron	ug/L	Y	300	**11000J**	-	**10000**	**6700**	**6300**	**6300**	**13000**	**15800**	-	**15500**	-	**14700**	-	**3050**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	12000	450	650	520 J	14000	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	40 U	130 J	40 UJ	40 UJ	40 UJ	-	45 J	-	40 U	-	40 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	17 J	150 U	89	15 U	15 U	-	15 U	-	15 U	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	-	2200 J	12000	28000 J	18000 J	11000 J	8000 UJ	-	25000 U	-	22600	-	33000	-	46000

Notes:
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377
			Field Sample ID	11/18/2014	11/19/2014	04/08/2015	04/09/2015	05/14/2015	05/15/2015	08/31/2015	09/01/2015	10/14/2015	10/14/2015	11/02/2015	11/03/2015	11/02/2016	11/03/2016	03/20/2017
			Sample Date	M377A5	M377A5X	M377A6	M377A6X	M377A7	M377A7X	M377A9	M377A9X	M377B1	M377B1X	M377B2	M377B2X	M377B4	M377B4X	M377B5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**10500**	-	**13400**	-	**10100**	-	**4170**	-	**5130**	-	**8350**	-	**3190**	-	**14800**
Iron	ug/L	Y	300	**9750**	-	**13400**	-	**9350**	-	**3900**	-	**4980**	-	**7940**	-	**1950**	-	**12500**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	-	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	-	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	17800	-	25900	-	25000 U	-	43500	-	28100	-	14500	-	41200 J	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377	MW-377
			Field Sample ID	03/21/2017	08/24/2017	08/25/2017	08/08/2018	08/09/2018	03/15/2019	03/15/2019	07/11/2019	07/11/2019	08/27/2019	08/27/2019	03/06/2020	03/06/2020	08/21/2020	08/21/2020
			Sample Date	M377B5X	M377B6	M377B6X	M377B8	M377B8X	M377B9	M377B9X	M377C1	M377C1X	M377C2	M377C2X	M377C3	M377C3X	M377C4	M377C4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**12900**	-	**8000**	-	**11400**	-	**4020**	-	**3850**	-	**8500**	-	-	-
Iron	ug/L	Y	300	-	**12100**	-	**6690**	-	**9900**	-	**3700**	-	**3770**	-	**7760**	-	**8700**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	8600	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40U	-	40 U	-	-	-	40 U	-	40 U	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15U	-	15 UJ	-	-	-	21 J	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	10000 U	-	**578000**	-	59100	-	47500	-	72200	-	63600 J	-	16400 J	-	83000 J

Notes:
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5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-377	MW-377	MW-377	MW-377	MW-377	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378
			Field Sample ID	10/16/2020	10/16/2020	01/11/2021	01/11/2021	04/08/2021	01/08/2014	01/09/2014	05/05/2014	05/06/2014	07/10/2014	07/11/2014	11/24/2014	11/25/2014	04/13/2015	04/14/2015
			Sample Date	M377C5	M377C5X	M377C6	M377C6X	M377C7	M378A1	M378A1X	M378A2	M378A2X	M378A3	M378A3X	M378A4	M378A4X	M378A5	M378A5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**8300**	-	**9700**	-	**20000**	**62700**	-	**72000**	-	**85400**	-	**106000**	-	**7860**	-
Iron	ug/L	Y	300	**7800**	-	**8600**	-	**8600**	**62500**	-	**70800**	-	**76000**	-	**102000**	-	**7440**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	40 J	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	74	-	79	-	130	-	85	-	130
Sulfate (SO4)	ug/L	N	250000	-	58000	-	22000 J	43000 J	-	198000 J	-	67300	-	17300 J	-	25000 U	-	98900

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378
			Field Sample ID	06/09/2015	06/10/2015	09/02/2015	09/03/2015	11/04/2015	11/05/2015	11/02/2016	11/03/2016	06/14/2017	06/21/2017	12/05/2017	12/06/2017	01/11/2019	01/11/2019	01/11/2019
			Sample Date	M378A6	M378A6X	M378A7	M378A7X	M378A8	M378A8X	M378B1	M378B1X	M378B2X	M378B3	M378B4	M378B4X	D0111198	M378B5	M378B5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	34800 UJ	30900 UJ	-
Iron	ug/L	N	300	**17500**	-	**140000**	-	**8530**	-	**55000**	-	-	**77000**	**54100**	-	**33200**	**34500**	-
Iron	ug/L	Y	300	**20300**	-	**121000**	-	**9600**	-	**56300**	-	-	**76300**	**55300**	-	**27600**	**27600**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	16000	-	16000
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	40 U	-	-	40 U	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250	-	140	-	95	-	84	56	-	-	66	63	-	60
Sulfate (SO4)	ug/L	N	250000	-	25000	-	10000 U	-	95700	-	25000 U	25000 U	-	-	10000 U	13500	-	12900

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-378	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379
			Field Sample ID	04/11/2019	04/11/2019	10/14/2019	10/14/2019	05/21/2021	09/23/2021	12/13/2021	03/23/2022	01/14/2014	01/15/2014	04/14/2014	04/15/2014	07/10/2014	07/11/2014	04/13/2015
			Sample Date	D0411198	M378B6	M378B7	M378B7X	M378B8	M378B9	M378C1	M378C2	M379A1	M379A1X	M379A2	M379A2X	M379A3	M379A3X	M379A4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	9100 J	9320 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	50700 UJ	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**44100**	-	**58000**	**49000**	**38000**	**44000**	**11100**	-	**1280**	-	**8950**	-	**1160**
Iron	ug/L	Y	300	-	-	**43900**	-	**57000**	**48000**	**44000**	**39000**	201	-	**463**	-	**7930**	-	**427**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	17000	21000	6600	21000	18000	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	40 UJ	1700 J	40 UJ	40 UJ	-	450	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	250 UJ	15 U	38 J	15 U	15 U	-	15 U	-	25 J	-	45 J	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	1600 J	2000 UJ	8000 UJ	10000 UJ	2000 UJ	-	25400	-	60400	-	68500	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379
			Field Sample ID	04/14/2015	06/15/2015	06/16/2015	08/27/2015	08/27/2015	10/28/2015	10/29/2015	11/08/2016	11/09/2016	03/21/2017	03/22/2017	08/23/2017	08/24/2017	05/01/2018	05/02/2018
			Sample Date	M379A4X	M379A5	M379A5X	M379A6	M379A6X	M379A7	M379A7X	M379A9	M379A9X	M379B1	M379B1X	M379B2	M379B2X	M379B3	M379B3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1220**	-	**1080**	-	**32900**	-	**1450**	-	**1100**	-	**1350**	-	88.8 J	-
Iron	ug/L	Y	300	-	**1080**	-	**881**	-	**31900**	-	**306**	-	74.7 U	-	**391**	-	80.5 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	340	-	40 U	-	370	-	40 U	-	450	-	170	-	180
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	47 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	42500	-	53600	-	40400	-	46400	-	45800	-	9400 J	-	14200	-	22200

Notes:
1. GWQS - Groundwater Quality Standard
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4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-379	MW-380	MW-380	MW-380	MW-380	MW-380
			Field Sample ID	08/15/2018	08/16/2018	05/29/2019	05/29/2019	10/22/2019	10/22/2019	06/23/2020	06/23/2020	10/30/2020	10/30/2020	01/14/2014	01/15/2014	04/14/2014	04/15/2014	07/10/2014
			Sample Date	M379B4	M379B4X	M379B5	M379B5X	M379B6	M379B6X	M379B7	M379B7X	M379B8	M379B8X	M380A1	M380A1X	M380A2	M380A2X	M380A3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**467**	-	**817**	-	**3460**	-	-	-	-	-	**22400**	-	**19200**	-	**21600**
Iron	ug/L	Y	300	265 J	-	109 J	-	**2960**	-	220	-	**340**	-	**18400**	-	**18900**	-	**20900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	330	-	750	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	73 J	-	40 U	-	40 U	-	40 U	-	62 J	-	65 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	41 J	-	78	-
Sulfate (SO4)	ug/L	N	250000	-	11500	-	11500	-	36700 J	-	13000 J	-	9400 J	-	83000	-	69300	-

Notes:
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5. U - Not detected

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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380
			Field Sample ID	07/11/2014	04/13/2015	04/14/2015	06/09/2015	06/09/2015	06/10/2015	06/10/2015	08/27/2015	08/27/2015	10/28/2015	10/29/2015	11/07/2016	11/08/2016	03/21/2017	03/22/2017
			Sample Date	M380A3X	M380A4	M380A4X	D0609151	M380A5	D0610151	M380A5X	M380A6	M380A6X	M380A7	M380A7X	M380A9	M380A9X	M380B1	M380B1X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**16600**	-	**18400**	**18200**	-	-	**12800**	-	**33200**	-	**15900**	-	**32600**	-
Iron	ug/L	Y	300	-	**17000**	-	**17200**	**17400**	-	-	**12400**	-	**33400**	-	**15200**	-	**32800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	40 U	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	45 J	-	59	-	-	31 J	49 J	-	19 J	-	31 J	-	15 U	-	82
Sulfate (SO4)	ug/L	N	250000	39800	-	60100	-	-	27700	28100	-	76400	-	125000	-	10000 U	-	224000

Notes:
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5. U - Not detected

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			Location ID	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-380	MW-383
			Field Sample ID	08/29/2017	08/30/2017	05/01/2018	05/02/2018	08/15/2018	08/16/2018	05/29/2019	05/29/2019	10/22/2019	10/22/2019	06/25/2020	06/25/2020	10/30/2020	10/30/2020	04/14/2014
			Sample Date	M380B2	M380B2X	M380B3	M380B3X	M380B4	M380B4X	M380B5	M380B5X	M380B6	M380B6X	M380B7	M380B7X	M380B8	M380B8X	M383A1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**28900**	-	**16600**	-	**15000**	-	**10100**	-	**8750**	-	-	-	-	-	**18300**
Iron	ug/L	Y	300	**29700**	-	**16400**	-	**14600**	-	**8370**	-	**8750**	-	**9100**	-	**17000**	-	**17300**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	7500	-	18000	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 UJ	-	40 UJ	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	17 J	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	86300	-	68200	-	41100	-	32500	-	14700 J	-	2700 J	-	67000 J	-

Notes:
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5. U - Not detected

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			Location ID	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383
			Field Sample ID	04/15/2014	07/10/2014	07/11/2014	04/08/2015	04/08/2015	04/09/2015	04/09/2015	06/15/2015	06/16/2015	08/27/2015	08/27/2015	10/28/2015	10/29/2015	11/07/2016	11/08/2016
			Sample Date	M383A1X	M383A2	M383A2X	D0408151	M383A3	D0409151	M383A3X	M383A4	M383A4X	M383A5	M383A5X	M383A6	M383A6X	M383A8	M383A8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**20600**	-	**21900**	**22200**	-	-	**26000**	-	**24900**	-	**24700**	-	**25600**	-
Iron	ug/L	Y	300	-	**21800**	-	**22700**	**22800**	-	-	**25900**	-	**25800**	-	**24900**	-	**23800**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	40 U	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	15 U	15 U	-	31 J	-	36 J	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	5700	-	2500 U	-	-	10000 U	5000 U	-	8300	-	10000 U	-	13400 J	-	13700 J

Notes:
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5. U - Not detected

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			Location ID	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383	MW-383
			Field Sample ID	03/21/2017	03/22/2017	08/23/2017	08/24/2017	05/01/2018	05/02/2018	08/15/2018	08/15/2018	08/16/2018	08/16/2018	05/17/2019	05/17/2019	10/21/2019	10/21/2019	05/15/2020
			Sample Date	M383B9	M383B9X	M383B1	M383B1X	M383B2	M383B2X	D0815181	M383B3	D0816181	M383B3X	M383B4	M383B4X	M383B5	M383B5X	M383B7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**26800**	-	**25800**	-	**23400**	-	**22300**	**23600**	-	-	**11300**	-	**23800**	-	**23900**
Iron	ug/L	Y	300	**26000**	-	**26000**	-	**23200**	-	**22500**	**23200**	-	-	**9910**	-	**24100**	-	**21400**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	40 U	-	-	40 U	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	26 J	-	15 U	-	-	15 U	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	-	65500	-	79200	-	108000	-	-	37900	36300	-	39300	-	5000 UJ	-

Notes:
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5. U - Not detected

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			Location ID	MW-383	MW-383	MW-383	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391	MW-391R	MW-391R	MW-391R	MW-391R
			Field Sample ID	05/15/2020	11/13/2020	11/13/2020	06/25/2014	06/25/2014	08/19/2014	08/19/2014	12/11/2014	12/11/2014	07/08/2019	07/10/2019	10/20/2020	10/20/2020	01/14/2021	01/14/2021
			Sample Date	M383B7X	M383B8	M383B8X	M391A1	M391A1X	M391A2	M391A2X	M391A3	M391A3X	M391B1	M391B1X	M391RB2	M391RB2X	M391RB3	M391RB3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**10800**	-	**10100**	-	**8940**	-	**6220**	-	-	-	**90000**	-
Iron	ug/L	Y	300	-	**21000**	-	**9300**	-	**7240**	-	**8630**	-	**6370**	-	**14000**	-	**89000**	-
Iron, Total Recoverable	ug/L	N	NA	-	23000	-	-	-	-	-	-	-	-	-	17000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	49600 J	-	9100 J	-	13000	-	11600	-	2000 J	-	6500	-	**30000000**	-	**360000**

Notes:
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5. U - Not detected

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			Location ID	MW-391R	MW-391R	MW-391R	MW-391R	MW-392	MW-392	MW-392	MW-392	MW-393	MW-393	MW-393	MW-393	MW-395	MW-395	MW-395
			Field Sample ID	04/09/2021	07/15/2021	10/08/2021	01/27/2022	08/19/2014	08/19/2014	12/11/2014	12/11/2014	09/12/2014	09/12/2014	10/14/2015	10/14/2015	05/05/2014	05/06/2014	07/09/2014
			Sample Date	M391RB4	M391RB5	M391RB6	M391RB7	M392A1	M392A1X	M392A2	M392A2X	M393A1	M393A1X	M393A4	M393A4X	M395A1	M395A1X	M395A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**93000**	**110000**	**110000**	**110000**	**3080**	-	**2880**	-	**22500**	-	**954**	-	**17600**	-	**16500**
Iron	ug/L	Y	300	**93000**	-	-	**90000**	**1450**	-	**1950**	-	**21600**	-	**898**	-	**16300**	-	**16200**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	**60000000**	**33000000**	**38000000J**	**37000000**	-	51100	-	11700	-	87600	-	93100	-	10000 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395
			Field Sample ID	07/10/2014	11/17/2014	11/18/2014	04/09/2015	04/10/2015	06/11/2015	06/12/2015	08/24/2015	08/25/2015	10/29/2015	10/30/2015	05/10/2016	05/11/2016	11/03/2016	11/04/2016
			Sample Date	M395A2X	M395A3	M395A3X	M395A4	M395A4X	M395A5	M395A5X	M395A6	M395A6X	M395A7	M395A7X	M395A8	M395A8X	M395A9	M395A9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**15200**	-	**16100**	-	**15000**	-	**11400**	-	**12400**	-	**13100**	-	**9640**	-
Iron	ug/L	Y	300	-	**11000**	-	**14400**	-	**14200**	-	**10800**	-	**12700**	-	**13600**	-	**9360**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 J	-	15 U	-	15 U	-	15 U	-	15 U	-	16 J	-	15 U	-	15 U
Sulfate (SO4)	ug/L	N	250000	50000 U	-	12500 U	-	5000 U	-	5000 U	-	12500 U	-	25000 U	-	5000 U	-	12500 U

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-395	MW-395	MW-395	MW-395	MW-395	MW-395	MW-396	MW-396	MW-396	MW-396	MW-396	MW-396	MW-396	MW-396	MW-396
			Field Sample ID	06/08/2017	06/09/2017	12/05/2017	12/05/2017	12/06/2017	12/06/2017	03/18/2014	03/18/2014	03/18/2014	03/18/2014	03/18/2014	06/12/2014	06/13/2014	10/17/2017	10/17/2017
			Sample Date	M395B1	M395B1X	D1205171	M395B2	D1206171	M395B2X	D0318148	D0318148	M396A1	M396A1	M396A1X	M396A2	M396A2X	M396A3	M396A3X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**11100**	-	**11100**	**11000**	-	-	**36900**	-	**33300**	-	-	**96400**	-	**2650**	-
Iron	ug/L	Y	300	**10600**	-	**9560**	**9290**	-	-	-	**27900**	-	**29200**	-	**93100**	-	**2090**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	-	40 U	40 U	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	17 J	17 J	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	-	25000 U	25000 U	**271000**	-	-	-	**267000**	-	**384000**	-	13500 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-396	MW-396	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R	MW-396R
			Field Sample ID	12/11/2017	12/11/2017	10/18/2018	01/17/2019	04/09/2019	07/12/2019	09/30/2019	01/23/2020	03/26/2020	03/26/2020	12/11/2020	12/11/2020	03/15/2021	03/15/2021	06/02/2021
			Sample Date	M396A4	M396A4X	M396RA5X	M396RA6X	M396RA7X	M396RA8X	M396RA9X	M396RB1X	M396RB2	M396RB2X	M396RB3	M396RB3X	M396RB4	M396RB4X	D060220211A
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**35600**	-	-	-	-	-	-	-	**23600**	-	**10000**	-	**15000**	-	**20000**
Iron	ug/L	Y	300	**35000**	-	-	-	-	-	-	-	**21200**	-	**6600**	-	**15000**	-	**16000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**369000J**	**529000**	**991000**	**1210000**	**1330000**	**441000**	**1340000**	-	**1280000**	-	**1200000**	-	**880000**	**1100000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-396R	MW-396R	MW-396R	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397
			Field Sample ID	06/02/2021	08/27/2021	12/09/2021	03/18/2014	03/18/2014	03/18/2014	06/06/2014	06/13/2014	10/16/2017	10/16/2017	12/12/2017	12/12/2017	10/17/2018	01/17/2019	04/09/2019
			Sample Date	M396RB5	M396RB6	M396RB7	M397A1	M397A1	M397A1X	M397A2	M397A2X	M397A3	M397A3X	M397A4	M397A4X	M397A5X	M397A6X	M397A7X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**20000**	**12000**	**9900**	**17400**	-	-	**16800**	-	**8450**	-	**7220**	-	-	-	-
Iron	ug/L	Y	300	**18000**	**16000**	**8000**	-	**13200**	-	**15300**	-	**9900**	-	**6840**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**1000000J**	**640000**	**670000**	-	-	5800	-	12400	-	2000 J	-	2600 J	1500 U	3700 J	5600

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-397	MW-398
			Field Sample ID	07/12/2019	09/30/2019	09/30/2019	01/23/2020	03/24/2020	03/24/2020	03/24/2020	12/11/2020	12/11/2020	03/16/2021	03/16/2021	06/04/2021	09/15/2021	12/10/2021	06/11/2014
			Sample Date	M397A8X	D0930198	M397A9X	M397B1X	D0324208	M397B2	M397B2X	M397B3	M397B3X	M397B4	M397B4X	M397B5	M397B6	M397B7	D0611148
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**5500**	**5900**	-	**3800**	-	**150000**	-	**30000**	**62000**	**6900**	**38900**
Iron	ug/L	Y	300	-	-	-	-	**6360**	**7400**	-	**3800**	-	**150000**	-	**31000**	**62000**	**6200**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	36300	3200 J	1900 J	2600 J	3000 J	-	2500 J	-	**820000**	-	**1700000**	**740000**	**1300000**	180000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398
			Field Sample ID	06/11/2014	06/11/2014	06/11/2014	06/12/2014	06/12/2014	09/24/2014	09/24/2014	10/16/2017	10/16/2017	12/08/2017	12/08/2017	12/08/2017	10/17/2018	10/17/2018	01/18/2019
			Sample Date	D0611148	M398A1	M398A1	D0612148	M398A1X	M398A2	M398A2X	M398A3	M398A3X	D1208178	M398A4	M398A4X	D1017188A	M398A5X	M398A6X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**46700**	-	-	-	**51400**	-	**47200**	-	**41900**	**41900**	-	-	-	-
Iron	ug/L	Y	300	**47600**	-	**45600**	-	-	**49800**	-	**44800**	-	**40600**	**39800**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	24200	25700 J	-	25100	-	38200	18100	-	19200	15100	16200 J	12500

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398	MW-398
			Field Sample ID	04/08/2019	07/11/2019	09/30/2019	01/14/2020	03/24/2020	03/24/2020	04/27/2020	12/14/2020	12/14/2020	03/16/2021	03/16/2021	06/03/2021	08/30/2021	12/10/2021	12/10/2021
			Sample Date	M398A7X	M398A8X	M398A9X	M398B1X	M398B2	M398B2X	M358C4	M398B3	M398B3X	M398B4	M398B4X	M398B5	M398B6	D121021A	M398B7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	**17100**	-	**19700**	**35000**	-	**27000**	-	**33000**	**39000**	**30000**	**31000**
Iron	ug/L	Y	300	-	-	-	-	**16800**	-	**1120**	**31000**	-	**26000**	-	**29000**	**32000**	**29000**	**30000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	18200	5000 J	1500 U	15700	-	6900	-	-	13000	-	5700	14000	3400 J	2400 J	2500 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402
			Field Sample ID	09/26/2014	10/28/2014	03/10/2015	05/28/2015	09/17/2015	11/17/2015	01/12/2016	04/07/2016	07/21/2016	01/19/2017	04/24/2017	10/11/2017	01/24/2018	04/11/2018	07/17/2018
			Sample Date	M402A1	M402A2	M402A3	M402A4	M402A5	M402A6	M402A7	M402A8	M402A9	M402B2	M402B4	M402B7	M402B8	M402B9	M402C1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**159000**	**262000**	**194000**	**353000**	**278000**	**223000**	**186000**	**131000**	**284000**	**183000**	**233000**	**287000**	**196000**	**73000**	**292000**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**289000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	25000 U	-	-	**477000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402
			Field Sample ID	10/25/2018	01/04/2019	04/02/2019	07/01/2019	09/25/2019	09/25/2019	01/06/2020	04/03/2020	07/08/2020	09/24/2020	09/24/2020	10/14/2020	12/08/2020	12/08/2020	01/07/2021
			Sample Date	M402C2	M402C4	M402C5	M402C6	D0925191	M402C7	M402C8	M402C9	M402D1	M402D2	M402D2X	M402D3	M402D4	M402D4X	M402D5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	200000 UJ	-	130000 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**207000**	**75500**	**180000**	**200000**	**269000**	**268000**	**185000**	**261000**	-	**300000**	-	-	**120000**	-	**160000**
Iron	ug/L	Y	300	**159000**	**37300**	-	-	-	-	-	-	-	**290000**	-	-	**120000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	300000	-	-	190000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	5200	-	-	17000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	250 U	-	-	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	**1400**	-	-	250 U	-
Sulfate (SO4)	ug/L	N	250000	**341000**	10000 U	-	-	-	-	-	-	-	-	240000	-	-	25000	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	MW-402	MW-402	MW-402	MW-402	MW-402	MW-402	MW-403	MW-403	MW-403	MW-403	MW-403	MW-403	MW-403	MW-403	MW-403
			Field Sample ID	03/25/2021	03/25/2021	04/02/2021	07/12/2021	10/08/2021	01/14/2022	06/06/2014	06/06/2014	12/04/2014	12/04/2014	12/04/2014	10/16/2017	10/16/2017	12/07/2017	12/08/2017
			Sample Date	M402D6	M402D6X	M402D7	M402D8	M402D9	M402E1	M403A1	M403A1X	M403A3	M403A3	M403A3X	M403A4	M403A4X	M403A5	M403A5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	230000 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**210000**	-	**64000**	**120000**	**210000**	**120000**	**5530**	-	**5190**	-	-	**5770**	-	**6850**	-
Iron	ug/L	Y	300	**210000**	-	-	-	-	-	**6320**	-	-	**5050**	-	**2920**	-	**4150**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	16000	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	290 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	7700	-	-	-	-	-	22200	-	-	46800	-	24500	-	19200

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R	MW-403R
			Field Sample ID	10/18/2018	01/17/2019	04/08/2019	07/12/2019	10/01/2019	01/22/2020	01/22/2020	03/25/2020	03/25/2020	12/10/2020	12/11/2020	03/22/2021	05/06/2021	06/02/2021	08/27/2021
			Sample Date	M403RA6X	M403RA7X	M403RA8X	M403RA9X	M403RB1X	D0122208	M403RB2X	M403RB3	M403RB3X	M403RB5	M403RB5X	M403RB6	M403RB7	M403RB8	M403RB9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	**3380**	-	**20000**	-	**8600J**	**4600**	**6200J**	**2100J**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	**3090**	-	180 J	-	120 J	-	65 J	400 UJ
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**326000**	160000	163000	110000	35400 J	71500	68600	-	43100	-	**19000000**	-	**54000000**	**63000000**	**40000000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-403R	MW-404	MW-404	MW-404	MW-404	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R	MW-404R
			Field Sample ID	12/10/2021	06/23/2014	06/24/2014	08/06/2014	08/13/2014	04/26/2017	08/31/2017	11/30/2017	06/14/2018	12/10/2018	06/10/2019	12/13/2019	06/19/2020	12/18/2020	03/12/2021
			Sample Date	M403RC1	M404A1	M404A1X	M404A2	M404A2X	M404RA4	M404RA5	M404RA6	M404RA8	M404RB1	M404RB3	M404RB5	M404RB7	M404RB9	M404RC1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3900**	**41900**	-	**118000**	-	**11900**	**25500**	**34600**	**15300**	**39400**	**38900**	**47000**	-	**36000**	**26000**
Iron	ug/L	Y	300	520 UJ	**36800**	-	**113000**	-	**11300**	**25400**	**34600**	**14500**	**38700**	**39200**	**44100**	**42000**	**36000**	**26000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	43000	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**58000000J**	-	**462000**	-	**324000**	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-404R	MW-404R	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405	MW-405
			Field Sample ID	05/26/2021	12/28/2021	08/15/2014	08/15/2014	12/10/2014	12/10/2014	11/21/2017	02/13/2018	05/21/2018	08/29/2018	11/19/2018	02/26/2019	02/26/2019	09/03/2019	09/03/2019
			Sample Date	M404RC2	M404RC4	M405A1	M405A1X	M405A2	M405A2X	M405A5	M405A6	M405A7	M405A8	M405A9	M405B1	M405B1X	D0903199	M405B2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**25000**	**37000**	**11600**	-	**6120**	-	**13000**	**17600**	**11500**	**11700**	**15900**	**18000**	-	**9920**	**9330**
Iron	ug/L	Y	300	**22000**	**37000**	**9460**	-	**5860**	-	-	**17500**	**11200**	**11700**	**15100**	**15600**	-	**9710**	**9560**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	14000	15000	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	40 UJ	-	-	-	-	-	-	-	-	-	-	250 U	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	15 U	-	-	-	-	-	-	-	-	-	-	250 U	250 U	-
Sulfate (SO4)	ug/L	N	250000	2000 UJ	10000 UJ	-	44400	-	45700	-	-	-	-	-	-	3600 J	4700 J	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-405	MW-405	MW-405	MW-405	MW-405	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406
			Field Sample ID	09/03/2019	04/09/2020	04/09/2020	10/06/2020	10/06/2020	06/20/2014	06/20/2014	06/20/2014	06/20/2014	06/20/2014	08/12/2014	08/12/2014	08/13/2014	08/13/2014	03/07/2017
			Sample Date	M405B2X	M405B3	M405B3X	M405B4	M405B4X	D0620148	D0620148	M406A1	M406A1	M406A1X	D0812148	M406A2	D0813148	M406A2X	M406A5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**17400**	-	-	-	**16900**	-	**16300**	-	-	**11300**	**12000**	-	-	**10000**
Iron	ug/L	Y	300	-	**17300**	-	**12000**	-	-	**12700**	-	**15600**	-	**11000**	**10500**	-	-	**6330**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	13000	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	350 J	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	250 U	-	-	-	250 UJ	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	4300 J	-	4500 J	-	180000	3600 J	-	-	-	3600 J	-	-	1600 J	1700 J	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406	MW-406
			Field Sample ID	09/13/2017	11/30/2017	06/13/2018	09/04/2018	09/04/2018	12/10/2018	06/06/2019	12/09/2019	06/18/2020	12/15/2020	03/10/2021	05/27/2021	05/27/2021	09/01/2021	10/27/2021
			Sample Date	M406A6	M406A7	M406A9	D0904188A	M406B1	M406B2	M406B4	M406B6	M406B8	M406C1	M406C2	D052720211A	M406C3	M406C4	M406C5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7350**	**12200**	**9760**	**9450**	**10800**	**11800**	**13100**	**15800**	-	**9100**	**18000**	**13000**	**13000**	**10000**	**10000**
Iron	ug/L	Y	300	**6970**	**9940**	**9580**	-	-	**9920**	**11600**	**14600**	**9200**	**8800**	**12000**	**12000**	**12000**	**10000**	**12000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	8300	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	21000	19000	18000	12000
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	40 UJ	40 UJ	40 UJ	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	15 U	15 U	15 U	15 U
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	2000 UJ	4100 J	2000 UJ	12000 J

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407	MW-407
			Field Sample ID	06/24/2014	06/24/2014	08/06/2014	08/13/2014	03/08/2017	09/07/2017	12/04/2017	06/14/2018	09/04/2018	12/11/2018	06/13/2019	09/11/2019	12/09/2019	06/17/2020	12/15/2020
			Sample Date	M407A1	M407A1X	M407A2	M407A2X	M407A3	M407A4	M407A5	M407A7	M407A8	M407A9	M407B2	M407B3	M407B4	M407B6	M407B8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**57300**	-	**58500**	-	**47000**	**31700**	**33500**	**63100**	**37300**	**44800**	**47800**	40 U	**376000**	-	**54000**
Iron	ug/L	Y	300	**44300**	-	**55900**	-	**44600**	**32000**	**20300**	**39800**	-	**41700**	**35600**	40 U	**32200**	**35000**	**38000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	37000	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	73700	-	20600	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-407	MW-407	MW-407	MW-415	MW-415	MW-415	MW-419	MW-419	MW-419	MW-419	MW-419	MW-419	MW-419	MW-419	MW-420
			Field Sample ID	03/11/2021	05/28/2021	12/17/2021	05/29/2015	08/26/2015	08/26/2015	12/07/2015	12/10/2015	07/21/2016	07/21/2016	07/10/2018	07/10/2018	10/25/2018	01/15/2019	M420A1
			Sample Date	M407B9	M407C1	M407C2	M415A1X	M415A2	M415A2X	M419A1	M419A1X	M419A2	M419A2X	D0710188A	M419A3X	M419A4X	M419A5X	12/02/2015
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**89000**	**37000**	-	-	**471**	-	**13700**	-	**12400**	-	-	-	-	-	**1250**
Iron	ug/L	Y	300	**50000**	**34000**	-	-	44 UJ	-	**11800**	-	**11900**	-	-	-	-	-	**1750**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	10000	13000	-	-	-	-	-	-	-	-	-	11000	13000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 UJ	-	-	-	-	-	-	-	-	40 U	41 J	250 U	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	-	-	-	-	-	-	-	15 U	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	10000 UJ	-	**823000**	-	**415000**	-	2100 J	-	1700 J	1900 J	3800 J	2300 J	1500 U	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-420	MW-420	MW-420	MW-420	MW-420	MW-420	MW-421	MW-421	MW-421	MW-421	MW-421	MW-421	MW-421	MW-421	MW-422
			Field Sample ID	M420A1X	M420A2	M420A2X	M420A3X	M420A4X	M420A5X	12/03/2015	12/03/2015	07/20/2016	07/20/2016	07/20/2016	07/11/2018	10/25/2018	01/15/2019	12/03/2015
			Sample Date	12/02/2015	08/01/2016	08/01/2016	07/09/2018	10/25/2018	01/14/2019	M421A1	M421A1X	D0720168	M421A2	M421A2X	M421A3X	M421A4X	M421A5X	M422A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1360**	-	-	-	-	**11700**	-	**7240**	**7410**	-	-	-	-	**5710**
Iron	ug/L	Y	300	-	**934J**	-	-	-	-	**9170**	-	**6740**	**7200**	-	-	-	-	**5430**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	11000	15000	-	-	-	-	-	-	15000	18000	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	400 U	250 U	250 U	-	-	-	-	-	40 U	250 U	250 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	300 U	-	-	-	-	-	-	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	36500	-	4300 J	21300	15400	17800	-	95500	13700	-	15000	6600	18500	37700	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-422	MW-422	MW-422	MW-422	MW-422	MW-422	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423	MW-423
			Field Sample ID	12/03/2015	07/22/2016	07/22/2016	07/10/2018	10/22/2018	01/15/2019	12/07/2015	12/10/2015	07/18/2016	07/18/2016	07/11/2018	10/19/2018	01/14/2019	11/19/2020	02/25/2021
			Sample Date	M422A2X	M422A3	M422A3X	M422A4X	M422A5X	M422A6X	M423A2	M423A2X	M423A3	M423A3X	M423A4X	M423A5X	M423A6X	M423A7X	M423A8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**6500**	-	-	-	-	**10400**	-	**9920**	-	-	-	-	-	**9300**
Iron	ug/L	Y	300	-	**5870**	-	-	-	-	**10300**	-	**9180**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	20000	23000	-	-	-	-	-	9300	11000	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	250 U	250 U	-	-	-	-	40 U	250 U	5000 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	-	-	-	15 U	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	4900 J	-	2000 J	3100 J	2900 J	1500 U	-	2800 J	-	1500 U	1500 U	1500 U	1500 U	420	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-423	MW-423	MW-423	MW-423	MW-423	MW-424	MW-424	MW-424	MW-424	MW-433	MW-433	MW-433	MW-433	MW-433	MW-433
			Field Sample ID	02/25/2021	05/07/2021	05/07/2021	08/05/2021	11/11/2021	09/15/2015	09/15/2015	12/16/2015	12/16/2015	08/25/2015	08/25/2015	08/26/2015	08/26/2015	10/13/2015	10/13/2015
			Sample Date	M423A8X	D0507218	M423A9	M423B2	M423B3	M424A1	M424A1X	M424A2	M424A2X	D0825158	M433A1	D0826158	M433A1X	M433A2	M433A2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**11000**	**11000**	-	**9600**	**29300**	-	**28000**	-	**40100**	**43900**	-	-	**33200**	-
Iron	ug/L	Y	300	-	-	-	-	-	**28800**	-	**27600**	-	**37100**	**35900**	-	-	**32500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	13000	55000	55000	1900 J	2000 UJ	-	7400	-	10200	-	-	226000	**267000**	-	**1240000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-466	MW-466	MW-466	MW-466	MW-466	MW-466	MW-466	MW-467	MW-467	MW-467	MW-467	MW-467	MW-467	MW-474	MW-474
			Field Sample ID	12/03/2015	12/03/2015	08/01/2016	08/01/2016	07/09/2018	10/25/2018	01/15/2019	12/02/2015	12/02/2015	08/01/2016	07/09/2018	10/22/2018	01/14/2019	01/08/2016	07/20/2016
			Sample Date	M466A1	M466A1X	M466A2	M466A2X	M466A3X	M466A4X	M466A5X	M467A1	M467A1X	M467A2X	M467A3X	M467A4X	M467A5X	M474A1	M474A3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6580**	-	**1130**	-	-	-	-	**1780**	-	-	-	-	-	**43700**	**57100**
Iron	ug/L	Y	300	**2050**	-	**571**	-	-	-	-	**1160**	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	17000	19000	-	-	-	-	18000	23000	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	200 U	250 U	250 U	-	-	-	800 U	250 U	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	75 U	-	-	-	-	-	1500 U	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	11600	-	37700	15100	8400	10800	-	6700	1800 J	60000 U	5800	3900 J	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474
			Field Sample ID	10/17/2016	01/19/2017	04/18/2017	07/19/2017	10/10/2017	01/25/2018	04/12/2018	07/18/2018	10/26/2018	01/09/2019	04/05/2019	07/05/2019	10/03/2019	01/08/2020	04/06/2020
			Sample Date	M474A4	M474A6	M474A7	M474A8	M474A9	M474B1	M474B2	M474B3	M474B4	M474B5	M474B6	M474B7	M474B8	M474B9	M474C1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**36700**	**23700**	**37800**	**34200**	**39100**	**42600**	**38600**	**43200**	**41800**	**40400**	**42800**	**56300**	**38300**	**41600**	**45800**
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	**40300**	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-474	MW-521	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538	MW-538
			Field Sample ID	07/09/2020	10/12/2020	01/08/2021	04/14/2021	07/12/2021	10/06/2021	01/19/2022	M521B8	02/13/2018	05/17/2018	05/17/2018	08/30/2018	11/16/2018	03/01/2019	03/01/2019
			Sample Date	M474C2	M474C3	M474C4	M474C5	M474C6	M474C7	M474C8	03/14/2022	M538A1	D0517181	M538A2	M538A3	M538A4	M538A5	M538A5X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**35000**	**45000**	**46000**	**50000**	**41000**	**43000**	**517000**	**77000**	**86700**	**424000**	**863000**	**143000**	-
Iron	ug/L	Y	300	-	-	-	**40000**	**45000**	-	**42000**	**43000**	**391000**	**86700**	**87600**	**569000**	**575000**	**79100**	-
Iron, Total Recoverable	ug/L	N	NA	48000	42000	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	21000	24000	-	22000	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	1200	40 UJ	-	40 UJ	40 UJ	-	-	-	-	-	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	57 J	15 U	-	15 U	15 U	-	-	-	-	-	-	250 U
Sulfate (SO4)	ug/L	N	250000	-	-	-	8000 UJ	-	-	20000 UJ	93000 J	-	-	-	-	-	-	**416000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-538	MW-538	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539	MW-539
			Field Sample ID	09/05/2019	09/06/2019	02/13/2018	05/17/2018	08/27/2018	08/27/2018	11/16/2018	03/01/2019	03/01/2019	09/03/2019	09/03/2019	04/10/2020	04/10/2020	10/05/2020	10/05/2020
			Sample Date	M538A6	M538A6X	M539A1	M539A2	D0827189	M539A3	M539A4	M539A5	M539A5X	M539A6	M539A6X	M539A7	M539A7X	M539A8	M539A8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**264000**	-	**410000**	**440000**	**469000**	**395000**	**6370000J**	**59000**	-	**305000**	-	**204000**	-	-	-
Iron	ug/L	Y	300	**243000**	-	**416000**	**452000**	**504000**	**444000**	**140000**	**319000**	-	**305000**	-	**218000**	-	**270000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	250000	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	340 J	-	-	-	-	-	-	250 U	-	250 U	-	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	250 U	-	-	-	-	-	-	250 U	-	250 U	-	-	-	250 U
Sulfate (SO4)	ug/L	N	250000	-	**1650000**	-	-	-	-	-	-	**951000**	-	**1290000**	-	**1150000**	-	**1200000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-539	MW-540	MW-540	MW-540	MW-540	MW-540	MW-540	MW-540	MW-540	MW-540R	MW-540R	MW-540R	MW-540R	MW-540R	MW-540R
			Field Sample ID	03/30/2022	02/12/2018	05/17/2018	08/27/2018	11/21/2018	02/27/2019	02/27/2019	09/06/2019	09/06/2019	04/17/2020	04/17/2020	10/06/2020	10/06/2020	02/16/2021	05/24/2021
			Sample Date	M539B1	M540A1	M540A2	M540A3	M540A4	M540A5	M540A5X	M540A6	M540A6X	M540RA7	M540RA7X	M540RA8	M540RA8X	M540RA9X	M540RB1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**42000**	**16200**	**30600**	**94100**	**16800**	**24700**	-	**20200**	-	**1240**	-	-	-	-	-
Iron	ug/L	Y	300	**25000**	**14600**	**26600**	**33600**	**15500**	**7340**	-	**19500**	-	267	-	41 U	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	1400	-	-	-
Methane	ug/L	N	NA	8800	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	-	-	-	-	250 U	-	250 U	-	250 U	-	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	250 U	-	250 U	-	-	-	250 UJ	-	-
Sulfate (SO4)	ug/L	N	250000	210000 J	-	-	-	-	-	103000	-	16400	-	**3890000**	-	**1100000**	**1400000J**	**900000J**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	MW-540R	MW-540R	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541	MW-541R	MW-541R	MW-541R	MW-541R	MW-541R
			Field Sample ID	09/02/2021	11/23/2021	02/12/2018	05/17/2018	08/28/2018	11/20/2018	02/28/2019	02/28/2019	09/04/2019	09/04/2019	04/10/2020	04/10/2020	10/06/2020	10/06/2020	10/06/2020
			Sample Date	M540RB2	M540RB3	M541A1	M541A2	M541A3	M541A4	M541A5	M541A5X	M541A6	M541A6X	M541RA7	M541RA7X	D1006208	M541RA8	M541RA8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**126000**	**162000**	**119000**	**130000**	**117000**	-	**90700J**	-	99.7 J	-	-	-	-
Iron	ug/L	Y	300	-	-	**119000**	**162000**	**113000**	**131000**	**114000**	-	**89900J**	-	41.2 U	-	41 U	41 U	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	74 J	68 J	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 UJ	-	250 U	-	250 U	250 U	-	250 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	250 U	-	250 U	-	-	250 UJ	-	250 UJ
Sulfate (SO4)	ug/L	N	250000	**2000000**	**1500000**	-	-	-	-	-	**1180000**	-	**1400000**	-	**5530000**	**4200000**	-	**4400000**

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-542	MW-543	MW-543	MW-543
			Field Sample ID	02/13/2018	05/22/2018	08/28/2018	11/20/2018	02/28/2019	02/28/2019	09/04/2019	09/04/2019	04/09/2020	04/09/2020	10/07/2020	10/07/2020	02/14/2018	02/14/2018	05/22/2018
			Sample Date	M542A1	M542A2	M542A3	M542A4	M542A5	M542A5X	M542A6	M542A6X	M542A7	M542A7X	M542A8	M542A8X	D0214189	M543A1	M543A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2680**	**17200**	**21100**	**13800**	**19400**	-	**11900**	-	**14700**	-	-	-	**2220**	**2170**	**973**
Iron	ug/L	Y	300	83.5 J	**15700**	**11600**	**10800**	**13400**	-	**9910**	-	**14500**	-	**6900**	-	**1740**	**1700**	**624**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	6700	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	250 UJ	-	250 U	-	250 U	-	250 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	250 U	-	250 UJ	-	-	-	250 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	-	-	204000	-	107000	-	**315000**	-	**390000**	-	-	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-543R	MW-544
			Field Sample ID	08/29/2018	11/15/2018	02/21/2019	02/21/2019	09/06/2019	09/06/2019	04/08/2020	04/09/2020	10/05/2020	10/05/2020	02/17/2021	05/25/2021	09/01/2021	11/15/2021	02/14/2018
			Sample Date	M543A3	M543A4	M543A5	M543A5X	M543A6	M543A6X	M543RA7	M543RA7X	M543RA8	M543RA8X	M543RA9X	M543RB1	M543RB2	M543RB3	M544A1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**20600**	**3070**	**4570**	-	**17900**	-	**2030**	-	-	-	-	-	-	-	**1680**
Iron	ug/L	Y	300	**14000**	**1960**	**2620**	-	**16200**	-	**1290**	-	210 U	-	-	-	-	-	**1880**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	490 J	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	250 U	-	250 U	-	250 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	250 U	-	250 UJ	-	-	-	250 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	61400	-	8400	-	**3430000**	-	**2800000**	**1200000**	**1500000**	**1300000**	**840000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544	MW-544
			Field Sample ID	05/22/2018	08/29/2018	11/14/2018	02/20/2019	02/20/2019	02/20/2019	09/06/2019	09/06/2019	04/08/2020	04/08/2020	04/08/2020	10/05/2020	10/05/2020	02/17/2021	05/25/2021
			Sample Date	M544A2	M544A3	M544A4	D0220199	M544A5	M544A5X	M544A6	M544A6X	D0408208	M544A7	M544A7X	M544A8	M544A8X	M544A9X	M544B1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**6020**	**73400**	**89900**	**49500**	**38200**	-	**104000**	-	**78900**	**75200**	-	-	-	-	-
Iron	ug/L	Y	300	**5360**	**69000**	**89400**	**28300**	**26900J**	-	**114000**	-	**73600**	**77300**	-	**52000**	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	66000	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	250 U	-	250 U	-	250 U	250 U	-	250 U	-	250 U	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	250 U	-	250 UJ	-	250 UJ	-	-	-	-	250 U	-	-
Sulfate (SO4)	ug/L	N	250000	-	-	-	12700 J	-	17000 J	-	41200	13100 J	-	19200 J	-	9100	2600 J	1500 U

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-544	MW-544	MW-550	MW-550	MW-550	MW-550	MW-550	MW-550	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551	MW-551
			Field Sample ID	09/01/2021	11/15/2021	01/06/2021	04/01/2021	04/02/2021	07/14/2021	10/08/2021	01/21/2022	12/18/2019	12/19/2019	02/28/2020	02/28/2020	01/06/2021	04/01/2021	04/01/2021
			Sample Date	M544B2	M544B3	M550A9X	M550B1	M550B1X	M550B2	M550B3	M550B4	M551A6	M551A6X	M551A7	M551A7X	M551B1X	M551B2	M551B2X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	**1300**	-	**2900**	**1700**	-	**21100**	-	**29100**	-	-	**33000**	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	**19100**	-	**26400**	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	40 U	-	52 J	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	15 U	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	2600 J	**1500000**	100000	-	86000	87000	99000	84000 J	-	**550000J**	-	51900 J	120000	-	19000

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-551	MW-551	MW-551	MW-551	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575	MW-575
			Field Sample ID	07/14/2021	10/07/2021	10/07/2021	01/21/2022	03/10/2020	09/14/2020	09/14/2020	09/14/2020	12/09/2020	12/09/2020	03/08/2021	03/08/2021	06/01/2021	08/27/2021	12/09/2021
			Sample Date	M551B3	D1007218	M551B4	M551B5	M575A1X	D0914208	M575A2	M575A2X	D1209208	M575A3X	M575A4	M575A4X	M575A5	M575A6	M575A7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**19000**	**8000**	**8600**	-	-	-	-	-	-	-	**15000**	-	**36000**	**40000**	**54000**
Iron	ug/L	Y	300	-	-	-	-	-	**37000**	**38000**	-	-	-	**14000**	-	**35000**	**37000**	**50000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	39000 J	40000 J	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	32000	20000	22000 J	98000 J	114000	110000	-	120000	97000	93000	-	52000	150000	140000	140000 J

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-576	MW-577R	MW-577R	MW-577R
			Field Sample ID	03/10/2020	03/10/2020	09/14/2020	09/14/2020	12/09/2020	03/08/2021	03/08/2021	03/08/2021	03/10/2021	06/01/2021	08/26/2021	12/08/2021	10/19/2020	10/19/2020	01/14/2021
			Sample Date	D0309208	M576A1X	M576A2	M576A2X	M576A3X	D0308218	M576A4	M576A4X	M576A5	M576A6	M576A7	M576A8	M577RA3	M577RA3X	M577RA4
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	**12000**	**12000**	-	-	**2400**	**610**	**2000**	-	-	**94000**
Iron	ug/L	Y	300	-	-	**14000**	-	-	-	-	-	**15000**	**1300**	270 J	**1400**	**56000**	-	**90000**
Iron, Total Recoverable	ug/L	N	NA	-	-	15000	-	-	-	-	-	-	-	-	-	57000	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**2260000**	**2860000J**	-	65000	**8700000**	**5000000**	-	**5600000**	-	**3900000**	**430000**	**530000**	-	**3900000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-577R	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578
			Field Sample ID	01/14/2021	04/09/2021	07/15/2021	07/15/2021	10/08/2021	01/28/2022	01/28/2022	11/21/2019	11/21/2019	01/14/2020	03/27/2020	03/27/2020	12/14/2020	12/14/2020	12/14/2020
			Sample Date	M577RA4X	M577RA5	D0715218	M577RA6	M577RA7	D0128228B	M577RA8	D1121198	M578A1X	M578A2X	M578A3	M578A3X	D1214208	M578B4	M578B4X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**120000**	**100000**	**99000**	**97000**	**86000**	**88000**	-	-	-	**15400**	-	**12000**	**11000**	-
Iron	ug/L	Y	300	-	**100000**	-	-	-	-	-	-	-	-	**15100**	-	**9800**	**11000**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	40000	**3500000**	**4000000**	**4000000J**	**4800000J**	**4700000**	**4500000**	2600 J	2500 J	1500 U	-	6800	74000	-	43000

Notes:
1. GWQS - Groundwater Quality Standard
2. Bold, Shaded and Brackets Indicates Exceedance to Crite
3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-578	MW-578	MW-578	MW-578	MW-578	MW-578	MW-583	MW-583	MW-583	MW-583	MW-583	MW-583	MW-583	MW-583	MW-584
			Field Sample ID	03/16/2021	03/16/2021	03/16/2021	06/03/2021	08/30/2021	12/10/2021	04/09/2020	04/10/2020	10/09/2020	10/09/2020	02/17/2021	05/24/2021	09/03/2021	11/23/2021	04/14/2020
			Sample Date	D0316218	M578A5	M578A5X	M578A6	M578A7	M578A9	M583A1	M583A1X	M583A2	M583A2X	M583A3X	M583A4	M583A5	M583A6	M584A1
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**15000**	**15000**	-	**14000**	**15000**	**14000**	**3770**	-	-	-	-	-	**480J**	-	**2860**
Iron	ug/L	Y	300	**14000**	**14000**	-	**13000**	**12000**	**15000**	213	-	190 J	-	-	-	-	-	**1930**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	480	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	250 U	-	410 J	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	250 UJ	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	75000	-	78000	1500 U	1500 U	1700 J	-	**37200000**	-	**50000000**	**84000000**	**50000000J**	**35000000**	**46000000**	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
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			Location ID	MW-584	MW-584	MW-584	MW-584	MW-584	MW-584	MW-584	MW-584	MW-585	MW-585	MW-585	MW-585	MW-585	MW-585	MW-585
			Field Sample ID	04/15/2020	10/05/2020	10/05/2020	02/17/2021	05/26/2021	09/01/2021	11/15/2021	11/15/2021	10/16/2020	10/16/2020	01/13/2021	01/13/2021	04/08/2021	07/16/2021	10/14/2021
			Sample Date	M584A1X	M584A2	M584A2X	M584A3X	M584A4	M584A5	D1115218	M584A6	M585A1	M585A1X	M585A2	M585A2X	M585A3	M585A4	M585A5
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	-	-	-	-	-	-	**4000**	-	**5700**	-	**24000**	**4900**	**3700**
Iron	ug/L	Y	300	-	210 U	-	-	-	-	-	-	**5200**	-	100 J	-	260	-	-
Iron, Total Recoverable	ug/L	N	NA	-	300 J	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	250 U	-	250 U	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	250 U	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**2950000**	-	**1000000**	120000	**2000000**	**720000**	180000	180000 J	-	210000	-	**400000**	**290000**	94000	210000

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-585	MW-586	MW-586	MW-586	MW-586	MW-586	MW-586	MW-586	MW-586	MW-587	MW-587	MW-587	MW-587	MW-587	MW-588
			Field Sample ID	01/31/2022	10/14/2020	10/14/2020	01/15/2021	01/15/2021	04/08/2021	07/16/2021	10/14/2021	01/31/2022	10/15/2020	10/15/2020	01/08/2021	01/08/2021	04/12/2021	10/20/2020
			Sample Date	M585A6	M586A1	M586A1X	M586A2	M586A2X	M586A3	M586A4	M586A5	M586A6	M587A1	M587A1X	M587A2	M587A2X	M587A3	M588A2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3900**	-	-	**8200**	-	**41000**	**46000**	**39000J**	**71000**	-	-	130 J	-	210	-
Iron	ug/L	Y	300	-	**1700**	-	**360**	-	**40000**	-	-	-	74 J	-	61 J	-	87 J	**11000**
Iron, Total Recoverable	ug/L	N	NA	-	6700	-	-	-	-	-	-	-	470	-	-	-	-	14000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	250000	-	**1700000**	-	**1000000**	**2800000**	**3600000**	**4400000**	**2200000**	-	79000	-	87000	100000	-

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-588	MW-588	MW-588	MW-588	MW-603	MW-603	MW-603	MW-603	MW-603	MW-603	MW-603	MW-604	MW-604	MW-604	MW-604
			Field Sample ID	10/20/2020	01/15/2021	01/15/2021	04/09/2021	11/23/2020	11/23/2020	02/23/2021	02/23/2021	05/04/2021	08/04/2021	11/10/2021	11/19/2020	02/22/2021	02/22/2021	05/11/2021
			Sample Date	M588A2X	M588A3	M588A3X	M588A4	D1123208	M603A1X	M603A2	M603A2X	M603A3	M603A4	M603A5	M604A1X	M604A2	M604A2X	M604A3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**12000**	-	**19000**	-	-	**43000**	-	-	-	**10000**	-	**7900**	-	**11000**
Iron	ug/L	Y	300	-	**11000**	-	**11000**	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	36000	-	30000 U	6200 J	**510000**	**500000**	-	**320000**	**470000**	44000	4300	**3000000**	-	**2000000**	**2200000**

Notes:
1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	MW-604	MW-604	MW-604	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10
			Field Sample ID	08/06/2021	11/10/2021	02/09/2022	04/02/2012	04/03/2012	10/11/2012	10/11/2012	04/17/2013	04/18/2013	08/19/2013	10/16/2013	11/13/2013	11/13/2013	04/24/2014	04/25/2014
			Sample Date	M604A4	M604A5	M604A6	NF10212	NF10212X	NF10412	NF10412X	NF10213	NF10213X	NF10A2	NF10413X	D1113131	NF10413	NF10214	NF10214X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	7900	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**3000**	-	**6260**	-	**4880**	-	**7650**	-	**8540**	-	**3860**	**3740**	**5160**	-
Iron	ug/L	Y	300	-	-	-	**5670**	-	**1640**	-	**7120**	-	-	-	**2920**	**2890**	**6070**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	7900	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	40 U	-	40 U	40 U	40 U	-	-	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	-	15 U	-	15 U	15 U	15 U	-	-	-	15 U
Sulfate (SO4)	ug/L	N	250000	**2700000**	**1700000**	**1600000**	-	5000 U	-	2500 U	-	2500 U	1500 U	2500 U	-	-	-	5000 U

Notes:
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

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			Location ID	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10	NF-10R	NF-10R	NF-10R	NF-10R	NF-10R
			Field Sample ID	08/18/2014	08/18/2014	10/08/2014	10/09/2014	12/05/2014	12/05/2014	05/04/2015	05/05/2015	10/07/2015	10/08/2015	07/08/2019	07/08/2019	10/19/2020	10/19/2020	01/12/2021
			Sample Date	NF10A3	NF10A3X	NF10414	NF10414X	NF10A4	NF10A4X	NF10215	NF10215X	NF10415	NF10415X	NF10RB2	NF10RB2X	NF10RB5	NF10RB5X	NF10RB6
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**7830**	-	**6420**	-	**4380**	-	**6690**	-	**5350**	-	**7610**	-	-	-	**17000**
Iron	ug/L	Y	300	**6760**	-	**3420**	-	**4710**	-	**5980**	-	**3930**	-	**8430**	-	170 J	-	**840**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	970	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	40 U	-	-	-	40 U	-	40 U	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	15 U	-	-	-	15 U	-	15 U	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	1500 U	-	2500 U	-	1500 U	-	2500 U	-	2500 U	-	112000	-	**780000**	-

Notes:
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5. U - Not detected

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			Location ID	NF-10R	NF-10R	NF-10R	NF-10R	NF-11	NF-11	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1
			Field Sample ID	01/12/2021	04/08/2021	10/08/2021	01/26/2022	NF11212	NF11212X	08/08/2012	08/09/2012	04/04/2013	04/05/2013	09/24/2013	09/25/2013	06/23/2014	06/24/2014	11/13/2014
			Sample Date	NF10RB6X	NF10RB7	NF10RB9	NF10RC1	04/02/2012	04/03/2012	P001B7	P001B7X	P001B8	P001B8X	P001B9	P001B9X	P001C1	P001C1X	P001C2
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**13000**	**8800**	**3100J**	**37200**	-	153 J	-	**1620**	-	**2500**	-	**1680**	-	**1030**
Iron	ug/L	Y	300	-	**1000**	-	**1700**	**37400**	-	33.3 U	-	**906**	-	**1110**	-	**1320**	-	**814**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	74	-	15 U	-	15 U	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	**1100000**	160000	**710000J**	**470000**	-	5300 J	-	12700	-	153000	-	8000	-	71600	-

Notes:
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5. U - Not detected

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			Location ID	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1
			Field Sample ID	11/14/2014	06/29/2015	06/30/2015	02/16/2016	02/17/2016	08/16/2016	08/16/2016	02/07/2017	02/08/2017	08/23/2017	08/24/2017	10/17/2017	10/17/2017	10/17/2017	12/11/2017
			Sample Date	P001C2X	P001C3	P001C3X	P001C4	P001C4X	P001C5	P001C5X	P001C6	P001C6X	P001C7	P001C7X	D1017178A	P001C8	P001C8X	P001C9
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1180**	-	**661**	-	**1150**	-	**323**	-	247	-	**1630**	**1880J**	-	**2050**
Iron	ug/L	Y	300	-	**511**	-	**345**	-	**637**	-	205	-	80.5 U	-	**1440**	**1470J**	-	**1160**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	40 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**332000**	-	148000	-	172000	-	18600	-	150000	-	8600	7800 J	-	16300 J	-

Notes:
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5. U - Not detected

Appendix B3 Main Yard
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			Location ID	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-1
			Field Sample ID	12/11/2017	08/22/2018	08/23/2018	12/07/2018	12/07/2018	12/07/2018	03/19/2019	03/19/2019	09/06/2019	09/06/2019	12/06/2019	12/06/2019	03/12/2020	03/13/2020	09/03/2020
			Sample Date	P001C9X	P001D3	P001D3X	D1207181	P001D5	P001D5X	P001D6	P001D6X	P001D8	P001D8X	P001D9	P001D9X	P001E1	P001E1X	P001E3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**116000**	-	**57900**	**56400**	-	**76000**	-	**83400**	-	**70200**	-	**78100**	-	-
Iron	ug/L	Y	300	-	**118000**	-	**56200**	**56400**	-	**72600**	-	**80900**	-	**69100**	-	**71800**	-	**88000**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93000
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	40 U	-	40 U	-	40 U	-	40 U	-	66 J	-	40 U	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	19 J	-	55 J	-	15 U	-	120	-	15 U	-	15 U	-
Sulfate (SO4)	ug/L	N	250000	9500	-	**451000**	152000	-	153000	-	53200	-	13400 J	-	24100 J	-	106000 J	-

Notes:
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Appendix B3 Main Yard
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			Location ID	P-1	P-1	P-1	P-1	P-1	P-1	P-1	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6
			Field Sample ID	09/03/2020	03/24/2021	03/25/2021	06/24/2021	09/21/2021	11/24/2021	11/24/2021	08/15/2012	08/16/2012	02/26/2013	02/27/2013	09/25/2013	09/26/2013	03/27/2014	03/28/2014
			Sample Date	P001E3X	P001E5	P001E5X	P001E6	P001E7	D1124211	P001E8	P006B4	P006B4X	P006B5	P006B5X	P006B6	P006B6X	P006B8	P006B8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**26000J**	-	**120000**	**67000**	**99000**	**100000**	**61200**	-	**25800**	-	**38900**	-	**28500**	-
Iron	ug/L	Y	300	-	**24000**	-	**87000**	**56000**	**100000**	**100000**	**53900**	-	**20100**	-	**38200**	-	**22100**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	430	970	700	350	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 UJ	-	40 UJ	850 J	290 J	40 UJ	40 UJ	-	40 U	-	190	-	40 U	-	40 U
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	36 J	-	-	44 J	210 J	15 UJ	15 UJ	-	15 U	-	48 J	-	22 J	-	45 J
Sulfate (SO4)	ug/L	N	250000	60000 J	-	**360000**	**1500000J**	**1900000J**	**3300000J**	400000 UJ	-	210000	-	177000	-	218000	-	220000

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Appendix B3 Main Yard
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			Location ID	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6
			Field Sample ID	11/11/2014	11/12/2014	06/26/2015	06/26/2015	03/14/2016	03/15/2016	08/31/2016	09/01/2016	03/27/2017	03/28/2017	09/05/2017	09/06/2017	03/26/2018	03/27/2018	10/16/2018
			Sample Date	P006B9	P006B9X	P006C1	P006C1X	P006C2	P006C2X	P006C3	P006C3X	P006C4	P006C4X	P006C5	P006C5X	P006C6	P006C6X	P006C7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**28500**	-	**38200**	-	**8330**	-	**29800**	-	293	-	80.5 U	-	**2280**	-	191 J
Iron	ug/L	Y	300	**20600**	-	**36900**	-	**8350**	-	**29400**	-	74.7 U	-	80.5 U	-	**665**	-	104 J
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	-	63 J	-	61 J	-	520	-	40 U	-	250	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	56	-	19 J	-	26 J	-	46 J	-	15 U	-	15 U	-	22 J	-
Sulfate (SO4)	ug/L	N	250000	-	36300	-	79900	-	132000	-	164000	-	71800	-	116000	-	86800	-

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Appendix B3 Main Yard
Historical Groundwater MNA Data
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			Location ID	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	P-6	RW-01	RW-01	RW-02
			Field Sample ID	10/16/2018	04/29/2019	04/29/2019	09/26/2019	09/26/2019	04/28/2020	04/28/2020	09/17/2020	09/17/2020	03/19/2021	03/19/2021	10/05/2021	R002D1	R002D1X	02/25/2013
			Sample Date	P006C7X	P006C8	P006C8X	P006D1	P006D1X	P006D2	P006D2X	P006D3	P006D3X	P006D4	P006D4X	P006D5	07/20/2018	07/20/2018	R002B3
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**495**	-	**11400**	-	75.7 UJ	-	-	-	**390**	-	**470**	**5510**	-	**15200**
Iron	ug/L	Y	300	-	62.4 J	-	**10000**	-	41.2 U	-	41 U	-	81 UJ	-	**340**	**2790**	-	**14900**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	60 J	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	58 UJ	-	62 J	-	74 J	-	2200	-	2200 J	-	990 J	40 UJ	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	15 U	-	15 U	-	15 U	-	15 U	-	15 U	230 J	-	-	-
Sulfate (SO4)	ug/L	N	250000	79500	-	77800	-	133000 J	-	52000 J	-	110000 J	-	45000 J	58000 J	-	**9860000**	-

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Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02
			Field Sample ID	02/26/2013	04/30/2013	04/30/2013	04/30/2013	06/18/2013	06/19/2013	03/12/2014	03/12/2014	03/12/2014	03/12/2014	03/12/2014	06/30/2014	06/30/2014	07/31/2014	07/31/2014
			Sample Date	R002B3X	R002B4	R002B4	R002B4X	R002B5	R002B5X	D0312148	D0312148	R002B6	R002B6	R002B6X	R002B7	R002B7X	R002B8	R002B8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	-	**13100**	-	**29100**	-	-	**1900**	-	**1930**	-	**14700**	-	**10800**	-
Iron	ug/L	Y	300	-	**11200**	-	-	**27000**	-	**881**	-	**916**	-	-	**1240**	-	**7750**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	40 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	15 U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2500 U	-	-	16200	-	4100 J	-	49500	-	-	49700	-	58400	-	**8610000**

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			Location ID	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02
			Field Sample ID	09/09/2014	09/10/2014	01/19/2015	01/19/2015	07/07/2015	07/07/2015	12/09/2015	12/14/2015	12/28/2015	12/29/2015	06/14/2016	06/15/2016	12/05/2016	12/06/2016	05/18/2017
			Sample Date	R002B9	R002B9X	R002C1	R002C1X	R002C2	R002C2X	R002C3	R002C3X	R002C4	R002C4X	R002C5	R002C5X	R002C7	R002C7X	R002C8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**4510**	-	**9580**	-	**4570**	-	**10600**	-	**17000**	-	**3580**	-	**7130**	-	**4810**
Iron	ug/L	Y	300	**530**	-	**2260**	-	**2660**	-	**8570**	-	**11700**	-	**2870**	-	**6860**	-	**3140**
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	400 U	-	-	-	-	-	-	-	40 U	-	40 U	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	300 U	-	-	-	-	-	-	-	15 U	-	15 U	-	-	-
Sulfate (SO4)	ug/L	N	250000	-	**4400000**	-	**15900000**	-	37000	-	**13400000**	-	**1050000**	-	**9070000**	-	**347000**	-

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			Location ID	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02	RW-02
			Field Sample ID	05/18/2017	11/29/2017	11/29/2017	01/08/2019	01/08/2019	10/09/2019	10/09/2019	09/23/2020	09/23/2020	09/23/2020	12/04/2020	12/04/2020	03/30/2021	03/30/2021	06/11/2021
			Sample Date	R002C8X	R002C9	R002C9X	R002D2	R002D2X	R002D3	R002D3X	D0923208	R002D4	R002D4X	R002D5	R002D5X	R002D6	R002D6X	R002D7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	12000 J	-	12000 J	4200 J	-	5300 J	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	2570 J	-	6000 J	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**1790**	-	**11700**	-	**12900**	-	-	-	-	**5500**	-	**7600**	-	**940**
Iron	ug/L	Y	300	-	**636**	-	**2460**	-	**3660**	-	**6800**	**6500**	-	**2800**	-	**5000**	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	8600	8500	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	400	-	6700	5900	-	6000	-	5100	-	5900	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	40 U	-	250 U	310 J	-	4000 J	-	250 U	-	250 J	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	65	-	250 U	250 U	-	250 U	-	250 U	-	250 UJ	-
Sulfate (SO4)	ug/L	N	250000	60800	-	**921000**	-	131000	-	30800	**3300000J**	-	**2400000J**	-	**2500000**	-	**1700000**	**860000**

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			Location ID	RW-02	RW-02	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-31	RW-35R	RW-35R	RW-35R	RW-35R	RW-35R	RW-35R
			Field Sample ID	09/09/2021	12/07/2021	11/20/2020	02/26/2021	02/26/2021	05/11/2021	08/05/2021	11/03/2021	02/14/2022	11/23/2020	02/23/2021	02/23/2021	02/23/2021	02/23/2021	05/04/2021
			Sample Date	R002D8	R002D9	R031C1X	R031C2	R031C2X	R031C3	R031C4	R031C5	R031C6	R035RB6X	D0223218	D0223218X	R035RB7	R035RB7X	R035RB8
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**3400**	**1400**	-	**35000**	-	**83000**	-	**60000**	-	-	**210000**	-	**210000**	-	-
Iron	ug/L	Y	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	2700 J	**1000000**	**4400000**	-	14000	**7000000**	**10000000**	**4600000**	**7100000**	**6400000**	-	**6600000J**	-	**12000000J**	**17000000**

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1. GWQS - Groundwater Quality Standard
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3. NA - No Criterion Available for the Analyte
4. J - Estimated value
5. U - Not detected

Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-35R	RW-35R	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41	RW-41
			Field Sample ID	08/04/2021	11/10/2021	08/16/2013	12/07/2015	12/10/2015	07/21/2016	07/21/2016	07/10/2018	10/19/2018	01/14/2019	01/14/2019	11/20/2020	02/25/2021	02/25/2021	05/07/2021
			Sample Date	R035RB9	R035RC1	R041A1	R041A3	R041A3X	R041A6	R041A6X	R041A9X	R041B1X	D0114198	R041B2X	R041B5X	R041B6	R041B6X	R041B7
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	13000	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**210000**	**12800**	**9080**	-	**3810**	-	-	-	-	-	-	**6500**	-	**6100**
Iron	ug/L	Y	300	-	-	-	**8490**	-	**3460**	-	-	-	-	-	-	-	-	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	12000	-	-	-	-	-	14000	14000	12000	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	40 U	-	-	-	-	40 U	510	250 U	250 U	-	-	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	15 U	-	-	-	-	15 U	-	-	-	-	-	-	-
Sulfate (SO4)	ug/L	N	250000	**15000000J**	**18000000**	1500 U	-	2100 J	-	1500 U	3400 J	1500 U	1500 U	1500 U	8400	-	6900	20000

Notes:
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Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

			Location ID	RW-41	RW-41	RW-41	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42
			Field Sample ID	08/05/2021	11/11/2021	02/11/2022	03/21/2013	03/21/2013	08/12/2013	09/03/2014	09/04/2014	12/04/2015	12/04/2015	12/04/2015	06/09/2016	06/10/2016	07/28/2016	07/29/2016
			Sample Date	R041B9	R041C1	R041C3	R042B4	R042B4X	R042B5	R042B6	R042B6X	D1204158	R042B7	R042B7X	R042B8	R042B8X	R042B9	R042B9X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	13000 J	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	-	**7500**	-	**8300**	-	**28600**	**14200**	-	**9860**	**9530**	-	**8580**	-	**21600**	-
Iron	ug/L	Y	300	-	-	-	**4020**	-	-	**13200**	-	**9810**	**8780**	-	**7190**	-	**14500**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane	ug/L	N	NA	-	-	-	-	-	7800 J	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	-	-	-	76 J	40 UJ	-	40 U	-	-	-	-	340	-	-
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	-	-	-	15 U	15 UJ	-	16 J	-	-	-	-	15 U	-	-
Sulfate (SO4)	ug/L	N	250000	47000	4000 J	21000	-	10000 U	1500 UJ	-	25000 U	44900 J	-	4300 J	-	10000 U	-	6800

Notes:
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Appendix B3 Main Yard
Historical Groundwater MNA Data
Monitored Natural Attenuation Annual Report
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			Location ID	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42	RW-42
			Field Sample ID	05/10/2017	05/11/2017	06/06/2018	06/07/2018	07/11/2018	10/24/2018	10/24/2018	01/14/2019	06/03/2019	06/03/2019	06/01/2020	06/01/2020
			Sample Date	R042C2	R042C2X	R042C3	R042C3X	R042C4X	D1024188	R042C5X	R042C6X	R042C7	R042C7X	R042C8	R042C8X
Parameter Name	**Report Units**	**Filtered**	**NJDEP GWQS**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**	**Report Result**
Ferrous Iron	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-
Ferrous Iron	ug/L	Y	NA	-	-	-	-	-	-	-	-	-	-	-	-
Iron	ug/L	N	300	**2680**	-	**1300**	-	-	-	-	-	**1930**	-	-	-
Iron	ug/L	Y	300	**1000**	-	**523**	-	-	-	-	-	**1260**	-	**1300**	-
Iron, Total Recoverable	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	2300	-
Methane	ug/L	N	NA	-	-	-	-	-	8000	7100	2100	-	-	-	-
Nitrogen, Nitrate as N	ug/L	N	10000	-	40 U	-	40 U	40 U	250 U	250 U	250 U	-	40 U	-	40 UJ
Nitrogen, Nitrate-Nitrite	ug/L	N	NA	-	-	-	-	-	-	-	-	-	-	-	-
Nitrogen, Nitrite	ug/L	N	1000	-	15 U	-	15 U	15 U	-	-	-	-	15 U	-	39 J
Sulfate (SO4)	ug/L	N	250000	-	10000 U	-	2000 U	4100 J	4200 J	4400 J	3100 J	-	2300 UJ	-	2000 UJ

Notes:
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Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0037R	08/20/2013 14:45	0.03	-52.8	6.80	2.17	4.095	21.21	312.80
MW-0037R	08/20/2013 15:18	0.04	-72.4	6.62	2.17	4.086	23.51	131.10
MW-0037R	08/20/2013 15:49	0.02	-78.4	6.70	2.19	4.128	23.03	119.70
MW-0037R	04/12/2016 10:45	0.53	-119	7.14	1.90	3.550	11.81	135.00
MW-0037R	04/12/2016 11:40	1.09	-83	7.07	2.00	3.910	11.13	274.00
MW-0037RR	11/21/2016 15:25	0.76	-113	7.08	2.4	4.48	17.31	35.2
MW-0037RR	11/21/2016 15:40	2.1	-118	7.09	2	3.9	17.32	59.1
MW-0037RR	02/17/2017 10:30	1.86	-91	6.89	3.30	6.280	8.32	6.70
MW-0037RR	02/17/2017 10:40	2.02	-76	6.82	3.30	6.120	9.15	156.00
MW-0037RR	05/04/2017 09:25	11.76	178.50	6.22	4.00	7.229	14.01	48.50
MW-0037RR	05/04/2017 10:15	6.68	91.30	6.22	3.68	6.684	16.61	20.50
MW-0037RR	05/04/2017 10:25	6.99	128.40	6.28	3.61	6.654	16.45	121.40
MW-0037RR	07/25/2017 13:15	4.98	-116.40	7.54	3.47	6.336	19.32	2.40
MW-0037RR	07/25/2017 13:55	2.15	-100.50	6.95	3.08	5.667	19.94	2.00
MW-0037RR	07/25/2017 14:05	3.32	-96.40	7.03	3.05	5.613	18.96	10.40
MW-0037RR	11/14/2017 13:25	4.60	-177.50	7.44	2.84	5.221	13.83	8.90
MW-0037RR	11/14/2017 13:55	5.06	-211.00	7.57	2.63	4.852	15.57	7.60
MW-0037RR	11/14/2017 14:05	4.41	-189.10	7.53	2.65	4.902	16	47.20
MW-0037RR	02/07/2018 08:55	0.07	-89.10	6.80	2.89	2.860	3.6	31.80
MW-0037RR	02/07/2018 10:00	6.87	-105.20	7.29	2.24	4.215	7.58	0.10
MW-0037RR	02/07/2018 10:15	15.92	-107.80	7.21	1.98	3.740	6.52	36.50
MW-0037RR	04/30/2018 12:35	10.19	-132.30	7.26	2.40	4.484	10.52	8.90
MW-0037RR	04/30/2018 13:25	10.76	-120.00	7.43	1.73	3.293	10.7	4.60
MW-0037RR	04/30/2018 13:40	12.92	-144.60	7.67	1.87	3.440	10.14	20.30
MW-0037RR	08/08/2018 13:05	5.14	-63.00	7.05	2.83	5.250	21.18	274.00
MW-0037RR	08/08/2018 13:40	5.76	-73.40	6.12	2.03	3.848	20.66	11.20
MW-0037RR	08/08/2018 13:50	7.34	-101.30	6.59	1.49	2.862	19.98	93.80
MW-0037RR	11/05/2018 13:15	6.28	-43.80	7.32	1.63	3.110	16.21	9.40
MW-0037RR	11/05/2018 14:00	3.98	-125.40	7.67	1.00	1.955	16.61	1.30
MW-0037RR	11/05/2018 14:15	3.31	-121.30	7.63	1.11	2.163	17.26	5.00
MW-0037RR	02/26/2019 09:20	8.66	-57.5	6.94	0.81	1.595	8.62	0.2
MW-0037RR	05/22/2019 11:24	3.82	-56.8	6.55	1.48	2.836	13.32	0.3
MW-0037RR	08/16/2019 10:10	12.03	-40.3	7.63	NM	0.6	26.87	139.8
MW-0037RR	08/16/2019 10:35	3.68	-125	7.2	1.18	2.3	21.37	8.4
MW-0037RR	08/16/2019 10:45	3.99	-123.9	7.44	1.31	2.528	21.68	11
MW-0037RR	10/31/2019 11:28	2.74	-33.1	6.71	NM	2.715	19.59	3.9
MW-0037RR	10/31/2019 12:13	3.14	-111.6	7.09	1.07	2.085	19.67	1
MW-0037RR	10/31/2019 12:25	3.28	-126.1	7.4	1.04	2.035	20.06	3.3
MW-0037RR	02/10/2020 12:42	0.62	-183.1	7.28	1.18	2.268	11.46	5.3
MW-0037RR	05/22/2020 10:50	5.93	-94.3	7.22	0.37	0.779	15.64	0.5
MW-0037RR	02/08/2021 10:45	3.05	-103.5	7.23	1.48	2.844	10.38	7
MW-0037RR	02/08/2021 11:10	2.09	-106.3	7.55	1.05	2.048	11.07	9.7
MW-0037RR	05/13/2021 13:05	2.46	-73.8	7.09	1.29	2.486	15.89	32.9
MW-0037RR	05/13/2021 13:10	1.87	-61.3	7.01	1.28	2.472	15.41	5.9
MW-0037RR	05/13/2021 13:15	1.46	-54.3	6.98	1.26	2.443	15.16	1.7
MW-0037RR	05/13/2021 13:20	1.29	-57.9	6.99	1.23	2.388	15.53	0.2
MW-0037RR	05/13/2021 13:25	1.16	-66.2	7.05	1.18	2.293	15.69	-4
MW-0037RR	05/13/2021 13:30	1.14	-67.3	7.06	1.16	2.244	15.72	-0.9
MW-0037RR	05/13/2021 13:35	1.05	-73.7	7.1	1.1	2.134	15.55	-1.6
MW-0037RR	05/13/2021 13:40	0.94	-82.4	7.13	1.05	2.044	15.61	-2.3
MW-0037RR	05/13/2021 13:45	0.9	-83.2	7.17	1.03	2.019	15.56	-1.2
MW-0044	04/02/2012 12:15	9.09	214.9	7.47	0.1	0.12	11.3	48.0
MW-0044	04/02/2012 12:18	8.82	223.4	6.81	0.1	0.11	11.3	40.9
MW-0044	04/02/2012 12:21	8.70	231.5	6.54	0.1	0.11	11.7	29.6
MW-0044	04/02/2012 12:24	8.72	240.3	6.48	0.1	0.11	11.6	45.6
MW-0044	04/02/2012 12:27	8.73	245	6.47	0.1	0.11	11.5	49.7
MW-0044	04/02/2012 12:30	8.71	252.1	6.46	0.1	0.11	11.3	33.3
MW-0044	04/02/2012 12:33	8.68	255.7	6.44	0.1	0.11	11.3	42.3
MW-0044	04/02/2012 12:36	8.63	260.1	6.44	0.1	0.11	11.3	43.0
MW-0044	04/02/2012 12:39	8.59	264.9	6.43	0.1	0.11	11.3	43.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0044	04/02/2012 14:20	9.23	312.9	6.45	0.05	0.087	11.88	5.30
MW-0044	04/02/2012 15:12	9.93	355.1	6.30	0.06	0.089	11.92	27.10
MW-0044	04/03/2012 08:45	10.18	217.2	6.10	0.11	0.237	10.64	70.10
MW-0044	06/12/2012 08:19	7.37	30	6.71	0.01	0.19657	21.26	8.8
MW-0044	06/12/2012 08:21	7.41	39	6.68	0.01	0.19513	20.85	8.7
MW-0044	06/12/2012 08:24	7.45	47	6.68	0.01	0.19607	19.65	8.3
MW-0044	06/12/2012 08:26	7.39	52	6.68	0.01	0.19578	19.65	9
MW-0044	06/12/2012 08:28	7.32	57	6.68	0.01	0.20009	19.58	8.1
MW-0044	06/12/2012 08:30	7.36	62	6.68	0.01	0.20412	19.62	7.6
MW-0044	06/12/2012 08:33	7.3	65	6.67	0.01	0.20704	19.65	6.8
MW-0044	06/12/2012 08:35	7.33	69	6.68	0.01	0.20815	19.67	6.2
MW-0044	06/12/2012 08:37	7.27	72	6.68	0.01	0.20861	19.72	6.8
MW-0044	06/12/2012 08:38	7.27	72	6.68	0.01	0.209	19.72	6.80
MW-0044	06/12/2012 10:24	7.31	-7	6.98	0.01	0.279	21.92	51.90
MW-0044	06/13/2012 10:05	6.83	82	6.98	0.01	0.174	20.04	49.90
MW-0045	06/27/2012 10:05	0.76	-27	9.28	0.02	0.32721	19.95	11.6
MW-0045	06/27/2012 10:08	0.51	-44	9.34	0.02	0.32224	19.24	13.4
MW-0045	06/27/2012 10:10	0.44	-54	9.28	0.02	0.32207	19.28	13.6
MW-0045	06/27/2012 10:12	0.39	-61	9.29	0.02	0.32161	19.31	12.3
MW-0045	06/27/2012 10:15	0.35	-67	9.25	0.02	0.32139	19.43	12.2
MW-0045	06/27/2012 10:17	0.33	-72	9.28	0.02	0.32191	19.48	12.1
MW-0045	06/27/2012 10:20	0.28	-75	9.23	0.02	0.32185	19.71	13.2
MW-0045	06/27/2012 10:22	0.25	-79	9.21	0.02	0.32207	19.88	13.1
MW-0045	06/27/2012 10:24	0.24	-82	9.24	0.02	0.32513	19.58	13.1
MW-0045	06/27/2012 10:27	0.22	-84	9.29	0.02	0.32353	19.66	14.4
MW-0045	06/27/2012 10:29	0.2	-86	9.25	0.02	0.3225	19.77	13.2
MW-0045	06/27/2012 10:31	0.19	-88	9.21	0.02	0.32352	19.84	13.9
MW-0045	06/27/2012 10:34	0.19	-90	9.18	0.02	0.324	20.02	14.61
MW-0045	06/27/2012 11:35	1.98	50	6.63	0.02	0.429	15.40	40.10
MW-0045	06/28/2012 10:20	0.0000	32	5.68	0.30	0.468	13.20	133.00
MW-0054	08/15/2013 08:56	0.15	-186.6	7.29	0.85	1.669	17.71	80.20
MW-0054	08/15/2013 09:34	0.11	-260.9	7.19	0.76	1.533	18.35	89.20
MW-0054	08/15/2013 10:34	0.18	-269.8	7.23	0.80	1.593	19.36	79.90
MW-0054	08/16/2013 10:34	0.18	-269.8	7.23	0.80	1.593	19.36	79.90
MW-0054	08/19/2014 11:01	0.52	187	7.16	1.29	21.220	20.04	113.30
MW-0054	12/02/2014 10:50	5.57	-155.9	7.15	NM	11.510	11.01	7.00
MW-0054	12/02/2014 11:25	0.31	-204.1	6.93	NM	12.030	11.13	6.00
MW-0054	12/03/2014 09:35	7.01	-110.9	6.99	NM	10.160	10.03	12.30
MW-0054	04/07/2015 09:30	1.97	-199	6.80	7.90	14.000	9.60	0.09
MW-0054	04/07/2015 10:20	8.85	-235	7.59	6.90	12.300	10.37	32.50
MW-0054	05/07/2015 10:20	2.17	-289	7.34	6.40	11.300	11.36	1000.00
MW-0054	06/04/2015 11:35	1.13	-295	7.01	3.20	5.920	11.60	0.0000
MW-0054	06/04/2015 14:30	NM	NM	NM	7.52	NM	NM	NM
MW-0054	04/11/2016 11:24	2.50	-198	8.67	9.60	16.500	12.70	49.50
MW-0054	04/11/2016 11:42	1.29	-221	8.59	10.70	18.300	13.28	133.00
MW-0054R	11/22/2016 12:15	0.4	-83	6.95	3.5	6.42	15.45	2.6
MW-0054R	11/22/2016 12:28	1.52	-104	7.03	3.6	6.59	15.44	63.5
MW-0054R	02/17/2017 09:00	7.43	-31	7.02	2.50	9.870	7.31	8.30
MW-0054R	02/17/2017 09:10	7.51	-66	7.12	2.40	5.670	7.13	73.90
MW-0054R	05/04/2017 12:55	3.44	147.30	7.16	4.69	8.300	14.78	20.70
MW-0054R	05/04/2017 13:50	5.15	-32.50	6.85	4.50	8.070	13.82	4.00
MW-0054R	05/04/2017 14:00	6.38	-17.90	6.63	4.25	7.875	12.58	0.80
MW-0054R	07/25/2017 09:05	4.96	91.30	6.60	5.01	8.933	18.87	36.90
MW-0054R	07/25/2017 09:50	2.33	-102.20	7.05	5.32	9.446	18.87	3.40
MW-0054R	07/25/2017 10:00	3.64	-103.00	7.10	5.23	9.282	18.32	7.60
MW-0054R	11/10/2017 13:05	3.63	53.20	7.33	4.45	7.972	12.52	29.10
MW-0054R	11/10/2017 13:58	4.36	11.40	7.31	4.51	8.041	13.41	10.10
MW-0054R	11/10/2017 14:10	5.39	8.70	7.24	4.56	8.153	13.56	13.20
MW-0054R	02/08/2018 10:05	19.52	-16.10	7.61	0.95	1.820	2.17	57.10
MW-0054R	02/08/2018 10:45	15.77	-42.50	7.41	0.24	2.412	3.14	8.30

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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0054R	02/08/2018 11:00	20.77	-28.60	7.57	1.08	2.122	4.26	21.20
MW-0054R	08/08/2018 11:05	4.86	-104.30	7.77	0.82	1.627	23.63	9.20
MW-0054R	08/08/2018 11:45	7.17	-101.00	7.65	1.33	2.565	21.82	4.90
MW-0054R	08/08/2018 11:55	7.99	-87.00	7.72	1.39	2.692	21.54	41.10
MW-0054R	11/06/2018 08:40	8.39	197.80	6.14	0.28	0.582	15	14.90
MW-0054R	11/06/2018 09:25	3.30	-53.20	7.02	0.61	1.227	16.71	3.80
MW-0054R	11/06/2018 09:35	2.93	-87.70	7.12	0.63	1.247	16.95	36.20
MW-0054R	02/26/2019 10:15	13.27	28	7.8	0.52	1.053	6.54	8.2
MW-0054R	05/22/2019 10:29	4	5.6	7.75	0.52	1.037	14.47	1
MW-0054R	08/16/2019 09:20	3.99	-14.7	7.36	NM	1.051	22.23	4.2
MW-0054R	08/16/2019 09:50	6.89	-46.1	7.37	0.59	1.197	23.93	0.9
MW-0054R	08/16/2019 10:05	9.47	-45.4	7.54	0.6	1.213	21.55	10.4
MW-0054R	10/31/2019 10:16	3.42	-121.6	7.72	NM	1.984	19.31	3.1
MW-0054R	10/31/2019 11:02	3.24	-100.6	7.78	0.99	1.938	19.08	0.2
MW-0054R	10/31/2019 11:15	2.85	-109.2	7.54	1.02	1.996	19.45	3.1
MW-0054R	02/11/2020 09:06	4.69	90.8	7.3	0.36	0.727	9	6.9
MW-0054R	05/22/2020 10:00	9.34	27.7	7.82	0.24	0.48	14.96	1.4
MW-0054R	02/08/2021 11:35	5.59	-102.9	7.7	1.38	2.66	6.59	11.2
MW-0054R	02/08/2021 11:50	8.3	-99.7	7.79	1.44	2.769	6.5	13.1
MW-0054R	05/14/2021 12:10	8.23	-33.4	7.59	0.43	0.863	19.54	12.8
MW-0054R	05/14/2021 12:15	9.41	-32.1	7.32	0.44	0.876	18.17	9.7
MW-0054R	05/14/2021 12:20	9.63	-31.1	7.46	0.45	0.904	17.84	14.7
MW-0054R	05/14/2021 12:25	9.19	-34.3	7.51	0.49	0.983	16.91	2.4
MW-0054R	05/14/2021 12:30	6.85	-38.7	7.49	0.61	1.017	16.92	2.7
MW-0054R	05/14/2021 12:35	9.09	-41	7.5	0.52	1.04	17.06	-1.3
MW-0054R	05/14/2021 12:40	9.11	-43.2	7.5	0.53	1.063	16.63	-0.4
MW-0054R	05/14/2021 12:45	5.45	-60	5.36	0.54	1.067	18.27	-0.5
MW-0054R	05/14/2021 12:50	5.83	-60.1	7.66	0.54	1.084	18.66	-0.5
MW-0054R	02/01/2022 11:10	5.29	-105.2	7.66	0.46	0.938	5.93	44
MW-0054R	02/01/2022 11:15	3.95	-83.4	6.99	0.29	0.59	9.67	55
MW-0054R	02/01/2022 11:20	1.27	-72.1	6.78	0.26	0.537	6.14	48.8
MW-0054R	02/01/2022 11:25	1.79	-64.4	6.65	0.26	0.534	5.55	30.1
MW-0054R	02/01/2022 11:30	1.96	-61.7	6.63	0.27	0.553	5.55	25.8
MW-0054R	02/01/2022 11:35	1.46	-60.5	6.64	0.27	0.563	5.52	18.6
MW-0054R	02/01/2022 11:40	0.98	-60	6.64	0.28	0.571	5.66	12.4
MW-0054R	02/01/2022 11:45	0.92	-60.2	6.64	0.27	0.566	6.06	11.5
MW-0054R	02/01/2022 11:50	1.12	-59.1	6.61	0.27	0.56	6.22	7.8
MW-0054R	02/01/2022 11:55	1.35	-55.6	6.56	0.26	0.544	6.23	7.1
MW-0054R	04/28/2022 12:55	6.19	-41.3	7.06	0.46	0.929	14.25	0
MW-0054R	04/28/2022 13:00	1.24	-88.5	7.05	0.44	0.885	13.66	1.1
MW-0054R	04/28/2022 13:05	0.59	-112.9	7.08	0.43	0.867	13.4	2.1
MW-0054R	04/28/2022 13:10	1.05	-104.1	7.11	0.43	0.86	13.47	0
MW-0054R	04/28/2022 13:15	1	-105.4	7.13	0.43	0.875	13.5	0
MW-0054R	04/28/2022 13:20	0.97	-109.4	7.14	0.44	0.883	13.58	0
MW-0054R	04/28/2022 13:25	0.95	-112.6	7.16	0.44	0.885	13.63	0
MW-0055	08/14/2013 14:31	0.99	-69	7.38	1.12	2.233	20.56	39.90
MW-0055	08/14/2013 15:30	0.73	-119.7	7.17	1.15	2.239	23.09	17.80
MW-0055	08/14/2013 17:00	1.71	-133.9	7.56	1.09	2.116	18.56	99.20
MW-0055	08/15/2013 17:00	1.71	-133.9	7.56	1.09	2.116	18.56	99.20
MW-0055	12/02/2014 14:05	0.41	-110.6	6.69	NM	3.016	12.39	11.30
MW-0055	12/02/2014 14:25	0.06	-101.3	6.61	NM	3.179	12.10	3.10
MW-0055	12/03/2014 10:40	3.49	-63.7	6.07	NM	3.095	10.93	26.10
MW-0055	04/12/2016 11:06	0.0000	-141	7.86	1.10	2.070	11.93	25.50
MW-0055	04/12/2016 11:22	0.0000	-81	7.48	1.20	2.380	10.55	129.00
MW-0055R	11/22/2016 13:05	0.38	-94	6.98	5.5	9.92	15.08	22.4
MW-0055R	11/22/2016 13:22	0.5	-94	7	5.7	10.1	14.84	86.5
MW-0055R	02/22/2017 11:20	4.21	-92	7.09	5.80	10.600	8.32	4.50
MW-0055R	02/22/2017 11:35	11.87	-93	7.42	5.70	10.300	8.22	10.50
MW-0055R	07/25/2017 10:10	6.75	-3.40	7.49	5.40	9.578	19.26	7.90
MW-0055R	07/25/2017 10:50	3.73	-41.50	7.68	5.32	9.454	21.12	3.50

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0055R	07/25/2017 11:00	3.35	-82.40	7.75	5.33	9.495	22.73	15.90
MW-0055R	11/10/2017 10:50	2.62	-25.70	7.93	3.71	6.726	11.92	42.60
MW-0055R	11/10/2017 11:55	2.68	-53.10	7.95	3.36	6.138	13.51	10.70
MW-0055R	11/10/2017 12:15	5.87	-25.10	7.95	3.39	61.890	13.12	15.30
MW-0055R	08/08/2018 10:00	2.45	-230.80	7.98	3.29	6.022	20.46	5.00
MW-0055R	08/08/2018 10:50	3.22	-187.30	7.97	3.23	5.955	24.32	4.10
MW-0055R	08/08/2018 11:00	4.85	-152.40	8.07	2.70	5.044	25.87	79.10
MW-0055R	11/06/2018 09:40	3.68	-96.30	7.39	1.48	2.828	14.88	13.00
MW-0055R	11/06/2018 10:20	3.12	-111.30	7.16	1.49	2.834	14.89	6.90
MW-0055R	11/06/2018 10:30	5.61	-103.60	7.34	1.46	2.857	15.03	18.60
MW-0055R	05/22/2019 09:36	3.67	-33.1	8.04	2.39	4.452	14.23	1.3
MW-0055R	08/16/2019 08:25	5.95	-38.9	8.48	NM	4.647	21.17	8.8
MW-0055R	08/16/2019 09:05	2.89	-124.2	8.08	2.36	4.429	22.08	5.5
MW-0055R	08/16/2019 09:15	3.01	-83.4	8.08	2.28	4.278	23.22	12.9
MW-0055R	10/31/2019 09:04	1.27	-3.1	7.72	NM	4.029	18.41	5.8
MW-0055R	10/31/2019 09:50	2.56	-60.9	8.15	2.06	3.888	18.98	0.9
MW-0055R	10/31/2019 10:04	2.89	-66.3	8.27	1.67	3.183	19.05	4.1
MW-0055R	02/11/2020 10:00	1.29	-205.4	8.13	1.01	1.973	8.76	1.2
MW-0055R	05/22/2020 09:10	8.26	-51.8	8.32	0.55	1.108	14.87	1.2
MW-0055R	11/10/2020 11:05	5.02	-8.3	8.14	0.92	1.815	18.27	16.8
MW-0055R	11/10/2020 11:15	2.74	-18.6	8.06	0.93	1.813	18.61	16
MW-0055R	02/08/2021 11:30	3.32	90.2	6.84	1.4	2.843	7.98	20.5
MW-0055R	02/08/2021 11:40	6.04	91	6.85	1.39	2.91	8.13	38.4
MW-0055R	05/14/2021 09:30	0.83	-67.2	7.97	1.12	2.176	16.71	7.1
MW-0055R	05/14/2021 09:35	7.11	-69.9	7.98	1.15	2.211	16.23	80.3
MW-0055R	05/14/2021 09:40	5.69	-70.8	8.06	1.17	2.256	15.64	77.9
MW-0055R	05/14/2021 09:45	7.33	-63.8	8.19	1.19	2.298	15.22	6.7
MW-0055R	05/14/2021 09:50	9.21	-61.9	8.15	1.21	2.331	15	84.3
MW-0055R	05/14/2021 09:55	9.23	63.2	8.06	1.2	2.33	14.89	42.8
MW-0055R	05/14/2021 10:00	9.08	-66.2	8.16	1.2	2.33	14.76	0.8
MW-0055R	05/14/2021 10:05	6.04	-68.8	8.23	1.2	2.322	14.81	8.7
MW-0055R	05/14/2021 10:10	8.61	-72.6	8.15	1.19	2.306	14.84	0.3
MW-0055R	02/01/2022 12:40	1.67	-80.3	7.27	1.15	2.243	6.19	32.3
MW-0055R	02/01/2022 12:45	0.69	-77.2	7.21	1.15	2.252	6.52	34.4
MW-0055R	02/01/2022 12:50	0.33	-71.7	7.03	1.16	2.256	6.88	26.4
MW-0055R	02/01/2022 12:55	0.33	-69.6	7.06	1.15	2.251	7.19	24.4
MW-0055R	02/01/2022 13:00	0.33	-69.1	7.04	1.15	2.237	7.29	11.2
MW-0055R	02/01/2022 13:05	0.31	-69.6	7	1.15	2.23	7.43	18.3
MW-0055R	02/01/2022 13:10	0.29	-70.3	7.02	1.14	2.21	7.49	4
MW-0055R	02/01/2022 13:15	0.3	-70.8	6.98	1.13	2.2	7.69	12.7
MW-0055R	02/01/2022 13:20	0.28	-70.2	6.94	1.12	2.189	7.79	11.7
MW-0055R	02/01/2022 13:25	0.27	-73	7.01	1.11	2.167	8.32	8.3
MW-0055R	04/28/2022 11:50	4.39	-26.6	7.88	1.12	2.167	13.56	14
MW-0055R	04/28/2022 11:55	0.75	-32.7	6.45	1.14	2.218	13.5	9.2
MW-0055R	04/28/2022 12:00	0.66	-15.3	5.97	1.13	2.191	13.48	11.4
MW-0055R	04/28/2022 12:05	0.63	-14.3	5.94	1.13	2.2	13.54	8.2
MW-0055R	04/28/2022 12:10	0.62	-14.5	5.92	1.14	2.201	13.5	6.5
MW-0055R	04/28/2022 12:15	0.6	-15.3	5.91	1.13	2.194	13.46	6.5
MW-0055R	04/28/2022 12:20	0.59	-15.5	5.89	1.13	2.192	13.5	6.8
MW-0056	08/14/2013 09:23	2.13	-88.7	7.25	0.52	1.046	17.46	17.00
MW-0056	08/14/2013 11:06	6.20	-140.1	6.80	0.57	1.149	19.69	3.70
MW-0056	08/19/2014 10:15	2.33	234	6.88	0.21	3.906	15.41	143.90
MW-0056	08/20/2014 09:53	2.01	-322	6.72	0.22	4.063	19.08	9.40
MW-0056	04/11/2016 11:20	0.0000	-68	7.38	1.40	2.770	12.31	3.40
MW-0056	04/11/2016 12:10	0.0000	-55	7.34	1.50	2.850	14.43	803.00
MW-0056R	11/22/2016 13:58	0.36	-140	7.23	2.9	5.33	15.08	13.6
MW-0056R	11/22/2016 14:12	1.27	-130	7.35	2.7	4.98	14.81	23.5
MW-0056R	05/05/2017 08:10	6.49	219.20	6.65	1.21	2.333	12.92	3.70
MW-0056R	05/05/2017 08:50	2.94	194.50	7.47	1.21	2.337	12.33	2.80
MW-0056R	05/05/2017 09:00	2.91	191.30	7.47	1.21	2.454	12.21	2.80

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Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0056R	07/25/2017 12:20	6.11	-74.30	8.16	1.09	2.119	20.13	16.40
MW-0056R	07/25/2017 13:00	2.20	-227.60	8.08	1.03	2.020	22.5	4.40
MW-0056R	07/25/2017 13:10	5.56	-117.40	8.21	1.06	2.074	21.88	12.20
MW-0056R	11/10/2017 09:10	2.99	-69.70	7.87	0.77	1.523	14.18	9.20
MW-0056R	11/10/2017 09:58	2.52	-125.60	8.00	0.71	1.404	15.79	21.90
MW-0056R	11/10/2017 10:30	2.65	-135.70	8.11	0.75	1.478	15.94	8.70
MW-0056R	02/02/2018 13:15	4.32	-53.00	8.13	0.75	1.504	3.98	0.90
MW-0056R	02/02/2018 14:00	8.62	-45.10	8.14	0.42	0.862	4.38	2.90
MW-0056R	02/02/2018 14:15	4.81	-62.80	8.16	0.49	0.926	4.95	3.80
MW-0056R	08/08/2018 08:50	0.35	-280.40	8.15	1.18	2.299	22.42	16.20
MW-0056R	08/08/2018 09:30	4.87	-289.90	8.18	0.94	1.851	21.54	2.80
MW-0056R	08/08/2018 09:50	2.25	-291.10	8.23	0.78	1.556	22.59	11.80
MW-0056R	11/07/2018 08:30	2.08	-107.90	8.27	0.38	0.078	15.11	1.40
MW-0056R	11/07/2018 09:10	2.18	-131.40	8.13	0.39	0.769	15.19	0.60
MW-0056R	11/07/2018 09:25	3.28	-121.10	8.26	0.40	0.814	15.22	13.40
MW-0056R	02/27/2019 09:11	4.33	-197.8	8.19	0.43	0.878	6.3	3.2
MW-0056R	08/19/2019 13:10	3	-198.7	7.97	NM	1.14	26.38	16.7
MW-0056R	08/19/2019 14:00	3.11	-230.5	8.1	0.72	1.44	24.19	5.3
MW-0056R	08/19/2019 14:10	5.85	-209	8.18	0.72	1.589	23.45	15.7
MW-0056R	11/06/2019 13:20	14.5	-229	7.82	NM	0.638	16.73	19.2
MW-0056R	11/06/2019 13:50	0.31	-328.4	8.25	0.26	0.544	16.91	2.8
MW-0056R	11/06/2019 14:00	3.72	-305.7	8.26	0.28	0.576	16.92	18.3
MW-0056R	02/11/2020 10:50	0.58	-299.7	8.16	0.49	0.997	8.48	5.7
MW-0056R	05/21/2020 13:55	7.8	-149.3	8.16	0.26	0.526	14.53	0.2
MW-0056R	11/10/2020 09:55	6.64	-157.9	8.3	0.5	1.008	17.43	15.4
MW-0056R	11/10/2020 10:05	4.1	-173.9	8.22	0.5	1.006	17.49	15.2
MW-0056R	05/13/2021 10:15	1.71	-217.9	7.94	0.71	1.416	14.47	8.1
MW-0056R	05/13/2021 10:20	1.41	-240.3	7.34	0.73	1.447	14.29	3.4
MW-0056R	05/13/2021 10:25	4.41	-236.4	7.89	0.75	1.479	13.98	3.3
MW-0056R	05/13/2021 10:30	2.31	-244.3	8.07	0.71	1.463	13.81	8
MW-0056R	05/13/2021 10:35	2.98	-264.7	8.13	0.69	1.373	14.04	11.9
MW-0056R	05/13/2021 10:40	4.12	-256.6	7.96	0.63	1.35	14.14	11.4
MW-0056R	05/13/2021 10:45	4.08	-262.2	8.09	0.7	1.384	14.1	6.8
MW-0056R	05/13/2021 10:50	3.73	-257.7	8.11	0.73	1.436	14.02	4.4
MW-0056R	05/13/2021 10:55	3.09	-261.7	8.09	0.77	1.518	14.07	-2.2
MW-0056R	04/29/2022 10:40	3.07	-107	6.97	0.95	1.852	14.6	27.7
MW-0056R	04/29/2022 10:45	0.59	-172.3	7.19	0.99	1.939	14.47	9.3
MW-0056R	04/29/2022 10:50	0.37	-207.8	7.28	1.04	2.019	14.05	0
MW-0056R	04/29/2022 10:55	0.22	-284.4	7.57	1.19	2.306	13.83	0
MW-0056R	04/29/2022 11:00	0.21	-288	7.59	1.2	2.325	13.84	0
MW-0056R	04/29/2022 11:05	0.19	-301.4	7.68	1.23	2.377	13.91	0
MW-0056R	04/29/2022 11:10	0.19	-304.8	7.69	1.24	2.383	13.86	0
MW-0056R	04/29/2022 11:15	0.18	-316.1	7.78	1.26	2.44	13.93	0
MW-0056R	04/29/2022 11:20	0.17	-321.2	7.8	1.25	2.422	13.93	0
MW-0056R	04/29/2022 11:25	0.17	-322.9	7.82	1.25	2.416	14.01	0
MW-101	06/26/2012 08:24	0.91	-71	7.27	0.17	3.1801	20.61	4.4
MW-101	06/26/2012 08:27	0.82	-82	7.34	0.17	3.21934	18.29	6.6
MW-101	06/26/2012 08:29	0.52	-87	7.37	0.17	3.21241	17.5	5.1
MW-101	06/26/2012 08:32	0.36	-90	7.18	0.17	3.21327	17.54	5.2
MW-101	06/26/2012 08:35	0.29	-92	7.14	0.17	3.22406	17.53	5.4
MW-101	06/26/2012 08:38	0.25	-93	7.13	0.17	3.22953	17.46	5.4
MW-101	06/26/2012 08:41	0.22	-94	7.17	0.17	3.23604	17.41	6.2
MW-101	06/26/2012 08:44	0.2	-94	7.23	0.17	3.22738	17.35	6.5
MW-101	06/26/2012 08:46	0.19	-95	7.48	0.17	3.23155	17.41	15.9
MW-101	06/26/2012 08:49	0.16	-96	7.61	0.17	3.2298	17.48	12.9
MW-101	06/26/2012 08:52	0.15	-96	7.59	0.17	3.23053	17.58	27.4
MW-101	06/26/2012 08:55	0.14	-97	7.87	0.17	3.22118	17.8	27.1
MW-101	06/26/2012 08:58	0.14	-97	8.09	0.17	3.233	17.95	27.23
MW-102	04/03/2012 10:08	4.07	77.2	6.59	0.1	0.27	11.3	5.7
MW-102	04/03/2012 10:13	0.76	44	6.43	0.1	0.27	10.9	15.9

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-102	04/03/2012 10:18	0.39	36.1	6.44	0.1	0.26	11.0	12.7
MW-102	04/03/2012 10:23	0.55	33.4	6.45	0.1	0.27	11.0	9.5
MW-102	04/03/2012 10:28	0.59	32.2	6.44	0.1	0.27	11.0	10.7
MW-102	04/03/2012 10:33	0.53	31.3	6.45	0.1	0.27	11.1	8.0
MW-102	04/03/2012 10:38	0.48	31.16	6.45	0.1	0.27	11.2	8.5
MW-102	04/03/2012 10:44	0.79	41	6.44	0.13	0.272	11.22	5.50
MW-102	04/03/2012 12:25	1.05	18.2	6.31	0.14	0.291	11.89	1.20
MW-102	04/04/2012 12:41	1.03	20.9	6.37	0.13	0.287	11.91	9.80
MW-102	06/12/2012 09:08	0.9	-73	6.86	0.01	0.30915	21.41	9.8
MW-102	06/12/2012 09:10	0.72	-92	6.87	0.02	0.31672	20.52	12.5
MW-102	06/12/2012 09:12	0.47	-107	6.89	0.02	0.31411	19.51	62.3
MW-102	06/12/2012 09:13	0.4	-116	6.9	0.01	0.31095	19.07	10.5
MW-102	06/12/2012 09:15	0.34	-123	6.91	0.01	0.31032	19.06	26.4
MW-102	06/12/2012 09:17	0.32	-129	6.91	0.01	0.31111	19.04	313.8
MW-102	06/12/2012 09:18	0.31	-133	6.91	0.01	0.31116	19.19	7.5
MW-102	06/12/2012 09:20	0.29	-137	6.92	0.02	0.3131	19.19	7.6
MW-102	06/12/2012 09:22	0.29	-140	6.92	0.01	0.31066	19.29	16.2
MW-102	06/12/2012 09:23	0.28	-143	6.92	0.02	0.31327	19.25	55.5
MW-102	06/12/2012 09:25	0.27	-145	6.92	0.01	0.31089	19.29	6.6
MW-102	06/12/2012 09:27	0.26	-148	6.93	0.02	0.31197	19.3	22.3
MW-102	06/12/2012 09:28	0.26	-150	6.93	0.01	0.31154	19.34	6.8
MW-102	06/12/2012 09:30	0.24	-152	6.93	0.02	0.31236	19.34	6.2
MW-102	06/12/2012 09:32	0.24	-153	6.93	0.01	0.31076	19.38	5.9
MW-102	06/12/2012 09:33	0.23	-155	6.93	0.01	0.3114	19.42	6.8
MW-102	06/12/2012 09:35	0.23	-156	6.93	0.02	0.31274	19.43	6.5
MW-102	06/12/2012 09:37	0.22	-158	6.93	0.01	0.3107	19.5	5.6
MW-102	06/12/2012 09:38	0.21	-159	6.93	0.01	0.31084	19.48	234.1
MW-102	06/12/2012 09:40	0.21	-161	6.93	0.01	0.30943	19.78	6.6
MW-102	06/12/2012 09:42	0.19	-162	6.93	0.01	0.31107	19.99	6.7
MW-102	06/12/2012 09:43	0.19	-163	6.92	0.01	0.31098	20.24	5.7
MW-102	06/12/2012 09:45	0.2	-164	6.92	0.02	0.31425	20.21	6.7
MW-102	06/12/2012 09:47	0.19	-165	6.92	0.01	0.31012	20.18	11
MW-102	06/12/2012 09:48	0.2	-166	6.92	0.01	0.31007	20.24	5.8
MW-102	06/12/2012 09:50	0.2	-166	6.92	0.02	0.31292	20.31	7.9
MW-102	06/12/2012 09:52	0.2	-167	6.92	0.02	0.31337	20.04	7.1
MW-102	06/12/2012 09:54	0.2	-168	6.92	0.01	0.3109	20.06	5.9
MW-102	06/12/2012 09:55	0.2	-168	6.92	0.01	0.31103	20.08	10.4
MW-102	06/12/2012 09:57	0.2	-168	6.91	0.01	0.31178	19.99	7.3
MW-102	06/12/2012 10:34	3.75	-14	6.70	0.02	0.342	17.00	13.10
MW-102	06/13/2012 10:40	5.18	77	7.18	0.01	0.241	21.94	5.70
MW-102	04/29/2013 15:34	2.92	19.5	7.05	0.15	0.238	12.99	16.7
MW-102	04/30/2013 15:38	2.49	11.4	6.94	0.15	0.237	12.97	15.7
MW-102R	08/21/2019 08:50	4.9	-66.7	6.21	NM	0.544	19.77	4.3
MW-102R	08/21/2019 09:45	3.72	-128.9	6.29	0.24	0.494	18.72	1.1
MW-102R	08/21/2019 09:55	0.4	-190.4	6.4	0.23	0.48	19.19	56.3
MW-102R	11/21/2019 10:55	6.43	-64.5	6.49	NM	0.962	13.78	30.4
MW-102R	11/21/2019 11:50	3.7	-86	6.56	0.28	0.567	15.76	6.6
MW-102R	11/21/2019 11:55	3.04	-125.6	6.7	0.23	0.473	15.64	7.5
MW-102R	01/22/2020 14:25	7.3	5.4	6.53	NM	0.775	11.29	2.7
MW-102R	01/22/2020 14:50	0.51	-116.8	6.56	0.31	0.629	11.38	0.8
MW-102R	01/22/2020 15:00	0.6	-144.5	6.57	0.3	0.617	11.37	1.6
MW-102R	05/13/2020 08:00	0.3	-166.3	6.47	0.41	0.827	12.25	0.7
MW-102R	08/07/2020 11:50	3.06	-222.3	7.15	0.42	0.859	21.66	1.8
MW-102R	08/07/2020 12:50	4.21	-211.4	7.27	0.4	0.825	21.62	1.7
MW-102R	08/07/2020 13:10	3.84	-195.9	6.89	0.39	0.795	21.85	5.4
MW-102R	11/13/2020 10:50	3.69	18.7	6.58	0.16	0.331	13.77	18.2
MW-102R	11/13/2020 11:20	5.6	-23.2	6.62	0.23	0.472	14.71	14.8
MW-102R	11/13/2020 11:30	2.75	-87.4	6.88	0.23	0.484	14.37	14.6
MW-102R	02/25/2021 09:25	1.82	-97.5	7.04	0.54	1.08	10.44	8.4
MW-102R	02/25/2021 09:45	5.47	-99.8	6.75	0.43	0.862	9.66	4.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-102R	02/25/2021 09:55	3.74	-111.4	6.75	0.37	0.742	9.42	9
MW-102R	05/21/2021 13:35	0.65	92.8	5.09	0.09	0.744	18	32
MW-102R	05/21/2021 13:40	1.03	82.4	5.21	0.46	0.93	15.31	30
MW-102R	05/21/2021 13:45	1	84.6	5.14	0.45	0.913	14.98	31.4
MW-102R	05/21/2021 13:50	1	81.1	5.15	0.43	0.882	14.81	17
MW-102R	05/21/2021 13:55	0.84	79.3	5.12	0.43	0.871	14.62	15
MW-102R	05/21/2021 14:00	0.66	63.4	5.16	0.4	0.814	14.38	10.5
MW-102R	05/21/2021 14:05	0.75	56.4	5.26	0.39	0.782	14.04	8.5
MW-102R	05/21/2021 14:10	0.56	52.8	5.22	0.38	0.771	14.08	8
MW-102R	05/21/2021 14:15	0.77	46.2	5.29	0.37	0.756	13.91	7.2
MW-102R	05/21/2021 14:20	0.76	44.6	5.28	0.37	0.755	13.88	7
MW-102R	09/30/2021 13:45	1.94	-61.3	6.26	0.21	0.426	20.04	28.4
MW-102R	09/30/2021 13:50	1.21	-52.9	5.89	0.21	0.437	18.89	9.9
MW-102R	09/30/2021 13:55	1.43	-75.8	5.98	0.22	0.455	19.37	2.6
MW-102R	09/30/2021 14:00	2	-100.6	6	0.22	0.465	19.26	2.9
MW-102R	09/30/2021 14:05	2.63	-114.2	5.92	0.22	0.465	18.5	4
MW-102R	09/30/2021 14:10	3.46	-113.5	5.92	0.23	0.466	18.3	0.9
MW-102R	09/30/2021 14:15	5.27	-167.5	6.01	0.23	0.471	18.71	0.5
MW-102R	09/30/2021 14:20	6.84	-186.9	6.01	0.23	0.474	18.37	2.1
MW-102R	09/30/2021 14:25	8.48	-202.6	5.97	0.23	0.475	18.25	0.3
MW-102R	09/30/2021 14:30	9.6	-217.4	5.99	0.23	0.476	18.19	0.6
MW-102R	12/28/2021 12:05	0.61	-15.7	5.4	0.26	0.538	12.77	11.8
MW-102R	12/28/2021 12:10	0.57	-28.8	5.48	0.35	0.705	12.69	8.8
MW-102R	12/28/2021 12:15	0.49	-50.9	5.67	0.34	0.7	12.62	6.7
MW-102R	12/28/2021 12:20	0.45	-69.8	5.8	0.34	0.699	12.61	5.1
MW-102R	12/28/2021 12:25	0.42	-85.2	5.9	0.34	0.699	12.59	4.7
MW-102R	12/28/2021 12:30	0.41	-96.1	5.96	0.34	0.699	12.56	4.3
MW-102R	12/28/2021 12:35	0.41	-113.2	6.02	0.34	0.7	12.6	3.8
MW-102R	12/28/2021 12:40	0.41	-126.5	6.05	0.34	0.7	12.61	3.9
MW-102R	12/28/2021 12:45	0.43	-143.2	6.1	0.34	0.7	12.67	4.3
MW-102R	12/28/2021 12:50	0.44	-155.8	6.12	0.34	0.7	12.65	3.8
MW-102R	03/28/2022 09:55	2.34	-99.1	6.01	0.49	0.993	6.53	20.8
MW-102R	03/28/2022 10:00	0.99	-98.7	5.99	0.49	0.984	6.86	13.3
MW-102R	03/28/2022 10:05	0.44	-120.9	6.2	0.46	0.922	8.09	1
MW-102R	03/28/2022 10:10	0.45	-122.7	6.23	0.46	0.921	8.09	-0.06
MW-102R	03/28/2022 10:15	0.49	-135.4	6.25	0.43	0.878	8.33	-4.4
MW-102R	03/28/2022 10:20	0.56	-137.9	6.22	0.43	0.874	8.34	-4.8
MW-102R	03/28/2022 10:25	-6	-149	6.27	0.41	0.834	8.28	-5.9
MW-102R	03/28/2022 10:30	0.61	-161.8	6.3	0.39	0.801	8.25	-6.4
MW-102R	03/28/2022 10:35	0.64	-163.3	6.31	0.39	0.795	8.32	-6.3
MW-102R	03/28/2022 10:40	0.58	-172.1	6.33	0.38	0.776	8.35	-6.2
MW-103	06/21/2012 09:13	0.9	-82	8.21	0.05	1.07975	30.25	22.3
MW-103	06/21/2012 09:15	0.62	-94	8.65	0.05	1.08329	23.05	12.2
MW-103	06/21/2012 09:17	0.48	-100	7.43	0.05	1.06664	23.41	12.3
MW-103	06/21/2012 09:19	0.44	-104	7.26	0.05	1.06494	24.17	103.9
MW-103	06/21/2012 09:22	0.43	-107	7.26	0.05	1.07411	23.91	53.5
MW-103	06/21/2012 09:24	0.39	-109	7.25	0.05	1.06344	24.25	45.5
MW-103	06/21/2012 09:26	0.35	-111	7.25	0.05	1.06331	24.18	43.8
MW-103	06/21/2012 09:28	0.31	-113	7.24	0.05	1.0524	24.68	37.5
MW-103	06/21/2012 09:31	0.28	-114	7.26	0.05	1.04767	24.46	38.3
MW-103	06/21/2012 09:33	0.27	-116	7.28	0.05	1.02433	24.1	37.3
MW-103	06/21/2012 09:35	0.26	-118	7.28	0.05	1.00862	24.37	35.1
MW-103	06/21/2012 09:37	0.25	-119	7.28	0.05	0.99947	24.32	34.2
MW-103	06/21/2012 09:38	0.25	-119	7.28	0.05	0.999	24.32	34.22
MW-103	06/21/2012 10:16	1.31	-62	7.18	0.06	1.231	15.82	89.20
MW-103	06/22/2012 09:07	0.94	24	5.89	0.10	1.360	18.00	87.50
MW-103	08/26/2013 11:26	0.56	-378	6.58	0.05	0.953	24.41	15.06
MW-103	08/26/2013 12:02	0.73	-322	6.51	0.06	1.259	19.33	185.40
MW-103	08/27/2013 10:37	0.67	-222	6.17	0.14	2.689	21.57	24.40
MW-103	08/20/2014 13:39	0.82	12	6.22	0.03	0.660	24.10	98.02

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-103	08/20/2014 14:19	0.72	173	6.79	0.04	0.846	18.67	2817.20
MW-103	08/21/2014 13:31	4.51	-265	6.21	0.03	0.602	20.70	26.70
MW-103	07/16/2015 10:26	7.5	-323	NM	0.03	0.707	17.68	26.3
MW-103	07/16/2015 10:33	2.41	-65	7.02	0.18	3.439	15.63	4.2
MW-103	02/12/2016 09:48	7.40	62	6.02	0.03	0.542	10.22	63.00
MW-103	02/12/2016 10:48	9.94	26	6.40	0.05	1.035	10.34	2227.90
MW-103	08/19/2016 09:29	3.80	81	6.12	0.02	0.322	23.36	40.10
MW-103	08/19/2016 09:51	1.11	-64	7.22	0.15	2.781	18.63	430.50
MW-103	02/23/2017 10:20	5.12	270	8.02	0.02	0.406	9.78	121.70
MW-103	02/23/2017 11:40	8.04	83	7.30	0.01	0.312	10.04	251.50
MW-103	09/12/2017 08:49	5.35	139.00	6.79	0.07	1.337	18.01	186.50
MW-103	09/12/2017 09:17	2.44	144.00	6.11	0.05	1.049	20.04	81.90
MW-103	09/12/2017 09:36	4.00	167.00	6.90	0.05	0.975	19.45	296.10
MW-103	09/12/2017 10:15	7.02	0.0000	5.90	0.05	1.036	18.04	21.70
MW-103	09/12/2017 10:35	0.23	99.00	5.46	0.09	1.789	18.26	15.12
MW-103	09/12/2017 11:05	4.06	70.00	7.01	0.07	1.372	18.42	18.80
MW-103	02/28/2018 09:18	9.54	241.00	6.99	0.12	2.330	8.51	116.60
MW-103	02/28/2018 10:01	7.20	99.00	6.47	0.08	1.579	10.23	1263.90
MW-103	02/28/2018 10:10	9.69	245.00	6.74	0.02	0.436	10.03	157.60
MW-103	08/14/2018 09:08	3.59	212.00	6.52	0.02	0.326	22.28	268.30
MW-103	08/14/2018 09:24	4.05	206.00	6.20	0.01	0.247	24.06	121.20
MW-103	08/14/2018 09:58	1.02	0.0000	6.93	0.03	0.690	18.4	1701.60
MW-103	03/11/2019 10:50	10.13	150.1	6.99	NM	0.557	8.12	54.4
MW-103	03/11/2019 12:12	7.95	41.6	6.5	0.3	0.614	9.31	80.4
MW-103	09/18/2019 12:17	1.09	168.4	6.57	NM	0.668	20.21	45
MW-103	09/18/2019 12:22	0.34	168.5	6.27	NM	0.627	20.24	3
MW-103	09/18/2019 12:27	0.28	162.2	6.29	NM	0.583	20.4	7.6
MW-103	09/18/2019 12:32	0.22	155.5	6.34	NM	0.541	20.58	28.3
MW-103	09/18/2019 12:37	0.2	148.2	6.37	NM	0.503	20.81	10.4
MW-103	09/18/2019 12:42	0.2	141.4	6.41	NM	0.473	20.98	3.7
MW-103	09/18/2019 12:47	0.21	134.3	6.43	NM	0.451	21.02	24.8
MW-103	09/18/2019 12:52	0.19	129.8	6.44	NM	0.429	20.9	26.3
MW-103	09/18/2019 12:57	0.16	122.6	6.47	NM	0.371	21.16	51.9
MW-103	09/18/2019 13:02	0.16	120	6.45	NM	0.326	20.96	59.6
MW-103	09/18/2019 13:02	0.16	120	6.45	NM	0.326	20.96	59.6
MW-103	09/18/2019 15:12	0.12	185.2	6.66	0.34	0.706	20.4	55
MW-103	09/18/2019 16:05	0.18	169.4	6.81	0.29	0.595	19.96	388.5
MW-103	03/11/2020 13:25	3.28	106	6.36	NM	0.645	10.68	55.7
MW-103	03/11/2020 14:30	1.98	121	6.64	0.34	1.23	10.62	32.3
MW-103	09/23/2020 10:30	3.36	-24.1	6.7	0.27	0.56	21.19	8.8
MW-103	09/23/2020 10:35	2.96	-31.9	6.58	0.28	0.543	21.08	9.7
MW-103	09/23/2020 10:40	3	-36.1	6.57	0.26	0.539	21.07	10.4
MW-103	09/23/2020 10:45	2.52	-39.2	6.55	0.26	0.536	21.2	11
MW-103	09/23/2020 10:50	2.4	-43.1	6.57	0.26	0.533	21.33	9.2
MW-103	09/23/2020 10:55	2.46	-41.1	6.54	0.26	0.534	21.48	7.6
MW-103	09/23/2020 11:00	2.23	-44.9	6.53	0.26	0.538	21.61	3.8
MW-103	09/23/2020 11:05	2.24	-50.8	6.53	0.27	0.553	21.7	1.4
MW-103	09/23/2020 11:10	2.08	-64.4	6.55	0.28	0.571	21.88	0.8
MW-103	09/23/2020 11:15	2.05	-65.9	6.57	0.28	0.573	21.86	1.2
MW-103	09/23/2020 12:30	4.73	-42	6.65	0.3	0.626	22.33	20.9
MW-103	09/23/2020 12:40	2.15	-40.8	6.58	0.28	0.668	21.01	NM
MW-103	10/13/2020 12:40	NM	NM	NM	NM	NM	NM	22.1
MW-103	05/02/2022 12:00	0.94	119.7	5.83	0.38	0.762	11.74	8.9
MW-103	05/02/2022 12:05	0.83	116.1	5.85	0.38	0.762	11.74	8.1
MW-103	05/02/2022 12:10	0.8	114.6	5.85	0.38	0.762	11.73	8
MW-103	05/02/2022 12:15	0.77	113.5	5.86	0.38	0.762	11.74	7
MW-103	05/02/2022 12:20	0.53	97.6	5.95	0.37	0.757	11.77	6.6
MW-103	05/02/2022 12:25	1.44	88.2	6.04	0.36	0.737	11.9	10.5
MW-103	05/02/2022 12:30	1.49	88.2	6.04	0.36	0.735	11.91	10.8
MW-103	05/02/2022 12:35	1.44	88.3	6.04	0.36	0.734	11.91	10.4

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-104	06/21/2012 07:39	1.44	24	6.51	0.12	2.36413	23.77	640.8
MW-104	06/21/2012 07:42	0.78	4	6.65	0.13	2.45594	19.24	92.4
MW-104	06/21/2012 07:45	0.59	-4	6.66	0.13	2.47434	19.4	61.6
MW-104	06/21/2012 07:48	0.56	-9	6.85	0.13	2.50052	19.28	69.8
MW-104	06/21/2012 07:51	0.5	-12	6.61	0.13	2.51332	19.91	55.2
MW-104	06/21/2012 07:54	0.44	-15	6.63	0.13	2.53516	19.94	62.3
MW-104	06/21/2012 07:57	0.4	-16	6.64	0.13	2.52162	20.03	58.9
MW-104	06/21/2012 08:00	0.38	-17	6.67	0.13	2.52832	19.74	59.8
MW-104	06/21/2012 08:03	0.36	-19	6.88	0.13	2.55537	20.06	52.2
MW-104	06/21/2012 08:06	0.33	-20	6.87	0.13	2.55296	20.48	51.6
MW-104	06/21/2012 08:09	0.33	-21	7.17	0.13	2.566	20.37	47.70
MW-104	06/21/2012 08:53	1.88	10	7.06	0.13	2.599	13.57	481.40
MW-104	06/22/2012 08:22	0.81	54	5.31	0.10	2.460	13.90	278.00
MW-104	08/26/2013 10:05	0.40	-205	6.09	0.13	2.411	19.60	27.04
MW-104	08/26/2013 10:49	1.04	-205	6.10	0.12	2.310	15.43	237.60
MW-104	08/27/2013 09:40	0.97	-190	5.84	0.27	5.043	17.43	111.10
MW-104	08/20/2014 15:29	0.48	44	5.71	0.09	1.792	21.94	80.46
MW-104	08/20/2014 16:05	2.22	118	6.78	0.13	2.499	14.17	2938.30
MW-104	09/21/2016 10:20	0.09	-31	5.94	0.27	4.940	18.44	287.30
MW-104	09/21/2016 14:09	2.47	-50	7.17	0.29	5.303	16.76	521.00
MW-104	02/23/2017 09:32	2.03	282	7.01	0.14	2.652	12.26	104.10
MW-104	02/23/2017 10:27	2.80	-102	6.39	0.11	2.121	13.56	1702.40
MW-104	02/28/2018 09:25	4.96	160.00	5.52	0.08	1.674	11.84	57.10
MW-104	02/28/2018 10:45	0.29	-5.00	6.01	0.97	16.580	12.72	44.50
MW-104	02/28/2018 11:29	8.99	-65.00	5.95	0.20	3.747	12.91	554.00
MW-104	03/19/2019 10:20	0.32	-9.9	6.18	NM	2.257	10.39	112.5
MW-104	03/19/2019 11:45	0.15	3.3	6.11	1.03	2.009	12.14	17.6
MW-105	06/28/2012 09:48	3.68	229	4.87	0.02	0.42386	23.77	43.3
MW-105	06/28/2012 09:51	3.55	242	4.72	0.02	0.4202	23.32	48.4
MW-105	06/28/2012 09:53	3.57	250	5.11	0.02	0.41885	23.54	47.4
MW-105	06/28/2012 09:55	3.6	256	4.55	0.02	0.42131	23.81	15.1
MW-105	06/28/2012 09:57	3.54	260	4.48	0.02	0.42259	23.78	19.6
MW-105	06/28/2012 10:00	3.56	264	4.46	0.02	0.41845	23.79	39.1
MW-105	06/28/2012 10:02	3.52	268	4.4	0.02	0.42139	23.7	24.2
MW-105	06/28/2012 10:04	3.43	271	4.37	0.02	0.41588	23.84	92.3
MW-105	06/28/2012 10:06	3.45	274	4.35	0.02	0.41665	23.67	13.8
MW-105	06/28/2012 10:09	3.42	276	4.32	0.02	0.41509	23.95	19.2
MW-105	06/28/2012 10:11	3.44	278	4.32	0.02	0.41806	24.07	57.5
MW-105	06/28/2012 10:13	3.38	280	4.32	0.02	0.41904	24.19	21.2
MW-105	06/28/2012 10:15	3.39	282	4.32	0.02	0.41888	24.27	17.3
MW-105	06/28/2012 10:18	3.36	284	4.32	0.02	0.41953	24.11	29.9
MW-105	06/28/2012 10:20	3.27	285	4.34	0.02	0.41747	24.12	16.2
MW-105	06/28/2012 10:22	3.21	286	4.33	0.02	0.41783	24.14	24.9
MW-105	06/28/2012 10:24	3.3	287	4.34	0.02	0.42089	24.52	16.4
MW-105	06/28/2012 10:27	3.21	289	4.32	0.02	0.42629	24.61	25.5
MW-105	06/28/2012 10:29	3.25	290	4.33	0.02	0.42541	24.53	20.7
MW-105	06/28/2012 10:31	3.2	290	4.34	0.02	0.42444	24.6	13.1
MW-105	06/28/2012 10:33	3.2	291	4.34	0.02	0.42659	24.73	15.2
MW-105	06/28/2012 10:36	3.18	292	4.35	0.02	0.42957	24.58	64.9
MW-105	06/28/2012 10:38	3.19	291	4.38	0.02	0.42914	24.37	54.6
MW-105	06/28/2012 11:19	1.97	147	6.11	0.08	1.490	19.63	146.00
MW-105	06/29/2012 09:56	0.06	34	5.43	1.50	2.280	19.40	36.00
MW-105	08/26/2013 15:17	0.57	-273	5.24	0.08	1.604	25.74	26.61
MW-105	08/26/2013 15:47	0.67	-308	5.37	0.10	2.020	21.66	332.70
MW-105	08/27/2013 12:13	0.84	-150	5.24	0.28	5.178	22.93	4.90
MW-105	08/21/2014 10:29	0.61	231	2.82	0.13	2.492	25.32	28.64
MW-105	08/21/2014 11:07	1.87	142	5.88	0.15	2.909	19.41	764.80
MW-105	08/22/2014 09:51	3.22	180	3.94	0.16	2.955	21.05	4.60
MW-105	12/09/2015 11:53	1.63	30	4.95	0.24	4.448	16.72	16.2
MW-105	12/09/2015 15:22	2.88	-15	5.66	0.73	12.62	17.22	1822

Appendix B4 Central Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-105	02/12/2016 11:31	4.95	275	4.21	0.15	2.905	12.02	12.20
MW-105	02/12/2016 14:11	3.69	-12	5.04	1.52	25.070	11.77	173.90
MW-105	02/17/2017 08:48	6.75	30	4.76	0.17	3.196	11.66	11.00
MW-105	02/17/2017 10:16	8.97	-70	5.46	0.15	2.826	11.06	43.40
MW-105	03/27/2018 10:59	2.35	124.00	4.86	0.22	4.236	10.24	15.56
MW-105	03/27/2018 11:41	10.58	89.00	6.08	0.22	4.199	11.58	29.90
MW-105	03/27/2018 12:50	8.83	152.00	5.08	0.13	2.437	10.5	5.30
MW-105	03/18/2019 10:30	1.63	161.7	4.65	NM	1.832	9.39	14.3
MW-105	03/18/2019 12:04	8.21	112.3	5.23	0.94	1.841	12.18	0
MW-106R	06/14/2012 10:23	4.08	178	5.26	0.02	0.40763	25.29	23.1
MW-106R	06/14/2012 10:26	5.02	213	4.77	0.02	0.41069	19.27	4.3
MW-106R	06/14/2012 10:29	4.94	223	4.68	0.02	0.40872	19.24	3.7
MW-106R	06/14/2012 10:32	4.92	230	4.63	0.02	0.40944	19.33	4.4
MW-106R	06/14/2012 10:36	4.81	235	4.62	0.02	0.40909	19.4	5
MW-106R	06/14/2012 10:39	4.76	239	4.6	0.02	0.40937	19.56	4.6
MW-106R	06/14/2012 10:42	4.77	242	4.6	0.02	0.41051	19.24	6.5
MW-106R	06/14/2012 10:45	4.73	245	4.59	0.02	0.41012	19.16	6.5
MW-106R	06/14/2012 10:48	4.7	248	4.58	0.02	0.40974	19.26	6.4
MW-106R	06/14/2012 10:49	4.70	248	4.58	0.02	0.410	19.26	6.41
MW-106R	06/14/2012 11:25	4.60	199	5.20	0.02	0.429	18.08	88.80
MW-106R	06/15/2012 09:50	2.86	357	4.26	0.02	0.417	17.21	41.00
MW-108	06/14/2012 08:32	1.32	104	5.73	0.03	0.5606	22.58	39.7
MW-108	06/14/2012 08:35	1.08	105	5.7	0.03	0.57169	19.59	33.4
MW-108	06/14/2012 08:38	0.64	103	5.69	0.03	0.56631	19.41	23.8
MW-108	06/14/2012 08:41	0.51	102	5.68	0.03	0.56821	19.45	32.7
MW-108	06/14/2012 08:44	0.47	101	5.68	0.03	0.56916	19.34	27.4
MW-108	06/14/2012 08:47	0.42	100	5.68	0.03	0.56916	19.25	34.9
MW-108	06/14/2012 08:50	0.37	100	5.67	0.03	0.5696	19.05	38.7
MW-108	06/14/2012 08:53	0.34	99	5.67	0.03	0.56893	19.02	35.3
MW-108	06/14/2012 08:56	0.3	99	5.68	0.03	0.56881	19.14	52.2
MW-108	06/14/2012 08:59	0.28	99	5.68	0.03	0.5697	18.92	42.5
MW-108	06/14/2012 09:02	0.26	99	5.67	0.03	0.56865	18.94	54.9
MW-108	06/14/2012 09:05	0.25	100	5.67	0.03	0.56822	19.1	44.5
MW-108	06/14/2012 09:08	0.23	100	5.67	0.03	0.56892	18.64	48.9
MW-108	06/14/2012 09:11	0.21	100	5.66	0.03	0.5674	18.48	53.4
MW-108	06/14/2012 09:14	0.21	100	5.66	0.03	0.56694	18.25	71.4
MW-108	06/14/2012 09:17	0.2	101	5.65	0.03	0.56692	18.46	69.8
MW-108	06/14/2012 09:19	0.19	100	5.66	0.03	0.56645	18.49	67.1
MW-108	06/14/2012 09:20	0.19	100	5.66	0.03	0.566	18.49	67.14
MW-108	06/14/2012 10:08	3.72	135	6.00	0.03	0.549	15.91	304.00
MW-108	06/15/2012 09:17	0.54	166	5.47	0.03	0.521	15.46	27.00
MW-108	08/20/2014 09:06	0.90	109	4.85	0.03	0.603	21.09	86.19
MW-108	08/20/2014 09:56	0.98	172	6.03	0.03	0.566	15.32	283.20
MW-108	12/20/2016 11:05	2.57	-49	5.25	0.05	0.953	17.32	23.2
MW-108	12/20/2016 14:02	2.51	-57	6.15	0.05	1.002	16.91	27.8
MW-108	02/17/2017 10:53	5.32	173	4.23	0.03	0.689	15.62	43.40
MW-108	02/17/2017 15:22	9.74	232	4.42	0.03	0.617	14.23	859.50
MW-108	03/01/2018 11:01	3.64	228.00	4.99	0.03	0.691	15.2	15.50
MW-108	03/01/2018 13:26	0.33	487.00	3.96	0.07	1.402	15	12.45
MW-108	03/01/2018 14:15	2.10	88.00	5.34	0.05	1.047	14.9	44.50
MW-108	03/05/2019 10:20	0.35	75.4	5.43	NM	0.635	9.67	20.4
MW-108	03/05/2019 12:20	0.32	68.1	5.28	0.31	0.633	11.1	2.3
MW-108	02/17/2020 10:05	1.12	302.5	4.82	NM	0.416	12.38	86.9
MW-108	02/17/2020 12:10	0.28	168.7	5.04	0.2	0.412	14.35	9
MW-108	03/31/2021 09:15	2.39	327.1	4.81	0.584	0.584	12.26	181
MW-108	03/31/2021 09:20	2.42	376.3	4.47	0.28	0.528	12.24	44.1
MW-108	03/31/2021 09:25	2.36	388.8	4.33	0.28	0.581	12.03	50.6
MW-108	03/31/2021 09:30	2.29	380.6	4.32	0.28	0.582	12.04	44.9
MW-108	03/31/2021 09:35	2.17	365.2	4.38	0.28	0.584	12.09	25.6
MW-108	03/31/2021 09:40	2.15	344.7	4.42	0.29	0.584	12.46	32.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-108	03/31/2021 09:45	2.14	326.8	4.42	0.29	0.585	12.61	23.4
MW-108	03/31/2021 09:50	2.14	321.6	4.42	0.29	0.585	12.87	17
MW-108	03/31/2021 09:55	2.15	303.2	4.46	0.29	0.586	13.26	16.8
MW-108	03/31/2021 10:00	2.15	300.9	4.45	0.29	0.585	13.21	6.2
MW-108	03/31/2021 15:35	5.16	164.5	5.28	0.53	1.068	14.77	14
MW-108	03/31/2021 15:50	4.92	227.8	4.89	0.3	0.605	13.74	18.4
MW-110	06/18/2012 09:57	2.25	89	6.25	0.2	3.66818	20.32	330.5
MW-110	06/18/2012 09:59	1.37	69	6.28	0.2	3.6616	19.31	160
MW-110	06/18/2012 10:01	0.97	61	6.3	0.19	3.62809	19.04	79.2
MW-110	06/18/2012 10:03	0.78	56	6.32	0.19	3.59822	18.98	79.6
MW-110	06/18/2012 10:05	0.65	53	6.33	0.19	3.56765	19.11	49
MW-110	06/18/2012 10:07	0.62	51	6.34	0.19	3.54275	18.89	47
MW-110	06/18/2012 10:10	0.69	50	6.35	0.19	3.52623	18.93	41.9
MW-110	06/18/2012 10:12	0.64	48	6.35	0.19	3.50921	18.97	51.2
MW-110	06/18/2012 10:14	0.56	47	6.36	0.19	3.50071	19.07	38.8
MW-110	06/18/2012 10:16	0.52	46	6.36	0.19	3.48437	19.22	40.2
MW-110	06/18/2012 10:18	0.52	45	6.36	0.18	3.48127	19.37	34.8
MW-110	06/18/2012 10:20	0.48	44	6.36	0.18	3.48033	19.6	35.5
MW-110	06/18/2012 10:23	0.44	44	6.37	0.18	3.48275	19.72	43.9
MW-110	06/18/2012 10:25	0.38	44	6.38	0.18	3.47135	19.75	58.5
MW-110	06/18/2012 10:27	0.37	43	6.39	0.18	3.46182	19.56	48.2
MW-110	06/18/2012 10:29	0.39	42	6.4	0.18	3.46117	19.62	47.9
MW-110	06/18/2012 10:31	0.4	42	6.4	0.18	3.46313	19.73	43.2
MW-110	06/18/2012 10:33	0.39	41	6.4	0.18	3.46289	19.85	41
MW-110	06/18/2012 10:36	0.38	40	6.41	0.18	3.46597	19.7	48.3
MW-110	06/18/2012 10:38	0.37	40	6.41	0.18	3.45625	19.67	46.7
MW-110	06/18/2012 10:40	0.37	39	6.42	0.18	3.45512	19.7	46.6
MW-110	08/21/2014 14:22	0.34	48	6.00	0.18	3.448	24.82	48.36
MW-110	08/21/2014 15:00	1.68	131	6.52	0.21	3.995	18.19	2951.20
MW-110	08/22/2014 11:20	0.55	126	6.11	0.20	3.796	20.42	31.80
MW-110	12/03/2015 12:50	2.13	479	5.95	0.2	3.727	16.63	210.5
MW-110	12/03/2015 15:35	5.27	-49	6.66	0.4	7.163	17.39	948.2
MW-110	09/21/2016 09:25	0.44	-20	6.00	0.37	6.666	24.08	216.50
MW-110	09/21/2016 10:20	1.08	-48	6.45	0.34	6.242	20.89	1619.20
MW-110	02/23/2017 11:00	0.36	238	7.38	0.17	3.314	10.69	65.00
MW-110	02/23/2017 15:58	4.21	-118	6.47	0.21	3.948	11.78	2830.20
MW-110	03/01/2018 09:21	1.81	33.00	6.11	0.21	4.059	10.81	36.50
MW-110	03/01/2018 09:50	0.15	-51.00	6.35	0.99	17.020	11.08	51.84
MW-110	03/01/2018 10:33	2.25	-73.00	6.24	0.52	9.371	11.12	933.60
MW-110	02/28/2019 13:35	0.23	-22.2	6.31	NM	3.599	10.35	22.4
MW-110	02/28/2019 15:09	0.68	-28.7	6.47	1.93	3.654	10.77	59
MW-110	02/25/2020 11:05	2.29	-19.7	6.23	NM	1.261	10.6	31.5
MW-110	02/26/2020 08:35	4.4	-55.7	6.24	1.05	2.035	11.89	17.2
MW-111	06/18/2012 08:17	2.75	395	3.84	0.07	1.32002	18.02	6.7
MW-111	06/18/2012 08:20	1.5	403	3.75	0.07	1.32556	16.38	6.6
MW-111	06/18/2012 08:23	1.2	404	3.71	0.07	1.32329	16.09	6.2
MW-111	06/18/2012 08:26	1.13	405	3.67	0.07	1.31947	16.12	6.5
MW-111	06/18/2012 08:30	1.12	406	3.64	0.07	1.31554	16.17	6.2
MW-111	06/18/2012 08:31	1.12	406	3.64	0.07	1.316	16.17	6.21
MW-111	06/18/2012 09:40	4.55	198	5.14	0.14	2.598	15.03	130.30
MW-111	06/19/2012 08:55	3.69	231	3.27	0.20	4.830	14.30	278.00
MW-111	08/20/2014 15:29	1.23	238	3.04	0.06	1.264	23.12	63.70
MW-111	08/20/2014 16:05	1.83	149	5.80	0.18	3.326	16.00	286.90
MW-111	09/23/2016 11:20	4.58	94.00	5.10	0.27	4.945	17.81	9.60
MW-111	09/23/2016 14:34	4.84	170	3.47	0.10	2.002	20.45	170.30
MW-111	02/17/2017 11:38	3.25	319	3.11	0.15	2.855	14.78	16.20
MW-111	02/17/2017 14:01	7.88	351	2.77	0.10	1.986	14.00	14.00
MW-111	03/01/2018 10:18	3.06	322.00	3.40	0.12	2.246	14.2	12.10
MW-111	03/01/2018 11:20	1.42	482.00	2.98	0.51	9.110	13.49	1.65
MW-111	03/01/2018 11:58	4.83	425.00	3.04	0.10	1.959	13.66	121.30

Appendix B4 Central Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-111	02/28/2019 10:10	1.28	472.1	2.77	NM	1.44	10.96	NM
MW-111	02/28/2019 11:48	9.8	460.8	2.82	0.6	1.304	9.37	0
MW-111	02/25/2020 13:55	2.57	430.8	3.1	NM	0.639	11.49	3.8
MW-111	02/26/2020 09:30	6.13	292.1	3.44	0.43	0.866	12.82	9.9
MW-129	06/28/2012 08:17	0.62	-73	7.77	0.03	0.5445	23.5	2.2
MW-129	06/28/2012 08:20	0.39	-100	7.9	0.03	0.5518	23.64	2.4
MW-129	06/28/2012 08:22	0.31	-115	7.97	0.03	0.55262	23.94	2.4
MW-129	06/28/2012 08:24	0.29	-124	8.01	0.03	0.55408	24.13	2.4
MW-129	06/28/2012 08:27	0.26	-131	8.04	0.03	0.55429	24.35	2.9
MW-129	06/28/2012 08:29	0.28	-135	8.05	0.03	0.55488	24.67	3
MW-129	06/28/2012 08:31	0.27	-138	8.06	0.03	0.55734	25.06	3
MW-129	06/28/2012 08:32	0.27	-138	8.06	0.03	0.557	25.06	3.00
MW-129	06/28/2012 09:25	3.44	-66	8.36	0.03	0.547	21.13	134.20
MW-129	06/29/2012 09:00	6.40	-84	7.55	0.31	0.664	25.10	3.78
MW-129	10/29/2013 11:10	1.38	-223	7.55	0.08	1.552	20.09	16.10
MW-129	10/29/2013 13:46	1.07	-334.00	7.65	0.06	1.197	18.41	1.01
MW-129	08/21/2014 09:23	0.18	89	6.67	0.03	0.591	26.87	10.52
MW-129	08/21/2014 10:04	0.89	143	7.25	0.03	0.637	20.91	228.70
MW-129	08/22/2014 09:21	0.20	155	7.21	0.03	0.687	25.44	3.30
MW-129	07/15/2015 12:42	3.05	-365	NM	0.03	0.632	23.87	4
MW-129	07/15/2015 14:03	2.62	-90	7.57	0.11	2.215	17.82	808.9
MW-129	04/26/2016 12:15	1.27	103	7.59	0.03	0.636	15.19	5.50
MW-129	04/26/2016 15:09	1.40	125	7.53	0.03	0.651	13.69	7.00
MW-129	08/05/2016 11:10	2.16	-25	7.14	0.04	0.747	24.33	7.70
MW-129	08/05/2016 11:29	1.27	-91	7.26	0.04	0.794	22.21	556.90
MW-129	10/26/2016 11:38	3.67	-96	6.97	0.06	1.123	20.93	16.10
MW-129	10/26/2016 12:03	1.61	-98.00	7.17	0.03	0.551	21.31	6.20
MW-129	06/16/2017 11:12	0.51	149.00	7.28	0.10	1.889	21.58	7.80
MW-129	06/16/2017 13:19	0.14	-93.00	7.65	0.12	2.235	22.43	2.36
MW-129	06/16/2017 14:00	6.76	-108.00	8.39	0.09	1.777	18.1	33.80
MW-129	12/19/2017 10:07	0.84	-38.00	7.71	0.05	1.065	12.98	4.08
MW-129	12/19/2017 10:33	2.19	-33.00	7.57	0.13	2.476	15.93	11.10
MW-129	12/19/2017 10:44	5.73	-56.00	7.99	0.05	1.043	15.88	219.20
MW-129	06/13/2018 08:30	4.85	-24	6.79	0.0658	1.3034	21.58	4.9
MW-129	06/13/2018 08:32	1.47	-75	6.56	0.0606	1.2047	20.07	3.5
MW-129	06/13/2018 08:34	0.96	-92	6.61	0.0608	1.2083	19.98	4.5
MW-129	06/13/2018 08:36	0.78	-103	6.68	0.0609	1.2102	19.86	4.4
MW-129	06/13/2018 08:38	0.71	-112	6.75	0.0608	1.2073	19.89	4.4
MW-129	06/13/2018 08:40	0.69	-118	6.82	0.0609	1.2100	20.07	3.3
MW-129	06/13/2018 08:42	0.63	-123	6.88	0.0609	1.2103	20.12	4.4
MW-129	06/13/2018 08:44	0.61	-127	6.93	0.0608	1.2078	20.17	3.4
MW-129	06/13/2018 08:46	0.57	-131	6.97	0.0608	1.2076	20.17	4.6
MW-129	06/13/2018 08:48	0.56	-134	7.01	0.0608	1.2085	20.15	3.4
MW-129	06/13/2018 08:49	0.56	-137	7.04	0.0608	1.2079	20.19	3.4
MW-129	06/13/2018 08:51	0.52	-139	7.07	0.0609	1.2091	20.19	4.6
MW-129	06/13/2018 08:53	0.51	-141	7.1	0.0608	1.2080	20.13	4.6
MW-129	06/13/2018 08:55	0.49	-143	7.13	0.0606	1.2051	20.1	4.8
MW-129	06/14/2018 08:55	0.49	-143.00	7.13	0.06	1.201	20.28	4.82
MW-129	06/14/2018 09:34	0.80	-118.00	7.05	0.06	1.212	15.99	229.50
MW-129	06/14/2018 13:00	1.22	-124.00	6.96	0.06	1.113	15.18	22.10
MW-129	12/03/2018 10:55	9.15	-110.20	7.55	0.57	1.149	14.7	31.40
MW-129	12/03/2018 11:35	5.77	-169.80	7.65	0.58	1.154	14.34	9.60
MW-129	12/03/2018 11:45	4.10	-165.20	7.67	0.58	1.159	14.28	10.00
MW-129	06/17/2019 10:05	1.95	-137.9	7.5	NM	0.509	18.79	1.6
MW-129	06/17/2019 10:10	1.66	-143.6	7.47	NM	0.502	18.81	1
MW-129	06/17/2019 10:15	1.42	-152	7.44	NM	0.499	18.85	0.1
MW-129	06/17/2019 10:20	0.86	-166	7.5	NM	0.493	18.86	0.1
MW-129	06/17/2019 10:25	1.34	-168.7	7.57	NM	0.488	18.9	0.1
MW-129	06/17/2019 10:30	1.32	-168.2	7.59	NM	0.489	18.91	0.3
MW-129	06/17/2019 10:35	1.3	-174.8	7.61	NM	0.49	18.92	0.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-129	06/17/2019 10:40	0.21	-189.4	7.62	0.23	0.484	18.96	NM
MW-129	06/17/2019 10:45	0.26	-184.7	7.63	0.23	0.479	NM	0.7
MW-129	06/17/2019 10:50	NM	NM	NM	NM	NM	18.47	0.5
MW-129	06/17/2019 11:00	1.3	-174.8	7.61	NM	0.49	18.92	0.2
MW-129	06/17/2019 12:16	0.21	-189.4	7.62	0.23	0.484	18.96	0.7
MW-129	12/04/2019 13:20	2.11	-4.1	8	NM	0.385	11.87	63.2
MW-129	12/04/2019 13:25	1.93	-20.8	7.97	NM	0.386	12.04	36.9
MW-129	12/04/2019 13:30	1.58	-66.8	7.82	NM	0.38	12.2	33.1
MW-129	12/04/2019 13:35	1.62	-87.6	7.74	NM	0.379	12.29	19
MW-129	12/04/2019 13:40	1.87	-94.2	7.73	NM	0.379	12.28	18.3
MW-129	12/04/2019 13:45	2.11	-99.8	7.71	NM	0.379	12.09	19.1
MW-129	12/04/2019 13:50	2.68	-106.9	7.71	NM	0.379	11.94	14.3
MW-129	12/04/2019 13:55	2.03	-113.1	7.7	NM	0.38	11.88	13.1
MW-129	12/04/2019 14:00	3.33	-118.7	7.69	NM	0.38	11.79	11.8
MW-129	12/04/2019 14:05	2.76	-124.4	7.69	NM	0.38	11.6	10.7
MW-129	12/04/2019 15:20	3.97	-71.8	7.98	0.2	0.412	9.8	8.3
MW-129	12/04/2019 15:35	5.99	-112.3	7.56	0.18	0.382	10.37	12
MW-129	06/15/2020 12:50	0.78	48.3	7.26	0.27	0.555	20.48	0.7
MW-129	06/15/2020 12:55	0.36	-107.4	7.23	0.26	0.547	21.21	1.1
MW-129	06/15/2020 13:00	0.32	-107.4	7.25	0.26	0.546	21.6	1.4
MW-129	06/15/2020 13:05	0.23	-117.4	7.26	0.26	0.546	21.52	2.9
MW-129	06/15/2020 13:10	0.21	-124.2	7.26	0.26	0.545	21.59	1.9
MW-129	06/15/2020 13:15	0.18	-81.7	7.26	0.26	0.544	21.75	2.1
MW-129	06/15/2020 13:20	0.15	-60.4	7.25	0.26	0.545	21.81	2.1
MW-129	06/15/2020 13:25	0.13	-115.6	7.26	0.26	0.546	21.57	2.1
MW-129	06/15/2020 13:30	0.12	-131.7	7.25	0.26	0.545	21.36	2.1
MW-129	06/15/2020 13:35	0.11	-140.5	7.24	0.26	0.545	21.27	2.2
MW-129	06/16/2020 08:45	6.63	238.2	7.26	0.31	0.636	19.35	5.1
MW-129	06/16/2020 09:15	5.13	398	7.25	0.27	0.555	19.37	7
MW-129	06/16/2020 13:35	0.11	-140.5	7.24	0.26	0.545	21.27	2.2
MW-129	12/09/2020 12:30	3.82	-36	7.94	0.24	0.487	10.55	43
MW-129	12/09/2020 12:35	3.84	-35.9	7.94	0.24	0.485	10.76	41.4
MW-129	12/09/2020 12:40	3.76	-35.7	7.93	0.24	0.484	10.87	41.6
MW-129	12/09/2020 12:45	3.7	-29.6	7.9	0.24	0.485	11.62	21.6
MW-129	12/09/2020 12:50	3.69	-29.4	7.9	0.24	0.486	11.64	21
MW-129	12/09/2020 12:55	3.51	-28.8	7.87	0.24	0.49	11.71	19.6
MW-129	12/09/2020 13:00	3.53	-28.8	7.87	0.24	0.49	11.71	18.7
MW-129	12/09/2020 13:05	3.55	-29.3	7.87	0.24	0.49	11.7	18.6
MW-129	12/09/2020 13:10	3.56	-30.3	7.89	0.25	0.488	11.7	17.6
MW-129	12/09/2020 13:15	3.49	-28.9	7.88	0.24	0.488	11.69	17.5
MW-129	12/09/2020 14:20	2.22	-30.9	7.55	0.25	0.428	11.26	10.6
MW-129	12/09/2020 14:30	3.39	-43.8	7.44	0.3	0.594	11.98	20.9
MW-130	06/25/2012 12:56	0.19	-54	7.34	0.19	3.642	21.29	13.51
MW-130	06/25/2012 13:46	3.65	-39	7.68	0.20	3.688	17.01	304.30
MW-130	06/26/2012 08:52	1.60	-20	6.73	0.20	4.660	17.10	173.00
MW-130	08/26/2013 13:42	1.60	-270	7.00	0.12	2.290	25.16	15.61
MW-130	08/26/2013 14:31	0.92	-338	6.85	0.12	2.300	20.46	775.60
MW-130	08/27/2013 11:35	1.22	-195	6.79	0.24	4.403	20.34	38.40
MW-130	08/21/2014 12:29	4.96	155	6.65	0.08	1.613	23.39	76.63
MW-130	08/21/2014 13:14	3.49	170	6.91	0.08	1.589	19.05	2951.10
MW-130	08/22/2014 10:41	4.25	107	6.75	0.08	1.560	17.75	2995.00
MW-130	06/15/2016 11:11	0.21	-39	6.94	0.07	1.455	15.25	404.50
MW-130	06/15/2016 15:10	2.55	-168	6.99	0.13	2.419	17.35	371.70
MW-130	05/03/2017 11:02	2.78	38.00	6.90	0.06	1.259	13.11	9.40
MW-130	05/03/2017 12:55	2.46	97.00	7.19	0.08	1.643	18.24	7.22
MW-130	05/03/2017 13:53	5.51	137.00	7.50	0.10	1.935	14.4	43.09
MW-130	05/23/2018 10:47	6.58	-59	6.88	0.0579	1.1529	24.66	24.6
MW-130	05/23/2018 10:50	3.13	-72	7.01	0.0578	1.1503	20.19	6.9
MW-130	05/23/2018 10:53	3.08	-76	7.06	0.0580	1.1547	20.13	7.7
MW-130	05/23/2018 10:55	2.81	-79	7.1	0.0580	1.1543	19.66	4

Appendix B4 Central Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-130	05/23/2018 10:58	2.74	-81	7.11	0.0580	1.1544	19.97	3.8
MW-130	05/23/2018 11:00	2.64	-83	7.12	0.0579	1.1521	19.6	4.3
MW-130	05/23/2018 11:03	2.62	-85	7.13	0.0580	1.1540	19.65	3.5
MW-130	05/23/2018 11:05	2.7	-86	7.14	0.0582	1.1592	19.83	3.8
MW-130	05/23/2018 11:08	2.62	-87	7.14	0.0582	1.1594	19.28	4.3
MW-130	05/23/2018 11:10	2.57	-87	7.15	0.0580	1.1542	19.46	3.9
MW-130	05/23/2018 11:13	2.64	-87	7.15	0.0584	1.1634	19.18	4.8
MW-130	05/23/2018 11:16	2.57	-87	7.15	0.0582	1.1596	19.01	4.4
MW-130	05/23/2018 11:18	2.59	-87	7.15	0.0585	1.1654	18.73	4.8
MW-130	05/24/2018 11:18	2.59	-87.00	7.15	0.06	1.161	18.91	4.77
MW-130	05/24/2018 12:03	4.75	-87.00	7.00	0.06	1.191	15.39	104.50
MW-130	05/24/2018 13:44	1.37	-81.00	7.06	0.06	1.189	14.25	62.30
MW-130	05/21/2019 10:15	0.84	88.3	7.22	NM	1.176	13.56	2.3
MW-130	05/21/2019 11:31	0.37	-95.2	7.11	0.58	1.152	12.57	3.5
MW-130	05/07/2020 11:50	6.48	-8.1	7.36	NM	0.587	14.85	7.4
MW-130	05/07/2020 12:55	2.77	-149.3	7.25	0.27	0.559	13.59	188.3
MW-130	05/25/2021 13:15	2.83	46.4	8.15	0.51	1.029	19.31	8.3
MW-130	05/25/2021 13:20	2.6	49.2	8.06	0.5	1.01	20.11	6.6
MW-130	05/25/2021 13:25	2.22	62.8	7.61	0.44	0.899	22.26	4
MW-130	05/25/2021 13:30	1.98	78.5	7.15	0.43	0.882	22.55	4.2
MW-130	05/25/2021 13:35	1.9	96.5	6.76	0.43	0.873	22.76	4
MW-130	05/25/2021 13:40	1.78	107	6.53	0.43	0.871	22.76	4.5
MW-130	05/25/2021 13:45	1.76	113.9	6.4	0.43	0.869	22.72	4.1
MW-130	05/25/2021 13:50	1.74	121.9	6.25	0.43	0.87	22.67	5.1
MW-130	05/25/2021 13:55	1.75	127.7	6.15	0.43	0.872	22.61	5.1
MW-130	05/25/2021 14:00	1.76	129.9	6.12	0.43	0.868	22.83	4.5
MW-130	04/25/2022 11:10	4.7	35.7	7.87	0.9	1.763	13.65	14.5
MW-130	04/25/2022 11:15	0.75	-27.6	7.32	0.6	1.223	13.28	10.9
MW-130	04/25/2022 11:20	0.7	-35.8	7.18	0.55	1.109	13.31	11.2
MW-130	04/25/2022 11:25	0.67	-38.7	7.12	0.53	1.067	13.37	10.7
MW-130	04/25/2022 11:30	0.73	-40.8	7.1	0.52	1.042	13.4	10
MW-130	04/25/2022 11:35	0.72	-43.4	7.1	0.52	1.038	13.4	10.1
MW-130	04/25/2022 11:40	0.69	-46.5	7.08	0.52	1.036	13.3	10.2
MW-147	06/21/2012 10:33	1.55	64	7.02	0.06	1.28293	29.4	93.9
MW-147	06/21/2012 10:35	0.92	70	6.59	0.07	1.30721	23.04	25.1
MW-147	06/21/2012 10:38	0.74	72	6.53	0.07	1.29508	22.18	22.2
MW-147	06/21/2012 10:41	0.65	72	6.51	0.06	1.28282	22.99	20.3
MW-147	06/21/2012 10:44	0.61	72	6.49	0.06	1.28287	23.81	21.6
MW-147	06/21/2012 10:47	0.57	71	6.48	0.07	1.2933	24.45	21.4
MW-147	06/21/2012 10:50	0.52	70	6.47	0.07	1.29499	24.96	26
MW-147	06/21/2012 10:52	0.48	70	6.48	0.07	1.30683	24.48	24.5
MW-147	06/21/2012 10:55	0.44	71	6.48	0.07	1.29956	24.75	22
MW-147	06/21/2012 10:58	0.42	70	6.47	0.07	1.28969	24.46	23.5
MW-147	06/21/2012 11:01	0.40	68	6.45	0.06	1.286	25.07	24.15
MW-147	06/21/2012 12:45	7.85	13	6.78	0.06	1.225	20.62	99.70
MW-147	06/22/2012 09:25	0.24	64	5.42	0.10	1.480	16.10	130.00
MW-147	08/27/2013 13:40	1.63	-278	5.97	0.07	1.29235	28.26	15.3
MW-147	08/27/2013 13:42	1.57	-297	5.82	0.06	1.13611	24.27	15
MW-147	08/27/2013 13:44	1.3	-328	5.8	0.06	1.12763	23.27	14.1
MW-147	08/27/2013 13:46	1.15	-329	5.81	0.06	1.14031	23.24	13.3
MW-147	08/27/2013 13:48	1.05	-328	5.82	0.06	1.1536	23.24	12.9
MW-147	08/27/2013 13:50	1	-325	5.82	0.06	1.15717	23.45	12.8
MW-147	08/27/2013 13:52	0.98	-326	5.83	0.06	1.16728	23.32	14.3
MW-147	08/25/2014 08:34	2.14	218	6.74	NM	1.156	22.35	41.60
MW-147	08/25/2014 08:37	1.56	226	6.29	NM	1.057	20.71	460.10
MW-147	08/25/2014 08:39	1.73	227	6.13	NM	1.048	20.33	534.20
MW-147	08/25/2014 08:42	1.95	224	6.07	NM	1.056	20.85	362.60
MW-147	08/25/2014 08:45	2.05	220	6.03	NM	1.058	21.06	17.80
MW-147	08/25/2014 08:48	1.75	214	5.98	NM	1.057	21.12	14.70
MW-147	08/25/2014 08:51	1.67	209	5.96	NM	1.064	21.37	12.30

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-147	08/25/2014 08:54	1.59	205	5.91	NM	1.067	21.60	12.20
MW-147	08/25/2014 08:56	1.57	200	5.89	NM	1.067	21.69	15.40
MW-147	08/25/2014 08:59	1.56	198	5.85	NM	1.065	21.62	16.70
MW-147	08/25/2014 09:02	1.52	194	5.85	NM	1.056	21.55	20.90
MW-147	08/25/2014 09:05	1.39	196	5.74	NM	1.056	21.18	15.10
MW-147	08/25/2014 09:08	1.40	191	5.77	NM	1.059	21.41	13.30
MW-147	08/25/2014 09:11	1.45	184	5.82	NM	1.065	21.96	14.80
MW-147	08/25/2014 09:13	1.35	181	5.83	NM	1.066	21.66	18.80
MW-147	08/25/2014 09:16	1.26	184	5.74	NM	1.051	21.25	14.60
MW-147	08/25/2014 09:19	1.19	183	5.72	NM	1.046	21.10	12.70
MW-147	08/25/2014 09:22	1.16	177	5.78	0.06	1.127	21.68	67.30
MW-147	08/25/2014 10:49	3.57	246	6.64	0.06	1.115	19.61	24.30
MW-147	08/26/2014 09:46	2.33	-297	6.12	0.06	1.147	18.49	7.70
MW-147	03/14/2016 10:54	130.134	116.000	7.090	0.001	0.032	8.950	2.000
MW-147	03/14/2016 10:57	66.748	61.000	6.740	0.445	8.061	9.980	296.400
MW-147	03/14/2016 11:00	54.043	47.000	6.720	0.458	8.283	10.320	79.300
MW-147	03/14/2016 11:04	50.124	42.000	6.710	0.477	8.590	10.490	124.000
MW-147	03/14/2016 11:07	48.069	40.000	6.710	0.479	8.624	10.700	78.400
MW-147	03/14/2016 11:10	47.114	39.000	6.710	0.481	8.658	10.720	70.800
MW-147	03/14/2016 11:13	46.556	39.000	6.710	0.482	8.676	10.760	62.700
MW-147	03/14/2016 11:16	46.364	39.000	6.720	0.487	8.760	10.650	70.400
MW-147	03/14/2016 11:19	46.640	38.000	6.710	0.489	8.784	10.730	57.200
MW-147	03/14/2016 11:22	46.182	38.000	6.720	0.494	8.870	10.670	61.200
MW-147	03/14/2016 11:26	46.087	38.000	6.720	0.496	8.906	10.620	62.400
MW-147	03/15/2016 10:09	2.79	30	6.20	0.07	1.443	10.76	6.70
MW-147	03/15/2016 12:29	7.15	45	6.73	0.57	10.100	11.21	236.40
MW-147	02/17/2017 11:20	9.55	20	6.90	1.50	2.840	9.84	19.10
MW-147	02/17/2017 11:30	9.39	30	6.94	1.40	2.800	10.23	18.80
MW-147	05/09/2017 09:40	1.90	145.40	6.87	1.64	3.125	10.09	8.20
MW-147	05/09/2017 11:15	1.70	138.40	6.67	1.54	3.224	10.27	120.10
MW-147	05/09/2017 11:25	1.69	127.50	6.76	1.57	3.224	10.35	84.10
MW-147	07/25/2017 08:30	7.15	191.40	7.14	1.31	2.233	20.31	10.70
MW-147	07/25/2017 08:45	7.34	184.40	7.61	1.36	1.998	26.34	14.40
MW-147	07/25/2017 09:05	6.33	211.20	7.22	1.21	2.272	22.71	8.10
MW-147	11/12/2017 09:10	6.72	197.70	6.50	0.79	1.568	12.14	41.40
MW-147	11/12/2017 11:20	7.43	-135.30	6.74	0.69	1.375	13.84	16.70
MW-147	11/12/2017 11:35	7.16	-137.40	6.52	0.67	1.324	14.47	52.60
MW-147	02/28/2018 10:51	3.61	230.00	6.84	0.15	2.974	11.15	10.70
MW-147	02/28/2018 12:52	3.84	130.00	6.84	1.69	27.710	12.78	5.32
MW-147	02/28/2018 13:37	9.82	86.00	6.88	1.40	23.120	14.27	3363.30
MW-147	05/24/2018 13:22	1.74	-76.00	6.87	0.15	2.908	14.5	8.00
MW-147	05/24/2018 14:42	3.03	-127.00	6.45	0.49	8.721	13.98	18.20
MW-147	08/21/2018 11:33	1.82	32.00	6.30	0.10	1.984	19.36	4.10
MW-147	08/21/2018 14:38	5.80	57.00	7.22	0.11	2.044	16.25	1335.70
MW-147	02/25/2019 13:20	1.1	140.6	7.09	NM	3.683	11.74	10.9
MW-147	02/25/2019 15:30	1.86	12.8	7.62	1.9	3.593	12.28	1.8
MW-147	05/22/2019 14:25	10.94	47.3	7.5	1.02	2.937	16.45	6.8
MW-147	08/19/2019 08:50	1.87	106.2	6.67	NM	3.542	21.7	21.1
MW-147	08/19/2019 10:50	8.25	1.7	7	1.85	3.517	22.31	16.4
MW-147	08/19/2019 11:00	8.22	83.6	7.12	1.96	3.703	17.89	1362.1
MW-147	11/06/2019 09:30	5.54	175.6	6.4	NM	1.369	15.91	16
MW-147	11/06/2019 14:40	4.35	-125.8	6.82	0.67	1.331	17.17	44.5
MW-147	11/06/2019 14:50	4.31	-121.4	6.71	0.65	1.296	17.07	25.8
MW-147	05/21/2020 09:50	0.71	-4.1	6.85	NM	0.896	14.15	13.6
MW-147	05/21/2020 10:50	9.34	57.8	7.54	0.49	0.996	15	36.3
MW-147	11/05/2020 12:35	2.18	-40.5	7.07	1.92	3.679	18.34	17.9
MW-147	11/05/2020 12:40	1.51	-39.6	7.04	1.93	3.647	18.16	18.1
MW-147	11/05/2020 12:45	0.72	-26.5	7.02	1.88	3.553	18.02	18.8
MW-147	11/05/2020 12:50	0.53	-26.5	7.02	1.88	3.559	18.01	18.9
MW-147	11/05/2020 12:55	0.51	-25.6	7.01	1.88	3.556	18.04	19

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-147	11/05/2020 13:00	0.54	-26.5	7.03	1.91	3.614	17.91	16.6
MW-147	11/05/2020 13:05	0.58	-26.5	7.01	1.92	3.618	17.9	16.5
MW-147	11/05/2020 13:10	0.65	-26.1	7.01	1.92	3.619	17.91	16.4
MW-147	11/05/2020 13:15	1.03	-30.1	7.01	1.96	3.694	17.78	15.7
MW-147	11/05/2020 13:20	1.06	-30	7.02	1.96	3.678	17.78	15.8
MW-147	11/06/2020 08:20	2.87	98.6	7.6	1.14	2.215	16.22	19.2
MW-147	11/06/2020 08:30	2.41	112.5	7.42	1.14	2.216	16.25	19.8
MW-147	02/09/2021 10:15	5.49	162.2	7.19	1.94	3.679	7.11	9.7
MW-147	02/09/2021 10:20	5.42	162.2	7.19	1.99	3.774	5.81	13
MW-147	02/09/2021 10:25	5.34	162.4	7.19	1.99	3.774	5.56	13.7
MW-147	02/09/2021 10:30	5.13	162.5	7.19	1.93	3.678	6.62	8.6
MW-147	02/09/2021 10:35	4.9	162	7.18	1.91	3.621	7.39	9.3
MW-147	02/09/2021 10:40	4.85	158	7.17	1.9	3.615	7.38	8.6
MW-147	02/09/2021 10:45	4.72	153.5	7.17	1.87	3.546	8	7.3
MW-147	02/09/2021 10:50	4.8	150.5	7.17	1.86	3.542	8.12	5.6
MW-147	02/09/2021 10:55	4.86	147.4	7.17	1.87	3.567	8.3	4.3
MW-147	02/09/2021 11:00	4.66	144.3	7.16	1.85	3.508	8.72	4
MW-147	02/09/2021 12:00	4.32	173.2	7.33	1.34	3.231	8.06	10.4
MW-147	02/09/2021 12:10	5.1	184.8	7.23	1.39	3.109	8	3.3
MW-147	06/28/2021 09:05	4.98	136.3	7.43	2.4	2.361	22.49	11.5
MW-147	06/28/2021 09:10	1.01	125.4	7.17	2.44	4.58	21.28	10.3
MW-147	06/28/2021 09:15	0.43	107.1	7.13	2.44	4.559	20.89	0
MW-147	06/28/2021 09:20	0.37	105.2	7.12	2.44	4.567	21.15	0
MW-147	06/28/2021 09:25	0.24	96.5	7.1	2.45	4.565	20.9	0
MW-147	06/28/2021 09:30	0.19	88.2	7.09	2.44	4.561	20.69	0
MW-147	06/28/2021 09:35	0.18	84.7	7.08	2.44	4.558	20.77	0
MW-147	06/28/2021 09:40	0.18	77.7	7.08	2.44	4.558	20.52	0
MW-147	06/28/2021 09:45	0.18	72.4	7.08	2.44	4.554	20.57	0
MW-147	06/28/2021 09:50	0.18	69.3	7.07	2.44	4.55	20.56	0
MW-147	10/22/2021 12:45	4	-35.4	7.24	2.03	3.816	18.8	-1
MW-147	10/22/2021 12:50	0.97	-35.3	7.23	2.03	3.822	18.89	-2.5
MW-147	10/22/2021 12:55	0.7	-43.2	7.26	2.1	3.948	19.39	-4
MW-147	10/22/2021 13:00	0.85	-44.8	7.25	2.11	3.964	19.4	-4.2
MW-147	10/22/2021 13:05	0.7	-53.6	7.25	2.19	4.103	19.04	1.3
MW-147	10/22/2021 13:10	51.2	-53.8	7.25	2.19	4.109	18.96	1.5
MW-147	10/22/2021 13:15	0.59	-55	7.21	2.22	4.164	19.12	-4.9
MW-147	10/22/2021 13:20	1.54	-54.3	7.17	2.25	4.21	18.73	-4.9
MW-147	02/01/2022 13:10	4.42	70.7	7.04	2.22	4.155	12.26	119.3
MW-147	02/01/2022 13:15	4.23	72.3	7.04	2.22	4.152	12.29	107.7
MW-147	02/01/2022 13:20	4.13	73.4	7.04	2.22	4.15	12.26	108.8
MW-147	02/01/2022 13:25	4.97	74.3	7.04	2.22	4.151	12.18	84.2
MW-147	02/01/2022 13:30	5	79.1	7.01	2.21	4.145	12.28	61.3
MW-147	02/01/2022 13:35	4.23	78.3	7.01	2.21	4.145	12.28	56
MW-147	02/01/2022 13:40	4.54	77.8	7.01	2.22	4.148	12.2	42.6
MW-147	02/01/2022 13:45	3.51	53.6	7	2.22	4.16	12.91	45
MW-147	02/01/2022 13:50	3.48	52.6	7	2.22	4.155	12.76	53.4
MW-147	02/01/2022 13:55	3.53	51.8	7	2.22	4.151	12.62	53.6
MW-167	07/03/2012 07:57	0.53	-34	7.26	0.03	0.54735	23.49	7.7
MW-167	07/03/2012 07:59	0.46	-42	7.25	0.03	0.54762	23.32	8.1
MW-167	07/03/2012 08:01	0.4	-46	7.18	0.03	0.54723	23.29	9.1
MW-167	07/03/2012 08:04	0.38	-49	7.17	0.03	0.54759	23.22	7.9
MW-167	07/03/2012 08:06	0.36	-51	7.17	0.03	0.5471	23.27	7.8
MW-167	07/03/2012 08:08	0.34	-53	7.16	0.03	0.54663	23.3	8.6
MW-167	07/03/2012 08:11	0.33	-55	7.16	0.03	0.5457	23.51	7.5
MW-167	07/03/2012 08:13	0.32	-56	7.16	0.03	0.54792	23.55	11
MW-167	07/03/2012 08:15	0.32	-56	7.16	0.03	0.54337	23.58	7.8
MW-167	07/03/2012 08:18	0.31	-57	7.16	0.03	0.54394	23.61	6.9
MW-167	07/03/2012 08:20	0.3	-57	7.16	0.03	0.54395	23.59	7.1
MW-167	07/03/2012 08:22	0.3	-57	7.16	0.03	0.54335	23.63	9.1
MW-167	07/03/2012 08:25	0.3	-57	7.16	0.03	0.5426	23.77	7.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-167	07/03/2012 08:27	0.3	-58	7.16	0.03	0.54571	23.96	7.9
MW-167	07/03/2012 08:29	0.31	-58	7.17	0.03	0.54404	24.05	6.3
MW-167	07/03/2012 08:32	0.31	-59	7.17	0.03	0.54415	24.21	7.5
MW-167	07/03/2012 08:34	0.3	-59	7.16	0.03	0.54363	24.42	6.8
MW-167	07/03/2012 08:36	0.3	-59	7.16	0.03	0.54328	24.56	7.5
MW-167	07/03/2012 08:37	0.30	-59	7.16	0.03	0.543	24.56	7.49
MW-167	07/03/2012 09:30	0.84	-93	7.63	0.04	0.838	19.86	22.30
MW-167	07/04/2012 11:30	3.97	-14	6.55	0.0000	0.577	23.43	9.70
MW-167	08/11/2014 10:39	2.07	-295	6.97	0.08	1.572	23.91	12.29
MW-167	08/11/2014 11:20	2.52	-315	7.42	0.08	1.664	19.62	27.60
MW-167	08/12/2014 11:05	1.37	-244	6.92	0.08	1.507	21.38	8.00
MW-167	12/03/2015 10:41	0.77	-69	6.9	0.07	1.413	16.3	594.5
MW-167	12/03/2015 11:05	1.01	457	6.78	0.13	2.526	15.45	5.69
MW-167	04/26/2016 10:42	1.61	81	7.13	0.38	6.895	11.71	16.60
MW-167	04/26/2016 11:54	6.27	178	7.11	0.42	7.515	12.26	77.60
MW-167	06/15/2017 09:30	0.44	-35.00	6.87	0.07	1.401	14.59	17.70
MW-167	06/15/2017 10:39	0.36	-42.00	7.01	0.15	2.878	19.49	2.01
MW-167	06/15/2017 11:21	1.64	-55.00	7.81	0.20	3.796	13.86	37.50
MW-167	05/09/2018 09:10	0.41	-93.80	7.25	0.63	1.258	12.42	24.50
MW-167	05/09/2018 10:55	3.48	-83.20	7.42	0.66	1.321	14.37	3.70
MW-167	05/09/2018 11:20	5.20	-58.90	7.25	0.62	1.065	16.08	25.50
MW-167	06/14/2018 10:45	0.48	-115.00	6.97	0.10	1.991	18.58	7.67
MW-167	06/14/2018 11:24	0.99	-122.00	7.06	0.15	2.929	13.67	5.90
MW-167	06/14/2018 13:30	1.43	-109.00	7.04	0.06	1.242	18.68	11.90
MW-167	12/12/2018 14:15	0.52	71.90	7.09	0.40	0.722	10.53	21.20
MW-167	12/12/2018 14:20	0.27	-43.60	7.20	0.62	1.242	9.48	14.70
MW-167	12/12/2018 14:35	1.53	27.30	7.25	0.34	0.700	11.47	53.40
MW-167	04/16/2019 13:05	0.06	-66.4	7.22	NM	0.709	13.73	0.7
MW-167	04/16/2019 14:15	0.36	-67.2	7.34	0.39	0.791	15.69	6.8
MW-167	06/21/2019 09:45	0.29	-116.4	7.22	NM	0.917	17.02	6.4
MW-167	06/21/2019 10:05	3.18	-33.1	7	NM	0.939	16.54	5
MW-167	06/21/2019 10:10	1.02	-95.9	7.06	NM	0.979	17.37	7.1
MW-167	06/21/2019 10:15	0.42	-111	7.15	NM	0.977	17.24	5.8
MW-167	06/21/2019 10:20	0.33	-119.1	7.19	NM	0.967	17.15	4.4
MW-167	06/21/2019 10:25	3.36	-103.4	7.26	NM	0.967	18.03	5.6
MW-167	06/21/2019 10:30	1.57	-92.8	7.21	NM	0.94	17.57	6
MW-167	06/21/2019 10:35	0.49	-103.9	7.2	NM	0.923	17.31	6.4
MW-167	06/21/2019 10:40	0.34	-110.8	7.21	NM	0.916	17.16	6.3
MW-167	06/21/2019 10:45	0.31	-114.5	7.22	NM	0.915	17.23	6.7
MW-167	06/21/2019 10:50	0.29	-116.4	7.22	NM	0.917	17.02	6.4
MW-167	06/21/2019 11:29	1.26	-111.8	7.24	0.47	0.956	15.65	4.5
MW-167	06/21/2019 11:45	0.26	-122.4	7.26	0.48	0.96	14.86	6.7
MW-167	10/24/2019 08:05	1.75	82.1	7.51	NM	0.807	15.42	28
MW-167	10/24/2019 08:10	1.31	78.4	7.33	NM	0.791	15.38	14.1
MW-167	10/24/2019 08:15	1	67.8	7.16	NM	0.78	15.5	9.7
MW-167	10/24/2019 08:20	0.86	55.2	7.08	NM	0.773	15.72	8.4
MW-167	10/24/2019 08:25	0.77	44.9	7.05	NM	0.776	15.66	9.1
MW-167	10/24/2019 08:30	0.83	35.1	7.03	NM	0.775	15.85	6.8
MW-167	10/24/2019 08:35	0.71	24.8	7.02	NM	0.775	15.93	6.8
MW-167	10/24/2019 08:40	0.61	16.7	7.02	NM	0.78	15.94	6.7
MW-167	10/24/2019 08:45	0.68	10	7	NM	0.777	16.06	6.5
MW-167	10/24/2019 08:50	0.59	6.3	7.01	NM	0.777	18.23	6.5
MW-167	10/24/2019 10:25	2.85	-121	7.61	0.48	1.107	18.62	1.2
MW-167	10/24/2019 10:40	1.57	-98.6	7.18	0.48	1.065	18.22	6.9
MW-167	04/27/2020 13:00	2.01	-6.1	7.21	NM	0.72	10.15	74.3
MW-167	04/27/2020 14:08	6.23	-48.9	7.46	0.39	0.782	11.16	64.5
MW-167	07/01/2021 09:20	3.81	-9.3	7.13	0.52	1.045	23.37	42.8
MW-167	07/01/2021 09:25	1.51	-32.7	6.81	0.49	0.998	20.68	21.9
MW-167	07/01/2021 09:30	1.56	-32.8	6.79	0.49	0.997	21.39	18.4
MW-167	07/01/2021 09:35	1.62	-33.5	6.81	0.5	1.005	22.73	12.5

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Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-167	07/01/2021 09:40	1.58	-25.5	6.72	0.49	1.001	22.23	6.3
MW-167	07/01/2021 09:45	1.59	-20.5	6.68	0.49	1	21.87	5.4
MW-167	07/01/2021 09:50	1.59	-16.7	6.65	0.49	1.001	21.93	5.2
MW-167	07/01/2021 09:55	1.63	-13.2	6.61	0.49	1	22	5.1
MW-167	10/01/2021 12:55	2.26	-92.6	7.06	0.5	1.018	20.66	4
MW-167	10/01/2021 13:00	1.23	-108.7	7.15	0.51	1.028	20.23	1.9
MW-167	10/01/2021 13:05	0.7	-114.8	7.19	0.51	1.019	19.66	2.5
MW-167	10/01/2021 13:10	0.54	-115.4	7.19	0.5	1.015	19.62	2.4
MW-167	10/01/2021 13:15	0.4	-119.1	7.21	0.5	1.017	19.79	1.2
MW-167	10/01/2021 13:20	0.32	-120.5	7.21	0.51	1.019	19.57	-1.3
MW-167	10/01/2021 13:25	0.29	-122.2	7.24	0.5	1.018	19.89	0.7
MW-167	10/01/2021 13:30	0.25	-122.8	7.25	0.5	1.018	19.87	0.8
MW-167	10/01/2021 13:35	0.27	-120.5	7.29	0.51	1.024	20.01	0.6
MW-167	10/01/2021 13:40	0.26	-124.7	7.3	0.5	1.018	20.34	0.4
MW-167	12/28/2021 13:25	7.59	-60.7	10.07	0.58	1.136	11.66	131.7
MW-167	12/28/2021 13:30	2.48	-75.9	9.75	0.51	1.052	12.36	97.3
MW-167	12/28/2021 13:35	2.29	-78.5	9.92	0.5	1.028	12.61	82.1
MW-167	12/28/2021 13:40	0.69	-62	10	0.46	0.931	13.08	26.9
MW-167	12/28/2021 13:45	0.11	-61.6	10	0.46	0.929	13.08	26.4
MW-167	12/28/2021 13:50	0.65	-69.5	10.3	0.46	0.923	13.18	16.6
MW-167	12/28/2021 13:55	0.62	-71.3	10.3	0.46	0.922	13.18	16.7
MW-167	12/28/2021 14:00	0.11	-81.2	10.62	0.46	0.931	13.05	11.1
MW-167	12/28/2021 14:05	0.44	-81.2	10.7	0.46	0.932	13.04	10.7
MW-167	02/17/2022 09:35	6.02	58.1	6.97	0.44	0.853	10.74	220.1
MW-167	02/17/2022 09:40	6.32	62.3	6.96	0.4	0.766	10.55	206.2
MW-167	02/17/2022 09:45	7.79	69.6	7.03	0.4	0.866	10.28	83
MW-167	02/17/2022 09:50	9.87	63.8	7.08	0.41	0.852	10.18	49.8
MW-167	02/17/2022 09:55	9.98	41.8	7.12	0.41	0.916	10.16	27.5
MW-167	02/17/2022 10:00	10.01	38	7.13	0.44	0.855	10.34	25.6
MW-167	02/17/2022 10:05	10.46	33.4	7.18	0.45	0.903	11.01	25.5
MW-167	02/17/2022 10:10	10.01	25.5	7.2	0.45	0.91	11.2	21.9
MW-167	02/17/2022 10:15	9.76	20.5	7.18	0.45	0.802	11.39	17.3
MW-167	02/17/2022 10:20	10.37	20.3	7.19	0.45	0.883	11.41	16.7
MW-168	06/18/2012 13:32	1.81	-57	7.7	0.02	0.49017	21.05	15.6
MW-168	06/18/2012 13:35	0.66	-104	8.37	0.02	0.48353	20.51	6.9
MW-168	06/18/2012 13:37	0.48	-123	8.44	0.02	0.48322	20.5	18
MW-168	06/18/2012 13:40	0.42	-134	8.62	0.02	0.48374	20.57	7.2
MW-168	06/18/2012 13:43	0.37	-141	8.75	0.02	0.48414	21.05	7.9
MW-168	06/18/2012 13:45	0.35	-146	8.96	0.02	0.48429	21.14	13.5
MW-168	06/18/2012 13:48	0.32	-150	9.31	0.02	0.48612	20.95	8.6
MW-168	06/18/2012 13:51	0.31	-154	10.33	0.02	0.48605	20.88	9.2
MW-168	06/18/2012 13:53	0.29	-157	9.86	0.02	0.48657	20.59	9.4
MW-168	06/18/2012 13:56	0.28	-160	9.5	0.02	0.48624	20.95	22.1
MW-168	06/18/2012 13:59	0.27	-162	9.31	0.02	0.48704	20.71	19.8
MW-168	06/18/2012 14:01	0.26	-164	9.17	0.02	0.48607	20.76	11.3
MW-168	06/18/2012 14:04	0.25	-166	9.06	0.02	0.48599	20.8	11.9
MW-168	06/18/2012 14:07	0.26	-167	8.95	0.02	0.4868	20.79	18.6
MW-168	06/18/2012 14:09	0.25	-168	8.9	0.02	0.48719	20.74	18.2
MW-168	06/18/2012 14:12	0.26	-169	8.76	0.02	0.4852	20.68	20.6
MW-168	06/18/2012 14:15	0.26	-170	8.68	0.02	0.48827	20.72	16.2
MW-168	06/18/2012 14:17	0.26	-171	8.6	0.02	0.48721	20.95	17
MW-168	06/18/2012 14:20	0.26	-172	8.43	0.02	0.490	20.53	20.10
MW-168	06/18/2012 15:42	1.58	-193	8.40	0.03	0.520	17.38	9.80
MW-168	06/19/2012 10:37	3.21	77	6.22	0.0000	0.398	17.80	40.00
MW-168	06/12/2013 14:00	10.38	16.2	7.21	0.24	0.492	18.23	24.4
MW-168	06/12/2013 14:30	9.88	-22.3	7.06	0.25	0.525	16.59	95.1
MW-168	06/12/2013 14:45	9.31	-37.7	6.94	0.26	0.536	15.35	116.50
MW-168	06/13/2013 14:45	9.31	-37.7	6.94	0.26	0.536	15.35	116.5
MW-168	07/31/2013 09:50	0.18	-150	7.05	0.07	1.371	24.92	4.57
MW-168	07/31/2013 10:46	0.08	-149	6.78	0.08	1.615	19.21	7.50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-168	08/01/2013 09:43	0.02	-182.00	6.58	0.08	1.565	22.43	20.90
MW-168	08/12/2014 10:44	1.37	137	6.52	0.04	0.785	20.84	11.68
MW-168	08/12/2014 11:22	1.62	169	6.81	0.04	0.836	17.88	1239.20
MW-168	12/02/2015 11:20	5.23	368	6.86	0.04	0.904	16.57	59.5
MW-168	12/02/2015 12:12	3.79	-121	7.26	0.03	0.535	16.41	609.4
MW-168	06/16/2017 10:23	6.71	190.00	7.41	0.17	3.266	13.94	1.80
MW-168	06/16/2017 11:17	7.09	75.00	7.17	0.16	3.097	20.1	6.53
MW-168	06/16/2017 11:46	9.79	89.00	8.33	0.10	1.983	17.1	2789.00
MW-168	06/13/2018 10:57	7.64	-32.00	6.99	0.04	0.715	19.92	17.70
MW-168	06/13/2018 11:45	8.26	12.00	7.10	0.04	0.732	14.78	15.10
MW-168	06/13/2018 12:10	7.37	-53.00	7.11	0.08	1.580	14.07	47.50
MW-168	06/19/2019 10:05	8.61	-1.4	7.3	NM	0.324	16.34	35.6
MW-168	06/19/2019 10:10	7.76	55.1	6.94	NM	0.292	16.6	1.5
MW-168	06/19/2019 10:15	7.72	83.1	6.8	NM	0.287	16.58	2.1
MW-168	06/19/2019 10:20	7.7	99.9	6.89	NM	0.287	16.57	2.7
MW-168	06/19/2019 10:25	7.7	112.5	6.9	NM	0.287	16.59	4.3
MW-168	06/19/2019 10:30	7.69	118.8	6.9	NM	0.29	16.59	4.5
MW-168	06/19/2019 10:35	7.69	136.8	6.9	NM	0.3	16.75	8.6
MW-168	06/19/2019 10:40	7.7	141.4	6.91	NM	0.311	16.83	10.4
MW-168	06/19/2019 10:45	7.73	148	6.91	NM	0.326	16.79	9.3
MW-168	06/19/2019 10:50	7.74	158.5	6.93	NM	0.337	16.89	8.4
MW-168	06/19/2019 13:40	7.74	158.5	6.93	NM	0.337	16.89	8.4
MW-168	06/19/2019 14:44	8.33	213	7.16	0.23	0.478	16.71	12.7
MW-168	06/19/2019 15:00	8.36	217.9	7.29	0.23	0.48	16.89	7.4
MW-168	09/09/2020 13:30	8.18	49.7	6.97	0.26	0.533	22.02	58.9
MW-168	09/09/2020 13:35	6.74	48.5	7.01	0.28	0.593	21.54	186.7
MW-168	09/09/2020 13:40	8.17	50.4	7	0.26	0.53	21.64	31.8
MW-168	09/09/2020 13:45	8.27	48.5	6.97	0.25	0.531	21.4	23
MW-168	09/09/2020 13:50	8.21	48.2	6.99	0.25	0.534	21.3	18.7
MW-168	09/09/2020 13:55	8.2	49	6.98	0.25	0.533	21.16	14.2
MW-168	09/09/2020 14:00	7.97	47.8	7.04	0.26	0.529	21.5	11.6
MW-168	09/09/2020 14:05	8.05	49.9	7.02	0.531	0.531	21.6	10.2
MW-168	09/09/2020 14:10	7.93	52.6	6.98	0.25	0.524	21.3	9
MW-168	09/09/2020 14:15	7.82	51.7	7.02	0.26	0.523	21.32	11.2
MW-168	09/10/2020 08:00	6.72	99.5	6.94	0.17	0.352	18.62	59
MW-168	09/10/2020 08:15	7.02	77.5	7.08	0.15	0.314	18.41	253.2
MW-168	09/10/2020 14:15	7.82	51.7	7.02	0.26	0.523	21.32	11.2
MW-169R	06/27/2012 12:51	0.54	42	6.77	0.03	0.66133	27.24	4.8
MW-169R	06/27/2012 12:55	0.8	41	6.84	0.03	0.66555	20.53	2.3
MW-169R	06/27/2012 12:58	0.57	45	6.84	0.03	0.66285	20.54	1.8
MW-169R	06/27/2012 13:02	0.5	47	6.82	0.03	0.66417	21.11	2.6
MW-169R	06/27/2012 13:06	0.47	49	6.82	0.03	0.66299	21.18	2.5
MW-169R	06/27/2012 13:09	0.45	50	6.82	0.03	0.66861	21.47	2.3
MW-169R	06/27/2012 13:10	0.45	50	6.82	0.03	0.669	21.47	2.33
MW-169R	06/27/2012 14:43	0.86	56	7.01	0.03	0.635	15.03	6.30
MW-169R	06/28/2012 12:12	0.0000	64	5.94	0.45	0.699	14.80	119.00
MW-169R	06/14/2013 09:50	0.98	9.7	6.32	0.28	0.562	14.55	0
MW-169R	06/14/2013 11:40	4.96	54.8	6.26	0.27	0.564	14.71	0
MW-169R	06/14/2013 11:59	4.81	48.4	6.27	0.27	0.563	15.12	0.0000
MW-169R	06/15/2013 11:59	4.81	48.4	6.27	0.27	0.563	15.12	0
MW-169R	07/31/2013 14:10	0.17	-138	6.28	0.09	1.848	18.58	0.22
MW-169R	07/31/2013 15:05	0.39	-182	6.06	0.11	2.062	15.25	2.70
MW-169R	08/01/2013 10:50	-0.02	-294.00	6.54	0.17	3.148	14.53	10.60
MW-169R	06/23/2014 13:45	0.41	-102.9	6.63	0.71	1.419	25.19	103.80
MW-169R	08/12/2014 13:51	0.92	136	6.59	0.07	1.340	18.27	13.39
MW-169R	08/12/2014 14:50	3.39	160	6.97	0.07	1.356	15.99	85.70
MW-169R	08/26/2014 09:00	1.60	-117.8	6.47	0.52	1.044	16.73	36.40
MW-169R	08/26/2014 12:30	9.44	-83.6	6.60	0.50	1.012	17.20	3.30
MW-169R	10/27/2014 11:00	0.69	-95.3	0.77	0.57	1.146	16.24	3.60
MW-169R	10/27/2014 12:30	0.59	-106.5	6.78	0.54	1.095	17.00	0.0000

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-169R	10/27/2014 14:26	0.05	-100.5	6.74	0.51	1.017	16.14	272.30
MW-169R	11/26/2014 09:30	1.40	-108.8	6.20	0.58	1.153	13.10	10.60
MW-169R	11/26/2014 10:24	0.86	-114.4	6.49	0.56	1.112	12.89	10.00
MW-169R	11/26/2014 10:32	0.79	-112.3	6.50	0.55	1.105	12.74	10.40
MW-169R	01/14/2015 09:15	1.01	-46.3	6.84	0.50	1.000	11.66	3.50
MW-169R	01/14/2015 09:55	0.36	-125.6	6.92	0.49	0.993	12.96	1.80
MW-169R	01/14/2015 12:30	1.23	-74.2	6.95	0.50	1.107	13.43	2.50
MW-169R	04/27/2015 09:45	0.33	-101.7	6.82	0.45	0.910	12.30	4.10
MW-169R	04/27/2015 12:15	4.70	-146.7	6.63	0.49	0.989	13.87	1.10
MW-169R	07/13/2015 13:15	5.47	-40.6	6.57	0.51	1.032	16.10	2.20
MW-169R	07/13/2015 13:30	9.88	-19.8	6.88	0.47	0.915	15.63	2.00
MW-169R	10/13/2015 11:55	4.60	9.9	6.21	0.48	0.972	16.84	3.90
MW-169R	10/13/2015 12:15	3.05	-107.4	6.09	0.41	0.842	16.35	4.90
MW-169R	02/04/2016 14:20	4.01	-34.8	6.69	0.24	0.503	14.09	12
MW-169R	02/04/2016 14:40	3.05	-130	6.87	0.22	0.446	14.22	24.1
MW-169R	05/13/2016 15:25	6.20	77.8	7.52	0.40	0.808	13.77	345.30
MW-169R	05/13/2016 15:35	2.90	12.7	7.12	0.38	0.763	13.82	27.60
MW-169R	08/08/2016 14:20	0.56	-91.7	6.79	0.40	0.820	21.96	7.40
MW-169R	11/04/2016 11:45	1.44	-185.6	7.90	0.48	0.971	18.41	6.10
MW-169R	11/04/2016 11:55	3.36	-118.8	6.89	0.38	0.775	17.16	8.30
MW-169R	05/25/2017 12:00	7.13	-397.20	6.93	0.25	0.521	13.67	148.90
MW-169R	05/25/2017 12:25	3.75	-353.90	6.61	0.38	0.776	13.38	18.71
MW-169R	05/25/2017 14:10	2.56	-202.90	6.62	0.36	0.734	14.94	0.20
MW-169R	11/07/2017 09:30	2.46	-119.60	6.74	0.59	1.180	14.24	3.90
MW-169R	11/07/2017 09:48	6.12	-89.70	6.73	0.40	0.805	15.08	8.20
MW-169R	11/07/2017 10:05	1.26	-101.70	6.76	0.31	0.635	17.23	0.70
MW-169R	05/08/2018 13:25	5.26	-13.10	6.71	0.36	0.736	15.5	34.90
MW-169R	05/08/2018 14:05	4.34	-50.20	7.14	0.36	0.736	14.73	2.10
MW-169R	05/08/2018 14:20	4.38	-51.50	7.15	0.36	0.736	14.64	26.20
MW-169R	12/06/2018 09:25	4.24	-99.40	6.61	0.16	0.338	10.83	15.40
MW-169R	12/06/2018 11:20	3.68	-108.20	6.89	0.18	0.379	12.29	3.30
MW-169R	12/06/2018 11:40	2.95	-97.80	6.86	0.19	0.386	13.04	2.40
MW-169R	04/18/2019 13:50	3.99	-103.1	6.71	NM	0.622	16.03	NM
MW-169R	04/18/2019 14:55	7.14	-74.8	6.81	0.31	0.635	16.24	2.6
MW-169R	10/28/2019 10:15	0.68	-52.8	6.8	NM	0.292	14.09	2.2
MW-169R	10/28/2019 10:20	0.42	-67	6.77	NM	0.302	14.01	2.1
MW-169R	10/28/2019 10:25	0.34	-79.9	6.8	NM	0.306	14.01	2.3
MW-169R	10/28/2019 10:30	0.35	-85.4	6.83	NM	0.31	14.03	2.4
MW-169R	10/28/2019 10:35	0.27	-90.7	6.83	NM	0.316	13.83	2.3
MW-169R	10/28/2019 10:40	0.28	-93.4	6.85	NM	0.322	13.78	2.4
MW-169R	10/28/2019 10:45	0.27	-94.9	6.86	NM	0.326	13.73	2.4
MW-169R	10/28/2019 10:50	0.26	-97	6.88	NM	0.333	13.65	2.3
MW-169R	10/28/2019 10:55	0.26	-98.7	6.89	NM	0.338	13.62	2.2
MW-169R	10/28/2019 11:00	0.25	-99.1	6.9	NM	0.341	13.57	1.9
MW-169R	10/28/2019 12:28	0.13	-102.4	6.93	0.17	0.357	13.06	2.3
MW-169R	10/28/2019 12:45	0.27	-100.6	6.95	0.17	0.36	13.34	10.3
MW-169R	12/17/2019 09:00	1.63	203.7	6.63	NM	0.185	9.44	8.7
MW-169R	12/17/2019 09:05	0.44	98.8	6.68	NM	0.163	11.05	7.8
MW-169R	12/17/2019 09:10	0.32	25.2	6.68	NM	0.158	10.8	9.4
MW-169R	12/17/2019 09:15	0.07	-10.4	6.69	NM	0.16	10.77	11.6
MW-169R	12/17/2019 09:20	0.23	-24.9	6.7	NM	0.163	10.87	12.2
MW-169R	12/17/2019 09:25	0.22	-30.5	6.71	NM	0.154	11.42	13.4
MW-169R	12/17/2019 09:30	0.2	-29	6.71	NM	0.163	10.89	13.4
MW-169R	12/17/2019 09:35	0.19	-28.7	6.71	NM	0.162	11.27	14.3
MW-169R	12/17/2019 09:40	0.2	-28	6.72	NM	0.16	11.29	13.7
MW-169R	12/17/2019 09:45	0.19	-44.8	6.75	NM	0.178	10.51	14.2
MW-169R	12/17/2019 11:01	1.16	-96.3	6.9	0.12	0.249	14.13	3.2
MW-169R	12/17/2019 11:25	0.7	-86.7	6.92	0.12	0.256	13.3	11
MW-169R	04/27/2020 12:25	6.56	-99.4	6.85	NM	0.49	11.11	0.9
MW-169R	04/27/2020 13:30	6.01	-94	6.94	0.28	0.577	13.52	2

Appendix B4 Central Yard
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-169R	06/30/2021 13:15	2.58	-63.4	7.44	0.32	0.652	28.39	6.5
MW-169R	06/30/2021 13:20	1.14	-54.8	6.93	0.26	0.539	22.62	4.2
MW-169R	06/30/2021 13:25	1.28	-50.9	6.88	0.25	0.51	24.08	0.3
MW-169R	06/30/2021 13:30	1.19	-39.7	6.76	0.24	0.504	24.29	0
MW-169R	06/30/2021 13:35	1.02	-27.9	6.62	0.24	0.502	24.53	0
MW-169R	06/30/2021 13:40	1.23	-15.1	6.48	0.24	0.504	23.93	0
MW-169R	06/30/2021 13:45	1.2	-12.3	6.45	0.24	0.509	23.98	0
MW-169R	06/30/2021 13:50	1.18	-11.7	6.43	0.25	0.513	24.05	0
MW-169R	09/30/2021 10:40	1.95	-76.9	7.25	0.18	0.374	19.25	8.6
MW-169R	09/30/2021 10:45	1.14	-74	7.04	0.17	0.362	19.77	6.1
MW-169R	09/30/2021 10:50	0.8	-72.1	6.94	0.17	0.354	19.86	4.1
MW-169R	09/30/2021 10:55	0.54	-71.2	6.89	0.17	0.347	19.67	3.2
MW-169R	09/30/2021 11:00	0.49	-71.3	6.88	0.17	0.347	19.8	3
MW-169R	09/30/2021 11:05	0.46	-70.9	6.9	0.17	0.348	19.7	3
MW-169R	09/30/2021 11:10	0.42	-70.4	6.89	0.17	0.348	19.68	2.8
MW-169R	09/30/2021 11:15	0.4	-71.2	6.88	0.17	0.351	19.77	3.1
MW-169R	09/30/2021 11:20	0.38	-71.1	6.88	0.17	0.354	19.88	3
MW-169R	09/30/2021 11:25	0.37	-70.1	6.87	0.17	0.359	19.78	3
MW-169R	12/15/2021 09:10	0.92	-31.8	6.65	0.16	0.343	15.27	0.7
MW-169R	12/15/2021 09:15	0.57	-38.2	6.68	0.16	0.334	15.33	0.4
MW-169R	12/15/2021 09:20	0.45	-38.5	6.67	0.15	0.32	15.44	0
MW-169R	12/15/2021 09:25	0.4	-43.1	6.64	0.16	0.325	15.62	0
MW-169R	12/15/2021 09:30	0.37	-54.9	6.67	0.17	0.345	15.64	0
MW-169R	12/15/2021 09:35	0.35	-69.1	6.69	0.18	0.375	15.77	0
MW-169R	12/15/2021 09:40	0.33	-80.2	6.7	0.19	0.391	15.8	0
MW-169R	12/15/2021 09:45	0.32	-87.7	6.71	0.19	0.402	15.92	0
MW-169R	12/15/2021 09:50	0.32	-93.2	6.72	0.2	0.414	16	0
MW-169R	12/15/2021 09:55	0.31	-97.1	6.74	0.21	0.425	15.96	0
MW-169R	02/03/2022 13:55	2.54	142.9	6.82	0.17	0.347	12.56	5.8
MW-169R	02/03/2022 14:00	1.45	139.1	6.65	0.16	0.342	12.22	4.8
MW-169R	02/03/2022 14:05	1.14	140.4	6.5	0.16	0.341	12.19	5.2
MW-169R	02/03/2022 14:10	0.96	140.8	6.43	0.16	0.341	12.23	5.2
MW-169R	02/03/2022 14:15	0.9	139.4	6.4	0.16	0.341	12.35	5.5
MW-169R	02/03/2022 14:20	0.82	131.9	6.41	0.16	0.341	12.14	5
MW-169R	02/03/2022 14:25	0.76	125.8	6.4	0.16	0.341	12.12	5
MW-169R	02/03/2022 14:30	0.76	113.9	6.37	0.16	0.341	11.91	5.2
MW-169R	02/03/2022 14:35	0.68	111.4	6.37	0.16	0.341	11.87	6
MW-169R	02/03/2022 14:40	0.68	111	6.36	0.16	0.34	11.84	5.9
MW-170	06/27/2012 08:32	1.5	210	5.83	0.01	0.15237	19.78	11.4
MW-170	06/27/2012 08:35	0.98	212	5.76	0.01	0.15142	18.32	12
MW-170	06/27/2012 08:37	0.8	213	5.74	0.01	0.15094	17.95	11.5
MW-170	06/27/2012 08:39	0.71	213	5.72	0.01	0.15105	18	11.2
MW-170	06/27/2012 08:42	0.63	213	5.72	0.01	0.15059	18.41	11.5
MW-170	06/27/2012 08:44	0.61	212	5.71	0.01	0.15142	18.7	10.9
MW-170	06/27/2012 08:47	0.58	212	5.70	0.01	0.152	18.91	10.53
MW-170	06/27/2012 09:45	1.48	188	6.18	0.01	0.151	14.61	110.30
MW-170	06/28/2012 09:23	4.24	264	4.70	0.11	0.166	16.70	347.00
MW-170	09/10/2012 10:35	3.25	255	4.62	0.0000	0.099	19.73	0.0000
MW-170	09/10/2012 11:19	6.30	248	5.19	0.0000	0.097	17.73	5.00
MW-170	09/11/2012 09:57	4.83	286	4.43	0.0000	0.099	18.06	16.30
MW-170	08/07/2013 13:26	4.71	2.97	131	0.47	40.2712	25.132222	30.133
MW-170	08/07/2013 13:28	3.96	3	210	0.28	22.2471	20.921111	30.127
MW-170	08/07/2013 13:31	4.39	3	197	0.22	18.9154	20.643333	30.123
MW-170	08/07/2013 13:33	4.75	2.97	178	0.21	18.1009	20.498888	30.117
MW-170	08/07/2013 13:36	4.83	2.97	169	0.2	17.9864	20.387777	30.116
MW-170	08/07/2013 13:38	5.01	2.97	157	0.2	18.0967	20.554444	30.115
MW-170	08/07/2013 13:41	4.97	2.97	154	0.19	18.5604	20.498888	30.119
MW-170	08/07/2013 13:43	5.03	3	149	0.19	19.0851	20.743333	30.117
MW-170	08/07/2013 13:45	5.06	2.97	146	0.19	19.3418	21.004444	30.115
MW-170	08/07/2013 13:48	5.02	3	146	0.19	19.09	21.11	30.113

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-170	08/07/2013 13:50	5.04	2.97	142	0.19	17.8508	21.16	30.112
MW-170	08/07/2013 13:53	5.02	3	142	0.19	16.2686	21.193333	30.108
MW-170	08/07/2013 13:55	5.03	3	139	0.19	14.8429	21.198888	30.107
MW-170	08/07/2013 13:58	4.94	2.97	142	0.19	13.6763	20.971111	30.1
MW-170	08/07/2013 14:00	5	3	135	0.19	12.5192	20.91	30.1
MW-170	08/07/2013 14:03	5	3	134	0.18	11.2821	20.76	30.101
MW-170	08/07/2013 14:05	4.99	2.97	132.83	0.18	10.2811	20.621111	30.102
MW-170	08/07/2013 14:08	5.06	2.97	126.07	0.18	9.5871	20.621111	30.103
MW-170	08/07/2013 14:10	5.21	3	114.39	0.18	8.7108	20.632222	30.104
MW-170	08/07/2013 14:12	5.22	2.97	113.97	0.18	8.2368	20.76	30.106
MW-170	08/07/2013 14:15	5.24	3	111.91	0.18	8.1309	20.882222	30.104
MW-170R	12/10/2015 09:14	2.26	26	6.57	0.0601	0.0012	12.54	430.3
MW-170R	12/10/2015 09:17	0.9	4	6.49	0.0575	0.0012	12.87	316.3
MW-170R	12/10/2015 09:19	0.71	-1	6.45	0.0536	0.0011	12.9	274.8
MW-170R	12/10/2015 09:22	0.67	-3	6.36	0.0535	0.0011	12.96	213.8
MW-170R	12/10/2015 09:25	0.64	-5	6.31	0.0536	0.0011	13	199.4
MW-170R	12/10/2015 09:27	0.61	-8	6.26	0.0537	0.0011	13.03	175.8
MW-170R	12/10/2015 09:30	0.59	-12	6.25	0.0549	0.0011	13.11	142.2
MW-170R	12/10/2015 09:32	0.6	-15	6.23	0.0553	0.0011	13.06	172.7
MW-170R	12/10/2015 09:35	0.58	-18	6.23	0.0564	0.0011	13.07	89.8
MW-170R	12/10/2015 09:38	0.57	-21	6.23	0.0570	0.0011	13.02	87.4
MW-170R	12/10/2015 09:40	0.54	-26	6.24	0.0584	0.0012	13.04	75.7
MW-170R	12/10/2015 09:43	0.52	-26	6.24	0.0582	0.0012	13.14	74.3
MW-170R	12/10/2015 09:46	0.5	-27	6.25	0.0586	0.0012	13.02	63.5
MW-170R	12/10/2015 09:48	0.48	-29	6.25	0.0596	0.0012	13.02	59.2
MW-170R	12/10/2015 09:51	0.47	-30	6.26	0.0600	0.0012	13.1	56.2
MW-170R	12/10/2015 09:54	0.48	-32	6.26	0.0602	0.0012	13.05	54.3
MW-170R	12/11/2015 09:27	1.08	41	6.83	0.03	0.516	14.14	364.1
MW-170R	12/11/2015 10:20	2.32	-44	7.1	0.07	1.298	14.09	1234.9
MW-170R	03/16/2016 08:50	4.000	102.000	5.280	0.045	0.911	10.130	168.600
MW-170R	03/16/2016 08:52	2.040	110.000	4.810	0.047	0.966	9.050	58.100
MW-170R	03/16/2016 08:55	1.620	104.000	4.870	0.048	0.984	9.140	29.000
MW-170R	03/16/2016 08:57	1.500	100.000	4.940	0.050	1.008	9.120	21.300
MW-170R	03/16/2016 09:00	1.460	100.000	4.940	0.051	1.028	9.150	20.700
MW-170R	03/16/2016 09:03	1.440	97.000	4.990	0.050	1.014	9.170	19.000
MW-170R	03/16/2016 09:05	1.440	93.000	5.040	0.050	1.006	9.210	14.800
MW-170R	03/16/2016 09:08	1.430	91.000	5.090	0.049	1.003	9.250	14.200
MW-170R	03/16/2016 09:11	1.360	88.000	5.140	0.050	1.005	9.240	12.400
MW-170R	03/16/2016 09:13	1.290	83.000	5.190	0.049	1.005	9.340	11.900
MW-170R	03/16/2016 09:16	1.180	80.000	5.220	0.049	1.004	9.480	11.100
MW-170R	03/16/2016 09:19	1.160	78.000	5.250	0.049	1.002	9.640	11.200
MW-170R	03/16/2016 09:21	1.070	74.000	5.310	0.049	1.004	9.610	10.500
MW-170R	03/16/2016 09:24	1.000	75.000	5.300	0.049	1.002	9.720	10.700
MW-170R	03/16/2016 09:27	0.950	73.000	5.330	0.049	1.003	9.730	9.800
MW-170R	03/16/2016 09:29	0.870	70.000	5.360	0.049	1.004	9.710	9.300
MW-170R	03/16/2016 09:32	0.770	68.000	5.390	0.050	1.009	9.640	6.300
MW-170R	03/16/2016 09:35	0.690	63.000	5.420	0.050	1.006	9.730	5.800
MW-170R	03/16/2016 09:37	0.620	57.000	5.470	0.049	1.002	9.850	4.300
MW-170R	03/16/2016 09:40	0.560	53.000	5.510	0.049	1.000	9.950	4.700
MW-170R	03/17/2016 09:45	0.42	-36	5.62	0.02	0.418	8.58	275.60
MW-170R	03/17/2016 10:06	1.75	-75	6.01	0.05	1.102	9.43	1054.30
MW-170R	09/15/2016 10:43	0.09	70	6.12	0.12	2.318	18.83	216.70
MW-170R	09/15/2016 14:26	0.29	-110	7.29	0.15	2.884	21.17	124.90
MW-170R	04/04/2017 08:42	9.85	284	6.68	0.0363	0.0074	10.8	276.4
MW-170R	04/04/2017 08:44	6.85	339	5.11	0.0585	0.0118	10	216.3
MW-170R	04/04/2017 08:47	6.34	352	4.26	0.0620	0.0124	10.15	137.2
MW-170R	04/04/2017 08:49	6.03	357	4.03	0.0630	0.0126	10.02	94.2
MW-170R	04/04/2017 08:52	5.87	363	3.94	0.0613	0.0123	10.04	79.6
MW-170R	04/04/2017 08:55	5.73	366	3.91	0.0592	0.0119	10.04	55.6
MW-170R	04/04/2017 08:57	5.63	369	3.91	0.0579	0.0117	10.06	95

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-170R	04/04/2017 09:00	5.65	366	3.96	0.0571	0.0115	9.95	45
MW-170R	04/04/2017 09:03	5.47	361	4.02	0.0569	0.0115	9.92	39.2
MW-170R	04/04/2017 09:05	5.37	357	4.08	0.0576	0.0116	9.72	30.5
MW-170R	04/04/2017 09:08	5	355	4.12	0.0583	0.0117	9.87	30.1
MW-170R	04/04/2017 09:11	4.92	350	4.16	0.0584	0.0118	10.06	32.7
MW-170R	04/05/2017 09:26	4.58	181	4.98	0.02	0.476	9.10	91.00
MW-170R	04/05/2017 09:37	4.70	142	7.22	0.06	1.221	8.44	227.10
MW-170R	09/11/2017 10:01	3.2	150	6.28	0.0550	0.0110	18.12	15
MW-170R	09/11/2017 10:04	0.91	146	5.28	0.0633	0.0126	18.31	12.5
MW-170R	09/11/2017 10:07	0.54	165	4.84	0.0695	0.0137	18.32	12.5
MW-170R	09/11/2017 10:10	0.43	165	4.81	0.0734	0.0145	18.36	13.1
MW-170R	09/11/2017 10:12	0.37	157	4.91	0.0769	0.0151	18.35	13.2
MW-170R	09/11/2017 10:15	0.34	146	5.03	0.0787	0.0155	18.4	14.5
MW-170R	09/11/2017 10:18	0.31	137	5.12	0.0803	0.0158	18.44	14.1
MW-170R	09/11/2017 10:21	0.27	128	5.21	0.0822	0.0161	18.46	14.9
MW-170R	09/11/2017 10:24	0.26	120	5.28	0.0841	0.0165	18.52	13.6
MW-170R	09/11/2017 10:27	0.26	113	5.34	0.0859	0.0168	18.55	14.4
MW-170R	09/11/2017 10:29	0.24	107	5.4	0.0880	0.0172	18.56	14.1
MW-170R	09/11/2017 10:32	0.24	103	5.43	0.0893	0.0175	18.59	13.6
MW-170R	09/11/2017 10:35	0.23	99	5.46	0.0908	0.0177	18.63	15.1
MW-170R	11/01/2017 09:27	3.48	76.00	7.87	1.36	1.081	17.01	18.40
MW-170R	11/01/2017 13:22	0.42	163.00	6.00	1.69	3.203	17.09	13.40
MW-170R	04/24/2018 08:34	5.07	119	6.37	0.0177	0.3673	13.44	47.1
MW-170R	04/24/2018 08:37	2.62	35	6.15	0.0180	0.3735	12.85	29
MW-170R	04/24/2018 08:39	2.08	7	6.13	0.0199	0.4129	15.22	22.5
MW-170R	04/24/2018 08:42	1.88	-5	6.14	0.0189	0.3908	16.94	24.9
MW-170R	04/24/2018 08:44	1.84	-12	6.16	0.0183	0.3792	18.29	25.9
MW-170R	04/24/2018 08:46	1.81	-12	6.16	0.0186	0.3855	21.31	22.9
MW-170R	04/24/2018 08:49	1.87	-11	6.19	0.0163	0.3374	23.59	23.8
MW-170R	04/24/2018 08:51	1.8	-15	6.2	0.0136	0.2831	25.19	22.9
MW-170R	04/24/2018 08:54	1.73	-17	6.21	0.0116	0.2425	26.59	24
MW-170R	04/24/2018 08:56	1.68	-17	6.23	0.0098	0.2068	27.8	24.9
MW-170R	04/24/2018 08:58	1.68	-16	6.23	0.0074	0.1571	28.86	24.6
MW-170R	04/24/2018 09:01	4.28	-7	6.37	0.0167	0.3459	19.55	46
MW-170R	04/24/2018 09:03	6.94	-53	6.25	0.0168	0.3506	13.39	27.9
MW-170R	04/24/2018 09:06	4.48	-42	6.16	0.0174	0.3626	14.48	42.6
MW-170R	04/24/2018 09:08	3.49	-15	6.19	0.0174	0.3607	16.61	43.2
MW-170R	04/24/2018 09:10	4.3	-2	6.25	0.0175	0.3618	17.95	43.7
MW-170R	04/24/2018 09:13	5.55	4	6.32	0.0175	0.3627	19.08	47.1
MW-170R	04/24/2018 09:15	6.48	5	6.39	0.0175	0.3628	19.92	56.9
MW-170R	04/24/2018 09:18	2.99	-39	6.25	0.0174	0.3629	12.94	48.3
MW-170R	04/24/2018 09:20	2.29	-49	6.18	0.0176	0.3677	12.13	36.5
MW-170R	04/24/2018 09:22	2.14	-49	6.16	0.0176	0.3665	11.94	33.7
MW-170R	04/25/2018 09:22	2.14	-49.00	6.16	0.02	0.365	12.12	33.67
MW-170R	04/25/2018 09:35	8.37	-6.00	6.09	0.02	0.357	9.87	47.20
MW-170R	04/25/2018 09:45	11.32	49.00	6.02	0.02	0.398	9.78	487.10
MW-170R	10/16/2018 09:50	0.40	136.90	5.19	0.17	0.357	17.83	1.80
MW-170R	10/16/2018 10:00	0.45	126.60	5.33	0.18	0.363	15.65	1.30
MW-170R	10/16/2018 10:20	0.12	103.00	5.67	0.19	0.386	18.27	1.10
MW-170R	03/28/2019 13:20	0.92	121.7	6.34	NM	0.185	9.2	12.4
MW-170R	03/28/2019 13:38	5.37	134.4	6.26	0.13	0.279	8.61	1166.6
MW-170R	09/16/2019 13:39	1.09	188.9	6.23	NM	0.287	22.55	15.1
MW-170R	09/16/2019 13:44	0.36	198.8	5.85	NM	0.278	21.54	7.1
MW-170R	09/16/2019 13:49	0.28	198.8	9.87	NM	0.273	21.1	2.2
MW-170R	09/16/2019 13:54	0.25	199.4	5.85	NM	0.264	20.64	1.6
MW-170R	09/16/2019 13:59	0.22	198.8	5.85	NM	0.253	20.49	1.1
MW-170R	09/16/2019 14:04	0.2	198.4	5.87	NM	0.243	20.32	0.5
MW-170R	09/16/2019 14:09	0.21	200.9	5.83	NM	0.236	20.08	0.1
MW-170R	09/16/2019 14:14	0.2	201.9	5.81	NM	0.231	19.81	0.2
MW-170R	09/16/2019 14:19	0.18	201.1	5.84	NM	0.227	19.8	0.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-170R	09/16/2019 14:24	0.18	200.5	5.86	NM	0.225	20.13	0.6
MW-170R	09/16/2019 15:04	0.18	215.8	5.82	0.1	0.219	19.89	1
MW-170R	09/16/2019 15:05	0.18	215.8	5.82	0.1	0.219	19.89	1
MW-170R	09/16/2019 15:38	1.41	219.7	5.82	0.11	0.229	20.15	68.7
MW-170R	04/30/2020 09:45	0.28	0.2	5.77	NM	0.277	11.05	6.4
MW-170R	04/30/2020 10:00	0.27	-5.5	5.82	0.13	0.279	10.98	4.8
MW-170R	10/15/2020 09:40	NM	NM	NM	NM	NM	NM	0
MW-170R	10/29/2020 08:35	5.52	96.7	5.97	0.16	0.325	14.74	15.6
MW-170R	10/29/2020 08:40	3.25	121.6	5.81	0.16	0.335	14.72	17.1
MW-170R	10/29/2020 08:45	2.19	134.8	5.72	0.17	0.348	14.88	7.5
MW-170R	10/29/2020 08:50	1.93	131.2	5.74	0.16	0.343	15.03	3.1
MW-170R	10/29/2020 08:55	1.6	122.8	5.8	0.16	0.329	15.17	0
MW-170R	10/29/2020 09:00	1.45	118.3	5.83	0.16	0.323	15.25	0
MW-170R	10/29/2020 09:05	1.31	109.1	5.91	0.16	0.323	15.2	0
MW-170R	10/29/2020 09:10	1.22	96.3	6.01	0.16	0.326	15.17	0
MW-170R	10/29/2020 09:15	1.2	95.3	6.02	0.16	0.326	15.18	0
MW-170R	10/29/2020 09:20	1.2	94.6	6.03	0.16	0.326	15.15	0
MW-170R	10/29/2020 09:30	5.05	63.7	6.33	0.19	0.393	15.84	0
MW-170R	10/29/2020 09:40	4.61	63.9	6.35	0.2	0.41	15.55	0
MW-170R	06/21/2021 10:15	4.46	-4.2	7.87	0.14	0.33	23.42	239.8
MW-170R	06/21/2021 10:20	1.48	137.2	5.13	0.14	0.285	22.34	137.9
MW-170R	06/21/2021 10:25	1.47	135.6	5.18	0.13	0.28	22.9	103.5
MW-170R	06/21/2021 10:30	1.3	128.6	5.4	0.13	0.278	24.4	77.1
MW-170R	06/21/2021 10:35	1.26	135.3	5.29	0.13	0.275	23.97	61.8
MW-170R	06/21/2021 10:40	1.31	154.5	5.13	0.13	0.267	22.67	44.7
MW-170R	06/21/2021 10:45	1.25	166.7	5.02	0.13	0.267	21.2	52.2
MW-170R	06/21/2021 10:50	1.22	166.6	5.05	0.13	0.267	21.07	51.3
MW-170R	06/21/2021 10:55	1.2	164.5	5.08	0.13	0.269	21.12	49.5
MW-170R	09/30/2021 09:45	3.22	93.3	5.12	0.11	0.233	19.67	40.7
MW-170R	09/30/2021 09:50	1.44	95.4	5.09	0.09	0.201	19.85	46
MW-170R	09/30/2021 09:55	1.04	94.5	5.13	0.09	0.199	19.82	39.5
MW-170R	09/30/2021 10:00	0.82	90.8	5.21	0.09	0.201	19.63	70.2
MW-170R	09/30/2021 10:05	0.74	83.3	5.3	0.1	0.208	19.42	24.3
MW-170R	09/30/2021 10:10	0.74	75.2	5.38	0.1	0.215	19.35	21
MW-170R	09/30/2021 10:15	0.9	58.9	5.44	0.11	0.223	19.35	13.8
MW-170R	09/30/2021 10:20	1.03	60.3	5.52	0.11	0.233	19.62	11.6
MW-170R	09/30/2021 10:25	1.1	53.2	5.59	0.11	0.24	19.68	10.7
MW-170R	09/30/2021 10:30	1.21	46.9	5.63	0.12	0.246	19.65	9.3
MW-170R	12/30/2021 08:05	4.89	-7.2	6.46	0.18	0.367	11.91	198.9
MW-170R	12/30/2021 08:10	1.13	-14.6	5.64	0.14	0.291	11.98	166.6
MW-170R	12/30/2021 08:15	0.57	-30.8	5.66	0.14	0.289	11.89	71.7
MW-170R	12/30/2021 08:20	0.44	-40.6	5.76	0.14	0.289	11.84	29.9
MW-170R	12/30/2021 08:25	0.37	-45.3	5.79	0.14	0.291	11.89	16
MW-170R	12/30/2021 08:30	0.32	-48.9	5.81	0.14	0.295	11.88	12.9
MW-170R	12/30/2021 08:35	0.28	-51.7	5.84	0.14	0.301	11.91	9.7
MW-170R	12/30/2021 08:40	0.27	-54.4	5.87	0.15	0.307	11.8	6.7
MW-170R	12/30/2021 08:45	0.24	-56.8	5.89	0.15	0.315	11.93	5.5
MW-170R	12/30/2021 08:50	0.23	-59.6	5.92	0.16	0.323	11.96	5.9
MW-170R	02/17/2022 11:10	8.37	163.2	5.71	0.13	0.297	13.62	116.4
MW-170R	02/17/2022 11:15	9.73	120.4	5.57	0.14	0.245	12.26	28
MW-170R	02/17/2022 11:20	8.99	115.5	5.59	0.13	0.263	12.2	23.5
MW-170R	02/17/2022 11:25	9.58	49.4	5.81	0.14	0.287	12.47	9.6
MW-170R	02/17/2022 11:30	7.57	43.4	5.79	0.15	0.3	12.69	10
MW-170R	02/17/2022 11:35	8.78	36.7	5.9	0.15	0.313	13.17	13.8
MW-170R	02/17/2022 11:40	9.29	30.6	5.97	0.15	0.306	13.18	12.3
MW-170R	02/17/2022 11:45	9.02	27.7	6	0.16	0.305	13.2	6.7
MW-170R	02/17/2022 11:50	8.27	27.6	6.03	0.15	0.259	13.01	6.5
MW-170R	02/17/2022 11:55	8.11	26.4	6.05	0.16	0.332	13.08	7.6
MW-183	06/18/2012 11:00	1.57	54	5.99	0.07	1.37309	19.27	32.5
MW-183	06/18/2012 11:02	0.65	46	6.01	0.07	1.37888	19	12.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-183	06/18/2012 11:04	0.43	43	6	0.07	1.37223	19.24	13.6
MW-183	06/18/2012 11:07	0.36	41	5.98	0.07	1.37431	19.55	13.3
MW-183	06/18/2012 11:09	0.31	40	5.97	0.07	1.37426	19.74	14.8
MW-183	06/18/2012 11:11	0.29	39	5.96	0.07	1.3804	19.52	11.8
MW-183	06/18/2012 11:13	0.28	39	5.96	0.07	1.38186	19.31	13.9
MW-183	06/18/2012 11:15	0.25	38	5.97	0.07	1.37422	19.45	13.4
MW-183	06/18/2012 11:17	0.24	38	5.97	0.07	1.37114	19.66	13.5
MW-183	06/18/2012 11:20	0.24	38	5.96	0.07	1.37642	19.79	15
MW-183	06/18/2012 11:22	0.23	37	5.96	0.07	1.37155	19.89	15.5
MW-183	06/18/2012 11:24	0.23	37	5.97	0.07	1.37105	20.12	16.8
MW-183	06/18/2012 11:26	0.22	36	5.96	0.07	1.37368	20.18	16.4
MW-183	06/18/2012 11:27	0.22	36	5.96	0.07	1.374	20.18	16.41
MW-183	06/18/2012 12:02	4.41	111	6.22	0.10	1.895	17.24	2136.20
MW-183	06/19/2012 09:45	0.40	59	5.29	0.10	1.460	15.50	20.46
MW-183	09/15/2016 09:52	2.14	339	4.58	0.20	3.830	21.18	62.60
MW-183	09/15/2016 11:46	3.56	-86	6.64	0.26	4.733	21.09	197.90
MW-183	06/15/2017 10:55	6.28	213.00	4.17	0.07	1.420	15.06	21.30
MW-183	06/15/2017 14:49	0.31	31.00	5.37	0.22	4.165	21.51	4.74
MW-183	06/15/2017 15:22	1.88	-92.00	7.97	0.33	6.060	15.46	2704.30
MW-183	06/13/2018 14:21	5.67	-116	6.75	0.155	2.9379	21.2	43.1
MW-183	06/13/2018 14:23	1.66	-69	6.21	0.160	3.0326	18.29	44.5
MW-183	06/13/2018 14:25	1.11	-46	5.89	0.159	3.0302	18.12	24.5
MW-183	06/13/2018 14:27	0.92	-30	5.66	0.160	3.0482	18.16	22.4
MW-183	06/13/2018 14:30	0.8	-18	5.49	0.160	3.0374	18.15	25.8
MW-183	06/13/2018 14:32	0.73	-10	5.38	0.160	3.0388	18.3	23
MW-183	06/13/2018 14:34	0.7	-4	5.3	0.160	3.0403	18.37	21.1
MW-183	06/13/2018 14:36	0.69	1	5.23	0.160	3.0341	18.4	19.1
MW-183	06/13/2018 14:38	0.67	5	5.19	0.160	3.0316	18.41	16.7
MW-183	06/13/2018 14:40	0.64	8	5.15	0.160	3.0462	18.6	18.4
MW-183	06/13/2018 14:43	0.61	11	5.12	0.160	3.0418	18.6	20.1
MW-183	06/13/2018 14:45	0.61	12	5.11	0.160	3.0378	18.68	22.5
MW-183	06/13/2018 14:47	0.61	14	5.09	0.160	3.0444	18.62	19.5
MW-183	06/13/2018 14:49	0.59	15	5.07	0.161	3.0487	18.65	19.2
MW-183	06/13/2018 14:51	0.59	17	5.05	0.160	3.0429	18.62	19.8
MW-183	06/14/2018 14:20	3.15	261.00	3.71	0.07	1.437	16.22	33.20
MW-183	06/14/2018 14:51	0.59	17.00	5.05	0.16	3.031	18.8	19.84
MW-183	06/14/2018 15:22	4.76	-109.00	7.08	0.17	3.262	15.47	211.00
MW-183	06/14/2019 09:25	0.72	79.1	7.31	NM	1.419	15.84	5
MW-183	06/14/2019 10:05	4.31	86.4	9.38	NM	1.677	16.32	27.8
MW-183	06/14/2019 10:10	1.38	32.5	7.8	NM	1.68	16.64	0.8
MW-183	06/14/2019 10:15	0.89	16.7	7.43	NM	1.669	16.88	1
MW-183	06/14/2019 10:20	0.79	20.3	6.9	NM	1.661	16.84	1.1
MW-183	06/14/2019 10:25	0.68	34.5	6.23	NM	1.65	16.85	1.8
MW-183	06/14/2019 10:30	0.62	50.7	6.64	NM	1.643	16.94	0.1
MW-183	06/14/2019 10:35	0.57	68.9	6.92	NM	1.136	16.99	0.5
MW-183	06/14/2019 10:37	2.37	113.5	5.92	0.53	1.442	15.88	50.5
MW-183	06/14/2019 10:40	0.54	28.3	6.91	NM	16.06	0.82	3.6
MW-183	06/14/2019 10:45	1.1	10.5	7.24	NM	1.582	15.74	5.4
MW-183	06/14/2019 10:50	0.72	79.1	7.31	NM	1.419	15.84	5
MW-183	06/14/2019 10:55	4.17	111.3	6.18	0.78	1.532	18.3	19.1
MW-183	06/12/2020 12:40	2.73	133	6.97	0.43	0.884	20.01	33.4
MW-183	06/12/2020 12:45	1.84	164.8	5.39	0.43	0.87	22.27	17.9
MW-183	06/12/2020 12:50	1.77	178.2	4.86	0.42	0.863	22.96	18.8
MW-183	06/12/2020 12:55	1.66	196.8	4.55	0.42	0.851	22.68	13.3
MW-183	06/12/2020 13:00	1.55	208.7	4.35	0.41	0.839	22.66	14.5
MW-183	06/12/2020 13:05	1.47	216.7	4.23	0.41	0.831	22.09	14.5
MW-183	06/12/2020 13:10	1.4	221.5	4.24	0.41	0.832	22.67	14.3
MW-183	06/12/2020 13:15	1.34	226	4.27	0.41	0.826	22.37	14.1
MW-183	06/12/2020 14:40	535	193.6	6.04	0.47	0.964	20.74	9.7
MW-183	06/12/2020 14:55	3.44	182.8	6.03	0.44	0.896	18.87	145.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-183	06/28/2021 12:25	1.48	19.6	7.42	0.85	1.731	27.09	231.7
MW-183	06/28/2021 12:30	7.38	146.9	5.07	0.81	1.606	20.23	201.9
MW-183	06/28/2021 12:35	2.43	130.6	4.72	0.81	1.606	22.85	220.5
MW-183	06/28/2021 12:40	1.96	130.4	4.7	0.82	1.617	23.28	197.5
MW-183	06/28/2021 12:45	1.55	126.4	4.67	0.82	1.624	23.65	173.1
MW-183	06/28/2021 12:50	1.48	131.7	4.61	0.82	1.623	23.76	189.3
MW-183	06/28/2021 12:55	1.45	136.2	4.52	0.81	1.603	22.77	162.7
MW-183	06/28/2021 13:00	1.4	137.2	4.49	0.8	1.588	22.75	138.8
MW-183	06/28/2021 13:05	1.35	144.9	4.45	0.8	1.587	23.65	118.6
MW-183	06/28/2021 13:10	1.33	145.6	4.42	0.8	1.583	23.59	115.6
MW-183	06/28/2021 13:15	1.3	145.9	4.42	0.8	1.582	23.55	113.4
MW-183	10/22/2021 11:15	1.17	108.2	5.45	0.55	1.11	22.08	3.7
MW-183	10/22/2021 11:20	-0.74	184.9	5.07	0.55	1.113	21.83	0.9
MW-183	10/22/2021 11:25	0.65	228.9	4.75	0.51	1.039	22.44	-4
MW-183	10/22/2021 11:30	48.3	236.3	4.71	0.5	1.022	22.44	-4.2
MW-183	10/22/2021 11:35	0.68	255	4.62	0.45	0.91	22.54	-4
MW-183	10/22/2021 11:40	0.75	260.4	4.61	0.42	0.857	22.53	-4.7
MW-183	10/22/2021 11:45	0.82	259.1	4.62	0.41	0.835	22.4	-5.1
MW-183	10/22/2021 11:50	0.88	258.4	4.64	0.41	0.83	22.49	-5.2
MW-183	10/22/2021 11:55	1.01	249.8	4.7	0.4	0.811	22.55	-5.5
MW-184	06/26/2012 10:07	0.14	-75	7.46	0.12	2.389	17.21	2.35
MW-184	06/26/2012 10:34	1.31	-41	7.71	0.12	2.377	15.88	10.00
MW-184	06/27/2012 09:02	0.0000	-114	6.70	0.10	2.720	15.60	258.00
MW-184	06/14/2013 14:39	0.09	-78.2	6.53	NM	2.287	18.29	-6.6
MW-184	06/14/2013 15:20	0.08	-77.8	6.46	NM	2.267	18.13	-7.4
MW-184	06/14/2013 15:50	0.07	-85.1	6.46	NM	2.284	20.04	-4.30
MW-184	06/16/2013 15:50	0.07	-85.1	6.46	NM	2.284	20.04	-4.3
MW-185	06/18/2012 14:43	2.66	-73	10.31	0.03	0.56206	21.4	79.8
MW-185	06/18/2012 14:48	1.52	-123	10.55	0.03	0.56449	17.07	17
MW-185	06/18/2012 14:53	1.34	-144	10.61	0.03	0.56387	17.04	16.5
MW-185	06/18/2012 14:57	1.22	-155	10.65	0.03	0.57012	17.45	16.4
MW-185	06/18/2012 15:02	1.16	-160	10.67	0.03	0.57377	17.93	17.6
MW-185	06/18/2012 15:07	1.14	-162	10.68	0.03	0.57562	17.61	18.3
MW-185	06/18/2012 15:11	1.16	-161	10.69	0.03	0.57569	17.55	19.8
MW-185	06/18/2012 15:16	1.13	-158	10.69	0.03	0.57221	17.63	21.2
MW-185	06/18/2012 15:21	1.12	-155	10.69	0.03	0.57832	17.82	20.9
MW-185	06/19/2012 11:05	0.56	-31	8.82	0.0000	0.507	14.40	96.90
MW-185	06/14/2013 14:49	4.4	87.5	9.81	0.21	0.442	17.88	0
MW-185	06/14/2013 15:58	5.23	38.9	9.96	0.24	0.493	16.53	23.3
MW-185	06/14/2013 16:05	4.77	28.3	9.95	0.24	0.492	16.84	31.60
MW-185	06/15/2013 16:05	4.77	28.3	9.95	0.24	0.492	16.84	31.6
MW-185	07/31/2013 11:47	0.25	-247	9.52	0.08	1.585	19.28	3.62
MW-185	07/31/2013 12:22	0.51	-173	8.87	0.08	1.506	15.86	37.40
MW-185	08/01/2013 10:14	5.20	-160	8.88	0.13	2.469	14.66	23.70
MW-185	10/21/2015 11:00	9.04	-24	7.44	0.30	0.536	20.66	0.0000
MW-185	10/21/2015 11:10	7.49	-97	8.23	0.20	0.442	20.64	0.0000
MW-185	12/02/2015 14:31	3.41	-206	8.47	0.03	0.686	12.11	993.4
MW-185	02/09/2016 10:45	5.47	-71.3	8.76	0.34	0.694	12.1	124.2
MW-185	02/09/2016 10:55	4.4	-74.7	9.52	0.24	0.497	12.96	131.6
MW-185	05/13/2016 12:15	5.52	112.8	9.66	0.43	0.868	15.11	68.10
MW-185	05/13/2016 12:35	3.55	-167.3	10.06	0.41	0.838	14.76	49.00
MW-185	11/04/2016 13:55	0.63	-102	9.63	0.33	0.732	14.02	12.30
MW-185	11/04/2016 14:20	1.06	-113.00	9.04	0.43	0.868	13.97	36.30
MW-185	05/24/2017 09:30	5.53	201.50	9.17	0.20	0.409	14.4	8.70
MW-185	11/10/2017 14:15	4.15	-145.70	10.33	0.38	0.769	12.82	21.30
MW-185	11/10/2017 14:40	4.95	-155.80	10.30	0.37	0.748	12.98	11.90
MW-185	11/10/2017 14:50	5.40	-150.40	10.60	0.25	0.512	14.27	11.10
MW-185	05/10/2018 09:05	5.17	-17.60	10.17	0.33	0.688	14.44	6.30
MW-185	05/10/2018 09:20	5.05	37.90	10.08	0.23	0.478	14.16	10.60
MW-185	05/10/2018 13:35	0.02	186.70	9.49	0.21	0.436	15.18	0.0000

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Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-185	12/07/2018 09:10	2.82	-43.40	9.91	0.11	0.235	11.44	5.10
MW-185	12/07/2018 09:25	3.50	30.70	9.64	0.11	0.235	12.44	14.50
MW-185	12/07/2018 13:25	3.48	-81.50	10.79	0.14	0.293	11.54	7.10
MW-185	04/19/2019 08:25	5.05	-27.66	9.84	0.47	0.943	15.43	581.10
MW-185	04/19/2019 08:50	3.98	46.10	9.75	0.24	0.492	15.55	28.00
MW-185	04/19/2019 09:55	6.50	14.00	9.85	0.22	0.455	13.13	2.70
MW-185	10/24/2019 08:30	2.62	174.3	9.22	NM	0.382	12.65	0.6
MW-185	10/24/2019 08:35	0.87	146.9	9.55	NM	0.273	13.47	0.4
MW-185	10/24/2019 08:40	0.7	113	9.72	NM	0.263	13.67	0.3
MW-185	10/24/2019 08:45	8.19	187.8	8.88	0.25	0.508	14.19	4.9
MW-185	10/24/2019 08:50	0.64	68.3	9.81	NM	0.265	13.52	0.4
MW-185	10/24/2019 08:55	0.62	52.3	9.84	NM	0.263	13.48	0.3
MW-185	10/24/2019 09:00	0.59	35.5	9.86	NM	0.261	13.56	0.3
MW-185	10/24/2019 09:05	0.56	3.7	9.88	NM	0.259	13.71	0.2
MW-185	10/24/2019 09:10	0.55	-22.5	9.81	NM	0.259	13.84	0.2
MW-185	10/24/2019 09:15	0.52	-48.9	9.93	NM	0.259	13.89	0.5
MW-185	10/24/2019 13:00	8.19	187.8	8.88	0.25	0.508	14.19	4.9
MW-185	10/24/2019 13:10	4.97	174.6	9.91	0.11	0.228	13.98	20
MW-185	12/16/2019 11:50	4.17	71.6	9.37	NM	0.216	10.16	8.9
MW-185	12/16/2019 11:55	0.42	48.6	9.63	NM	0.202	12.15	6.3
MW-185	12/16/2019 12:00	0.25	42	9.6	NM	0.203	12.63	8
MW-185	12/16/2019 12:05	0.22	38	9.6	NM	0.203	12.65	8.6
MW-185	12/16/2019 12:10	0.2	36.6	9.6	NM	0.196	12.37	9.6
MW-185	12/16/2019 12:15	0.22	34.3	9.6	NM	0.198	12.4	10.6
MW-185	12/16/2019 12:20	0.21	33	9.6	NM	0.201	12.33	10
MW-185	12/16/2019 12:25	0.22	31.8	9.6	NM	0.2	12.52	11.5
MW-185	12/16/2019 12:30	0.26	31.7	9.6	NM	0.199	12.08	12.2
MW-185	12/16/2019 12:35	0.3	31	9.59	NM	0.198	12.3	12.5
MW-185	12/17/2019 11:40	1.49	77.8	8.14	0.05	0.106	11.26	330
MW-185	12/17/2019 11:50	1.29	65.6	8.18	0.02	0.037	9.08	152.3
MW-185	04/30/2020 09:35	6.3	124.8	9.56	NM	0.328	12.9	9.7
MW-185	05/01/2020 09:00	6.44	61.9	9.45	0.25	0.516	13.99	15.3
MW-185	06/21/2021 10:00	6.27	129.4	8.85	0.21	0.446	15.9	16.3
MW-185	06/21/2021 10:05	4.98	137.7	8.75	0.21	0.43	16.58	20.9
MW-185	06/21/2021 10:10	4.71	152	7.7	0.19	0.394	16.52	18.7
MW-185	06/21/2021 10:15	4.59	161	7.06	0.19	0.391	16.38	16.2
MW-185	06/21/2021 10:20	4.52	162	6.91	0.19	0.386	16.47	15
MW-185	06/21/2021 10:25	4.48	160.1	7	0.18	0.381	16.35	13.2
MW-185	06/21/2021 10:30	4.45	147.2	7.92	0.18	0.376	16.57	11.2
MW-185	06/21/2021 10:35	4.37	144	8.29	0.18	0.375	16.42	10.9
MW-185	06/21/2021 10:40	4.37	140.3	8.64	0.18	0.375	16.24	11.2
MW-185	06/21/2021 10:45	4.32	137.9	8.65	0.18	0.373	16.26	10.1
MW-185	09/24/2021 08:40	4.41	108.6	9.52	0.19	0.404	15.9	2.5
MW-185	09/24/2021 08:45	0.78	132.5	9.24	0.19	0.397	14.93	1
MW-185	09/24/2021 08:50	0.91	130.1	9.29	0.19	0.394	14.99	0
MW-185	09/24/2021 08:55	0.85	126.4	9.35	0.19	0.393	15.13	0
MW-185	09/24/2021 09:00	0.9	123.5	9.38	0.19	0.391	15.29	0
MW-185	09/24/2021 09:05	0.92	120	9.41	0.19	0.39	15.45	0
MW-185	09/24/2021 09:10	0.95	117.1	9.45	0.19	0.388	15.6	0
MW-185	10/22/2021 10:40	3.26	-14.9	9.75	0.2	0.419	16.17	5.6
MW-185	10/22/2021 10:45	2.63	-37.1	9.75	0.2	0.417	16.55	5.4
MW-185	10/22/2021 10:50	2.54	-39	9.72	0.2	0.416	16.71	4.1
MW-185	10/22/2021 10:55	2.52	-38.8	9.71	0.2	0.416	16.73	3.7
MW-185	10/22/2021 11:00	2.47	-36.4	9.67	0.2	0.415	16.87	3.5
MW-185	10/22/2021 11:05	2.05	-60.3	9.79	0.2	0.419	16.68	5.9
MW-185	10/22/2021 11:10	1.46	-66.8	9.79	0.2	0.42	16.31	6.7
MW-185	10/22/2021 11:15	1.33	-73.1	9.79	0.2	0.42	16.18	5.4
MW-185	10/22/2021 11:20	1.28	-80.6	9.81	0.2	0.421	16	5.6
MW-185	10/22/2021 11:25	1.05	-87.2	9.82	0.2	0.421	15.95	4.8
MW-185	01/13/2022 08:50	2.24	113.8	8.76	0.19	0.39	12.07	5.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-185	01/13/2022 08:55	0.93	68	9.13	0.19	0.389	12.72	5
MW-185	01/13/2022 09:00	0.47	-140	9.35	0.19	0.391	12.96	4.2
MW-185	01/13/2022 09:05	0.4	-1.2	9.39	0.19	0.39	12.99	3.5
MW-185	01/13/2022 09:10	0.4	-22.1	9.12	0.19	0.391	12.93	2.8
MW-185	01/13/2022 09:15	0.47	-33.2	9.48	0.19	0.391	12.92	2.8
MW-185	01/13/2022 09:20	0.92	-39.2	9.54	0.19	0.389	12.97	2.2
MW-185	01/13/2022 09:25	1.52	-35.8	9.55	0.19	0.387	12.93	1.7
MW-185	01/13/2022 09:30	2.36	-28.4	9.56	0.19	0.384	12.95	1.8
MW-185	01/13/2022 09:35	3.06	-19.7	9.3	0.18	0.38	12.95	1.6
MW-186	06/27/2012 13:40	1.04	43	7.7	0.01	0.20885	22.12	4.7
MW-186	06/27/2012 13:42	0.68	39	7.67	0.01	0.2037	21.94	5
MW-186	06/27/2012 13:45	0.45	37	7.68	0.01	0.20196	21.13	3.7
MW-186	06/27/2012 13:47	0.39	35	7.68	0.01	0.20163	21.07	5.2
MW-186	06/27/2012 13:49	0.36	33	7.69	0.01	0.20264	21	4.4
MW-186	06/27/2012 13:52	0.34	32	7.69	0.01	0.20235	20.89	3.8
MW-186	06/27/2012 13:54	0.33	31	7.69	0.01	0.20283	20.84	4.7
MW-186	06/27/2012 13:57	0.32	30	7.69	0.01	0.20201	20.81	5
MW-186	06/27/2012 13:59	0.32	29	7.69	0.01	0.20224	20.76	3.2
MW-186	06/27/2012 14:01	0.31	28	7.68	0.01	0.20134	21.25	3.9
MW-186	06/27/2012 14:04	0.31	27	7.69	0.01	0.20418	21.42	3.8
MW-186	06/27/2012 14:06	0.32	26	7.68	0.01	0.20446	21.85	3.2
MW-186	06/27/2012 14:08	0.31	26	7.69	0.01	0.20405	21.43	2.9
MW-186	06/27/2012 14:11	0.31	25	7.69	0.01	0.20087	21.48	3.7
MW-186	06/27/2012 14:13	0.3	25	7.69	0.01	0.20323	21.46	3.4
MW-186	06/27/2012 14:15	0.31	25	7.69	0.01	0.20075	21.58	3.5
MW-186	06/27/2012 14:16	0.31	25	7.69	0.01	0.201	21.58	3.55
MW-186	06/27/2012 15:26	3.97	69	7.83	0.01	0.205	17.67	19.60
MW-186	06/28/2012 12:38	2.99	49	6.64	0.14	0.222	20.01	12.50
MW-186	07/31/2013 14:55	0.39	-199	6.94	0.01	0.290	23.39	0.44
MW-186	07/31/2013 16:00	0.31	-117	6.93	0.02	0.338	17.79	57.20
MW-186	08/01/2013 11:28	6.01	-116	7.05	0.02	0.343	22.38	4.80
MW-186	08/12/2014 12:42	0.66	151	6.38	0.06	1.287	21.14	30.57
MW-186	08/12/2014 13:25	1.70	168	6.57	0.07	1.291	19.89	2906.00
MW-186	08/13/2014 11:00	1.32	-236	6.67	0.06	1.187	22.19	56.50
MW-186	12/02/2015 12:30	2.69	325	6.84	0.04	0.735	16.76	45.3
MW-186	12/02/2015 15:15	4.96	-129	7.4	0.03	0.675	13.4	210.5
MW-186	06/16/2017 09:25	1.55	191.00	7.91	0.16	2.986	13.3	284.20
MW-186	06/16/2017 09:45	0.22	61.00	7.81	0.12	2.413	17.2	1.50
MW-186	06/16/2017 10:18	0.98	52.00	8.38	0.10	1.905	16.2	3000.20
MW-186	06/12/2018 08:49	5.01	102	6.92	0.018	0.3648	18.56	6.1
MW-186	06/12/2018 08:52	2.18	37	6.83	0.017	0.3518	15.89	6.2
MW-186	06/12/2018 08:54	1.79	2	6.87	0.017	0.3507	15.78	6.7
MW-186	06/12/2018 08:56	1.54	-22	6.93	0.017	0.3500	15.64	6.5
MW-186	06/12/2018 08:58	1.46	-38	6.99	0.017	0.3492	15.52	5.5
MW-186	06/12/2018 09:00	1.41	-50	7.03	0.017	0.3510	15.49	7
MW-186	06/12/2018 09:02	2.28	-45	7.08	0.017	0.3510	16.47	7.6
MW-186	06/12/2018 09:05	1.74	-61	7.13	0.017	0.3481	16.09	4.8
MW-186	06/12/2018 09:07	1.49	-70	7.17	0.017	0.3479	15.99	5
MW-186	06/12/2018 09:09	1.42	-76	7.2	0.017	0.3472	15.81	6.1
MW-186	06/12/2018 09:11	1.4	-81	7.23	0.017	0.3480	15.86	4.9
MW-186	06/12/2018 09:13	1.38	-85	7.26	0.017	0.3478	16.03	5.3
MW-186	06/12/2018 09:15	1.35	-88	7.28	0.017	0.3482	16	7.2
MW-186	06/12/2018 09:18	1.37	-91	7.31	0.017	0.3482	16.06	6.7
MW-186	06/12/2018 09:20	1.36	-93	7.33	0.017	0.3496	16.01	7.7
MW-186	06/12/2018 09:22	1.37	-96	7.34	0.017	0.3491	15.97	8.4
MW-186	06/12/2018 09:24	1.35	-98	7.37	0.017	0.3487	15.93	8.1
MW-186	06/13/2018 09:24	1.35	-98.00	7.37	0.02	0.347	16.11	8.05
MW-186	06/13/2018 10:01	2.32	-95.00	7.17	0.02	0.406	14.81	360.00
MW-186	06/13/2018 11:50	1.63	-101.00	7.43	0.04	0.879	14.28	16.50
MW-186	06/20/2019 10:05	0.54	-48.9	7.86	NM	0.302	15.38	0.9

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-186	06/20/2019 10:10	0.56	-74.4	7.77	NM	0.299	16.44	3
MW-186	06/20/2019 10:15	0.56	-108.5	7.76	NM	0.299	17.46	2.6
MW-186	06/20/2019 10:20	0.44	-123.1	7.76	NM	0.3	17.2	4.2
MW-186	06/20/2019 10:25	0.32	-130.7	7.74	NM	0.296	17.19	6.1
MW-186	06/20/2019 10:30	0.31	-136.8	7.75	NM	0.295	17.2	6.4
MW-186	06/20/2019 10:35	0.3	-140.2	7.74	NM	0.294	17.21	6.2
MW-186	06/20/2019 10:40	0.61	-107.8	7.88	0.13	0.268	17.64	NM
MW-186	06/20/2019 10:45	1.43	-52.1	7.88	0.13	0.272	NM	5.2
MW-186	06/20/2019 10:50	NM	NM	NM	NM	NM	17.45	6
MW-186	06/20/2019 13:20	0.3	-140.2	7.74	NM	0.294	17.21	6.2
MW-186	06/20/2019 14:16	0.61	-107.8	7.88	0.13	0.268	17.64	5.2
MW-186	04/30/2020 12:40	2.02	-18.4	7.66	NM	0.174	12.25	5.6
MW-186	05/01/2020 09:40	9.94	-205.8	8.68	0.06	0.118	12.08	9.3
MW-188	10/18/2012 08:34	3.82	-55	5.60	0.3	0.64	14.1	37.1
MW-188	10/18/2012 08:39	1.68	-65	6.56	0.3	0.59	15.3	31.0
MW-188	10/18/2012 08:44	1.26	-86	6.62	0.3	0.58	15.3	18.3
MW-188	10/18/2012 08:49	1.04	-99	6.66	0.3	0.58	15.3	12.8
MW-188	10/18/2012 08:54	0.89	-104	6.68	0.3	0.58	15.4	10.6
MW-188	10/18/2012 08:59	0.79	-108	6.69	0.3	0.59	15.4	7.7
MW-188	10/18/2012 09:04	0.72	-109	6.68	0.3	0.59	15.5	5.6
MW-188	10/18/2012 09:09	0.65	-107	6.66	0.3	0.61	15.4	5.1
MW-188	10/18/2012 09:14	0.59	-104	6.65	0.3	0.64	15.4	5.2
MW-188	10/18/2012 09:36	5.65	-100	6.70	0.30	0.595	16.40	27.50
MW-188	10/18/2012 10:09	3.69	-103	6.67	0.30	0.636	16.31	0.0000
MW-188	10/19/2012 10:45	2.97	-81	6.78	0.30	0.643	16.15	235.00
MW-188	12/13/2012 09:05	16.71	-44.8	5.4	NM	0	6.5	7.8
MW-188	12/13/2012 09:10	0.22	-102.3	6.52	NM	0.44	12.9	20.5
MW-188	12/13/2012 09:15	-0.39	-121.1	6.61	NM	0.45	13.2	13.8
MW-188	12/13/2012 09:20	-0.57	-123.6	6.6	NM	0.46	13.6	7.4
MW-188	12/13/2012 09:25	-0.63	-124.2	6.01	NM	0.46	13.9	4.9
MW-188	12/13/2012 09:30	-0.64	-125	6.61	NM	0.47	14.1	3
MW-188	12/13/2012 09:35	-0.66	-125.3	6.61	NM	0.47	14.2	1.7
MW-188	12/13/2012 09:40	-0.68	-125.6	6.62	NM	0.47	14.4	1.3
MW-188	12/13/2012 09:45	-0.7	-123.9	6.61	NM	0.47	14.4	0.9
MW-188	12/13/2012 09:50	-0.71	-123.7	6.62	NM	0.47	14.4	0.8
MW-188	12/13/2012 09:55	-0.71	-115.8	6.61	NM	0.48	14.7	0.4
MW-188	12/13/2012 10:00	0.71	-115.8	6.61	NM	0.481	14.79	0.40
MW-188	12/13/2012 14:00	NM	-87.8	6.68	NM	0.472	14.23	0.90
MW-188	12/14/2012 11:20	7.75	-86.3	6.70	NM	0.442	13.84	144.60
MW-188	02/13/2013 10:10	0.11	-98.9	6.67	NM	0.380	11.27	36.50
MW-188	02/14/2013 09:15	31.30	182.3	6.40	NM	0.240	9.63	140.20
MW-188	02/14/2013 09:20	31.3	182.3	6.4	NM	0.24	9.4	140.2
MW-188	02/14/2013 09:25	10.2	136.9	6.49	NM	0.25	11	96.4
MW-188	02/14/2013 09:30	0.71	23.5	6.53	NM	0.25	11.1	70.4
MW-188	02/14/2013 09:35	0.45	-10	6.55	NM	0.25	11.4	53.4
MW-188	02/14/2013 09:40	0.35	-29.05	6.57	NM	0.26	11.5	45.8
MW-188	02/14/2013 09:45	0.21	-85.9	6.62	NM	0.35	11.9	18.3
MW-188	02/14/2013 10:00	0.21	-85.9	6.62	NM	0.35	11.9	18.3
MW-188	02/14/2013 10:05	0.17	-92.8	6.64	NM	0.360	11.98	21.70
MW-188	04/16/2013 09:10	1.26	-69.6	6.45	NM	0.551	15.22	37.3
MW-188	04/16/2013 09:15	1.22	-74.5	6.42	NM	0.54	15.1	37.6
MW-188	04/16/2013 09:20	1.03	-77.6	6.53	NM	0.54	14.9	34.1
MW-188	04/16/2013 09:25	0.83	-83.6	6.54	NM	0.55	14.7	28.7
MW-188	04/16/2013 09:30	0.75	-87.7	6.53	NM	0.55	14.8	21.3
MW-188	04/16/2013 09:35	0.66	-94	6.56	NM	0.56	15	15.5
MW-188	04/16/2013 09:40	0.69	-97.1	6.55	NM	0.56	15.6	13.7
MW-188	04/16/2013 09:45	0.77	-98.6	6.56	NM	0.57	15.2	12.6
MW-188	04/16/2013 09:50	0.7	-98.5	6.56	NM	0.56	15.3	14.1
MW-188	04/16/2013 09:55	0.7	-102.1	6.55	NM	0.57	15.6	9.2
MW-188	04/16/2013 10:00	0.68	-103.7	6.57	NM	0.58	15.8	8.2

Appendix B4 Central Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-188	04/16/2013 10:05	0.68	-104.1	6.58	NM	0.579	15.78	7.7
MW-188	04/17/2013 10:15	0.62	-105.1	6.57	NM	0.589	15.02	6.1
MW-188	06/12/2013 14:00	6.1	-66.8	6.62	0.23	0.489	24.47	1.3
MW-188	06/12/2013 15:05	8.04	-80.5	6.68	0.27	0.562	19.91	25.1
MW-188	06/12/2013 15:38	11.76	-71.7	6.60	0.27	0.565	25.16	17.40
MW-188	06/13/2013 15:38	11.76	-71.7	6.6	0.27	0.565	25.16	17.4
MW-188	09/20/2013 09:55	0.90	-85.4	6.50	0.32	0.653	16.84	1.20
MW-188	09/20/2013 10:57	5.37	-9.5	6.64	0.31	0.637	16.63	11.60
MW-188	09/20/2013 11:30	10.18	-10	6.71	0.19	0.388	18.63	72.20
MW-188	09/21/2013 11:30	10.18	-10	6.71	0.19	0.388	18.63	72.20
MW-188	01/10/2014 12:02	24.24	-99.5	6.53	NM	0.498	12.84	42.10
MW-188	01/10/2014 12:45	25.34	-93	6.52	NM	0.499	14.39	36.00
MW-188	01/10/2014 13:03	19.58	-87.9	6.45	NM	0.489	11.60	17.80
MW-188	04/10/2014 11:00	0.37	-83.4	6.69	0.27	0.535	14.62	36.80
MW-188	04/10/2014 11:22	0.04	-107.3	6.69	0.28	0.572	13.99	6.80
MW-188	04/10/2014 11:42	0.40	101.9	8.71	0.29	0.589	15.20	35.60
MW-188	06/19/2014 13:55	12.20	-77.2	6.52	0.23	0.458	19.15	119.10
MW-188	06/19/2014 15:25	4.66	-84.7	6.51	0.24	0.492	19.03	50.20
MW-188	06/19/2014 15:50	4.62	-85.2	0.52	0.24	0.496	19.00	100.20
MW-188	09/04/2014 10:15	0.43	-72.4	7.26	0.26	0.533	18.52	3.50
MW-188	09/04/2014 10:55	1.71	-65.3	7.56	0.25	0.527	18.27	0.80
MW-188	09/04/2014 11:35	0.56	-66.7	7.33	0.26	0.525	18.66	10.80
MW-188	10/29/2014 11:30	2.63	-58	6.72	0.27	0.563	16.91	20.60
MW-188	10/29/2014 12:10	2.85	-91.4	6.70	0.29	0.600	16.55	0.0000
MW-188	10/29/2014 13:10	2.93	-80.6	6.71	0.30	0.608	20.85	11.80
MW-188	09/09/2015 11:55	1.02	-40.4	6.57	0.21	0.521	15.30	30.70
MW-188	09/09/2015 12:05	1.99	-40.2	6.59	0.21	0.531	15.37	47.50
MW-188	10/20/2015 15:12	0.0000	-108	6.84	0.20	0.365	22.73	0.0000
MW-188	10/20/2015 15:30	0.0000	-90	6.87	0.20	0.371	23.72	0.0000
MW-188	02/11/2016 13:30	7.59	-51.8	7.12	0.08	0.166	11.3	52.2
MW-188	02/11/2016 13:40	8.24	-52.2	7.09	0.09	0.191	12.66	73
MW-188	05/24/2016 12:30	2.66	-91.2	6.54	0.31	0.634	16.28	39.10
MW-188	05/24/2016 12:55	2.48	-80.7	6.56	0.28	0.578	14.10	117.90
MW-188	08/10/2016 12:00	1.47	-70.1	6.71	0.29	0.594	21.29	0.30
MW-188	08/10/2016 12:11	1.14	64.9	6.70	0.25	0.524	17.39	11.90
MW-188	11/09/2016 11:05	2.89	-87.4	6.69	0.98	1.915	14.73	1.40
MW-188	11/09/2016 11:30	3.13	-81.3	6.75	0.60	1.196	15.34	10.30
MW-188	05/30/2017 12:20	2.29	-72.10	6.60	0.24	0.473	14.62	37.40
MW-188	05/30/2017 12:40	7.67	25.00	7.27	0.09	0.196	13.68	20.40
MW-188	05/30/2017 13:00	5.24	-63.90	6.53	0.28	0.567	13.52	16.10
MW-188	05/12/2018 09:55	0.36	-106.40	6.52	0.33	0.678	13.56	1.70
MW-188	05/12/2018 10:40	0.42	20.40	6.85	0.30	0.612	12.8	56.50
MW-188	05/12/2018 10:50	0.70	-14.30	6.79	0.35	0.631	12.91	83.70
MW-188	02/09/2019 09:40	2.77	-122.70	6.64	0.30	0.609	13.19	0.0000
MW-188	02/09/2019 10:30	4.00	-95.50	6.84	0.41	0.820	11.96	8.10
MW-188	02/09/2019 10:45	4.25	-96.00	6.70	0.34	0.687	13.08	14.80
MW-188	05/04/2019 09:35	0.43	-67.60	6.56	0.30	0.622	13.55	2.00
MW-188	05/04/2019 10:35	2.04	-55.10	6.61	0.38	0.765	15.32	6.60
MW-188	05/04/2019 10:55	2.18	-41.30	6.51	0.29	0.600	13.99	29.90
MW-188	07/27/2019 09:35	4.22	-128.8	6.71	NM	1.099	15.22	1.8
MW-188	07/27/2019 10:05	4.25	-131.2	6.65	NM	1.287	17.66	9.1
MW-188	07/27/2019 10:10	4.25	-131.2	6.65	NM	1.287	17.66	9.1
MW-188	07/27/2019 10:15	3.73	-143.3	6.68	NM	1.186	15.62	4
MW-188	07/27/2019 10:20	3.38	-98.2	6.75	0.83	1.626	18.24	1.9
MW-188	07/27/2019 10:25	3.73	-143.3	6.68	NM	1.186	15.62	1
MW-188	07/27/2019 10:30	3.38	-98.2	6.75	0.83	1.626	18.24	1
MW-188	07/27/2019 10:35	4.63	-115.8	6.73	NM	1.125	15.43	3.5
MW-188	07/27/2019 10:40	4.36	-127.1	6.73	NM	1.091	15.47	3.4
MW-188	07/27/2019 10:45	4.33	-124.1	6.72	NM	1.086	15.29	3.4
MW-188	07/27/2019 10:50	4.22	-127.4	6.71	NM	1.097	15.24	1.9

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-188	07/27/2019 10:55	4.22	-127.4	6.71	NM	1.097	NM	NM
MW-188	07/27/2019 11:00	4.22	-128.8	6.71	NM	1.099	15.22	1.8
MW-188	07/27/2019 11:05	4.63	-115.8	6.73	NM	1.125	15.43	3.5
MW-188	07/27/2019 11:10	4.36	-127.1	6.73	NM	1.091	NM	1
MW-188	07/27/2019 11:15	4.33	-124.1	6.72	NM	1.086	15.29	1.9
MW-188	07/27/2019 11:20	NM	NM	NM	NM	NM	15.24	1.9
MW-188	07/27/2019 13:00	NM	NM	NM	NM	NM	18.24	NM
MW-188	07/27/2019 13:10	4.38	-126	6.72	NM	1.148	15.51	3.8
MW-188	07/27/2019 13:15	NM	NM	NM	NM	NM	15.47	NM
MW-188	11/02/2019 08:45	5.92	-1.3	6.89	NM	0.228	13.83	17.8
MW-188	11/02/2019 08:50	4.55	-72.8	6.72	NM	0.281	13.97	14.6
MW-188	11/02/2019 08:55	1.62	-81.8	6.65	NM	0.47	14.09	10.5
MW-188	11/02/2019 09:00	0.84	-95.3	6.71	NM	0.571	13.85	7.4
MW-188	11/02/2019 09:05	0.9	-97.54	6.74	NM	0.613	14.23	3.3
MW-188	11/02/2019 09:10	0.93	-102	6.78	NM	0.618	14.25	2.5
MW-188	11/02/2019 09:15	1.03	-104.5	6.82	NM	0.622	14.4	0.7
MW-188	11/02/2019 09:20	1.05	-106.4	6.85	NM	0.62	14.46	0.2
MW-188	11/02/2019 09:25	1.01	-107.8	6.85	NM	0.619	14.43	0.1
MW-188	11/02/2019 10:20	2.88	-99.1	6.97	0.3	0.612	13.35	3.7
MW-188	11/02/2019 10:50	3.61	-90.5	7.05	0.23	0.476	14.91	17.1
MW-188	01/25/2020 10:30	1.39	37.7	6.19	NM	0.556	12.77	60.1
MW-188	01/25/2020 10:35	0.97	26.8	6.27	NM	0.559	12.57	52.5
MW-188	01/25/2020 10:40	0.44	7.4	6.4	NM	0.557	12.63	19.8
MW-188	01/25/2020 10:45	0.24	-16.3	6.53	NM	0.542	12.63	3.6
MW-188	01/25/2020 10:50	0.2	-25.4	6.58	NM	0.522	12.61	2.7
MW-188	01/25/2020 10:55	0.15	-31.8	6.62	NM	0.509	12.61	2.3
MW-188	01/25/2020 11:00	0.14	-37.8	6.65	NM	0.508	12.56	3.8
MW-188	01/25/2020 11:05	0.13	-43.1	6.66	NM	0.51	12.74	4.2
MW-188	01/25/2020 11:10	0.12	-48.2	6.68	NM	0.516	12.62	4.8
MW-188	01/25/2020 11:15	0.12	-50.5	6.69	NM	0.519	12.46	4.9
MW-188	01/25/2020 12:07	1.13	-2.8	6.65	0.27	0.561	11.99	2.2
MW-188	01/25/2020 12:54	2.8	-19.6	6.77	0.22	0.463	12.56	170.5
MW-188	05/02/2020 09:20	0.51	-33.5	6.79	NM	0.633	14.49	7.4
MW-188	05/02/2020 10:10	2.27	10.6	6.72	32	0.651	15.43	6.9
MW-188	07/25/2020 09:55	0.71	-148.3	7.06	0.44	0.983	17.57	17.2
MW-188	07/25/2020 10:00	1.61	-136	6.04	0.38	0.774	16.58	10.6
MW-188	07/25/2020 10:05	0.66	-142	5.92	0.37	0.755	15.75	10.1
MW-188	07/25/2020 10:10	0.24	-152.1	6.12	0.36	0.736	15.74	9.1
MW-188	07/25/2020 10:15	0.09	-155	6.29	0.36	0.724	15.94	8.7
MW-188	07/25/2020 10:20	0.1	-126.9	6.43	0.36	0.723	15.9	15.1
MW-188	07/25/2020 10:25	0.09	-118.6	6.48	0.36	0.725	15.92	15.4
MW-188	07/25/2020 10:30	0.09	-112.5	6.52	0.35	0.722	15.87	14.6
MW-188	07/25/2020 10:35	0.09	-109.7	6.53	0.35	0.722	15.85	14.7
MW-188	07/25/2020 11:10	0.08	-99.3	6.62	0.32	0.659	17.4	7.3
MW-188	07/25/2020 11:30	0.1	-93.7	6.58	0.34	0.688	18.67	30.6
MW-188	03/27/2021 08:45	3.15	-59.4	7.03	0.29	0.596	13.9	34.5
MW-188	03/27/2021 08:50	0.86	-60.6	6.4	0.25	0.513	13.82	34.3
MW-188	03/27/2021 08:55	0.75	-72.4	6.43	0.25	0.517	13.76	26
MW-188	03/27/2021 09:00	0.71	-80	6.49	0.25	0.518	13.84	17.4
MW-188	03/27/2021 09:05	0.72	-88.2	6.56	0.25	0.52	13.94	14.5
MW-188	03/27/2021 09:10	0.7	-93.2	6.62	0.25	0.519	13.96	11.5
MW-188	03/27/2021 09:15	0.68	-95.1	6.64	0.25	0.521	13.95	10.1
MW-188	03/27/2021 09:20	0.66	-96	6.65	0.26	0.525	13.98	8.3
MW-188	03/27/2021 09:25	0.63	-96.6	6.66	0.26	0.538	13.99	8.4
MW-188	03/27/2021 09:30	0.62	-97.4	6.66	0.27	0.547	14.06	5.5
MW-188	03/27/2021 09:50	0.5	-99.2	6.67	0.28	0.566	14.1	5.1
MW-188	03/27/2021 10:05	1.22	-94.3	66.6	0.28	0.573	14.11	16.3
MW-188	06/19/2021 09:55	2.22	-42.8	6.39	0.1	0.209	17.07	14.1
MW-188	06/19/2021 10:00	1.7	-40.2	6.29	0.1	0.208	17.19	10.2
MW-188	06/19/2021 10:05	0.195	1.1	6.19	0.09	0.105	17.17	4.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-188	06/19/2021 10:10	1.02	-17.8	6.05	0.09	0.193	16.98	6.9
MW-188	06/19/2021 10:15	0.95	-1.1	5.92	0.09	0.192	16.73	12.6
MW-188	06/19/2021 10:20	0.93	3.6	5.88	0.09	0.191	16.7	16.2
MW-188	06/19/2021 10:25	0.92	8.8	5.85	0.09	0.19	16.61	23.1
MW-188	06/19/2021 10:30	0.91	12.8	5.82	0.09	0.189	16.6	22.4
MW-188	06/19/2021 10:35	0.94	14.2	5.82	0.09	0.189	16.7	24.8
MW-188	06/19/2021 10:40	0.93	14.5	5.82	0.09	0.189	16.63	25.1
MW-188	09/22/2021 11:50	2.05	-55.2	6.81	0.17	0.342	19.67	10.5
MW-188	09/22/2021 11:55	1.03	-56.8	6.69	0.17	0.353	19.87	13.5
MW-188	09/22/2021 12:00	0.73	-74	6.71	0.19	0.389	19.5	14.6
MW-188	09/22/2021 12:05	0.66	-86.2	6.72	0.2	0.423	19.27	9.1
MW-188	09/22/2021 12:10	0.58	-103.7	6.74	0.23	0.466	18.89	8.5
MW-188	09/22/2021 12:15	0.53	-110.9	6.77	0.24	0.49	18.63	4.6
MW-188	09/22/2021 12:20	0.5	-112.3	6.77	0.24	0.491	18.64	5.8
MW-188	09/22/2021 12:25	0.47	-114.6	6.78	0.24	0.495	18.65	5.4
MW-188	09/22/2021 12:30	0.45	-116.1	6.78	0.24	0.501	18.93	3
MW-188	09/22/2021 12:35	0.45	-115.6	6.77	0.25	0.51	18.63	2.7
MW-188	12/17/2021 09:40	1.34	-93.2	6.55	0.17	0.353	15.56	445
MW-188	12/17/2021 09:45	0.97	-103.2	6.58	0.18	0.375	15.68	203.7
MW-188	12/17/2021 09:50	0.95	-109.2	6.58	0.2	0.417	15.69	141.8
MW-188	12/17/2021 09:55	0.75	-113.7	6.6	0.22	0.45	15.68	83.6
MW-188	12/17/2021 10:00	0.73	-118.1	6.61	0.23	0.467	15.71	53.9
MW-188	12/17/2021 10:05	0.53	-124.1	6.61	0.23	0.478	15.77	41.9
MW-188	12/17/2021 10:10	0.51	-125	6.61	0.23	0.483	15.83	35
MW-188	12/17/2021 10:15	0.51	-127.4	6.62	0.24	0.484	15.85	25.2
MW-188	12/17/2021 10:20	0.44	-125.4	6.62	0.24	0.486	15.83	24.3
MW-188	12/17/2021 10:25	0.44	-125.6	6.62	0.24	0.496	15.81	19.4
MW-188	03/15/2022 12:25	5.14	-65.3	6.84	0.14	0.287	15.16	88.4
MW-188	03/15/2022 12:30	3.5	-52.5	6.56	0.16	0.337	14.78	87.8
MW-188	03/15/2022 12:35	1.33	-87.4	6.56	0.25	0.516	14.84	22.9
MW-188	03/15/2022 12:40	1.24	-91.5	6.55	0.25	0.522	14.83	25.6
MW-188	03/15/2022 12:45	0.76	-94.5	6.52	0.28	0.567	15.32	12.4
MW-188	03/15/2022 12:50	0.49	-67.2	6.57	0.28	0.577	15.48	2.7
MW-188	03/15/2022 12:55	0.41	-97.4	6.53	0.28	0.578	15.66	0
MW-188	03/15/2022 13:00	0.41	-98.2	6.53	0.28	0.581	15.56	0.3
MW-188	03/15/2022 13:05	0.38	-102.2	6.54	0.29	0.603	15.98	0
MW-188	03/15/2022 13:10	0.38	-100.4	6.52	0.29	0.603	15.97	1.2
MW-189	10/17/2012 10:56	5.05	-40	7.06	0.4	0.74	14.8	43.0
MW-189	10/17/2012 11:01	2.23	-46	6.79	0.4	0.73	14.9	33.7
MW-189	10/17/2012 11:06	1.72	-54	6.76	0.4	0.73	15.1	34.1
MW-189	10/17/2012 11:11	1.34	-60	6.75	0.4	0.73	15.2	8.5
MW-189	10/17/2012 11:16	1.35	-64	6.75	0.4	0.73	15.3	7.2
MW-189	10/17/2012 11:21	1.26	-68	6.75	0.4	0.73	15.4	2.9
MW-189	10/17/2012 11:26	1.35	-71	6.80	0.4	0.73	15.4	0.6
MW-189	10/17/2012 11:31	1.20	-73	6.75	0.4	0.73	15.4	0.00
MW-189	10/17/2012 11:36	1.26	-75	6.75	0.4	0.74	15.4	0.00
MW-189	10/17/2012 11:41	1.19	-76	6.75	0.4	0.74	15.4	0.00
MW-189	10/17/2012 11:46	1.14	-77	6.75	0.4	0.73	15.4	0.00
MW-189	10/17/2012 11:51	1.17	-77	6.75	0.40	0.733	15.45	0.30
MW-189	10/17/2012 12:15	1.63	-69	6.76	0.40	0.731	15.70	0.90
MW-189	10/18/2012 15:01	3.39	-56	7.02	0.30	0.716	16.88	127.00
MW-189	06/12/2013 09:35	12.98	-28	6.39	0.2	0.422	11.6	42.9
MW-189	06/12/2013 10:50	2.14	-44.6	6.45	0.22	0.462	15.04	0.5
MW-189	06/12/2013 11:30	1.25	-47.2	6.54	0.21	0.424	20.28	5.80
MW-189	06/13/2013 11:30	1.25	-47.2	6.54	0.21	0.424	20.28	5.8
MW-189	06/19/2014 10:35	1.49	-39	6.40	0.30	0.618	18.71	138.50
MW-189	06/19/2014 11:42	4.16	-42.2	6.42	0.29	0.589	18.22	379.10
MW-189	06/19/2014 12:15	2.58	-38	6.26	0.31	0.627	15.86	263.00
MW-189	09/04/2014 13:05	0.30	-58.5	7.08	0.31	0.638	17.71	4.90
MW-189	09/04/2014 13:40	0.47	-83.2	6.69	0.31	0.642	18.75	2.50

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-189	09/04/2014 14:35	0.41	-93.1	6.94	0.31	0.645	19.00	18.60
MW-189	10/29/2014 08:55	6.06	-85.2	6.45	0.36	0.736	15.29	0.0000
MW-189	10/29/2014 09:35	6.25	-73.8	6.55	0.35	0.716	15.39	0.0000
MW-189	10/29/2014 10:52	4.15	-51.4	6.58	0.35	0.725	15.69	51.30
MW-189	09/09/2015 10:55	6.39	-138.7	6.56	0.42	0.860	17.83	4.00
MW-189	09/09/2015 11:20	2.04	-118	6.50	0.38	0.767	15.79	14.90
MW-189	10/20/2015 11:54	0.0000	-91	6.59	0.20	0.496	20.74	7.00
MW-189	10/20/2015 12:30	0.0000	-91	6.60	0.20	0.495	20.89	6.30
MW-189	02/11/2016 11:40	0.2	-125	7.23	0.63	0.249	8.57	30.3
MW-189	02/11/2016 11:50	3.14	-62.1	6.67	0.49	0.394	11.2	102.7
MW-189	05/24/2016 11:30	2.49	-114.5	6.72	0.36	0.738	16.03	6.60
MW-189	05/24/2016 11:50	3.54	-78.9	6.75	0.34	0.685	14.57	103.00
MW-189	08/10/2016 09:35	2.10	-51.9	6.53	0.33	0.681	16.36	0.0000
MW-189	08/10/2016 10:00	1.99	-41.8	6.81	NM	0.702	NM	0.0000
MW-189	11/09/2016 12:35	0.39	-110	6.69	0.77	1.520	14.36	2.20
MW-189	11/09/2016 12:55	1.07	-101.90	6.76	0.73	1.443	14.68	89.30
MW-189	05/30/2017 10:05	0.31	-83.10	6.34	0.21	0.426	13.93	18.00
MW-189	05/30/2017 10:55	1.72	-92.30	6.49	0.34	0.696	14.19	30.90
MW-189	05/30/2017 11:15	3.84	-79.20	6.50	0.26	0.527	13.67	33.50
MW-189	05/12/2018 11:15	1.98	-28.80	6.65	0.36	0.733	13.72	153.90
MW-189	05/12/2018 12:00	3.65	-49.70	6.70	0.37	0.755	14.29	21.00
MW-189	05/12/2018 12:10	6.55	-69.80	6.75	0.35	0.714	13.88	65.80
MW-189	05/04/2019 11:35	0.04	-66.1	6.97	NM	0.58	12.34	6.4
MW-189	05/04/2019 12:40	0.31	-45	7.46	0.32	0.646	12.41	1.6
MW-189	11/02/2019 10:45	2.93	-106.7	6.64	NM	0.682	13.47	64.2
MW-189	11/02/2019 10:50	0.6	-128.3	6.56	NM	0.644	13.99	125
MW-189	11/02/2019 10:55	0.58	-123.5	6.57	NM	0.645	13.97	23
MW-189	11/02/2019 11:00	0.54	-113.5	6.58	NM	0.642	14.06	6.2
MW-189	11/02/2019 11:05	0.52	-103.6	6.58	NM	0.633	14.12	58.5
MW-189	11/02/2019 11:10	0.48	-100.2	6.57	NM	0.628	14.27	8.3
MW-189	11/02/2019 11:15	0.48	-97.5	6.57	NM	0.622	14.27	4
MW-189	11/02/2019 11:20	0.48	-97.1	6.57	NM	0.617	14.25	2.2
MW-189	11/02/2019 11:25	0.44	-91.7	6.56	NM	0.613	14.26	13.9
MW-189	11/02/2019 11:30	0.43	-92.6	6.55	NM	0.615	14.29	64.2
MW-189	11/02/2019 12:00	0.42	-102.8	6.59	0.3	0.609	14.5	0.7
MW-189	11/02/2019 12:20	0.57	-100.8	6.58	0.3	0.609	14.03	209.6
MW-189	05/02/2020 10:45	0.65	-78.1	6.53	NM	0.689	15.23	5.7
MW-189	05/02/2020 11:25	3.9	-91.4	6.61	0.37	0.746	18.28	0
MW-189	06/19/2021 13:15	1.49	-67.1	6.49	0.33	0.638	17.68	59
MW-189	06/19/2021 13:20	0.74	-78.1	6.49	0.33	0.671	15.51	71
MW-189	06/19/2021 13:25	0.68	-78.8	6.46	0.33	0.671	15.39	71.3
MW-189	06/19/2021 13:30	0.58	-77.9	6.45	0.33	0.672	15.04	57
MW-189	06/19/2021 13:35	0.55	-78.5	6.45	0.33	0.674	15.08	54.1
MW-189	06/19/2021 13:40	0.51	-79.7	6.45	0.33	0.675	15.08	46.3
MW-189	06/19/2021 13:45	0.49	-80.1	6.45	0.33	0.674	14.9	42.9
MW-189	06/19/2021 13:50	0.49	-80	6.41	0.33	0.674	14.81	40.5
MW-189	06/19/2021 13:55	0.49	-80	6.42	0.33	0.673	14.99	44.6
MW-189	06/19/2021 14:00	0.47	-80.9	6.47	0.33	0.672	15.02	35.1
MW-189	09/22/2021 15:00	1.19	-85.9	6.66	0.33	0.68	21.14	209
MW-189	09/22/2021 15:05	0.54	-80.7	6.58	0.33	0.672	17.7	140.2
MW-189	09/22/2021 15:10	0.36	-81.7	6.55	0.33	0.667	17.76	105.5
MW-189	09/22/2021 15:15	0.32	-83.5	6.51	0.32	0.665	18.53	116.3
MW-189	09/22/2021 15:20	0.4	-84.3	6.52	0.32	0.664	18.47	176.5
MW-189	09/22/2021 15:25	0.64	-83.4	6.53	0.32	0.663	18.3	218.3
MW-189	09/22/2021 15:30	0.63	-81.7	6.54	0.32	0.662	18.29	313.5
MW-189	09/22/2021 15:35	0.8	-77.2	6.55	0.32	0.66	18.3	392.5
MW-189	09/22/2021 15:40	0.91	-74.8	6.56	0.32	0.66	18.44	411.3
MW-189	09/22/2021 15:45	1.03	-71.3	6.56	0.32	0.66	18.41	458.8
MW-189	12/17/2021 12:15	5.4	-45.9	6.75	0.34	0.7	15.07	38.9
MW-189	12/17/2021 12:20	4.77	-51	6.66	0.34	0.699	14.96	33.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-189	12/17/2021 12:25	3.64	-66.6	6.61	0.35	0.707	14.97	20.9
MW-189	12/17/2021 12:30	3	-77.4	6.55	0.35	0.711	14.98	14.6
MW-189	12/17/2021 12:35	2.6	-84.5	6.58	0.35	0.712	15.02	11.2
MW-189	12/17/2021 12:40	2.15	-89.3	6.56	0.35	0.712	15.1	8.7
MW-189	12/17/2021 12:45	1.92	-91.3	6.57	0.35	0.712	15.16	8.6
MW-189	12/17/2021 12:50	1.68	-93.1	6.58	0.35	0.712	15.2	8.1
MW-189	12/17/2021 12:55	1.52	-94.6	6.58	0.35	0.712	15.36	7.8
MW-189	12/17/2021 13:00	1.35	-95.3	6.59	0.35	0.713	15.49	8.4
MW-189	03/15/2022 11:05	1.42	-87.6	6.51	0.35	0.711	15	40.4
MW-189	03/15/2022 11:10	1.29	-54.8	6.42	0.34	0.703	14.76	92.9
MW-189	03/15/2022 11:15	1.24	-62.6	6.4	0.34	0.702	14.94	59.5
MW-189	03/15/2022 11:20	1.28	-56.5	6.4	0.35	0.705	16.07	35.6
MW-189	03/15/2022 11:25	1.22	-30.8	6.1	0.35	0.714	14.62	65.8
MW-189	03/15/2022 11:30	0.94	-40	6.34	0.35	0.715	14.55	19
MW-189	03/15/2022 11:35	0.79	-75.2	6.39	0.35	0.712	14.75	21.4
MW-189	03/15/2022 11:40	0.84	-73.8	6.46	0.35	0.704	14.73	11.8
MW-189	03/15/2022 11:45	0.74	-79.1	6.45	0.35	0.706	14.72	4.8
MW-189	03/15/2022 11:50	0.71	-78.5	6.44	0.35	0.707	14.77	3.8
MW-190	06/19/2012 08:30	1.32	168	6.41	0.12	2.23037	20.3	7.2
MW-190	06/19/2012 08:32	0.96	168	6.37	0.12	2.28831	18.8	5.4
MW-190	06/19/2012 08:35	0.67	168	6.36	0.12	2.25788	17.86	5.6
MW-190	06/19/2012 08:37	0.66	168	6.34	0.12	2.2358	17.69	5.4
MW-190	06/19/2012 08:40	0.69	169	6.32	0.12	2.22311	17.58	5.6
MW-190	06/19/2012 08:42	0.7	169	6.31	0.12	2.21998	17.53	6
MW-190	06/19/2012 08:43	0.70	169	6.31	0.11	2.220	17.53	5.97
MW-190	06/19/2012 09:28	6.21	159	6.81	0.15	2.799	15.22	215.80
MW-190	06/20/2012 08:05	3.61	154	9.79	0.10	2.950	19.90	109.00
MW-190	08/27/2013 09:10	2.24	-157	6.14	0.13	2.56311	24.05	7.2
MW-190	08/27/2013 09:12	1.28	-275	6.17	0.13	2.49971	22.23	2
MW-190	08/27/2013 09:15	0.82	-319	6.18	0.13	2.4337	22.24	1.8
MW-190	08/27/2013 09:17	0.7	-339	6.19	0.13	2.42046	22.37	1.9
MW-190	08/27/2013 09:20	0.65	-349	6.2	0.13	2.4404	22.5	1.3
MW-190	08/27/2013 09:23	0.65	-358	6.21	0.13	2.44985	22.38	1.6
MW-190	08/27/2013 09:25	0.68	-363	6.22	0.13	2.46267	22.51	1.5
MW-190	08/27/2013 09:28	0.71	-365	6.23	0.13	2.47769	22.7	1.5
MW-190	08/27/2013 09:30	0.74	-373	6.24	0.13	2.47375	22.77	1.9
MW-190	08/27/2013 09:33	0.73	-376	6.24	0.13	2.46698	22.56	1.4
MW-190	08/27/2013 09:35	0.72	-374	6.26	0.13	2.46814	22.83	1.5
MW-190	08/27/2013 09:38	0.69	-376	6.26	0.13	2.4872	22.36	1.2
MW-190	08/27/2013 09:40	0.64	-378	6.27	0.13	2.45131	22.31	1.7
MW-190	08/27/2013 09:43	0.6	-384	6.28	0.13	2.44722	22.18	1.2
MW-190	08/27/2013 09:45	0.57	-377	6.28	0.13	2.44423	22.25	0.9
MW-190	08/27/2013 09:48	0.56	-382	6.29	0.13	2.46472	22.32	1.1
MW-190	08/27/2013 09:51	0.54	-377	6.29	0.13	2.47495	22.06	0.9
MW-190	08/19/2014 08:37	3.53	219	6.24	NM	1.38225	22.47	7.8
MW-190	08/19/2014 08:40	1.04	237	5.24	0.08	1.490	20.78	7.61
MW-190	08/19/2014 08:42	1.62	236	5.48	NM	1.35153	21.16	7.3
MW-190	08/19/2014 08:45	1.37	238	5.35	NM	1.35352	21.08	7.2
MW-190	08/19/2014 08:47	1.19	237	5.28	NM	1.36732	21.04	7.2
MW-190	08/19/2014 08:49	1.04	237	5.24	NM	1.37035	20.78	7.6
MW-190	08/19/2014 09:29	0.97	209	6.62	0.13	2.499	16.98	478.10
MW-190	03/14/2016 08:51	9.230	57.000	5.860	0.427	7.776	23.230	58.900
MW-190	03/14/2016 08:54	8.500	60.000	5.750	0.456	8.273	9.240	48.000
MW-190	03/14/2016 08:57	8.220	62.000	5.700	0.473	8.547	9.170	33.200
MW-190	03/14/2016 08:59	8.040	64.000	5.680	0.483	8.729	9.210	21.700
MW-190	03/14/2016 09:02	7.950	65.000	5.660	0.495	8.922	9.110	21.900
MW-190	03/14/2016 09:05	7.880	67.000	5.640	0.501	9.038	9.030	18.100
MW-190	03/14/2016 09:07	7.770	67.000	5.640	0.502	9.037	9.180	17.000
MW-190	03/14/2016 09:10	7.710	68.000	5.630	0.502	9.034	9.250	14.400
MW-190	03/14/2016 09:13	7.620	69.000	5.630	0.501	9.026	9.370	20.200

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-190	03/14/2016 09:15	7.600	69.000	5.630	0.505	9.084	9.360	12.500
MW-190	03/14/2016 09:18	7.570	69.000	5.630	0.505	9.087	9.490	13.200
MW-190	03/14/2016 09:21	7.600	68.000	5.630	0.509	9.159	9.370	11.100
MW-190	03/14/2016 09:23	7.570	70.000	5.620	0.511	9.185	9.400	9.900
MW-190	03/14/2016 09:26	7.560	71.000	5.620	0.512	9.209	9.390	11.000
MW-190	03/14/2016 09:29	7.480	70.000	5.620	0.514	9.233	9.380	11.400
MW-190	03/14/2016 09:31	7.460	70.000	5.630	0.516	9.270	9.370	9.300
MW-190	03/14/2016 09:34	7.450	70.000	5.630	0.516	9.270	9.430	8.900
MW-190	03/14/2016 09:37	7.450	70.000	5.640	0.518	9.302	9.430	8.200
MW-190	03/14/2016 09:39	7.430	70.000	5.650	0.522	9.376	9.300	7.900
MW-190	03/14/2016 09:42	7.400	69.000	5.660	0.521	9.353	9.390	8.000
MW-190	03/15/2016 09:28	3.51	57	6.07	0.12	2.316	11.19	22.40
MW-190	03/15/2016 10:27	2.51	57	6.31	0.50	8.977	11.74	18.10
MW-190	11/22/2016 11:10	1.38	208	6.37	1.2	2.37	16.65	0.1
MW-190	11/22/2016 11:21	0.45	198	6.39	1.3	2.5	16.6	0.1
MW-190	02/16/2017 10:50	6.79	268	6.13	1.20	2.320	8.37	0.60
MW-190	02/16/2017 11:05	6.59	279	6.00	1.00	2.040	9.21	1.80
MW-190	05/08/2017 13:10	4.27	217.00	5.98	1.09	2.129	10.78	7.90
MW-190	05/08/2017 14:10	5.40	169.30	6.27	1.20	2.324	11.39	11.10
MW-190	05/08/2017 14:20	6.27	217.90	5.79	0.99	1.930	9.73	8.40
MW-190	07/24/2017 12:20	6.58	219.40	7.26	1.29	2.498	18.61	24.30
MW-190	07/24/2017 13:45	5.79	192.90	7.05	1.21	2.339	17.8	10.80
MW-190	07/24/2017 14:00	7.97	192.30	6.35	1.79	2.112	18.11	8.80
MW-190	11/13/2017 12:40	8.37	-166.00	6.57	1.28	2.458	14.07	4.30
MW-190	11/13/2017 13:45	6.08	-170.40	7.08	1.16	2.241	15.15	2.30
MW-190	11/13/2017 13:55	8.47	-157.10	7.00	0.92	1.786	16.02	0.0000
MW-190	02/28/2018 11:35	4.57	250.00	6.34	0.12	2.419	11.4	11.60
MW-190	02/28/2018 14:30	5.48	227.00	6.27	1.07	18.246	12.61	3.85
MW-190	02/28/2018 15:04	11.86	261.00	6.36	0.24	4.481	12.18	13.60
MW-190	05/24/2018 10:30	5.43	-52.00	6.54	0.11	2.212	13.01	17.40
MW-190	05/24/2018 13:04	5.56	-46.00	6.44	0.12	2.267	13.6	11.80
MW-190	08/21/2018 10:53	1.49	24.00	6.43	0.12	2.250	19.96	2.80
MW-190	08/21/2018 12:38	1.07	108.00	6.76	0.13	2.416	17.65	4.20
MW-190	02/25/2019 10:40	20.2	204.3	6.26	NM	1.917	10.41	NM
MW-190	02/25/2019 12:10	3.17	169.7	6.48	1.21	2.349	11.37	0
MW-190	05/24/2019 12:11	6.09	66.7	6.76	0.69	1.377	14.3	3.8
MW-190	08/19/2019 11:10	4.38	78	6.13	NM	1.909	23.55	47.2
MW-190	08/19/2019 12:30	4.38	78	6.13	0.97	1.909	23.55	47.2
MW-190	08/19/2019 12:40	7.87	2.2	6.65	1.3	2.508	20.99	4.8
MW-190	11/13/2019 09:50	8.01	1.4	6.1	NM	0.523	13.32	1.9
MW-190	11/13/2019 10:50	2.29	39.7	6.28	0.46	0.935	17.03	3.3
MW-190	11/13/2019 11:00	2.24	40.2	6.29	0.46	0.934	17	5.2
MW-190	11/13/2019 11:05	2.24	40.2	6.29	0.46	0.934	17	5.2
MW-190	02/12/2020 09:05	7.69	141	6.32	NM	0.884	11.45	1.1
MW-190	02/12/2020 10:15	4.79	153.7	6.36	0.54	1.081	11.93	0.5
MW-190	05/21/2020 13:20	6.8	84.8	6.4	0.33	0.682	14.04	0.3
MW-190	01/27/2021 09:15	10.07	66.1	6.66	0.67	1.333	9.47	12.1
MW-190	01/27/2021 09:20	8.15	88	6.35	0.68	1.348	10.27	11.8
MW-190	01/27/2021 09:25	7.43	105.8	6.23	0.69	1.366	10.61	12.2
MW-190	01/27/2021 09:30	7.26	116.8	6.17	0.69	1.372	10.61	11.8
MW-190	01/27/2021 09:35	7.31	118.3	6.14	0.7	1.381	10.61	12.1
MW-190	01/27/2021 09:40	7.1	146.8	5.94	0.71	1.399	10.35	10.5
MW-190	01/27/2021 09:45	7.05	150.8	5.94	0.71	1.399	10.33	10.5
MW-190	01/27/2021 09:50	6.69	163.3	5.86	0.7	1.396	9	10.4
MW-190	01/27/2021 09:55	6.67	163.9	5.86	0.7	1.395	8.88	9.6
MW-190	01/27/2021 10:00	6.42	165.8	5.84	0.7	1.389	7.97	9.8
MW-190	01/27/2021 10:45	6.31	146.7	6.18	1	1.946	11.27	8.9
MW-190	01/27/2021 11:12	4.82	84.2	6.52	1.12	2.162	12.67	24.6
MW-190	05/03/2021 09:50	10.47	137	6.66	1.41	2.714	14.19	7
MW-190	05/03/2021 09:55	9.69	146.7	6.39	1.4	2.689	13.59	6.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-190	05/03/2021 10:00	9.14	157.5	6.22	1.39	2.671	13.05	7.6
MW-190	05/03/2021 10:05	8.25	185.1	6.08	1.41	2.714	12.41	6.5
MW-190	05/03/2021 10:10	8.13	186.2	6.09	1.42	2.717	12.39	6.5
MW-190	05/03/2021 10:15	7.16	189.4	6.18	1.44	2.766	12.34	4.4
MW-190	05/03/2021 10:20	6.77	189.1	6.22	1.45	2.778	12.32	3.6
MW-190	05/03/2021 10:25	6.23	186.3	6.27	1.47	2.812	12.27	2.4
MW-190	05/03/2021 10:30	6.14	186.2	6.28	1.47	2.816	12.28	2.3
MW-190	05/03/2021 10:35	5.56	181.8	6.33	1.51	2.89	12.26	1.9
MW-190	10/27/2021 12:55	4.42	68.8	7.45	1.06	2.05	18.54	5
MW-190	10/27/2021 13:00	2.22	113.4	6.38	1.07	2.086	18.56	3.7
MW-190	10/27/2021 13:05	1.64	128.2	6.29	1.09	2.122	18.59	3.6
MW-190	10/27/2021 13:10	0.93	132.3	6.27	1.15	2.228	18.75	2.9
MW-190	10/27/2021 13:15	0.94	133.1	6.26	1.14	2.214	18.74	2.8
MW-190	10/27/2021 13:20	0.95	134.3	6.24	1.12	2.185	19.06	2.5
MW-190	10/27/2021 13:25	0.93	134.9	6.23	1.11	2.163	19.17	2.3
MW-190	10/27/2021 13:30	0.92	135.8	6.23	1.11	2.159	19.09	2.2
MW-190	10/27/2021 13:35	0.9	136.7	6.23	1.11	2.161	18.87	2.2
MW-190	03/25/2022 09:20	6.82	173.9	6	0.96	1.883	11.17	-1.3
MW-190	03/25/2022 09:25	6.11	179.3	5.97	0.96	1.881	11.33	-5.9
MW-190	03/25/2022 09:30	6.02	179.4	5.98	0.96	1.881	11.53	-2.5
MW-190	03/25/2022 09:35	5.85	190	6.03	0.96	1.88	12.65	-2.4
MW-190	03/25/2022 09:40	6.15	191.3	6.04	0.96	1.883	11.73	-0.9
MW-190	03/25/2022 09:45	6.11	192	6.03	0.96	1.881	11.59	-1.4
MW-190	03/25/2022 09:50	6.05	189.8	6.03	0.96	1.876	11.79	-2
MW-191	10/17/2012 09:37	3.13	-122	7.26	0.4	0.91	14.8	0.00
MW-191	10/17/2012 09:42	2.08	-127	7.25	0.4	0.91	16.8	0.00
MW-191	10/17/2012 09:47	1.92	-132	7.27	0.4	0.89	17.0	0.00
MW-191	10/17/2012 09:52	1.78	-132	7.25	0.4	0.89	17.0	0.00
MW-191	10/17/2012 09:57	1.71	-128	7.19	0.4	0.90	17.0	0.00
MW-191	10/17/2012 10:02	1.65	-123	7.14	0.4	0.91	16.9	0.00
MW-191	10/17/2012 10:13	2.60	-115	7.08	0.50	0.926	17.15	0.0000
MW-191	10/17/2012 10:28	1.81	-112	7.07	0.50	0.927	16.14	41.00
MW-191	10/18/2012 13:46	11.24	-81	6.97	0.40	0.846	19.03	678.00
MW-191	06/11/2013 10:05	10.16	-119.5	7.11	0.47	0.962	18.87	3.3
MW-191	06/11/2013 11:05	7.38	-117.3	7.09	0.45	0.913	18.87	0
MW-191	06/11/2013 11:40	8.95	-102.7	7.00	0.44	0.893	20.93	104.10
MW-191	06/12/2013 11:40	8.95	-102.7	7	0.44	0.893	20.93	104.1
MW-191	09/09/2015 14:00	3.72	-97.2	7.03	0.51	1.024	19.42	3.20
MW-191	09/09/2015 14:30	2.69	-42.3	6.94	0.51	0.991	20.14	15.40
MW-191	10/20/2015 12:45	7.73	-163	6.83	0.30	0.678	24.66	0.0000
MW-191	10/20/2015 13:20	6.32	-152	6.97	0.30	0.661	24.31	0.70
MW-191	02/11/2016 10:55	4.24	-126.9	7.14	0.45	0.902	12.73	28.1
MW-191	02/11/2016 11:05	2.74	-122.7	7.02	0.45	0.91	12.91	57.3
MW-191	05/24/2016 10:30	2.63	-119.3	6.82	0.50	1.005	15.31	7.30
MW-191	05/24/2016 11:00	3.76	-107.3	6.70	0.50	1.001	15.22	62.80
MW-191	08/10/2016 09:15	2.57	-111.7	6.89	0.53	1.045	21.33	13.90
MW-191	08/10/2016 09:40	3.30	-100.5	6.90	0.54	1.094	21.05	51.80
MW-191	11/09/2016 10:30	0.87	-131.3	6.79	0.97	1.893	17.76	12.50
MW-191	05/30/2017 10:05	2.78	-85.90	6.89	0.54	1.080	15.64	5.80
MW-191	05/30/2017 10:40	0.29	-116.70	7.04	0.80	1.582	15.76	13.70
MW-191	05/30/2017 11:05	1.82	-95.30	6.72	0.53	1.068	15.96	355.20
MW-191	05/12/2018 09:45	0.74	-95.40	7.10	0.53	1.056	14.63	26.80
MW-191	05/12/2018 10:15	2.07	-46.20	7.29	0.60	1.139	14.69	89.00
MW-191	05/12/2018 10:25	2.46	-54.30	7.23	0.64	1.275	14.69	97.60
MW-191	05/04/2019 10:00	0.06	-110.5	7.3	NM	1.041	13.45	21.5
MW-191	05/04/2019 10:25	0.28	-93.2	7.59	0.5	0.998	13.79	6.9
MW-191	11/02/2019 08:40	1.02	-40.9	6.91	NM	1.134	13.08	241.7
MW-191	11/02/2019 08:45	0.31	-120.6	6.99	NM	1.027	13.78	316.4
MW-191	11/02/2019 08:50	0.26	-122.3	7.04	NM	1.01	14.45	160.8
MW-191	11/02/2019 08:55	0.3	-118.9	7.06	NM	0.999	14.9	110

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-191	11/02/2019 09:00	0.35	-119.5	7.07	NM	1.001	14.77	81
MW-191	11/02/2019 09:05	0.41	-119.8	7.07	NM	1.006	14.72	63.6
MW-191	11/02/2019 09:10	0.43	-110.8	7.07	NM	1.007	14.8	53.2
MW-191	11/02/2019 09:15	0.41	-110	7.07	NM	1.005	14.82	46.2
MW-191	11/02/2019 09:20	0.42	-109.2	7.08	NM	1.001	14.94	44.9
MW-191	11/02/2019 09:25	0.39	-113.6	7.08	NM	0.997	15.13	41.1
MW-191	11/02/2019 09:40	0.6	-116.6	7.06	0.49	0.978	15.18	17.9
MW-191	11/02/2019 10:10	0.74	-103.5	7.03	0.48	0.948	11.91	718.4
MW-191	05/02/2020 09:20	0.78	-119.1	6.94	NM	1.039	15.57	219.9
MW-191	05/02/2020 09:37	6.9	-145	6.95	0.28	0.566	15.4	0
MW-191	06/19/2021 10:35	0.75	-135.5	6.83	0.48	0.971	17.45	261.4
MW-191	06/19/2021 10:40	0.69	-135.7	6.84	0.48	0.969	17.38	232.4
MW-191	06/19/2021 10:45	0.62	-136.6	6.9	0.48	0.969	17.39	164.1
MW-191	06/19/2021 10:50	0.61	-137.5	6.9	0.48	0.972	17.34	147.8
MW-191	06/19/2021 10:55	0.59	-140.1	6.91	0.49	0.991	17.35	88.3
MW-191	06/19/2021 11:00	0.6	-140.8	6.92	0.5	0.998	17.28	57.2
MW-191	06/19/2021 11:05	0.59	-142.2	6.95	0.5	1.014	17.21	63
MW-191	06/19/2021 11:10	0.58	-145.5	6.97	0.51	1.023	17.4	25.8
MW-191	06/19/2021 11:15	0.58	-144.6	6.98	0.51	1.024	17.5	18
MW-191	06/19/2021 11:20	0.58	-145.9	6.98	0.51	1.025	17.52	26.6
MW-191	09/22/2021 13:00	0.58	-136.2	6.68	0.51	1.023	22.02	230.1
MW-191	09/22/2021 13:05	0.37	-140.8	6.72	0.5	1.014	21.82	294.2
MW-191	09/22/2021 13:10	0.23	-141.4	6.84	0.49	0.996	20.96	210.1
MW-191	09/22/2021 13:15	0.2	-141.3	6.89	0.49	0.987	20.98	208
MW-191	09/22/2021 13:20	0.25	34.7	6.45	0.21	0.038	23.45	32
MW-191	09/22/2021 13:25	44.56	0.98	6.21	0.87	0.008	24.9	217
MW-191	09/22/2021 13:30	0.31	0.98	6.54	0.402	1.209	22.1	234.1
MW-191	09/22/2021 13:35	0.87	-24	6.32	0.05	1.274	22.21	222.7
MW-191	09/22/2021 13:40	-25	0.98	6.45	0.05	1.987	22.39	233.4
MW-191	09/22/2021 13:45	0.08	22	6.57	0.04	1.384	22.11	233.9
MW-191	12/17/2021 09:25	5.09	35.1	6.09	0.55	1.101	16.23	50.8
MW-191	12/17/2021 09:30	2.55	15	5.95	0.52	1.044	16.59	46.7
MW-191	12/17/2021 09:35	2.15	8	5.37	0.52	1.046	16.67	34.3
MW-191	12/17/2021 09:40	1.9	-0.4	5.92	0.53	1.058	16.78	21.6
MW-191	12/17/2021 09:45	1.85	-3.2	5.92	0.53	1.065	16.88	15.1
MW-191	12/17/2021 09:50	1.84	-4.3	5.91	0.53	1.073	16.87	9
MW-191	12/17/2021 09:55	1.8	-5.1	5.89	0.54	1.077	16.88	6.7
MW-191	12/17/2021 10:00	1.81	-5.8	5.93	0.54	1.076	16.89	5.5
MW-191	12/17/2021 10:05	1.78	-6.5	5.88	0.53	1.065	16.91	5
MW-191	12/17/2021 10:10	5.92	-8.2	5.88	0.53	1.038	17.16	3.9
MW-191	03/15/2022 09:15	3.25	-83.1	6.64	0.58	1.164	13	61.4
MW-191	03/15/2022 09:20	1.88	-91.8	6.62	0.6	1.191	14.62	15.8
MW-191	03/15/2022 09:25	1.07	-96.7	6.61	0.59	1.182	14.37	5.5
MW-191	03/15/2022 09:30	1.03	-95.9	6.6	0.59	1.18	14.36	5.7
MW-191	03/15/2022 09:35	1	-94.8	6.59	0.59	1.174	14.12	3.9
MW-191	03/15/2022 09:40	0.96	-83.3	6.53	0.59	1.168	13.94	4.6
MW-191	03/15/2022 09:45	0.92	-72.6	6.49	0.58	1.157	13.82	7.1
MW-191	03/15/2022 09:50	0.9	-70.1	6.45	0.58	1.156	13.91	4.4
MW-191	03/15/2022 09:55	0.89	-69.1	6.45	0.58	1.15	14.04	3.4
MW-191	03/15/2022 10:00	0.88	-67.3	6.46	0.58	1.15	13.96	14.3
MW-216	04/04/2012 11:00	16.56	0.15	0.66	156.0	58.00	0.3	2.2
MW-216	04/04/2012 11:05	0.74	223.2	4.98	0.3	0.63	14.3	56.3
MW-216	04/04/2012 11:10	0.68	248.8	4.94	0.3	0.62	14.7	54.0
MW-216	04/04/2012 11:15	0.29	267.5	4.81	0.3	0.61	14.9	53.6
MW-216	04/04/2012 11:20	0.05	275.8	4.81	0.3	0.60	15.5	54.2
MW-216	04/04/2012 11:25	0.07	NM	5.09	NM	0.26	NM	52.9
MW-216	06/14/2012 13:37	0.07	198	4.50	0.0000	0.667	18.10	71.30
MW-216	06/14/2012 14:09	0.92	184	4.27	0.0000	0.674	14.30	-5.01
MW-216	06/15/2012 11:25	1.03	269	4.91	0.03	0.603	16.66	23.40
MW-216	10/18/2012 14:09	0.73	239.4	4.62	0.3	0.49	18.8	0.3

Appendix B4 Central Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-216	10/18/2012 14:14	0.59	238.7	4.52	0.2	0.56	18.8	6.9
MW-216	10/18/2012 14:19	0.56	242.6	4.47	0.2	0.56	18.9	1.5
MW-216	10/18/2012 14:24	0.53	242.4	4.45	0.3	0.56	18.9	-2.6
MW-216	10/18/2012 14:29	0.48	239.9	4.44	0.3	0.56	18.8	-3.4
MW-216	10/18/2012 14:34	0.47	239.9	4.44	0.3	0.56	18.9	-3.3
MW-216	10/18/2012 14:39	0.47	339.6	4.44	0.3	0.56	18.9	-3.5
MW-216	12/13/2012 14:40	0.0000	226.3	4.72	NM	0.597	14.95	0.50
MW-216	12/13/2012 15:23	0.0000	216.6	4.82	NM	0.583	14.97	0.80
MW-216	12/14/2012 11:20	0.0000	212.3	4.89	NM	0.594	15.55	0.70
MW-216	02/13/2013 13:47	3.83	221.2	4.97	NM	0.420	12.46	22.90
MW-216	02/13/2013 13:52	0.53	244.4	4.67	NM	0.43	13	26.7
MW-216	02/13/2013 13:57	0.47	248.4	4.66	NM	0.43	12.7	13.4
MW-216	02/13/2013 14:02	0.44	249.4	4.67	NM	0.43	12.7	8.3
MW-216	02/13/2013 14:07	0.46	249.1	4.67	NM	0.43	12.7	6.7
MW-216	02/13/2013 14:12	0.5	249	4.67	NM	0.43	12.7	5.3
MW-216	02/13/2013 14:15	0.51	248.7	4.67	NM	0.430	12.68	4.00
MW-216	02/13/2013 14:26	0.83	249.5	4.68	NM	0.426	12.31	5.60
MW-216	04/15/2013 00:00	0.26	183.1	4.40	NM	0.283	13.58	3.30
MW-216	04/15/2013 14:15	0.05	134.8	4.63	NM	0.527	13.34	16
MW-216	04/15/2013 14:20	0.17	163	4.38	NM	0.53	13.1	13
MW-216	04/15/2013 14:25	0.27	169.4	4.36	NM	0.53	13	10.7
MW-216	04/15/2013 14:30	0.25	173.5	4.37	NM	0.53	13	9.8
MW-216	04/15/2013 14:35	0.22	177.4	4.36	NM	0.53	12.9	7.7
MW-216	04/15/2013 14:40	0.2	178.7	4.37	NM	0.53	13	6.3
MW-216	04/15/2013 14:45	0.18	181.4	4.38	NM	0.53	13	5
MW-216	04/15/2013 14:50	0.18	182.5	4.38	NM	0.53	13	4.8
MW-216	04/15/2013 14:55	0.19	183	4.39	NM	0.534	12.95	4.9
MW-216	04/16/2013 00:00	0.26	183.1	4.4	NM	0.283	13.58	3.3
MW-216	06/04/2013 13:29	5.7	139.8	5.04	0.28	0.511	18.29	0.9
MW-216	06/04/2013 14:09	2.55	237.4	4.48	0.28	0.469	15.93	0
MW-216	06/04/2013 14:25	8.19	230.5	4.59	0.27	0.470	16.88	6.70
MW-216	06/05/2013 14:25	8.19	230.5	4.59	0.27	0.47	16.88	6.7
MW-216	07/29/2013 16:14	0.37	-179	4.56	0.04	0.722	23.34	9.75
MW-216	07/29/2013 16:38	1.72	-5	4.88	0.07	1.422	14.96	2166.20
MW-216	07/30/2013 10:30	0.40	-157	5.00	0.08	1.632	17.46	29.70
MW-216	09/18/2013 09:45	12.12	96.2	4.94	0.26	0.541	19.61	98.70
MW-216	09/18/2013 13:40	6.53	79	4.65	0.26	0.530	18.87	22.80
MW-216	09/19/2013 10:15	16.43	93.2	4.97	0.27	0.549	19.72	149.70
MW-216	09/24/2013 10:00	5.31	48.4	5.43	0.26	0.537	16.58	15.80
MW-216	09/24/2013 11:20	2.57	145.5	4.81	0.27	0.548	18.29	2.10
MW-216	09/24/2013 11:35	6.48	149.5	4.91	0.25	0.525	18.04	26.30
MW-216	09/25/2013 11:35	6.48	149.5	4.91	0.25	0.525	18.04	26.30
MW-216	12/18/2013 11:25	4.95	-69.3	6.76	1.24	2.398	11.46	270.60
MW-216	12/18/2013 12:20	4.21	-46.2	6.51	1.26	2.432	12.20	78.20
MW-216	12/19/2013 12:40	2.86	-56.8	6.61	1.28	2.472	13.60	564.40
MW-216	03/12/2014 09:45	0.44	-99.2	6.54	0.91	1.769	12.23	15.60
MW-216	03/12/2014 10:30	0.41	-100.3	6.45	0.92	1.787	12.10	17.40
MW-216	03/12/2014 10:50	0.33	-102.4	6.52	0.88	1.792	11.95	18.30
MW-216	06/24/2014 00:00	10.12	-75.2	5.95	0.73	1.120	20.50	812.60
MW-216	06/24/2014 00:02	6.93	NM	NM	NM	NM	NM	NM
MW-216	06/24/2014 00:04	NM	NM	6.17	NM	NM	NM	NM
MW-216	06/24/2014 00:06	NM	NM	NM	NM	NM	NM	348.20
MW-216	06/24/2014 00:08	NM	NM	NM	NM	1.696	NM	NM
MW-216	06/24/2014 00:10	NM	-70.8	NM	NM	NM	NM	NM
MW-216	06/24/2014 00:12	NM	NM	NM	0.86	NM	NM	NM
MW-216	06/24/2014 00:16	NM	NM	NM	NM	NM	14.95	NM
MW-216	06/24/2014 09:35	4.72	-84.8	6.19	0.74	1.437	17.11	97.50
MW-216	08/11/2014 14:50	0.15	-30	6.16	0.07	1.333	22.35	9.26
MW-216	08/11/2014 15:25	0.90	103	6.21	0.08	1.543	14.85	2734.50
MW-216	08/28/2014 09:15	3.19	-112.9	6.63	0.50	1.009	18.66	195.20

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-216	08/28/2014 11:10	1.17	-125.4	6.64	0.42	0.848	16.96	20.80
MW-216	08/28/2014 11:25	1.24	-130.1	6.64	0.42	0.953	17.05	23.90
MW-216	10/31/2014 13:20	6.58	-80.8	5.82	0.78	1.563	16.11	133.40
MW-216	10/31/2014 14:05	3.19	-101.2	6.16	0.70	1.398	16.19	80.80
MW-216	10/31/2014 15:35	6.64	-92.4	6.27	0.71	1.347	16.72	127.40
MW-216	11/24/2014 13:32	1.85	-106.1	6.40	0.79	1.445	17.66	395.60
MW-216	11/24/2014 14:14	1.52	-105.3	6.30	0.71	1.408	16.82	916.20
MW-216	11/24/2014 14:18	0.88	-125	6.24	0.68	1.345	17.03	394.60
MW-216	01/19/2015 11:25	0.13	-84.7	6.56	0.64	1.283	12.43	212.10
MW-216	01/19/2015 12:05	0.0000	-108.7	6.49	0.39	1.176	12.83	60.50
MW-216	01/19/2015 13:20	0.82	-80.4	6.52	0.60	1.213	12.52	92.70
MW-216	04/23/2015 12:55	2.10	-76.9	6.73	0.67	1.370	10.90	33.60
MW-216	04/23/2015 14:35	5.60	84	7.49	0.60	1.197	11.78	18.90
MW-216	07/09/2015 10:45	3.78	-55.9	6.75	0.70	1.496	15.58	46.50
MW-216	07/09/2015 10:50	4.20	-66.9	6.73	0.58	1.160	14.61	241.90
MW-216	10/12/2015 11:45	4.48	-44.7	6.00	0.29	0.596	19.37	2.50
MW-216	10/12/2015 12:00	5.45	-48.3	5.42	0.31	0.628	18.85	18.80
MW-216	02/09/2016 11:45	5.12	-106.4	6.67	0.55	1.098	11.16	28.6
MW-216	02/09/2016 12:00	4.52	-93.9	6.63	0.57	1.133	12.47	173.2
MW-216	05/11/2016 11:35	1.96	-92.1	6.37	0.58	1.162	20.28	31.90
MW-216	05/11/2016 12:10	3.06	-70.6	6.48	0.54	1.090	15.40	68.10
MW-216	08/05/2016 13:30	2.33	-64	7.74	0.48	0.967	18.80	106.40
MW-216	08/05/2016 13:45	2.00	-56.3	7.74	0.49	0.985	17.01	405.00
MW-216	10/31/2016 14:20	2.91	-89.1	6.52	0.50	1.012	18.40	197.30
MW-216	10/31/2016 14:45	2.93	-82.7	6.48	0.46	0.932	17.74	225.90
MW-216	05/23/2017 13:20	1.55	221.30	6.13	0.40	0.898	15.3	20.80
MW-216	05/23/2017 14:05	3.29	220.50	6.37	0.47	0.951	15.09	45.60
MW-216	05/23/2017 14:25	4.45	220.90	6.23	0.44	0.892	14.28	74.90
MW-216	08/28/2017 11:00	2.54	-31.30	6.47	0.31	0.626	18.65	55.20
MW-216	08/28/2017 11:10	2.29	-32.60	6.40	0.31	0.627	18.93	52.30
MW-216	11/07/2017 10:35	5.71	-71.50	6.34	0.48	0.972	15.57	168.90
MW-216	11/07/2017 10:55	6.72	-55.20	6.27	0.44	0.889	16.52	167.20
MW-216	11/07/2017 11:05	1.09	-85.50	6.19	0.35	0.718	17.48	30.10
MW-216	02/22/2018 09:20	0.72	-51.00	6.10	0.39	0.800	11.16	50.10
MW-216	02/22/2018 10:45	6.42	-41.00	6.24	0.41	0.826	11.83	2.40
MW-216	02/22/2018 11:00	4.57	-37.90	6.33	0.40	0.820	12.32	41.60
MW-216	05/18/2018 09:25	0.39	-67.20	6.10	0.44	0.882	13.04	3.10
MW-216	05/18/2018 10:45	2.64	-74.30	6.46	0.64	1.279	14.27	8.40
MW-216	05/18/2018 11:05	4.85	-47.50	6.47	0.46	0.929	13.46	29.80
MW-216	12/17/2018 09:15	3.64	-113.50	6.61	1.05	2.039	13.39	1383.70
MW-216	12/17/2018 11:15	3.82	-117.50	6.79	0.87	1.707	12.87	1377.00
MW-216	12/17/2018 11:35	4.62	-106.90	6.61	1.02	1.996	15.12	1401.90
MW-216	02/22/2019 13:00	2.97	-51.20	6.48	0.55	1.107	11.27	300.10
MW-216	02/22/2019 13:55	3.02	-65.70	6.28	0.49	0.916	12.04	48.70
MW-216	02/22/2019 14:30	3.31	-42.20	6.29	0.47	1.091	12.46	281.20
MW-216	04/23/2019 09:45	0.47	-118.70	6.38	0.74	1.459	14.45	109.20
MW-216	04/23/2019 10:45	2.40	-122.60	6.54	0.79	1.547	16.48	273.60
MW-216	04/23/2019 11:10	3.89	-98.20	6.58	0.83	1.641	16.35	1515.80
MW-216	07/17/2019 10:05	3.41	-111.2	6.6	NM	1.355	28.59	166.4
MW-216	07/17/2019 10:10	0.38	-112	6.22	NM	1.617	22.15	155.2
MW-216	07/17/2019 10:15	0.31	-109.2	6.19	NM	1.613	21.35	81.5
MW-216	07/17/2019 10:20	0.32	-108.1	6.17	NM	1.597	22.38	133.1
MW-216	07/17/2019 10:25	0.33	-110.5	6.22	NM	1.589	22.81	123.2
MW-216	07/17/2019 10:30	0.35	-110.4	6.22	NM	1.578	22.22	119.2
MW-216	07/17/2019 10:35	0.34	-110.2	6.2	NM	1.565	20.2	112
MW-216	07/17/2019 10:40	0.35	-110.4	6.24	NM	1.555	20.42	106.3
MW-216	07/17/2019 10:45	0.36	-110.7	6.24	NM	1.554	20.51	107.9
MW-216	07/17/2019 10:50	2.13	-98.3	6.19	0.73	1.454	22.47	NM
MW-216	07/17/2019 13:30	0.36	-110.7	6.24	NM	1.554	20.51	107.9
MW-216	07/17/2019 14:35	2.13	-98.3	6.19	0.73	1.454	22.47	201.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-216	07/17/2019 15:00	4.63	-101.7	6.22	0.74	1.411	22.1	324.6
MW-216	10/29/2019 13:00	2.44	-79.3	6.71	NM	0.634	18.71	32.3
MW-216	10/29/2019 13:05	0.62	-85.3	6.65	NM	0.63	18.6	37
MW-216	10/29/2019 13:10	0.49	-88	6.63	NM	0.63	18.61	39.9
MW-216	10/29/2019 13:15	0.39	-90.9	6.62	NM	0.634	18.63	52
MW-216	10/29/2019 13:20	0.48	-77.9	6.62	NM	0.637	18.41	142
MW-216	10/29/2019 13:25	0.54	-82.3	6.59	NM	0.664	17.83	176.3
MW-216	10/29/2019 13:30	0.45	-85.9	6.58	NM	0.668	17.95	148
MW-216	10/29/2019 13:35	0.37	-87.2	6.58	NM	0.668	17.99	120.6
MW-216	10/29/2019 13:40	0.34	-88.5	6.58	NM	0.665	18.02	153.7
MW-216	10/29/2019 13:45	0.29	-89.3	6.57	NM	0.667	18.08	174.4
MW-216	10/29/2019 14:35	0.22	-93.6	6.54	0.34	0.695	17.47	924.2
MW-216	10/29/2019 14:55	0.57	-92.7	6.55	0.35	0.712	18.02	1348.9
MW-216	12/16/2019 13:40	0.57	-134.5	6.56	NM	0.62	14.38	183
MW-216	12/16/2019 13:45	0.24	-139	6.53	NM	0.616	14.42	178.8
MW-216	12/16/2019 13:50	0.21	-133.7	6.53	NM	0.603	13.86	174.6
MW-216	12/16/2019 13:55	0.21	-128	6.53	NM	0.598	13.76	180.2
MW-216	12/16/2019 14:00	0.2	-125.8	6.53	NM	0.598	13.86	216.5
MW-216	12/16/2019 14:05	0.19	-124.6	6.52	NM	0.591	14.05	220.5
MW-216	12/16/2019 14:10	0.19	-125.3	6.52	NM	0.584	14.14	184
MW-216	12/16/2019 14:15	0.17	-123.6	6.51	NM	0.58	14.04	200.8
MW-216	12/16/2019 14:20	0.17	-122.8	6.51	NM	0.574	14.17	190.1
MW-216	12/16/2019 14:25	0.17	-123.9	6.51	NM	0.573	14.16	169.4
MW-216	12/16/2019 15:00	0.19	-135.7	6.47	0.27	0.56	13.95	387.7
MW-216	12/16/2019 15:16	0.24	-132.4	6.48	0.28	0.574	14.86	541.8
MW-216	01/21/2020 09:00	2.41	-133.7	6.64	NM	1.188	14.42	112.8
MW-216	01/21/2020 09:05	1.05	-138.9	6.69	NM	1.177	13.16	58.6
MW-216	01/21/2020 09:10	0.88	-136.5	6.66	NM	1.162	12.62	111.2
MW-216	01/21/2020 09:15	0.77	-136.3	6.66	NM	1.169	12.67	182.8
MW-216	01/21/2020 09:20	0.72	-136.2	6.74	NM	1.169	12.63	185.2
MW-216	01/21/2020 09:25	0.65	-135.9	6.67	NM	1.168	12.71	141
MW-216	01/21/2020 09:30	0.61	-135.3	6.72	NM	1.166	12.73	133.4
MW-216	01/21/2020 09:35	0.57	-134.1	6.54	NM	1.162	12.74	104.3
MW-216	01/21/2020 09:40	0.55	-133.3	6.62	NM	1.16	12.8	82.7
MW-216	01/21/2020 09:45	0.52	-132.6	6.61	NM	1.155	12.79	51.4
MW-216	01/21/2020 10:43	2.29	-117	6.58	0.55	1.101	13.27	245.7
MW-216	01/21/2020 11:10	2.69	-89.9	6.62	0.56	1.122	11.35	390.1
MW-216	04/28/2020 12:10	0.2	-101.5	6.6	NM	1.223	16.24	10.2
MW-216	04/28/2020 12:55	0.84	-91.9	6.42	0.6	1.19	16.22	779.3
MW-216	07/27/2020 09:10	2.65	-121.6	7.24	0.68	1.346	23.28	47.8
MW-216	07/27/2020 09:15	1.04	-107.5	6.32	0.62	1.245	21.2	49.3
MW-216	07/27/2020 09:20	0.83	-106.2	6.29	0.61	1.216	20.55	55.8
MW-216	07/27/2020 09:25	0.72	-101.1	6.29	0.6	1.208	20.89	62.7
MW-216	07/27/2020 09:30	0.59	97	6.32	0.6	1.208	20.41	70
MW-216	07/27/2020 09:35	0.52	-90.9	6.32	0.59	1.192	20.27	58.8
MW-216	07/27/2020 09:40	0.49	-87.3	6.32	0.6	1.194	20.22	56
MW-216	07/27/2020 09:45	0.44	-82.4	6.35	0.59	1.184	20.7	51.7
MW-216	07/27/2020 09:50	0.43	-80.5	6.37	0.59	1.182	20.86	43.4
MW-216	07/27/2020 09:55	0.42	-79.4	6.35	0.59	1.177	20.84	38.4
MW-216	07/27/2020 10:50	6.37	-110	6.39	0.6	1.2	20.24	30.7
MW-216	07/27/2020 11:00	1.26	-102.2	6.34	0.6	1.209	21.09	33.2
MW-216	04/06/2021 09:00	5.57	-82.8	7.02	0.57	1.132	14.05	1.4
MW-216	04/06/2021 09:05	0.55	-83.2	6.52	0.52	1.068	13.7	1
MW-216	04/06/2021 09:10	0.4	-89.2	6.56	0.53	1.066	13.62	4.2
MW-216	04/06/2021 09:15	0.36	-93	6.6	0.53	1.095	13.61	33.9
MW-216	04/06/2021 09:20	0.33	-94	6.61	0.53	1.063	13.58	41.6
MW-216	04/06/2021 09:25	0.45	-95	6.62	0.53	1.056	13.82	27.8
MW-216	04/06/2021 09:30	0.38	-94.4	6.63	0.53	1.054	13.66	19.8
MW-216	04/06/2021 09:35	0.32	-94.3	6.63	0.52	1.05	13.79	22.5
MW-216	04/06/2021 09:40	0.29	-94	6.63	0.52	1.046	13.87	21.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-216	04/06/2021 09:45	0.27	-93.9	6.63	0.52	1.045	13.85	17.8
MW-216	04/06/2021 10:10	0.22	-89.1	6.59	0.51	1.028	13.29	15.7
MW-216	04/06/2021 10:35	0.32	-83.9	6.62	0.63	1.058	13.95	97.8
MW-216	06/24/2021 09:00	2.75	-95	7.24	0.5	1.007	19.61	30.1
MW-216	06/24/2021 09:05	0.91	-78.1	6.34	0.49	0.995	18.79	16.9
MW-216	06/24/2021 09:10	0.78	-81.6	6.33	0.49	0.988	19.01	17.3
MW-216	06/24/2021 09:15	0.71	-83	6.33	0.48	0.974	19.12	23.5
MW-216	06/24/2021 09:20	0.7	-80.5	6.32	0.48	0.967	18.89	23
MW-216	06/24/2021 09:25	0.68	-80.6	6.31	0.46	0.962	18.84	22.7
MW-216	06/24/2021 09:30	0.65	-81.4	6.32	0.48	0.96	19	22.8
MW-216	09/30/2021 09:15	1.45	-52.8	6.34	0.43	0.867	18.72	16.1
MW-216	09/30/2021 09:20	0.97	-68.9	6.29	0.46	0.934	19.18	11.9
MW-216	09/30/2021 09:25	0.74	-85.9	6.32	0.48	0.978	19.52	13.5
MW-216	09/30/2021 09:30	0.67	-94.4	6.36	0.48	0.978	19.53	13
MW-216	09/30/2021 09:35	0.61	-96.3	6.36	0.48	0.973	19.53	14.4
MW-216	09/30/2021 09:40	0.56	-102.3	6.37	0.48	0.968	19.41	18.2
MW-216	09/30/2021 09:45	0.55	-103.8	6.37	0.48	0.966	19.52	16.1
MW-216	09/30/2021 09:50	0.51	-109.1	6.39	0.48	0.972	19.43	15.6
MW-216	09/30/2021 09:55	0.5	-111.5	6.4	0.48	0.976	19.55	13.7
MW-216	09/30/2021 10:00	0.5	-112.1	6.4	0.48	0.977	19.5	11.8
MW-216	12/28/2021 08:55	1.87	-106.5	6.22	0.38	0.776	14.14	29.1
MW-216	12/28/2021 09:00	1.2	-100.2	6.29	0.39	0.786	14.99	109.5
MW-216	12/28/2021 09:05	1.12	-95.7	6.32	0.38	0.765	15.08	86.2
MW-216	12/28/2021 09:10	1.09	-94.8	6.32	0.38	0.772	15.18	62.8
MW-216	12/28/2021 09:15	1.06	-97.6	6.31	0.39	0.795	15.2	46.6
MW-216	12/28/2021 09:20	1.06	-99.9	6.31	0.4	0.804	15.19	39.8
MW-216	12/28/2021 09:25	1.08	-100.5	6.31	0.4	0.807	15.33	28.4
MW-216	12/28/2021 09:30	1.12	-100.3	6.31	0.4	0.811	15.34	21.2
MW-216	12/28/2021 09:35	1.11	-101.1	6.31	0.4	0.813	15.33	17.2
MW-216	12/28/2021 09:40	1.11	-103	6.3	0.4	0.814	15.42	15.2
MW-216	03/29/2022 10:00	11.63	-38	6.2	0.46	0.923	9.83	95.3
MW-216	03/29/2022 10:05	10.89	-47.7	6.27	0.46	0.929	9.71	101.6
MW-216	03/29/2022 10:10	11.96	-68	6.42	0.48	0.969	10.31	294.6
MW-216	03/29/2022 10:15	13.03	-74.7	6.32	0.49	0.981	10.32	100.7
MW-216	03/29/2022 10:20	10.59	-76.1	6.62	0.49	0.981	10.79	67.1
MW-216	03/29/2022 10:25	14.53	-74.7	6.33	0.48	0.974	10.87	53.1
MW-216	03/29/2022 10:30	9	-74.9	6.34	0.48	0.973	11.2	38.7
MW-216	03/29/2022 10:35	10.28	-76.7	6.41	0.48	0.971	11.48	30
MW-216	03/29/2022 10:40	9	-76.4	6.32	0.48	0.969	11.35	22.2
MW-216	03/29/2022 10:45	11.02	-76.8	6.34	0.48	0.969	11.4	24.4
MW-217	04/04/2012 14:40	2.99	26.1	6.41	0.6	1.25	17.9	23.0
MW-217	04/04/2012 14:45	2.21	-13.4	6.26	0.6	1.23	17.0	28.0
MW-217	04/04/2012 14:50	2.62	-13.1	6.25	0.6	1.23	18.2	24.7
MW-217	04/04/2012 14:55	2.18	-14.7	6.24	0.6	1.23	19.1	18.1
MW-217	04/04/2012 15:00	1.96	-15.6	6.24	0.6	1.23	19.5	18.8
MW-217	04/04/2012 15:05	1.73	-15.9	6.25	0.6	1.23	19.9	17.3
MW-217	04/04/2012 15:10	1.55	-16.1	6.24	0.6	1.24	19.9	14.5
MW-217	04/04/2012 15:20	1.33	-20.2	6.26	0.61	1.228	18.21	25.20
MW-217	04/04/2012 16:00	0.70	-25.5	6.24	0.61	1.214	16.53	2.90
MW-217	04/05/2012 16:15	4.77	-43.6	6.32	0.31	0.628	15.33	40.30
MW-217	06/14/2012 14:54	0.0000	-59	6.82	0.10	1.390	17.60	152.00
MW-217	06/14/2012 15:44	20.00	-82	6.98	0.10	1.320	15.40	755.00
MW-217	06/15/2012 12:00	-0.12	-31	6.84	0.06	1.230	14.17	24.20
MW-217	10/19/2012 14:13	1.96	-12	6.31	0.6	1.28	19.1	18
MW-217	10/19/2012 14:18	1.29	-24	6.31	0.6	1.26	19	16.7
MW-217	10/19/2012 14:23	0.94	-30	6.33	0.6	1.26	18.9	9.5
MW-217	10/19/2012 14:28	0.75	-34	6.34	0.6	1.26	19	7.1
MW-217	10/19/2012 14:32	0.68	-36	6.35	0.6	1.27	19	4.7
MW-217	10/19/2012 14:38	0.59	-38	6.36	0.6	1.27	19.6	3.1
MW-217	10/19/2012 14:43	0.55	-39	6.36	0.6	1.28	19.7	3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-217	10/19/2012 14:48	0.52	-40	6.37	0.6	1.29	19.6	2.7
MW-217	12/14/2012 15:15	0.0000	-123	6.58	NM	1.748	14.94	0.0000
MW-217	12/14/2012 15:23	0.0000	-114.5	6.61	NM	1.574	15.97	1.00
MW-217	12/15/2012 11:20	3.51	-124.8	6.69	NM	1.596	15.05	3.50
MW-217	02/13/2013 14:22	0.11	-126.8	6.74	NM	1.036	12.86	9.90
MW-217	02/14/2013 13:43	4.31	-115.7	6.75	NM	1.038	12.80	20.80
MW-217	02/14/2013 13:45	4.31	-115.7	6.75	NM	1.04	12.8	20.8
MW-217	02/14/2013 13:50	1.03	-126.5	6.75	NM	1.05	13	15.7
MW-217	02/14/2013 13:55	0.64	-127.8	6.72	NM	1.04	12.8	12.8
MW-217	02/14/2013 14:00	0.48	-127.8	6.71	NM	1.05	12.9	11.1
MW-217	02/14/2013 14:05	0.35	-128.3	6.71	NM	1.04	12.9	9.4
MW-217	02/14/2013 14:10	0.32	-127.9	6.72	NM	1.040	12.97	9.30
MW-217	04/16/2013 13:03	0	28.6	6.57	NM	2.112	15.26	30.3
MW-217	04/16/2013 13:08	0	-125.2	6.55	NM	2.13	16.1	30.1
MW-217	04/16/2013 13:13	0	-130	6.57	NM	2.16	16.1	24.6
MW-217	04/16/2013 13:18	0.04	-131.1	6.56	NM	2.16	15.6	26.7
MW-217	04/16/2013 13:23	0.05	-131.4	6.54	NM	2.15	15.4	26.8
MW-217	04/16/2013 13:28	0.06	-132.4	6.57	NM	2.153	15.46	25.5
MW-217	04/17/2013 13:42	0.07	-126.9	6.56	NM	2.18	16.26	30.2
MW-217	07/29/2013 14:52	0.10	-196	6.57	0.07	1.446	20.65	16.99
MW-217	07/29/2013 16:32	2.09	-172	6.26	0.17	3.179	14.96	173.30
MW-217	07/30/2013 10:02	0.20	-169	6.70	0.23	4.333	17.41	44.50
MW-217	09/19/2013 10:55	0.90	-52.8	6.52	0.69	1.377	19.82	17.20
MW-217	09/19/2013 12:15	1.66	-130.3	6.74	0.96	1.871	22.09	23.90
MW-217	09/19/2013 13:25	2.03	-103.7	6.78	1.11	2.173	22.03	66.10
MW-217	09/20/2013 13:25	2.03	-103.7	6.78	1.11	2.173	22.03	66.10
MW-217	12/17/2013 12:00	1.02	-120.1	6.53	0.62	1.205	9.93	9.60
MW-217	12/17/2013 13:10	1.22	-116	6.60	0.64	1.365	11.75	7.40
MW-217	12/17/2013 13:40	3.05	-108.8	6.64	0.72	1.403	12.62	64.50
MW-217	12/19/2013 09:35	3.17	-92.1	6.33	0.93	1.824	12.01	10.70
MW-217	12/19/2013 10:25	3.58	-84.3	6.64	0.88	1.736	11.03	32.60
MW-217	12/19/2013 10:40	5.77	-78.7	6.68	1.03	2.006	13.42	74.80
MW-217	03/13/2014 10:00	1.31	-49.7	6.60	0.52	1.043	4.24	24.90
MW-217	03/13/2014 10:55	5.25	-85.9	6.87	0.95	1.811	11.22	21.20
MW-217	03/13/2014 11:20	4.66	-117.5	6.91	0.72	1.415	11.46	292.30
MW-217	06/20/2014 13:05	6.59	-102.9	6.33	0.90	1.784	21.30	31.20
MW-217	06/20/2014 14:05	6.55	-103.2	6.35	0.90	1.785	21.25	31.40
MW-217	06/20/2014 14:15	6.57	-102.6	6.33	0.90	1.789	27.20	42.10
MW-217	08/12/2014 09:17	0.25	8	6.02	0.05	0.933	18.56	9.43
MW-217	08/12/2014 10:08	1.43	156	6.55	0.07	1.415	14.62	307.30
MW-217	01/15/2015 11:40	0.87	-95.3	6.54	0.60	1.205	12.31	12.70
MW-217	01/15/2015 12:20	0.23	-119.7	6.60	0.65	1.298	12.83	6.10
MW-217	01/15/2015 13:20	10.76	-107.6	6.68	0.73	1.449	12.38	29.40
MW-217	04/21/2015 10:30	0.84	-82.2	6.66	0.90	1.774	12.90	44.20
MW-217	04/21/2015 12:00	2.89	-79	6.65	0.91	1.782	13.49	36.70
MW-217	07/06/2015 15:10	1.12	-99.4	6.87	0.78	1.532	15.53	14.30
MW-217	07/06/2015 15:15	0.93	-79.1	6.65	0.82	1.619	15.90	22.40
MW-217	10/09/2015 09:35	3.84	-73.5	6.88	0.82	1.620	15.95	23.20
MW-217	10/09/2015 09:55	3.86	-77.2	6.67	0.71	1.404	17.30	10.10
MW-217	12/02/2015 10:12	1.1	394	6.25	0.08	1.489	16.9	29.9
MW-217	12/02/2015 10:44	0.66	-85	6.66	0.06	1.131	15.67	1278.6
MW-217	02/08/2016 14:20	1.63	-87.7	6.56	0.67	1.331	13.41	23
MW-217	02/08/2016 14:30	3.03	-96.4	6.64	0.68	1.355	13.09	566.9
MW-217	05/17/2016 13:00	2.75	-80.7	6.49	0.68	1.360	16.59	20.30
MW-217	05/17/2016 13:15	3.12	-75.9	6.57	0.70	1.389	14.23	400.20
MW-217	08/09/2016 14:55	1.98	-91.6	6.49	0.70	1.345	20.55	128.90
MW-217	08/09/2016 15:10	2.03	-90.2	6.39	0.69	1.389	20.47	150.40
MW-217	11/03/2016 14:55	3.20	-63	6.37	0.63	1.261	18.57	12.30
MW-217	11/03/2016 15:10	3.06	-64.6	6.37	0.62	1.244	18.04	43.70
MW-217	05/24/2017 10:45	3.36	198.10	6.98	0.50	0.999	14.14	0.60

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-217	05/24/2017 11:45	3.97	200.40	6.41	0.51	1.036	14.86	9.30
MW-217	05/24/2017 12:05	3.96	198.50	6.15	0.53	1.074	17.4	45.40
MW-217	11/07/2017 12:50	5.33	-88.20	6.61	0.49	0.981	14.85	6.30
MW-217	11/07/2017 13:15	5.45	-76.00	6.62	0.50	1.014	14.89	167.30
MW-217	11/07/2017 13:20	1.37	-93.80	6.56	0.40	0.821	18.25	2.70
MW-217	05/08/2018 08:55	2.55	-62.70	6.63	0.51	1.016	15.04	68.90
MW-217	05/08/2018 10:00	1.32	-76.30	6.56	0.53	1.070	15.25	4.30
MW-217	05/08/2018 10:30	2.10	-74.60	6.50	0.31	0.642	14.66	60.40
MW-217	04/19/2019 13:55	0.38	-61.4	6.65	NM	1.023	18.42	4.7
MW-217	04/22/2019 09:20	7.48	-52.1	6.78	0.53	1.06	13.71	1
MW-217	10/25/2019 12:15	2.37	-147.5	6.69	NM	0.299	19.76	0.7
MW-217	10/25/2019 12:20	0.9	-122.1	6.56	NM	0.27	19.38	0.5
MW-217	10/25/2019 12:25	0.68	-133.7	6.6	NM	0.345	19.18	0.6
MW-217	10/25/2019 12:30	0.62	-138.4	6.66	NM	0.383	18.34	1.8
MW-217	10/25/2019 12:35	0.57	-140.5	6.68	NM	0.399	17.94	1.5
MW-217	10/25/2019 12:40	0.64	-140.8	6.71	NM	0.412	17.93	0.8
MW-217	10/25/2019 12:45	0.6	-141.2	6.7	NM	0.429	17.99	0.7
MW-217	10/25/2019 12:50	0.58	-141.3	6.7	NM	0.437	17.88	0.3
MW-217	10/25/2019 12:55	0.54	-140.5	6.72	NM	0.441	17.81	0.2
MW-217	10/25/2019 13:00	0.6	-139	6.74	NM	0.442	17.96	0.2
MW-217	10/25/2019 13:30	0.98	-120.9	6.79	0.21	0.431	17.35	4.1
MW-217	10/25/2019 13:55	0.89	-109.2	6.73	0.22	0.449	17.82	15.2
MW-217	12/07/2019 08:40	2.34	-116.30	6.84	0.24	0.486	14.03	4.40
MW-217	12/07/2019 10:10	4.96	-162.30	7.29	0.23	0.475	14.81	1.10
MW-217	12/07/2019 10:45	6.03	-84.70	6.98	0.20	0.407	15.25	197.80
MW-217	12/20/2019 08:20	3.7	-86.2	6.48	NM	0.297	10.96	63
MW-217	12/20/2019 08:25	0.6	-115.7	6.72	NM	0.255	12.22	65.9
MW-217	12/20/2019 08:30	0.65	-117.7	6.75	NM	0.273	9.33	48.7
MW-217	12/20/2019 08:35	0.6	-123.5	6.74	NM	0.291	10.98	28.7
MW-217	12/20/2019 08:40	0.57	-120.6	6.79	NM	0.285	11.15	28.2
MW-217	12/20/2019 08:45	0.55	-120.4	6.76	NM	0.285	11.44	19.9
MW-217	12/20/2019 08:50	0.51	-119.6	6.77	NM	0.285	11.52	19.7
MW-217	12/20/2019 08:55	0.52	-119.6	6.77	NM	0.286	11.51	17.8
MW-217	12/20/2019 09:00	0.49	-118.2	6.77	NM	0.283	11.82	19.7
MW-217	12/20/2019 09:05	0.47	-117.1	6.77	NM	0.281	11.94	15.2
MW-217	12/20/2019 09:35	0.51	-123.6	6.72	0.12	0.26	15.48	37.7
MW-217	12/20/2019 09:50	2.15	-113.9	6.79	0.14	0.295	14.16	21.1
MW-217	04/28/2020 09:10	0.59	-93.2	6.76	NM	1.021	12.92	9.1
MW-217	04/28/2020 09:50	2.74	-103.5	6.78	0.52	1.042	15.09	8.7
MW-217	06/29/2021 13:35	7.25	-32.5	7.03	0.23	0.49	32.3	68.8
MW-217	06/29/2021 13:40	0.99	-71.6	6.79	0.45	0.91	23.77	32.6
MW-217	06/29/2021 13:45	0.84	-70	6.82	0.45	0.905	22.38	31.1
MW-217	06/29/2021 13:50	1.13	-69.8	6.81	0.45	0.907	22.27	24.8
MW-217	06/29/2021 13:55	1.19	-70.3	6.8	0.44	0.903	21.83	16.5
MW-217	06/29/2021 14:00	1.15	-70.5	6.8	0.44	0.9	21.78	16
MW-217	06/29/2021 14:05	1.12	-69.7	6.8	0.44	0.898	21.75	15.5
MW-217	08/31/2021 13:00	3.48	-64.6	6.63	0.39	0.792	27.36	142.5
MW-217	08/31/2021 13:05	1.28	-88	6.67	0.43	0.882	24.1	63.1
MW-217	08/31/2021 13:10	1.1	-91.1	6.69	0.43	0.878	23.13	58.9
MW-217	08/31/2021 13:15	0.99	-93.6	6.68	0.43	0.876	23.07	38.5
MW-217	08/31/2021 13:20	0.95	-96.7	6.72	0.43	0.881	22.74	34.9
MW-217	08/31/2021 13:25	0.93	-98.6	6.72	0.44	0.888	22.7	33.7
MW-217	08/31/2021 13:30	0.9	-99.2	6.76	0.44	0.889	22.65	33.3
MW-217	11/24/2021 11:30	2.73	-51.7	7.08	0.39	0.78	15.37	69.2
MW-217	11/24/2021 11:35	0.76	-52.2	6.69	0.38	0.765	15.69	84.4
MW-217	11/24/2021 11:40	0.53	-62	6.63	0.37	0.744	15.94	101.5
MW-217	11/24/2021 11:45	0.45	-71.1	6.65	0.34	0.693	16.37	84.6
MW-217	11/24/2021 11:50	0.41	-76.4	6.65	0.33	0.679	16.45	58.3
MW-217	11/24/2021 11:55	0.39	-82.6	6.69	0.35	0.709	16.29	42.3
MW-217	11/24/2021 12:00	0.38	-86.8	6.7	0.36	0.731	16.24	32.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-217	11/24/2021 12:05	0.37	-89.7	6.7	0.36	0.744	16.3	31.1
MW-217	11/24/2021 12:10	0.36	-92.7	6.71	0.37	0.758	16.31	24.9
MW-217	11/24/2021 12:15	0.36	-94.5	6.71	0.38	0.767	16.44	22.7
MW-217	03/28/2022 13:40	0.86	-66.1	6.53	0.42	0.86	10.43	504.5
MW-217	03/28/2022 13:45	0.64	-69.6	6.58	0.43	0.86	10.21	565.1
MW-217	03/28/2022 13:50	0.25	-87.2	6.67	0.42	0.859	9.33	341.1
MW-217	03/28/2022 13:55	0.29	-88.8	6.67	0.42	0.858	9.37	337.1
MW-217	03/28/2022 14:00	0.24	-92.2	6.68	0.42	0.86	9.33	244.1
MW-217	03/28/2022 14:05	0.11	-98.6	6.69	0.42	0.859	9.66	148.5
MW-217	03/28/2022 14:10	0.15	-99.4	6.7	0.42	0.86	9.74	137.4
MW-217	03/28/2022 14:15	0.16	-104.7	6.7	0.43	0.861	10.31	126.8
MW-217	03/28/2022 14:20	0.15	-105.5	6.7	0.43	0.861	10.39	122.1
MW-217	03/28/2022 14:25	0.17	-108.2	6.74	0.43	0.86	10.7	82.2
MW-219	04/03/2012 14:25	0.98	52.8	6.56	0.2	0.44	13.3	51.4
MW-219	04/03/2012 14:30	0.45	36.3	6.47	0.2	0.44	13.6	42.7
MW-219	04/03/2012 14:35	0.48	24.7	6.48	0.2	0.44	13.8	38.5
MW-219	04/03/2012 14:40	0.37	13.2	6.49	0.2	0.44	13.7	34.8
MW-219	04/03/2012 14:45	0.40	6.9	6.48	0.2	0.44	13.7	18.2
MW-219	04/03/2012 14:50	0.29	2.6	6.50	0.2	0.45	13.5	18.5
MW-219	04/03/2012 14:55	0.29	1.8	6.52	0.2	0.45	13.6	18.7
MW-219	04/03/2012 15:02	1.01	3.6	6.61	0.22	0.445	12.80	19.60
MW-219	04/03/2012 15:45	0.47	-4.2	6.53	0.22	0.446	12.53	1.50
MW-219	04/04/2012 16:05	2.17	11.2	6.74	0.22	0.446	12.20	42.10
MW-219	06/12/2012 13:05	1.18	-3	6.8	0.02	0.4904	19.14	51.3
MW-219	06/12/2012 13:09	0.62	-14	6.81	0.02	0.5028	17.52	14.5
MW-219	06/12/2012 13:12	0.44	-20	6.81	0.02	0.49809	17.46	10.9
MW-219	06/12/2012 13:15	0.4	-24	6.82	0.02	0.49774	17.5	18.9
MW-219	06/12/2012 13:18	0.37	-26	6.84	0.02	0.49801	17.43	467.9
MW-219	06/12/2012 13:21	0.32	-28	6.84	0.02	0.49706	16.92	13.9
MW-219	06/12/2012 13:24	0.29	-30	6.84	0.02	0.5017	16.8	9.5
MW-219	06/12/2012 13:27	0.3	-31	6.85	0.02	0.49643	16.93	7.9
MW-219	06/12/2012 13:31	0.29	-32	6.85	0.02	0.49598	16.98	4.5
MW-219	06/12/2012 13:34	0.28	-33	6.85	0.02	0.49537	16.93	26.9
MW-219	06/12/2012 13:37	0.27	-34	6.85	0.02	0.49838	17.08	36.1
MW-219	06/12/2012 13:40	0.26	-35	6.85	0.02	0.49803	17.09	12.8
MW-219	06/12/2012 13:43	0.26	-35	6.85	0.02	0.49795	16.94	10.5
MW-219	06/12/2012 13:46	0.25	-36	6.85	0.02	0.49645	17.1	19
MW-219	06/12/2012 13:49	0.25	-37	6.85	0.02	0.49677	17.05	56.9
MW-219	06/12/2012 13:52	0.25	-38	6.85	0.02	0.49986	17.05	4.1
MW-219	06/12/2012 13:56	0.24	-38	6.85	0.02	0.49831	17.07	9.7
MW-219	06/12/2012 14:32	4.52	11	7.07	0.02	0.485	14.84	87.10
MW-219	06/13/2012 11:54	5.26	65	6.76	0.01	0.109	15.60	29.40
MW-219	10/19/2012 15:24	1.59	-31	6.66	0.2	0.43	19.9	6.8
MW-219	10/19/2012 15:29	0.9	-32	6.54	0.2	0.48	19.6	1.8
MW-219	10/19/2012 15:34	0.79	-33	6.54	0.2	0.48	19.6	0.8
MW-219	10/19/2012 15:39	0.66	-35	6.53	0.2	0.49	19.6	0
MW-219	10/19/2012 15:44	0.6	-37	6.53	0.2	0.5	19.5	0
MW-219	10/19/2012 15:49	0.58	-37	6.53	0.2	0.51	19.5	0
MW-219	12/12/2012 13:51	0.0000	24.9	6.58	NM	0.343	16.29	2.10
MW-219	12/12/2012 14:40	0.0000	27.5	6.50	NM	0.333	16.90	2.80
MW-219	12/15/2012 12:05	0.0000	37.9	6.48	NM	0.331	16.25	18.30
MW-219	02/06/2013 10:27	1.76	48.4	6.58	NM	0.321	11.96	15.30
MW-219	02/13/2013 09:10	1.02	52.1	6.69	NM	0.330	12.43	76.80
MW-219	02/13/2013 09:15	0.7	33	6.67	NM	0.33	12.5	68.6
MW-219	02/13/2013 09:20	0.55	16.2	6.67	NM	0.34	12.8	44.8
MW-219	02/13/2013 09:25	0.54	16.4	6.64	NM	0.33	12.7	33.8
MW-219	02/13/2013 09:30	0.51	14.6	6.63	NM	0.33	12.7	26.6
MW-219	02/13/2013 09:35	0.45	15.3	6.61	NM	0.33	12.6	19.5
MW-219	02/13/2013 09:40	0.46	17.8	6.59	NM	0.33	12.7	17.2
MW-219	02/13/2013 09:45	0.47	19.2	6.59	NM	0.33	12.6	17.1

Appendix B4 Central Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-219	02/13/2013 09:50	0.44	24.4	6.56	NM	0.33	12.7	14.7
MW-219	02/13/2013 09:55	0.42	25.3	6.55	NM	0.33	12.6	17.7
MW-219	02/13/2013 10:00	0.42	25.9	6.54	NM	0.32	12.5	15.2
MW-219	02/13/2013 10:05	0.44	28.6	6.54	NM	0.323	12.59	12.80
MW-219	04/15/2013 10:10	2.69	12.3	6.62	NM	0.416	12.63	302.6
MW-219	04/15/2013 10:15	11.55	3.7	6.54	NM	0.41	12.6	364.3
MW-219	04/15/2013 10:20	10.54	0.6	6.56	NM	0.4	12.6	234.4
MW-219	04/15/2013 10:25	8.09	-2.9	6.55	NM	0.4	12.6	144.5
MW-219	04/15/2013 10:30	8.27	-3.2	6.52	NM	0.4	12.6	122.3
MW-219	04/15/2013 10:35	7.64	-3.6	6.54	NM	0.4	12.6	90.1
MW-219	04/15/2013 10:40	8.03	-1.8	6.52	NM	0.4	12.6	74.5
MW-219	04/15/2013 10:45	8.3	-0.6	6.5	NM	0.4	12.6	54.7
MW-219	04/15/2013 10:50	8.72	0.5	6.49	NM	0.4	12.8	48
MW-219	04/15/2013 10:55	9.66	1.8	6.47	NM	0.39	12.9	41.5
MW-219	04/15/2013 11:00	10.36	2.4	6.46	NM	0.32	12.9	35.7
MW-219	04/15/2013 11:05	10.54	2.9	6.45	NM	0.39	12.8	33
MW-219	04/15/2013 11:10	10.86	3.9	6.45	NM	0.39	12.9	25
MW-219	04/15/2013 11:15	10.86	3.9	6.45	NM	0.39	12.9	25
MW-219	04/15/2013 11:20	11.02	3.9	6.43	NM	0.389	12.89	25.6
MW-219	04/16/2013 11:38	8.42	9.8	6.42	NM	0.384	13.03	16.8
MW-219	06/03/2013 13:44	3.22	-0.5	6.31	0.2	0.352	16.76	39.6
MW-219	06/03/2013 14:29	1.92	-5	6.4	0.2	0.339	15.84	7.8
MW-219	06/03/2013 14:35	3.87	1.8	6.60	0.20	0.346	16.90	4.80
MW-219	06/04/2013 14:35	3.87	1.8	6.6	0.2	0.346	16.9	4.8
MW-219	09/17/2013 09:30	5.77	68.5	6.28	0.23	0.470	18.13	10.60
MW-219	09/17/2013 09:50	3.64	9.4	6.35	0.21	0.438	17.83	1.20
MW-219	09/18/2013 11:45	7.34	-10.8	6.19	0.22	0.451	19.40	9.80
MW-219R	10/28/2014 13:40	2.40	84.3	6.05	0.78	0.379	17.99	-14.60
MW-219R	10/28/2014 14:26	3.22	103.5	6.20	0.36	0.736	19.60	13.80
MW-219R	10/28/2014 14:30	3.03	104.8	6.15	0.34	0.693	17.97	25.00
MW-219R	11/25/2014 13:17	0.22	82.8	6.02	0.37	0.750	15.73	32.10
MW-219R	11/25/2014 13:57	0.06	76.1	5.92	0.40	0.806	15.95	3.20
MW-219R	11/25/2014 14:01	0.20	75.7	5.91	0.40	0.807	14.73	17.80
MW-219R	01/13/2015 09:35	1.66	185	6.12	0.36	0.725	9.14	23.40
MW-219R	01/13/2015 10:15	0.94	90.1	6.08	0.37	0.755	10.52	0.0000
MW-219R	01/13/2015 11:20	4.31	93.9	6.38	0.39	0.792	11.96	5.40
MW-219R	04/20/2015 11:52	0.77	80.2	6.12	0.48	0.973	11.73	111.30
MW-219R	04/20/2015 13:00	1.32	152.3	6.51	0.65	1.273	11.97	0.0000
MW-219R	04/22/2015 09:50	1.50	53	6.10	0.47	0.956	13.24	104.40
MW-219R	07/06/2015 11:40	0.43	31.7	6.46	0.61	1.718	16.37	7.20
MW-219R	07/06/2015 12:00	0.20	236	6.52	0.48	1.212	17.95	10.01
MW-219R	10/08/2015 10:10	3.87	178.2	6.37	0.50	1.006	18.76	18.80
MW-219R	10/08/2015 10:25	3.17	200.2	6.30	0.49	0.987	18.05	22.90
MW-219R	12/03/2015 10:36	2.97	855	5.91	0.06	1.216	15.69	6.4
MW-219R	12/03/2015 11:47	2.12	-33	6.34	0.06	1.111	15.96	64.2
MW-219R	02/01/2016 10:50	1.4	47.3	6.8	1.03	1.996	13.03	31
MW-219R	02/01/2016 11:08	1.71	207.4	6.4	0.7	1.394	13.48	35.4
MW-219R	05/10/2016 10:20	1.65	50	6.62	0.69	1.415	13.55	4.30
MW-219R	05/10/2016 10:38	1.43	4.4	6.46	0.76	1.494	13.15	2.00
MW-219R	08/08/2016 11:30	0.05	144.5	7.10	0.52	1.055	21.60	20.80
MW-219R	08/08/2016 11:45	0.65	289.9	6.21	0.65	1.289	16.92	21.10
MW-219R	11/07/2016 14:10	5.82	22	6.34	0.60	1.280	18.25	0.0000
MW-219R	11/07/2016 14:40	9.06	46	8.23	0.50	0.936	18.91	8.40
MW-219R	05/25/2017 14:00	0.98	-430.40	6.12	0.52	1.035	13.95	0.20
MW-219R	05/25/2017 14:30	3.64	-431.10	6.44	0.56	1.112	13.7	15.80
MW-219R	05/25/2017 14:50	6.24	-430.10	6.62	0.45	0.905	13.59	90.60
MW-219R	11/08/2017 14:30	0.47	49.20	5.97	0.44	0.894	16.31	0.20
MW-219R	11/08/2017 15:20	0.40	48.10	5.99	0.42	0.890	16.4	0.10
MW-219R	11/08/2017 15:50	6.54	14.60	6.56	0.30	0.519	16.81	101.10
MW-219R	05/09/2018 13:20	0.39	52.30	6.20	0.48	0.975	14.92	0.0000

Appendix B4 Central Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-219R	05/09/2018 14:15	3.61	47.30	6.53	0.50	1.001	15.74	5.90
MW-219R	05/09/2018 14:35	6.14	27.30	6.58	0.50	0.995	19.01	46.80
MW-219R	12/11/2018 14:20	0.14	48.5	6.31	NM	0.451	13.35	1.2
MW-219R	12/11/2018 14:30	0.59	53.70	6.32	0.22	0.451	14.08	66.40
MW-219R	12/11/2018 15:10	0.62	40.40	6.29	0.22	0.450	15.32	26.00
MW-219R	12/11/2018 15:20	3.98	54.00	6.80	0.13	1.261	13.25	37.40
MW-219R	04/16/2019 10:10	4.2	102.3	6.75	NM	0.54	12.06	4.1
MW-219R	04/16/2019 11:15	0.28	25.9	6.77	0.44	0.888	14.15	2.9
MW-219R	10/24/2019 12:40	2.69	53.6	7.49	NM	0.425	18.03	13.9
MW-219R	10/24/2019 12:45	1.38	50.4	6.61	NM	0.588	17.94	13.6
MW-219R	10/24/2019 12:50	1.67	46.9	6.49	NM	0.605	18.05	5.5
MW-219R	10/24/2019 12:55	1.59	42.2	6.35	NM	0.648	17.98	2.6
MW-219R	10/24/2019 13:00	1.38	38.1	6.34	NM	0.663	18.02	2.2
MW-219R	10/24/2019 13:05	1.25	34.3	6.32	NM	0.681	17.94	2.1
MW-219R	10/24/2019 13:10	1.25	29	6.3	NM	0.69	17.95	2.9
MW-219R	10/24/2019 13:15	1.24	24.6	6.29	NM	0.698	17.86	6.7
MW-219R	10/24/2019 13:20	1.3	20.4	6.29	NM	0.706	17.85	4.3
MW-219R	10/24/2019 13:25	1.42	19	6.28	NM	0.709	17.96	4.8
MW-219R	10/24/2019 14:15	2.03	5.1	6.8	0.18	0.778	19.37	8.6
MW-219R	10/24/2019 14:30	3.44	-8.1	6.69	0.19	0.678	17.99	24.7
MW-219R	12/20/2019 10:30	5.44	-8.8	7.13	NM	0.196	7.1	29
MW-219R	12/20/2019 10:35	1.82	27.2	6.75	NM	0.191	8.93	25.3
MW-219R	12/20/2019 10:40	1.24	33.1	6.67	NM	0.195	9.53	15
MW-219R	12/20/2019 10:45	0.94	34.4	6.61	NM	0.197	10.27	9.3
MW-219R	12/20/2019 10:50	0.81	34.1	6.58	NM	0.197	10.09	6.3
MW-219R	12/20/2019 10:55	0.73	33.2	6.56	NM	0.194	9.92	5.3
MW-219R	12/20/2019 11:00	0.76	32.3	6.55	NM	0.192	10.09	4.6
MW-219R	12/20/2019 11:05	0.83	28.4	6.57	NM	0.198	10.72	4
MW-219R	12/20/2019 11:10	0.85	27.4	6.56	NM	0.196	10.59	4.7
MW-219R	12/20/2019 11:15	0.82	23.7	6.54	NM	0.197	11	3
MW-219R	12/20/2019 11:40	0.77	-5.5	6.61	0.1	0.211	15.12	693.5
MW-219R	12/20/2019 12:00	2.62	7.6	6.54	0.1	0.204	13.94	41.8
MW-219R	04/28/2020 09:00	5.62	8.1	6.47	NM	0.702	11.93	20.3
MW-219R	04/28/2020 09:40	7.46	-5.2	6.72	0.37	0.753	13.22	3.3
MW-219R	06/21/2021 11:25	8.77	70.7	7.7	0.25	0.53	19.76	45.4
MW-219R	06/21/2021 11:30	8.13	41.8	6.57	0.29	0.604	20.18	78.9
MW-219R	06/21/2021 11:35	7.53	42.9	6.28	0.3	0.624	19.76	43.2
MW-219R	06/21/2021 11:40	6.98	28.4	6.2	0.32	0.648	19.71	19
MW-219R	06/21/2021 11:45	6.53	22	6.18	0.32	0.654	19.48	12.1
MW-219R	06/21/2021 11:50	6.12	20.3	6.15	0.32	0.663	19.64	10
MW-219R	06/21/2021 11:55	5.8	18	6.15	0.33	0.666	19.29	9.3
MW-219R	06/21/2021 12:00	5.59	19.3	6.13	0.33	0.669	19.67	8.9
MW-219R	06/21/2021 12:05	5.21	14.9	6.16	0.33	0.671	20	7.1
MW-219R	06/21/2021 12:10	1.03	13.4	6.18	0.33	0.672	19.63	7.2
MW-219R	08/26/2021 09:10	2.59	31.2	6.32	0.28	0.586	22.44	16.9
MW-219R	08/26/2021 09:15	1.34	30.7	6.11	0.27	0.569	22.77	10.5
MW-219R	08/26/2021 09:20	1.09	25.5	6.18	0.27	0.563	22.88	8.2
MW-219R	08/26/2021 09:25	0.88	37.7	6.18	0.27	0.558	22.47	5.6
MW-219R	08/26/2021 09:30	0.81	45.4	6.19	0.27	0.557	22.28	4.6
MW-219R	08/26/2021 09:35	0.75	49	6.17	0.28	0.569	22.05	5.8
MW-219R	08/26/2021 09:40	0.73	47.7	6.21	0.28	0.575	21.99	6.2
MW-219R	08/26/2021 09:45	0.72	44.3	6.26	0.28	0.581	22.16	6.3
MW-219R	10/22/2021 09:20	2.89	127.7	6.53	0.3	0.615	18.02	10.2
MW-219R	10/22/2021 09:25	2.18	185.8	6.43	0.29	0.608	18.11	7.3
MW-219R	10/22/2021 09:30	3.74	223.5	6.42	0.3	0.612	18.25	4.7
MW-219R	10/22/2021 09:35	2.72	27.3	6.49	0.32	0.656	18.55	3.8
MW-219R	10/22/2021 09:40	2.64	-26.1	6.53	0.33	0.68	18.42	2.9
MW-219R	10/22/2021 09:45	4.24	-38.7	6.55	0.34	0.692	18.29	2.1
MW-219R	10/22/2021 09:50	3.06	-45.4	6.57	0.34	0.697	18.37	1.6
MW-219R	10/22/2021 09:55	3.54	-45.7	6.56	0.34	0.698	18.33	1.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-219R	10/22/2021 10:00	3.37	-47.1	6.56	0.34	0.698	18.63	0
MW-219R	10/22/2021 10:05	5.23	-46.4	6.56	0.34	0.699	18.83	0.3
MW-219R	02/18/2022 11:55	6.48	103.4	6.26	0.21	0.509	11.61	92.2
MW-219R	02/18/2022 12:00	6.38	102.1	6.28	0.22	0.469	11.65	73.1
MW-219R	02/18/2022 12:05	5.84	77.9	6.42	0.25	0.509	11.59	80.5
MW-219R	02/18/2022 12:10	4.91	53	6.52	0.25	0.521	12.09	39.6
MW-219R	02/18/2022 12:15	4.73	51.6	6.51	0.25	0.523	12.15	37.6
MW-219R	02/18/2022 12:20	4.39	42.1	6.53	0.26	0.469	12.33	26
MW-219R	02/18/2022 12:25	4.36	41.7	6.52	0.25	0.488	12.38	22.4
MW-219R	02/18/2022 12:30	4.07	39	6.49	0.23	0.44	12.26	17.7
MW-219R	02/18/2022 12:35	5.11	31	6.58	0.26	0.536	13.62	15.6
MW-219R	02/18/2022 12:40	5.31	24.1	6.58	0.26	0.537	13.78	7.6
MW-219R	04/27/2022 09:10	4.76	43.8	6.21	0.29	0.594	12.78	189.2
MW-219R	04/27/2022 09:15	4.33	44	6.2	0.29	0.59	12.93	105.7
MW-219R	04/27/2022 09:20	4.36	43.5	6.21	0.29	0.591	12.97	90.9
MW-219R	04/27/2022 09:25	2.73	27.1	6.38	0.3	0.613	13.26	101.3
MW-219R	04/27/2022 09:30	1.19	-10.5	6.47	0.3	0.619	12.81	287.6
MW-219R	04/27/2022 09:35	-15.3	-14.9	6.47	0.3	0.62	12.78	176.6
MW-219R	04/27/2022 09:40	2.25	-17.9	6.48	0.3	0.619	12.75	133.8
MW-219R	04/27/2022 09:45	2.66	-30.6	6.49	0.3	0.622	12.5	58.5
MW-219R	04/27/2022 09:50	2.67	-31.9	6.5	0.3	0.621	12.54	59.4
MW-219R	04/27/2022 09:55	2.59	-32.7	6.49	0.3	0.62	12.57	54.9
MW-220	04/04/2012 08:30	4.03	-18	6.16	0.4	0.82	11.1	118.7
MW-220	04/04/2012 08:35	1.70	-19.6	6.10	0.4	0.82	10.8	106.1
MW-220	04/04/2012 08:40	1.33	-18.3	6.12	0.4	0.82	10.9	81.6
MW-220	04/04/2012 08:45	1.04	-18.9	6.11	0.4	0.82	10.9	73.4
MW-220	04/04/2012 08:50	0.77	-22.9	6.10	0.4	0.82	11.1	66.7
MW-220	04/04/2012 08:55	0.64	-22.6	6.09	0.4	0.82	11.1	61.6
MW-220	04/04/2012 09:00	0.53	-24.1	6.03	0.4	0.82	11.3	63.6
MW-220	04/04/2012 09:15	1.82	-17.7	6.03	0.41	0.824	11.41	61.60
MW-220	04/04/2012 10:00	0.76	-15.2	6.03	0.40	0.809	11.29	54.60
MW-220	04/05/2012 10:17	1.75	-11.6	9.92	0.41	0.823	11.00	84.90
MW-220	07/09/2012 10:42	3.00	-27	6.01	0.0000	0.525	19.60	105.00
MW-220	07/09/2012 11:25	0.0000	-55	6.03	0.0000	0.531	184.00	23.80
MW-220	07/10/2012 12:03	4.20	-45	6.41	0.0000	0.539	20.50	70.80
MW-220	10/19/2012 15:26	0.82	-14.7	6	0.3	0.61	19.6	110.2
MW-220	10/19/2012 15:31	0.61	-22.2	6.04	0.3	0.63	19.4	39.9
MW-220	10/19/2012 15:36	0.53	-26.7	6.05	0.3	0.64	19.4	24.7
MW-220	10/19/2012 15:41	0.49	-28.1	6.05	0.3	0.64	19.4	20.7
MW-220	10/19/2012 15:46	0.44	-32	6.05	0.3	0.65	19.4	13
MW-220	10/19/2012 15:51	0.42	-34.5	6.04	0.3	0.66	19.4	8.2
MW-220	10/19/2012 15:56	0.41	-34.1	6.04	0.3	0.66	19.6	7.1
MW-220	06/04/2013 09:30	9.2	-27.5	6.05	0.39	0.633	14.68	199.8
MW-220	06/04/2013 10:20	3.14	-12.6	6.09	0.39	0.628	14.9	15.7
MW-220	06/04/2013 10:35	7.94	-20.5	6.18	0.39	0.639	15.29	6.90
MW-220	06/05/2013 10:35	7.94	-20.5	6.18	0.39	0.639	15.29	6.9
MW-220	06/23/2014 10:10	2.81	-69.3	5.90	0.94	1.844	19.69	100.40
MW-220	06/23/2014 11:10	2.83	-68.8	5.91	0.94	1.841	19.72	102.30
MW-220	06/23/2014 11:30	2.86	-69.3	5.90	-94.00	1.840	19.71	104.10
MW-220	08/27/2014 09:40	4.02	-39.6	6.27	1.08	2.111	21.65	14.20
MW-220	08/27/2014 10:50	1.46	-82	6.30	1.06	2.112	21.66	63.00
MW-220	08/28/2014 10:20	3.80	-64.3	6.37	1.17	2.279	18.50	375.50
MW-220	10/28/2014 09:00	7.81	-101.9	6.49	1.32	2.562	16.48	200.70
MW-220	10/28/2014 09:45	8.12	-128.1	6.65	1.00	2.112	17.22	44.00
MW-220	10/28/2014 10:41	7.45	-80.3	6.53	1.49	2.709	20.56	1171.80
MW-220	11/24/2014 09:28	2.67	-106.9	6.16	1.25	2.409	17.30	61.90
MW-220	11/24/2014 09:49	0.51	-123.3	6.20	1.06	2.058	16.75	282.50
MW-220	11/24/2014 09:52	1.30	-97.4	6.23	1.20	2.323	17.58	164.80
MW-220	01/16/2015 11:20	2.92	-108.6	6.61	0.92	3.583	12.43	70.10
MW-220	01/16/2015 12:00	4.68	-115.9	6.70	0.93	1.950	13.30	63.20

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-220	01/16/2015 13:25	5.63	-68.4	7.36	0.92	1.921	11.29	433.10
MW-220	04/22/2015 10:45	2.94	-98.2	6.73	0.92	1.804	12.27	45.00
MW-220	04/22/2015 14:20	3.43	-138.2	6.69	0.86	1.696	14.34	103.00
MW-220	07/10/2015 13:00	5.01	-40.2	7.49	0.77	1.524	17.11	52.60
MW-220	07/10/2015 13:35	7.93	-72	7.20	0.05	0.107	28.01	17.30
MW-220	10/13/2015 14:40	5.11	-46.9	6.50	0.73	1.455	19.81	56.00
MW-220	10/13/2015 14:54	3.19	-43.1	5.84	1.03	2.008	18.41	981.40
MW-220	02/02/2016 11:25	5.9	-133.2	6.45	0.29	0.587	12.25	29
MW-220	02/02/2016 11:56	2.68	-127.5	6.6	0.26	0.534	12.19	102.1
MW-220	05/11/2016 09:10	0.67	-124	6.91	1.24	2.399	15.37	72.40
MW-220	05/11/2016 09:30	3.15	-60	6.63	0.66	1.303	15.33	578.70
MW-220	08/05/2016 09:55	1.98	-29.3	6.47	0.63	1.254	19.86	40.60
MW-220	08/05/2016 10:10	2.02	-61.4	6.68	0.64	1.275	19.11	731.10
MW-220	11/02/2016 11:40	2.04	-112	6.54	0.71	1.412	20.44	1197.10
MW-220	11/02/2016 12:05	4.07	-98.7	6.61	0.71	1.406	18.42	1180.10
MW-220	05/22/2017 13:55	0.83	78.60	6.48	0.64	1.275	13.69	0.70
MW-220	05/22/2017 14:30	3.45	78.60	6.54	0.62	1.226	13.88	29.10
MW-220	05/22/2017 14:55	0.38	76.60	5.52	0.62	1.235	13.6	122.60
MW-220	11/10/2017 11:30	0.21	-118.20	6.50	0.71	1.541	16.74	13.90
MW-220	11/10/2017 12:00	0.65	-156.90	7.23	1.59	3.042	16.47	24.80
MW-220	11/10/2017 12:25	2.84	-77.60	6.47	0.76	1.504	15.03	1436.80
MW-220	02/19/2018 13:35	1.11	-82.80	6.96	0.61	1.219	11.06	40.60
MW-220	02/19/2018 14:15	6.81	-38.60	7.25	0.38	0.781	11.09	24.50
MW-220	02/19/2018 14:30	5.55	-70.90	7.08	0.41	0.826	10.8	125.30
MW-220	05/10/2018 13:40	0.06	-86.20	6.63	0.32	0.660	12.36	0.70
MW-220	05/10/2018 14:05	1.16	-54.20	6.75	0.35	0.716	14.24	10.30
MW-220	05/10/2018 14:25	0.95	-66.70	6.55	0.38	0.775	14.44	94.70
MW-220	12/13/2018 12:45	4.38	24.50	6.73	0.34	0.680	13.02	19.90
MW-220	12/13/2018 14:00	4.20	-20.40	6.63	0.27	0.546	13.65	12.10
MW-220	12/13/2018 14:15	3.32	2.60	6.70	0.22	0.459	12.44	192.70
MW-220	02/25/2019 10:20	3.30	-76.60	6.08	0.55	1.105	8.04	139.10
MW-220	02/25/2019 10:55	2.07	-55.70	6.19	0.45	0.909	10.18	20.40
MW-220	02/25/2019 11:35	1.86	-65.80	6.86	0.41	0.828	9.69	42.30
MW-220	04/23/2019 09:45	0.72	-80.8	6.71	NM	1.101	14.87	NM
MW-220	04/23/2019 10:40	3.88	-1.5	7.09	0.54	1.079	15.29	28.9
MW-220	07/17/2019 09:50	0.27	-116.8	6.19	NM	1.126	19.07	2.5
MW-220	07/17/2019 10:05	2.19	-120.4	7.42	NM	1.483	19.2	137
MW-220	07/17/2019 10:10	0.52	-103.9	6.1	NM	1.337	18.06	74.6
MW-220	07/17/2019 10:15	0.31	-103.7	6.03	NM	1.235	18.17	30.8
MW-220	07/17/2019 10:20	0.3	-107.2	6.04	NM	1.154	18.43	15.7
MW-220	07/17/2019 10:25	0.29	-110	6.07	NM	1.116	18.89	7.7
MW-220	07/17/2019 10:30	1.15	-99.6	6.23	0.57	1.151	24.29	6.8
MW-220	07/17/2019 10:35	0.27	-114.4	6.16	NM	1.122	18.86	3.6
MW-220	07/17/2019 10:40	0.27	-115.5	6.18	NM	1.126	19.02	2.9
MW-220	07/17/2019 10:45	0.27	-116.1	6.2	NM	1.125	18.99	2.7
MW-220	07/17/2019 10:50	0.27	-116.8	6.19	NM	1.126	19.07	2.5
MW-220	07/17/2019 11:05	2.93	-86	6.26	0.43	0.877	23.19	50.3
MW-220	10/29/2019 11:50	0.62	-24.3	6.81	NM	0.461	15.1	44.6
MW-220	10/29/2019 11:55	0.44	-43.1	6.71	NM	0.37	15.33	40.6
MW-220	10/29/2019 12:00	0.52	-51.6	6.65	NM	0.344	15.45	36.1
MW-220	10/29/2019 12:05	0.29	-58	6.63	NM	0.331	15.5	41.5
MW-220	10/29/2019 12:10	0.27	-61.5	6.63	NM	0.325	15.53	23
MW-220	10/29/2019 12:15	0.27	-64.9	6.63	NM	0.326	15.59	21
MW-220	10/29/2019 12:20	0.25	-67.8	6.63	NM	0.329	15.67	18.6
MW-220	10/29/2019 12:25	0.24	-69.6	6.63	NM	0.333	15.69	10.4
MW-220	10/29/2019 12:30	1.16	-69.9	6.63	NM	0.337	15.66	365
MW-220	10/29/2019 12:35	0.26	-71.3	6.63	NM	0.337	15.67	33.5
MW-220	10/29/2019 12:55	2.85	-41.3	6.57	0.17	0.353	15.61	8.8
MW-220	10/29/2019 13:30	3.71	-93.3	6.81	0.12	0.259	15.76	33.5
MW-220	01/21/2020 12:10	6.24	-84.3	6.76	NM	0.966	12.64	19

Appendix B4 Central Yard
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-220	01/21/2020 12:15	0.96	-93.7	6.56	NM	0.961	12.4	8.5
MW-220	01/21/2020 12:20	0.59	-101.3	6.73	NM	0.88	12.38	8.9
MW-220	01/21/2020 12:25	0.47	-104.8	6.73	NM	0.774	12.48	5.4
MW-220	01/21/2020 12:30	0.42	-106.9	6.71	NM	0.702	12.44	2.9
MW-220	01/21/2020 12:35	0.39	-108.8	6.75	NM	0.668	12.42	2.5
MW-220	01/21/2020 12:40	0.39	-110.5	6.71	NM	0.649	12.37	1.2
MW-220	01/21/2020 12:45	0.4	-112.1	6.73	NM	0.621	12.29	0.8
MW-220	01/21/2020 12:50	0.42	-112.8	6.75	NM	0.613	12.29	0.1
MW-220	01/21/2020 12:55	0.41	-113.2	6.72	NM	0.603	12.28	0.4
MW-220	01/21/2020 13:32	2.33	-83	6.74	0.28	0.583	11.9	18.1
MW-220	01/21/2020 13:49	3.47	-78.4	6.92	0.25	0.517	11.51	63.1
MW-220	05/04/2020 13:05	12.54	-92	6.57	NM	1.106	18.46	3.6
MW-220	05/04/2020 13:40	13.83	-69.1	6.52	0.867	0.867	16.32	10
MW-220	07/27/2020 12:30	2.03	-119.4	6.36	0.47	0.965	28.66	22.1
MW-220	07/27/2020 12:35	0.75	-117.2	6.26	0.5	1.019	25.2	20.5
MW-220	07/27/2020 12:40	0.63	-117	6.27	0.5	1.02	25.89	15.5
MW-220	07/27/2020 12:45	0.65	-118.7	6.29	0.5	1.028	25.89	11.6
MW-220	07/27/2020 12:50	0.64	-116.3	6.28	0.51	1.046	25.51	11.7
MW-220	07/27/2020 12:55	0.52	-108.4	6.27	0.48	0.982	22.5	8.7
MW-220	07/27/2020 13:00	0.46	-106.8	6.25	0.47	0.949	22.2	7.6
MW-220	07/27/2020 13:05	0.43	-105.1	6.24	0.45	0.914	22.43	4.6
MW-220	07/27/2020 13:10	0.43	-104.1	6.24	0.44	0.891	22.56	3.7
MW-220	07/27/2020 13:15	0.42	-102.9	6.24	0.44	0.886	22.5	4
MW-220	07/27/2020 13:45	2.31	-90	6.33	0.38	0.769	22.77	14.2
MW-220	07/27/2020 13:55	1.44	-89	6.29	0.38	0.775	22.29	12.2
MW-220	03/25/2021 11:30	1.29	-64.6	7.01	0.5	1.005	13.54	63.9
MW-220	03/25/2021 11:35	0.56	-73.6	6.65	0.49	0.986	12.39	48.6
MW-220	03/25/2021 11:40	0.5	-76.2	6.64	0.49	0.977	12.23	32.9
MW-220	03/25/2021 11:45	0.47	-79.5	6.65	0.48	0.959	12.27	23.9
MW-220	03/25/2021 11:50	0.45	-80	6.63	0.47	0.954	12.06	20.3
MW-220	03/25/2021 11:55	0.44	-81.9	6.63	0.46	0.936	11.89	11.6
MW-220	03/25/2021 12:00	0.43	-82.3	6.61	0.46	0.933	11.92	10.6
MW-220	03/25/2021 12:05	0.41	-84	6.65	0.46	0.929	11.93	8.6
MW-220	03/25/2021 12:10	0.41	-83.9	6.62	0.46	0.923	11.82	8.3
MW-220	03/25/2021 12:15	0.41	-84	6.63	0.45	0.915	11.84	7.3
MW-220	03/25/2021 12:30	0.37	-83.2	6.65	0.39	0.8	11.45	10.2
MW-220	03/25/2021 12:45	0.46	-84.4	6.66	0.41	0.835	11.84	94
MW-220	06/22/2021 13:30	4.14	-36.8	6.41	0.27	0.56	18.21	108.6
MW-220	06/22/2021 13:35	1.06	-52.8	6.25	0.35	0.718	16.48	22.2
MW-220	06/22/2021 13:40	1.03	-58.2	6.27	0.36	0.737	16.62	15.6
MW-220	06/22/2021 13:45	0.92	-65.4	6.35	0.38	0.773	16.71	7.1
MW-220	06/22/2021 13:50	0.67	-70.1	6.36	0.39	0.793	16.53	5.2
MW-220	06/22/2021 13:55	0.56	-73	6.39	0.39	0.796	16.48	4
MW-220	06/22/2021 14:00	0.48	-74.6	6.41	0.39	0.798	16.35	2.4
MW-220	06/22/2021 14:05	0.56	-73.3	6.41	0.39	0.799	16.43	3.8
MW-220	06/22/2021 14:10	0.52	-76.2	6.43	0.4	0.807	16.49	2.1
MW-220	06/22/2021 14:15	0.53	-75.5	6.45	0.4	0.812	16.44	2
MW-220	06/22/2021 14:20	0.5	-77.7	6.45	0.4	0.814	16.43	2
MW-220	09/23/2021 13:05	3.05	-95.6	6.83	0.41	0.839	23.32	61.1
MW-220	09/23/2021 13:10	1.39	-76.5	6.42	0.45	0.91	22.21	27.7
MW-220	09/23/2021 13:15	1.7	-77.7	6.44	0.44	0.899	22.66	17
MW-220	09/23/2021 13:20	1.98	-82.5	6.52	0.42	0.866	23.25	7.5
MW-220	09/23/2021 13:25	2.12	-82.5	6.51	0.41	0.847	23.53	2.5
MW-220	09/23/2021 13:30	2.12	-82.6	6.5	0.41	0.842	23.61	0.3
MW-220	09/23/2021 13:35	2.12	-82.9	6.5	0.41	0.838	23.63	0.2
MW-220	09/23/2021 13:40	2.02	-82.9	6.5	0.41	0.835	23.74	0
MW-220	11/22/2021 14:45	2.87	-86.8	6.62	0.39	0.8	14.57	195.6
MW-220	11/22/2021 14:50	0.7	-105.8	6.54	0.42	0.844	16.26	246.6
MW-220	11/22/2021 14:55	0.63	-106.5	6.53	0.34	0.687	15.52	66.2
MW-220	11/22/2021 15:00	0.56	-108.3	6.53	0.34	0.695	16.65	47.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-220	11/22/2021 15:05	0.48	-110.6	6.53	0.35	0.704	16.71	30.6
MW-220	11/22/2021 15:10	0.43	-112.9	6.53	0.35	0.707	16.69	22.2
MW-220	11/22/2021 15:15	0.39	-114.2	6.54	0.35	0.712	16.39	15.7
MW-220	11/22/2021 15:20	0.37	-115.1	6.53	0.35	0.715	16.38	13.6
MW-220	11/22/2021 15:25	0.35	-116.4	6.53	0.35	0.719	16.41	10.9
MW-220	11/22/2021 15:30	0.34	-117.1	6.54	0.35	0.723	16.5	9.1
MW-220	03/17/2022 12:35	4.1	-33.2	6.73	0.44	0.886	11.55	165.8
MW-220	03/17/2022 12:40	2.66	-43.9	6.33	0.41	0.837	11.16	106.2
MW-220	03/17/2022 12:45	2.36	-51	6.34	0.4	0.813	11.51	37.3
MW-220	03/17/2022 12:50	2.2	-47.3	6.18	0.4	0.812	11.52	27
MW-220	03/17/2022 12:55	2.04	-51.3	6.32	0.4	0.808	11.46	25.2
MW-220	03/17/2022 13:00	1.85	-52	6.31	0.39	0.792	11.29	18.5
MW-220	03/17/2022 13:05	1.69	-51.6	6.31	0.39	0.786	11.28	15.1
MW-220	03/17/2022 13:10	1.36	-54.5	6.31	0.38	0.771	11.42	17.5
MW-220	03/17/2022 13:15	1.14	-52.2	6.2	0.37	0.758	11.53	12.2
MW-220	03/17/2022 13:20	9	-52.6	6.2	0.37	0.75	1.53	10.4
MW-221	06/20/2012 08:46	1.58	129	12.01	0.05	1.08192	22.84	522
MW-221	06/20/2012 08:49	0.78	127	9	0.05	1.07856	21.07	45.2
MW-221	06/20/2012 08:51	0.61	124	6.94	0.05	1.07403	20.43	12.6
MW-221	06/20/2012 08:54	0.55	121	6.83	0.05	1.07345	20.64	13.7
MW-221	06/20/2012 08:57	0.51	118	6.8	0.05	1.06751	21.25	15.2
MW-221	06/20/2012 08:59	0.48	116	6.79	0.05	1.07947	20.91	13.2
MW-221	06/20/2012 09:02	0.44	111	6.78	0.05	1.07006	21.12	11.3
MW-221	06/20/2012 09:05	0.39	104	6.78	0.05	1.06529	21.2	12.9
MW-221	06/20/2012 09:07	0.4	97	6.78	0.05	1.06899	20.87	13.5
MW-221	06/20/2012 09:10	0.36	91	6.78	0.05	1.06577	20.98	12.8
MW-221	06/20/2012 09:13	0.36	87	6.78	0.05	1.07	20.95	12.6
MW-221	06/20/2012 09:15	0.34	84	6.78	0.05	1.06771	21.1	14.4
MW-221	06/20/2012 09:18	0.32	81	6.78	0.05	1.06485	21.21	14.2
MW-221	06/20/2012 09:21	0.32	79	6.78	0.05	1.07297	21.35	16
MW-221	06/20/2012 09:23	0.32	77	6.78	0.05	1.07046	20.94	13.8
MW-221	06/20/2012 09:26	0.31	76	6.8	0.05	1.05994	21.17	13.3
MW-221	06/20/2012 09:28	0.32	75	6.8	0.05	1.06502	21.17	13.3
MW-221	06/20/2012 09:29	0.32	75	6.80	0.05	1.065	21.17	13.31
MW-221	06/20/2012 10:16	5.22	140	8.36	0.06	1.143	19.55	29.50
MW-221	06/21/2012 10:00	0.36	146	5.86	0.10	1.280	17.50	121.00
MW-221	08/29/2013 09:47	1.37	-303	6.61	0.09	1.751	21.15	8.13
MW-221	08/29/2013 10:38	2.18	-282	6.71	0.10	1.999	21.57	15.60
MW-221	08/30/2013 09:13	0.50	-332	6.62	0.13	2.503	19.91	6.30
MW-221	08/13/2014 11:26	0.92	188	6.30	0.04	0.860	20.21	4.54
MW-221	08/13/2014 12:22	1.16	207	6.71	0.08	1.608	19.06	75.70
MW-221	04/26/2016 10:50	4.87	175	6.73	0.35	6.353	13.27	46.90
MW-221	04/26/2016 12:32	5.12	279	6.95	0.23	4.302	15.17	317.30
MW-221	06/20/2017 09:21	0.27	183.00	6.66	0.12	2.289	19.09	2.05
MW-221	06/20/2017 09:22	5.78	256.00	6.78	0.32	5.773	15.47	333.70
MW-221	06/20/2017 09:52	8.90	235.00	7.81	0.14	2.701	17.12	553.70
MW-221	06/14/2018 09:05	5.2	91	6.86	0.081	1.5894	19.05	10.4
MW-221	06/14/2018 09:08	0	17	6.59	0.082	1.6083	17.86	9.3
MW-221	06/14/2018 09:10	-0.47	-3	6.51	0.083	1.6299	17.93	8.2
MW-221	06/14/2018 09:12	-0.75	-14	6.49	0.083	1.6255	17.73	10
MW-221	06/14/2018 09:15	-0.85	-21	6.48	0.083	1.6232	17.7	10.8
MW-221	06/14/2018 09:17	-0.98	-26	6.48	0.082	1.6196	17.55	10.1
MW-221	06/14/2018 09:20	-1.01	-31	6.48	0.082	1.6193	17.53	9.4
MW-221	06/14/2018 09:22	-1.04	-35	6.48	0.082	1.6144	17.5	7.6
MW-221	06/14/2018 09:25	-1.16	-37	6.49	0.082	1.6110	17.63	7.5
MW-221	06/14/2018 09:27	-1.16	-41	6.5	0.082	1.6120	17.66	6.9
MW-221	06/14/2018 09:30	-1.23	-43	6.5	0.082	1.6108	17.67	7
MW-221	06/15/2018 09:30	-1.23	-43.00	6.50	0.08	1.605	17.85	7.04
MW-221	06/15/2018 09:43	6.14	26.00	6.60	0.09	1.825	16.88	188.20
MW-221	06/15/2018 10:10	2.25	42.00	7.03	0.09	1.675	16.11	99.40

Appendix B4 Central Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-221	06/07/2019 10:05	2.45	98.1	7.1	NM	0.631	15.55	0.9
MW-221	06/07/2019 10:10	0.81	107.4	6.67	NM	0.566	15.54	0.5
MW-221	06/07/2019 10:15	0.75	110	6.66	NM	0.524	15.2	2.9
MW-221	06/07/2019 10:20	0.78	111.8	6.63	NM	0.536	15.17	4.1
MW-221	06/07/2019 10:25	0.83	113.2	6.6	NM	0.565	15.23	5.3
MW-221	06/07/2019 10:30	0.81	115.9	6.61	NM	0.567	15.23	5.4
MW-221	06/07/2019 10:35	0.81	117.6	6.63	NM	0.568	15.22	5.3
MW-221	06/07/2019 10:40	1.29	119.8	6.6	0.51	1.025	13.89	NM
MW-221	06/07/2019 10:45	1.32	121	6.74	0.52	1.046	NM	2.4
MW-221	06/07/2019 10:50	NM	NM	NM	NM	NM	13.98	3.4
MW-221	06/07/2019 11:35	0.81	117.6	6.63	NM	0.568	15.22	5.3
MW-221	06/07/2019 11:55	1.29	119.8	6.6	0.51	1.025	13.89	2.4
MW-221	06/05/2020 12:10	1.63	487.9	6.89	NM	0.422	23.28	NM
MW-221	06/05/2020 13:00	4.16	386.2	5.43	0.57	1.137	18.52	2.4
MW-221	06/16/2021 12:05	2.06	169.4	6.61	0.32	0.661	21.48	11.8
MW-221	06/16/2021 12:10	1	168.9	6.29	0.35	0.726	21.32	6.7
MW-221	06/16/2021 12:15	0.81	154.3	6.43	0.38	0.781	22.27	4
MW-221	06/16/2021 12:20	0.87	150.2	6.49	0.42	0.865	23.42	3
MW-221	06/16/2021 12:25	0.56	142.3	6.3	0.66	1.318	21.33	0.7
MW-221	06/16/2021 12:30	0.54	136.8	6.33	0.65	1.309	21.83	0.8
MW-221	06/16/2021 12:35	0.45	126.9	6.45	0.66	1.322	22.59	0.6
MW-221	06/16/2021 12:40	0.44	124.1	6.46	0.69	1.378	22.8	0.5
MW-221	06/16/2021 12:45	0.43	122.9	6.47	0.69	1.384	22.82	0.2
MW-221	06/16/2021 12:50	0.44	120.9	6.43	0.69	1.388	22.88	0
MW-221	10/21/2021 09:10	3.83	282.5	6.44	0.81	1.576	20.08	16.3
MW-221	10/21/2021 09:15	2.14	150.2	6.53	1.03	2.014	20.32	13.5
MW-221	10/21/2021 09:20	2.38	82.6	6.54	1.05	2.051	20.52	13.5
MW-221	10/21/2021 09:25	1.24	53.6	6.57	1.03	2.012	20.66	9.5
MW-221	10/21/2021 09:30	2.1	28.1	6.57	1.01	1.983	20.73	8.3
MW-221	10/21/2021 09:35	1.63	14.5	6.57	1.01	1.973	20.74	8.1
MW-221	10/21/2021 09:40	1.43	14.5	6.57	1	1.962	20.79	4.6
MW-221	10/21/2021 09:45	1.64	14.6	6.56	1	1.951	20.78	5.8
MW-221	10/21/2021 09:50	1.74	13.9	6.55	0.99	1.943	20.78	4.8
MW-221	10/21/2021 09:55	1.58	11.2	6.55	0.99	1.934	20.8	4.1
MW-221	04/27/2022 12:40	3.4	51.7	6.91	0.14	0.284	14.62	122
MW-221	04/27/2022 12:45	3.11	55.5	6.9	0.14	0.296	14.63	78.3
MW-221	04/27/2022 12:50	2.84	57.3	6.89	0.15	0.313	14.88	51.7
MW-221	04/27/2022 12:55	2.35	58.8	6.88	0.16	0.328	15.11	84.6
MW-221	04/27/2022 13:00	2.41	60	6.88	0.17	0.352	15.2	65.7
MW-221	04/27/2022 13:05	2.24	61.7	6.86	0.18	0.376	15.38	55.5
MW-221	04/27/2022 13:10	2.22	63.5	6.85	0.19	0.399	15.49	55.7
MW-221	04/27/2022 13:15	2.21	73.3	6.8	0.27	0.55	14.61	99.3
MW-221	04/27/2022 13:20	3.47	75.4	6.78	0.28	0.569	14.44	86.7
MW-221	04/27/2022 13:25	2.41	76.9	6.77	0.29	0.59	14.39	74.2
MW-222	06/20/2012 07:36	2.67	165	6.55	0.08	1.59725	21.25	10.7
MW-222	06/20/2012 07:38	1.02	156	6.75	0.08	1.55473	20.65	5.8
MW-222	06/20/2012 07:41	0.89	153	6.69	0.08	1.55188	20.94	8.1
MW-222	06/20/2012 07:44	0.93	152	6.68	0.08	1.55462	20.91	6.7
MW-222	06/20/2012 07:46	0.96	150	6.67	0.08	1.55248	21.04	5.8
MW-222	06/20/2012 07:49	0.97	149	6.67	0.08	1.54883	21.19	7.1
MW-222	06/20/2012 07:52	0.96	149	6.66	0.08	1.54705	21.35	12.2
MW-222	06/20/2012 07:54	0.98	147	6.66	0.08	1.55342	21.64	7.7
MW-222	06/20/2012 07:57	0.93	145	6.67	0.08	1.55329	21.7	14.3
MW-222	06/20/2012 08:00	0.85	144	6.67	0.08	1.55324	21.89	10.2
MW-222	06/20/2012 08:02	0.81	142	6.67	0.08	1.55735	22.3	9.4
MW-222	06/20/2012 08:05	0.77	141	6.67	0.08	1.5684	22.38	10.6
MW-222	06/20/2012 08:07	0.71	140	6.68	0.08	1.57203	22.24	10.6
MW-222	06/20/2012 08:10	0.67	139	6.68	0.08	1.56587	22.15	11.3
MW-222	06/20/2012 08:13	0.66	138	6.68	0.08	1.57087	22.27	11.9
MW-222	06/20/2012 08:15	0.64	137	6.68	0.08	1.57604	22.06	15

Appendix B4 Central Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-222	06/20/2012 08:18	0.62	137	6.69	0.08	1.57641	22.14	13.7
MW-222	06/20/2012 08:21	0.58	136	6.69	0.08	1.573	22.14	14.29
MW-222	06/20/2012 09:41	1.67	106	9.00	0.08	1.541	22.44	14.70
MW-222	06/21/2012 09:09	0.0000	122	5.84	0.10	1.760	19.50	64.50
MW-222	08/28/2013 10:56	0.81	-376	6.42	0.08	1.511	24.38	0.96
MW-222	08/28/2013 11:46	1.16	-333	6.34	0.08	1.530	23.26	11.20
MW-222	08/29/2013 10:20	0.72	-227	6.34	0.18	3.357	22.51	17.10
MW-222	08/13/2014 09:53	0.57	177	6.18	0.07	1.388	23.30	6.60
MW-222	08/13/2014 10:52	2.19	204	6.51	0.07	1.320	22.79	7.50
MW-222	08/14/2014 10:02	2.20	-315	6.45	0.08	1.515	22.98	13.30
MW-222	04/26/2016 10:13	2.91	170	6.80	0.49	8.780	15.09	21.40
MW-222	04/26/2016 10:49	7.54	235	6.82	0.41	7.372	14.86	23.20
MW-222	06/20/2017 10:36	0.40	231.00	6.42	0.18	3.369	21.02	4.23
MW-222	06/20/2017 10:59	5.16	258.00	6.50	1.25	20.700	20.06	30.40
MW-222	06/20/2017 11:04	7.43	250.00	7.48	0.19	3.633	19.37	134.60
MW-222	06/15/2018 10:39	2.64	-6.00	6.41	NM	3.009	19.87	19.50
MW-222	06/15/2018 10:41	0.79	-43.00	6.28	NM	3.103	21.69	7.35
MW-222	06/15/2018 11:27	0.70	-34.00	6.68	NM	3.064	20.13	16.50
MW-222	06/07/2019 09:50	0.67	112.4	6.5	NM	2.481	15.28	5.3
MW-222	06/07/2019 10:05	1.42	86.8	6.71	NM	2.37	14.81	5.6
MW-222	06/07/2019 10:10	0.6	118.5	6.46	1.32	2.534	14.32	5
MW-222	06/07/2019 10:15	0.68	103.6	6.53	NM	2.436	15.18	5.7
MW-222	06/07/2019 10:20	0.71	106.4	6.51	NM	2.455	15.29	5.7
MW-222	06/07/2019 10:25	0.66	108.2	6.51	NM	2.479	15.29	5.6
MW-222	06/07/2019 10:30	0.65	110.3	6.51	NM	2.481	15.29	5.4
MW-222	06/07/2019 10:35	0.67	112.4	6.5	NM	2.481	15.28	5.3
MW-222	06/07/2019 10:40	0.6	118.5	6.46	1.32	2.534	14.32	NM
MW-222	06/07/2019 10:45	0.6	120	6.46	1.31	2.53	NM	5
MW-222	06/07/2019 10:50	NM	NM	NM	NM	NM	14.59	4.4
MW-222	06/05/2020 09:30	0.34	488.8	6.15	NM	1.824	18.42	NM
MW-222	06/05/2020 10:10	1.84	394.6	6.22	0.95	1.855	18.6	0.8
MW-222	06/16/2021 10:45	2.29	154.1	6.82	0.81	1.598	20.94	15.3
MW-222	06/16/2021 10:50	1.14	160.8	6.45	0.79	1.559	19.85	12.7
MW-222	06/16/2021 10:55	1.13	158.1	6.45	0.79	1.561	21.03	6.4
MW-222	06/16/2021 11:00	1.06	158.1	6.47	0.79	1.57	22.91	4
MW-222	06/16/2021 11:05	1.07	162.6	6.31	0.8	1.587	21.4	4.1
MW-222	06/16/2021 11:10	1.01	164.1	6.25	0.8	1.593	20.97	2.8
MW-222	06/16/2021 11:15	0.98	162.3	6.22	0.81	1.6	20.87	1.6
MW-222	06/16/2021 11:20	1.02	160.1	6.23	0.81	1.608	20.96	0.8
MW-222	06/16/2021 11:25	1.02	159.4	6.25	0.81	1.609	21.01	0.5
MW-222	06/16/2021 11:30	1.02	158.9	6.23	0.82	1.613	21.01	0.3
MW-222	10/21/2021 10:30	4.33	110	6.68	0.98	1.934	22.54	19.2
MW-222	10/21/2021 10:35	3.25	108.8	6.57	1.02	2.007	22.95	15.6
MW-222	10/21/2021 10:40	2.73	106.4	6.54	1.04	2.038	23.24	16.5
MW-222	10/21/2021 10:45	2.32	94.3	6.53	1.01	1.983	23.62	9.4
MW-222	10/21/2021 10:50	1.97	88.2	6.52	1.02	1.994	23.6	7.7
MW-222	10/21/2021 10:55	1.97	81.1	6.51	1.02	2.009	23.79	7.3
MW-222	10/21/2021 11:00	1.73	76.3	6.5	1.04	2.044	23.68	7.3
MW-222	10/21/2021 11:05	1.88	74.1	6.49	1.05	2.061	23.85	5.8
MW-222	10/21/2021 11:10	1.49	72.2	6.49	1.06	2.072	23.84	3.7
MW-222	10/21/2021 11:15	1.66	70.6	6.48	1.06	2.082	23.92	4.2
MW-222	04/04/2022 10:20	1.85	178.2	5.44	0.92	1.808	12.16	30.3
MW-222	04/04/2022 10:25	1.73	191.6	5.41	0.92	1.807	11.88	26.2
MW-222	04/04/2022 10:30	1.7	200.6	5.38	0.92	1.809	11.63	15
MW-222	04/04/2022 10:35	1.69	202.2	5.39	0.92	1.809	11.67	8.2
MW-222	04/04/2022 10:40	1.72	207	5.39	0.92	1.807	11.8	8.4
MW-222	04/04/2022 10:45	1.69	210.8	5.4	0.92	1.804	11.82	7.7
MW-222	04/04/2022 10:50	1.72	214.1	5.39	0.92	1.803	11.82	7.7
MW-226	06/20/2012 11:10	1.78	113	8.86	0.02	0.49412	29.83	4.8
MW-226	06/20/2012 11:13	1.81	107	9.66	0.02	0.48625	21.19	4.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-226	06/20/2012 11:16	1.47	101	8.09	0.02	0.48259	20.47	4.5
MW-226	06/20/2012 11:18	1.3	97	9.22	0.02	0.48105	20.71	6
MW-226	06/20/2012 11:21	1.24	95	9.2	0.02	0.48225	20.8	8.3
MW-226	06/20/2012 11:24	1.48	93	9.07	0.02	0.47926	20.79	16.3
MW-226	06/20/2012 11:26	1.78	92	9.08	0.02	0.47839	20.71	14.8
MW-226	06/20/2012 11:29	1.71	91	9.11	0.02	0.48341	20.91	15.6
MW-226	06/20/2012 11:32	1.65	92	9	0.02	0.47551	21.01	14.6
MW-226	06/20/2012 12:05	4.63	108	7.25	0.02	0.495	20.90	35.90
MW-226	06/21/2012 11:30	6.79	154	6.20	0.0000	0.545	15.80	-5.00
MW-226	08/29/2013 11:33	1.09	-338	6.63	0.08	1.604	20.84	6.13
MW-226	08/29/2013 12:02	4.09	-199	7.04	0.09	1.780	20.02	10.50
MW-226	08/30/2013 10:05	5.54	-82	6.80	0.12	2.288	17.51	478.80
MW-226	08/13/2014 13:52	0.85	209	6.35	0.06	1.244	20.01	6.36
MW-226	08/13/2014 14:41	1.95	199	6.88	0.06	1.213	17.64	3021.10
MW-226	12/13/2019 09:15	10.17	191.2	7.47	NM	0.217	13.75	44.2
MW-226	12/13/2019 09:20	2.03	85.5	6.42	NM	0.188	14.36	41.2
MW-226	12/13/2019 09:25	2.17	0.5	6.44	NM	0.19	13.5	31.2
MW-226	12/13/2019 09:30	1.75	-24.2	6.48	NM	0.191	13.49	23
MW-226	12/13/2019 09:35	1.62	-39	6.51	NM	0.192	13.37	18.2
MW-226	12/13/2019 09:40	1.65	-43.9	6.51	NM	0.151	12.35	20.2
MW-226	12/13/2019 09:45	1.69	-42.7	6.51	NM	0.194	12.21	28.3
MW-226	12/13/2019 09:50	1.41	-45.9	6.52	NM	0.193	13.11	56.7
MW-226	12/13/2019 09:55	1.48	-51.1	6.51	NM	0.193	13.33	28.8
MW-226	12/13/2019 10:00	1.2	-51.4	6.52	NM	0.192	13.61	14.8
MW-226	12/13/2019 10:50	5.38	-7.5	6.62	0.1	0.205	9.92	4.6
MW-226	12/13/2019 11:05	4.83	-25.1	6.61	0.05	0.106	14.47	285.9
MW-226	12/09/2020 08:50	11.16	-21.1	7.57	0.27	0.557	9.68	6.1
MW-226	12/09/2020 08:55	10.65	-21.6	6.79	0.27	0.554	9.87	6
MW-226	12/09/2020 09:00	9.63	-18.6	6.92	0.27	0.547	11.07	1.8
MW-226	12/09/2020 09:05	10.21	-24	6.98	0.26	0.535	12.13	0.2
MW-226	12/09/2020 09:10	10.6	-26.2	7	0.25	0.52	12.84	0
MW-226	12/09/2020 09:15	13.66	-24.6	7.01	0.25	0.52	11.86	1.7
MW-226	12/09/2020 09:20	14.32	-22.5	6.98	0.25	0.521	11.41	0.7
MW-226	12/09/2020 09:25	16.09	-19.6	7	0.25	0.521	10.54	0.6
MW-226	12/09/2020 09:30	16.45	-18.7	7.05	0.25	0.552	9.88	2.5
MW-226	12/09/2020 09:35	17.33	-18	7.07	0.25	0.523	9.62	1.4
MW-226	12/09/2020 10:25	13.29	-14.2	7.11	0.27	0.554	12.29	3
MW-226	12/09/2020 10:35	12.01	-21.9	7.22	0.27	0.547	12.21	2.6
MW-230	06/12/2012 10:49	1.22	79	5.7	0.02	0.4862	22.27	50.2
MW-230	06/12/2012 10:51	0.67	40	6.35	0.03	0.56251	21.29	2.8
MW-230	06/12/2012 10:53	0.43	3	6.58	0.03	0.58591	20.76	3.9
MW-230	06/12/2012 10:55	0.35	-12	6.59	0.03	0.60206	20.73	2.5
MW-230	06/12/2012 10:57	0.32	-20	6.6	0.03	0.60679	20.59	2.2
MW-230	06/12/2012 10:59	0.3	-25	6.61	0.03	0.6017	20.71	1.6
MW-230	06/12/2012 11:02	0.28	-26	6.65	0.03	0.6032	20.58	1.9
MW-230	06/12/2012 11:04	0.26	-26	6.63	0.03	0.59423	20.62	1.8
MW-230	06/12/2012 11:06	0.26	-25	6.62	0.03	0.59566	20.59	1.8
MW-230	06/12/2012 11:42	4.10	47	6.45	0.03	0.594	19.12	330.50
MW-230	06/13/2012 11:20	0.97	70	6.14	0.03	0.559	19.59	55.80
MW-230	08/11/2014 12:50	0.66	221	4.71	0.05	1.014	24.97	6.42
MW-230	08/11/2014 13:47	0.89	256	5.34	0.04	0.741	23.39	121.90
MW-230	08/12/2014 11:53	1.99	-263	5.12	0.04	0.748	22.47	47.10
MW-230	12/03/2015 11:58	2.01	510	4.86	0.04	0.804	15.5	65.4
MW-230	12/03/2015 13:57	5.33	50	5.53	0.04	0.811	16.54	719.2
MW-230	04/28/2016 09:53	1.25	170	5.38	0.05	1.065	13.46	30.60
MW-230	04/28/2016 10:19	4.24	199	6.01	0.06	1.230	13.17	123.70
MW-230	06/15/2017 10:13	0.92	-59.00	6.05	0.09	1.704	17.8	36.30
MW-230	06/15/2017 13:21	0.27	-46.00	6.66	0.27	4.928	20.65	7.88
MW-230	06/15/2017 14:42	3.31	-90.00	7.80	0.22	4.075	17.41	314.10
MW-230	05/09/2018 09:00	0.17	-38.00	6.05	0.68	1.357	13.89	1.50

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-230	05/09/2018 09:55	0.29	-42.20	6.14	0.68	1.353	18.5	16.00
MW-230	05/09/2018 10:15	0.34	0.30	5.95	0.67	1.325	18.83	20.40
MW-230	06/13/2018 13:02	1.93	-112	6.64	0.144	2.7489	19.81	33.6
MW-230	06/13/2018 13:04	1.04	-114	6.63	0.145	2.7623	19.79	29.3
MW-230	06/13/2018 13:07	0.86	-115	6.63	0.147	2.8012	19.7	27.3
MW-230	06/13/2018 13:09	0.74	-116	6.63	0.148	2.8289	19.71	24.1
MW-230	06/13/2018 13:11	0.71	-116	6.64	0.149	2.8358	19.7	20.6
MW-230	06/13/2018 13:14	0.67	-116	6.65	0.149	2.8452	19.71	20.2
MW-230	06/13/2018 13:16	0.65	-116	6.65	0.150	2.8629	19.76	17.1
MW-230	06/13/2018 13:19	0.64	-115	6.66	0.151	2.8771	19.71	19.4
MW-230	06/13/2018 13:21	0.63	-115	6.66	0.151	2.8716	19.55	16.9
MW-230	06/13/2018 13:23	0.62	-114	6.66	0.151	2.8681	19.59	15.1
MW-230	06/13/2018 13:26	0.61	-114	6.66	0.151	2.8748	19.68	13.6
MW-230	06/13/2018 13:28	0.59	-113	6.66	0.151	2.8708	19.68	15.5
MW-230	06/13/2018 13:31	0.6	-112	6.66	0.151	2.8770	19.69	11.6
MW-230	06/13/2018 13:33	0.58	-111	6.65	0.152	2.8943	19.74	12.1
MW-230	06/13/2018 13:35	0.57	-111	6.65	0.152	2.8836	19.63	11.8
MW-230	06/14/2018 13:35	0.57	-111.00	6.65	0.15	2.873	19.81	11.83
MW-230	06/14/2018 13:50	0.59	-121.00	6.56	0.11	1.075	20.7	80.60
MW-230	06/14/2018 14:14	3.56	-112.00	7.00	0.15	2.084	19.64	72.30
MW-230	12/10/2018 10:15	2.82	-86.2	6.77	NM	1.004	9.27	10.8
MW-230	12/10/2018 10:25	2.77	-84.90	6.74	0.50	1.006	9.28	9.10
MW-230	12/10/2018 11:00	2.37	-38.40	6.43	0.50	1.004	10.29	0.30
MW-230	12/10/2018 11:15	8.26	45.60	6.48	0.51	1.017	11.25	147.10
MW-230	04/17/2019 09:20	0.68	-54.90	6.55	0.58	1.166	11.57	0.10
MW-230	04/17/2019 09:50	1.80	5.20	6.21	0.58	1.156	12.69	4.70
MW-230	04/17/2019 10:20	2.67	13.90	6.23	0.55	1.105	11.64	54.30
MW-230	06/21/2019 10:05	1.29	-92.9	6.83	NM	1.065	17.2	1914.8
MW-230	06/21/2019 10:10	0.78	-95.7	6.78	NM	1.069	17.33	41
MW-230	06/21/2019 10:15	0.53	-99.5	6.76	NM	1.038	17.65	12.2
MW-230	06/21/2019 10:20	0.48	-98.5	6.73	NM	0.999	17.76	7.3
MW-230	06/21/2019 10:25	0.46	-95.6	6.71	NM	0.994	17.8	4.7
MW-230	06/21/2019 10:30	0.45	-89.9	6.67	NM	0.993	17.82	4.6
MW-230	06/21/2019 10:35	0.43	-86.7	6.64	NM	0.995	17.81	4.5
MW-230	06/21/2019 10:40	0.37	-38.3	6.3	0.46	0.927	17.57	NM
MW-230	06/21/2019 10:45	0.37	-26.6	6.22	0.46	0.937	NM	2
MW-230	06/21/2019 10:50	NM	NM	NM	NM	NM	17.56	0.3
MW-230	06/21/2019 12:40	0.43	-86.7	6.64	NM	0.995	17.81	4.5
MW-230	06/21/2019 13:00	0.37	-38.3	6.3	0.46	0.927	17.57	2
MW-230	10/25/2019 12:15	7.88	-99.7	6.72	NM	0.793	19.1	30
MW-230	10/25/2019 12:20	6.03	-106.5	6.28	NM	0.784	18.97	26.1
MW-230	10/25/2019 12:25	7.01	-109.6	6.72	NM	0.782	18.96	16.5
MW-230	10/25/2019 12:30	6.5	-111	6.49	NM	0.781	19.04	13.3
MW-230	10/25/2019 12:35	6.53	-108.5	6.48	NM	0.775	19.03	11.2
MW-230	10/25/2019 12:40	6.85	-106.7	6.79	NM	0.772	19.05	10.1
MW-230	10/25/2019 12:45	5.82	-101	6.66	NM	0.772	19	8.1
MW-230	10/25/2019 12:50	6.76	-95.4	6.75	NM	0.772	19.06	7.6
MW-230	10/25/2019 12:55	6.7	-90.7	6.79	NM	0.771	19.11	5
MW-230	10/25/2019 13:00	6.61	-88.4	6.56	NM	0.77	19.1	5.3
MW-230	10/25/2019 13:30	13.01	-33.9	6.42	0.33	0.742	19.48	40.9
MW-230	10/25/2019 13:45	9.63	-25.4	6.22	0.33	0.725	19.17	64
MW-230	04/28/2020 12:00	0.79	17	6.16	NM	0.939	13.67	0.2
MW-230	04/28/2020 12:20	3.66	45.5	6.12	0.45	0.9	15.59	4.7
MW-230	06/22/2021 13:50	3.71	-68.5	6.56	0.39	0.794	18.9	420.7
MW-230	06/22/2021 13:55	1.89	-73	6.5	0.44	0.893	18.65	231.1
MW-230	06/22/2021 14:00	1.55	-76.4	6.52	0.45	0.916	18.58	182.4
MW-230	06/22/2021 14:05	1.19	-78	6.54	0.46	0.927	18.52	135.9
MW-230	06/22/2021 14:10	0.86	-77.7	6.54	0.46	0.929	18.46	111.3
MW-230	06/22/2021 14:15	0.62	-76.7	6.52	0.47	0.936	6.52	99.8
MW-230	06/22/2021 14:20	0.57	-75.7	6.52	0.46	0.94	18.36	87.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-230	06/22/2021 14:25	0.45	-68.8	6.48	0.46	0.938	18.37	69.5
MW-230	06/22/2021 14:30	0.43	-68	6.47	0.46	0.939	18.33	61.2
MW-230	06/22/2021 14:35	0.41	-66.2	6.46	0.47	0.939	18.3	54.1
MW-230	09/23/2021 12:45	3.16	-102.8	6.73	0.49	0.985	23.59	82.2
MW-230	09/23/2021 12:50	2.4	-106.3	6.7	0.49	0.99	24.64	76.3
MW-230	09/23/2021 12:55	1.84	-100.8	6.62	0.51	1.026	25.1	56.5
MW-230	09/23/2021 13:00	1.87	-96.5	6.57	0.52	1.048	24.92	27.4
MW-230	09/23/2021 13:05	1.38	-95.9	6.56	0.52	1.047	24.88	23.9
MW-230	09/23/2021 13:10	1.15	-95.4	6.56	0.52	1.045	24.87	19.1
MW-230	09/23/2021 13:15	1.28	-92.7	6.53	0.51	1.035	24.89	15
MW-230	09/23/2021 13:20	1.1	-89.5	6.51	0.51	1.03	24.86	11.7
MW-230	09/23/2021 13:25	1.07	-86.3	6.48	0.5	1.021	24.87	10.6
MW-230	09/23/2021 13:30	1.05	-82.5	6.46	0.5	1.014	24.79	11.1
MW-230	12/29/2021 10:45	2.99	88.4	5.19	0.45	0.912	11.34	544.8
MW-230	12/29/2021 10:50	1.26	-6.2	5.14	0.45	0.915	11.94	502.6
MW-230	12/29/2021 10:55	1.12	-14.8	5.18	0.46	0.919	11.9	299.5
MW-230	12/29/2021 11:00	1.05	-23.5	5.32	0.46	0.934	11.81	133
MW-230	12/29/2021 11:05	1.1	-30.2	5.41	0.47	0.938	11.85	70.8
MW-230	12/29/2021 11:10	1.03	-35.2	5.46	0.46	0.935	11.83	35.5
MW-230	12/29/2021 11:15	0.99	-38.4	5.43	0.46	0.926	11.82	19.7
MW-230	12/29/2021 11:20	1.03	-40	5.38	0.45	0.917	11.8	12.4
MW-230	12/29/2021 11:25	1.01	-41	5.34	0.45	0.911	11.81	8.4
MW-230	12/29/2021 11:30	0.97	-41.7	5.3	0.45	0.905	11.9	6.8
MW-230	03/28/2022 09:50	6.93	-39	6	0.51	1.03	8.68	1446.1
MW-230	03/28/2022 09:55	9.14	4.8	5.57	0.47	0.955	7.73	902.5
MW-230	03/28/2022 10:00	9.61	18	5.66	0.46	0.927	7.63	737.5
MW-230	03/28/2022 10:05	11.42	39.3	5.3	0.46	0.926	6.97	587.1
MW-230	03/28/2022 10:10	12.99	49.1	5.22	0.45	0.917	6.8	480.2
MW-230	03/28/2022 10:15	14.67	52	5.21	0.45	0.913	7.31	458.1
MW-230	03/28/2022 10:20	15.16	56.9	5.19	0.46	0.925	7.31	415.7
MW-230	03/28/2022 10:25	15.91	61.8	5.14	0.46	0.935	6.98	375.4
MW-230	03/28/2022 10:30	16.37	65.1	5.12	0.46	0.929	7.18	370.3
MW-230	03/28/2022 10:35	16.42	65.7	5.12	0.46	0.928	7.22	368.3
MW-232	06/20/2012 10:56	1.30	151	6.02	0.02	350.300	18.16	29.40
MW-232	06/21/2012 10:28	6.06	189	9.28	0.0000	0.366	20.00	46.20
MW-232	09/10/2012 09:22	4.45	235	5.66	0.0000	0.230	21.60	5.00
MW-232	09/11/2012 08:51	5.98	259	5.02	0.0000	0.216	24.14	0.0000
MW-232	08/28/2013 10:20	2.58	-238	5.69	0.02	0.424	22.67	22.50
MW-232	08/29/2013 10:49	5.01	-89	5.77	0.09	1.664	23.09	16.10
MW-232	08/13/2014 09:28	1.49	203	5.78	0.02	0.390	21.37	32.70
MW-232	08/14/2014 09:17	4.82	-254	5.98	0.02	0.439	23.91	13.50
MW-232	12/18/2014 09:48	2.68	-12	5.98	0.02	0.476	15.10	40.90
MW-232	12/19/2014 08:51	6.42	-21	5.73	0.02	0.454	17.38	14.90
MW-232	07/16/2015 11:26	10.03	-281	NM	NM	0.381	17.87	29.8
MW-232	07/16/2015 11:41	2.18	12	6.93	NM	1.525	18.16	33.7
MW-232	04/26/2016 11:20	1.64	180	5.78	0.03	0.522	14.51	18.90
MW-232	04/26/2016 15:47	2.85	319	6.90	0.02	0.421	16.89	91.70
MW-232	06/20/2017 10:08	6.11	263.00	6.07	0.10	1.918	19.5	51.50
MW-232	06/20/2017 11:48	6.39	232.00	8.12	0.05	0.961	18.06	132.50
MW-232	12/15/2017 10:32	11.32	13.00	6.45	0.04	0.869	18.73	33.30
MW-232	12/15/2017 13:41	3.03	-48.00	7.72	0.02	0.503	17.91	32.50
MW-232	06/15/2018 08:55	6.21	73.00	5.96	0.02	0.466	20.08	29.30
MW-232	06/15/2018 11:57	2.28	1.00	7.00	0.02	0.424	17.83	97.40
MW-232	12/03/2018 13:45	6.88	161.80	6.75	0.20	0.410	17.99	5.20
MW-232	12/03/2018 13:55	7.56	121.10	6.07	0.38	0.777	18.98	0.30
MW-232	12/03/2018 14:05	5.93	70.80	6.09	0.24	0.019	19.06	1.00
MW-232	06/06/2019 10:50	4.06	74.2	5.94	NM	0.347	NM	NM
MW-232	06/06/2019 12:45	NM	NM	NM	NM	NM	18.04	2.7
MW-232	06/06/2019 13:09	4.26	132.7	5.86	0.1	0.22	16.42	0.6
MW-232	06/06/2019 13:20	4.61	114	5.86	0.2	0.407	15.24	0.9

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-232	12/03/2019 13:50	5.9	65.9	6.59	NM	0.794	12.2	29.2
MW-232	12/03/2019 14:50	3.76	111.2	5.93	0.12	0.247	12.25	10.3
MW-232	12/03/2019 14:55	4.64	85.5	6.03	0.11	0.228	16.79	27.2
MW-232	06/08/2020 09:55	1.04	100.3	5.81	0.16	0.339	16.64	5.3
MW-232	12/08/2020 13:20	10.48	-39.1	7.49	0.3	0.614	12.59	9.3
MW-232	12/08/2020 13:50	12.24	-23.4	6.1	0.15	0.32	15.72	1.5
MW-232	12/08/2020 14:00	7.01	-22.6	6.21	0.15	0.319	15.14	0
MW-335	10/18/2012 12:45	2.03	46	6.87	0.4	0.86	23.8	2.1
MW-335	10/18/2012 12:50	1.24	75	6.71	0.4	0.87	23.3	2.3
MW-335	10/18/2012 12:55	0.99	84	6.64	0.4	0.88	23.2	2.4
MW-335	10/18/2012 13:00	0.77	93	6.54	0.4	0.89	22.9	1.9
MW-335	10/18/2012 13:05	0.64	98	6.49	0.4	0.88	22.7	1.2
MW-335	10/18/2012 13:10	0.57	100	6.45	0.4	0.89	22.6	1.2
MW-335	10/18/2012 13:15	0.56	102	6.42	0.4	0.89	22.5	0.2
MW-335	10/18/2012 13:20	0.47	103	6.41	0.4	0.89	22.4	0.00
MW-335	10/18/2012 13:25	0.44	100	6.41	0.4	0.89	22.4	0.00
MW-335	10/18/2012 13:30	0.41	93	6.40	0.4	0.88	22.6	0.00
MW-335	10/18/2012 13:37	0.52	85	6.35	0.40	0.914	22.47	0.90
MW-335	10/18/2012 14:13	8.50	51	5.90	0.40	0.904	22.14	0.0000
MW-335	10/19/2012 14:36	1.55	15	6.34	0.50	1.000	20.39	765.00
MW-335	12/14/2012 09:45	0.0000	-103.6	6.12	NM	9.895	13.07	1659.30
MW-335	12/14/2012 11:40	0.0000	-106.8	6.43	NM	5.306	14.12	1662.70
MW-335	12/15/2012 12:05	0.0000	-52.9	6.22	NM	5.782	12.55	1642.00
MW-335	02/07/2013 09:48	1.21	-84.2	6.86	NM	0.138	10.06	316.80
MW-335	02/15/2013 09:09	10.67	190.4	5.44	NM	0.002	8.55	2.80
MW-335	02/15/2013 09:13	0.83	-112.1	6.57	NM	2.44	10.8	230
MW-335	02/15/2013 09:18	0.42	-118.8	6.59	NM	2.46	10.8	274.1
MW-335	02/15/2013 09:23	0.27	-122	6.59	NM	2.43	10.6	280
MW-335	02/15/2013 09:28	0.14	-121	6.58	NM	2.34	9.9	306.4
MW-335	02/15/2013 09:33	0.13	-120.9	6.58	NM	2.34	10	298.8
MW-335	02/15/2013 09:38	0.13	-119.7	6.58	NM	2.313	9.98	286.50
MW-335	04/17/2013 09:52	1.86	-85.9	6.42	NM	2.608	13.3	155.8
MW-335	04/17/2013 09:57	1.68	-94.2	6.46	NM	2.71	13.4	201.1
MW-335	04/17/2013 10:03	158	-92.4	6.46	NM	2.75	13.5	213.2
MW-335	04/17/2013 10:07	1.58	-90.6	6.45	NM	2.76	13.4	209.6
MW-335	04/17/2013 10:12	1.63	-89.6	6.45	NM	2.77	13.5	205.6
MW-335	04/17/2013 10:17	1.66	-89.7	6.45	NM	2.78	13.6	205.7
MW-335	04/17/2013 10:23	1.7	-91.2	6.45	NM	2.77	13.7	200.6
MW-335	04/17/2013 10:27	1.69	-91.2	6.44	NM	2.771	13.81	199.8
MW-335	04/18/2013 10:35	1.7	-93.1	6.46	NM	2.78	14.12	266.01
MW-335	09/19/2013 12:30	1.76	-125.7	6.94	1.35	2.615	21.41	351.70
MW-335	09/19/2013 14:35	2.34	26.4	6.25	1.34	2.436	20.32	102.30
MW-335	09/20/2013 15:00	3.29	-102.7	6.57	1.35	2.186	21.65	256.70
MW-335	12/17/2013 12:00	2.34	-142.3	-6.81	1.21	2.340	11.97	157.00
MW-335	12/17/2013 13:05	5.09	-75.9	6.65	1.32	2.543	12.33	119.00
MW-335	12/18/2013 13:25	13.51	-106.4	6.59	1.31	2.529	13.28	1582.70
MW-335	12/19/2013 09:45	4.21	-46.2	6.51	1.26	2.432	12.20	78.20
MW-335	12/19/2013 09:55	2.86	-56.8	6.61	1.28	2.472	13.60	564.40
MW-335	12/19/2013 13:15	4.95	-69.3	6.76	1.24	2.398	11.46	270.60
MW-335	03/11/2014 11:55	0.93	-87	7.04	1.09	2.116	14.43	163.50
MW-335	03/12/2014 11:15	1.35	-50.9	6.83	1.20	2.322	13.41	208.80
MW-335	06/20/2014 09:30	1.35	-32.3	6.62	1.01	1.967	19.71	165.20
MW-335	06/20/2014 10:40	1.32	-33.3	6.60	1.01	1.948	19.74	166.80
MW-335	06/20/2014 10:55	1.29	-34.1	6.61	1.01	11.955	19.60	169.90
MW-335	01/19/2015 08:35	1.08	19.7	6.71	0.67	1.338	11.50	253.90
MW-335	01/19/2015 09:20	0.89	-55.1	6.67	0.71	1.407	10.65	344.50
MW-335	01/19/2015 10:55	1.53	-2.4	6.73	0.70	1.521	10.79	421.40
MW-335	04/22/2015 10:45	0.88	-71.5	6.61	0.83	1.629	13.80	0.0000
MW-335	04/22/2015 12:10	4.92	-103.4	6.54	0.86	1.700	17.62	292.90
MW-335	07/08/2015 13:30	3.85	-110.6	6.65	0.99	1.942	17.88	418.20

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-335	07/08/2015 13:40	2.80	-103.5	6.81	0.97	1.889	15.59	1635.00
MW-335	10/08/2015 14:20	1.79	-147.7	6.52	0.90	1.767	17.22	473.40
MW-335	10/08/2015 14:40	0.92	-99.4	6.65	0.88	1.736	16.55	408.70
MW-335	02/02/2016 15:20	3.48	-121.8	6.71	0.42	0.855	14.46	344.1
MW-335	02/02/2016 15:30	3.3	-142.6	6.62	0.42	0.844	14.76	522.7
MW-335	05/17/2016 09:50	2.89	-100	6.77	0.73	1.449	16.46	22.20
MW-335	05/17/2016 10:15	1.89	-103.1	6.77	0.72	1.434	14.09	1115.10
MW-335	08/09/2016 15:00	2.04	-122.9	7.16	0.74	1.471	19.14	254.70
MW-335	08/09/2016 15:12	2.10	-97.1	6.88	0.72	1.423	18.20	166.90
MW-335	11/03/2016 11:25	3.05	-105.7	6.99	0.72	1.429	17.59	124.30
MW-335	11/03/2016 11:45	1.67	-108.6	7.00	0.74	1.464	17.14	1202.00
MW-335	05/25/2017 10:45	0.89	-121.30	6.65	0.67	1.021	14.89	67.80
MW-335	05/25/2017 11:20	0.98	-143.00	6.71	0.63	1.054	14.97	70.90
MW-335	05/25/2017 14:40	0.40	-110.10	6.76	0.53	1.057	15.86	46.20
MW-335	11/07/2017 14:20	3.16	-94.20	6.76	0.39	0.786	18.19	16.60
MW-335	11/07/2017 14:40	6.60	-76.90	6.75	0.35	0.721	14.78	197.20
MW-335	11/07/2017 15:00	5.74	-64.90	6.73	0.53	1.061	14.73	1660.90
MW-335	05/08/2018 09:00	5.41	-50.40	6.94	0.45	0.910	14.35	141.40
MW-335	05/08/2018 09:55	4.04	-82.20	6.97	0.48	0.975	19.09	121.60
MW-335	05/08/2018 10:15	4.18	-83.60	6.98	0.48	0.979	19.18	136.20
MW-335	12/07/2018 08:40	0.52	-106.90	7.11	0.21	0.433	10.72	76.70
MW-335	12/07/2018 10:10	1.59	-138.50	6.99	0.21	0.436	15.41	0.10
MW-335	12/07/2018 10:30	3.83	-117.00	7.00	0.20	0.422	16.26	897.60
MW-335	04/19/2019 10:05	0.31	-99.00	7.03	0.43	0.869	14.77	97.70
MW-335	04/19/2019 11:05	2.52	-88.20	7.06	0.48	0.968	16.4	137.10
MW-335	04/19/2019 11:25	2.10	-79.80	6.94	0.44	0.880	15.44	1740.00
MW-335	10/28/2019 10:10	35.9	-84	6.99	NM	0.225	18.79	3.4
MW-335	10/28/2019 10:15	2.44	-75.1	6.92	NM	0.245	18.58	20.2
MW-335	10/28/2019 10:20	2.61	-76.9	6.88	NM	0.297	18.49	13.2
MW-335	10/28/2019 10:25	2.37	-81.6	6.9	NM	0.335	18.3	14
MW-335	10/28/2019 10:30	2.11	-85	6.91	NM	0.355	18.34	15.4
MW-335	10/28/2019 10:35	2.52	-89.9	6.9	NM	0.414	18.08	15.5
MW-335	10/28/2019 10:40	1.7	-98	6.95	NM	0.475	17.54	5.6
MW-335	10/28/2019 10:45	0.68	-118	6.96	NM	0.493	17.46	3.4
MW-335	10/28/2019 10:50	0.38	-123.5	6.97	NM	0.494	17.39	2.9
MW-335	10/28/2019 10:55	0.36	-124.1	6.96	NM	0.477	17.4	2.6
MW-335	10/28/2019 11:59	2.82	-105.3	6.98	0.25	0.516	18.09	152.9
MW-335	10/28/2019 12:29	3.91	-84.3	6.99	0.24	0.503	17.85	911.4
MW-335	05/05/2020 13:40	0.61	-104.3	7.03	NM	0.771	15.97	61.5
MW-335	05/06/2020 12:03	10.96	-115.5	7.31	0.37	0.743	13	665.7
MW-335	06/21/2021 13:10	2.13	-79.7	6.74	0.31	0.641	23.16	861.1
MW-335	06/21/2021 13:15	1.31	-83.1	6.52	0.32	0.652	21.72	278.4
MW-335	06/21/2021 13:20	1.4	-85.3	6.68	0.31	0.634	23.27	198.5
MW-335	06/21/2021 13:25	1.57	-95.2	6.93	0.3	0.618	26.09	166.8
MW-335	06/21/2021 13:30	1.64	-96.2	6.96	0.29	0.615	25.72	153.8
MW-335	06/21/2021 13:35	1.59	-93.4	6.89	0.29	0.607	26.57	148.7
MW-335	06/21/2021 13:40	1.63	-96.3	6.93	0.3	0.613	26.42	138.6
MW-335	06/21/2021 13:45	1.61	-96	6.93	0.3	0.617	26.48	135.7
MW-335	10/04/2021 12:15	1.91	-90.1	7.11	0.32	0.648	21.5	86.9
MW-335	10/04/2021 12:20	1.25	-122.6	7	0.32	0.662	19.73	107.7
MW-335	10/04/2021 12:25	1.15	-122.2	7.01	0.32	0.661	19.72	94
MW-335	10/04/2021 12:30	0.98	-124.5	7.02	0.32	0.66	20.35	77.9
MW-335	10/04/2021 12:35	1.16	-124.7	7.05	0.32	0.658	21.01	54.5
MW-335	10/04/2021 12:40	1.23	-124.3	6.99	0.32	0.657	21.17	46.3
MW-335	10/04/2021 12:45	1.3	-124.4	7.06	0.32	0.657	21.34	35.9
MW-335	10/04/2021 12:50	1.34	-123.7	7.03	0.32	0.658	21.31	33
MW-335	10/04/2021 12:55	1.36	-123.8	7.04	0.32	0.658	21.2	34.7
MW-335	12/27/2021 13:00	3.61	-93	7.26	0.35	0.71	13.65	175.8
MW-335	12/27/2021 13:05	1.43	-95.3	7.09	0.35	0.718	13.4	164.9
MW-335	12/27/2021 13:10	1.58	-90.7	7.05	0.35	0.712	12.72	159.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-335	12/27/2021 13:15	1.54	-86.2	7.01	0.35	0.706	12.4	160.9
MW-335	12/27/2021 13:20	1.52	-83.2	7.01	0.34	0.702	12.23	162.6
MW-335	12/27/2021 13:25	1.3	-83.7	7.01	0.34	0.698	12.36	224.7
MW-335	12/27/2021 13:30	1.07	-84.6	7	0.34	0.695	12.53	252.8
MW-335	12/27/2021 13:35	0.94	-86.8	7	0.34	0.695	12.54	246.1
MW-335	12/27/2021 13:40	0.72	-89.2	6.99	0.34	0.696	12.65	221.4
MW-335	12/27/2021 13:45	0.66	-89.9	6.99	0.34	0.698	12.62	216.1
MW-335	03/18/2022 13:00	2.17	-123.6	7.05	0.38	0.79	22.77	16
MW-335	03/18/2022 13:05	0.97	-120	6.83	0.37	0.747	20.93	43.3
MW-335	03/18/2022 13:10	0.72	-121.9	6.85	0.36	0.744	21.12	47.8
MW-335	03/18/2022 13:15	0.59	-124.6	6.86	0.36	0.743	21.14	36.7
MW-335	03/18/2022 13:20	0.55	-124.3	6.84	0.36	0.746	20.47	28.3
MW-335	03/18/2022 13:25	0.53	-127.1	6.87	0.37	0.746	20.51	27.5
MW-335	03/18/2022 13:30	0.53	-127.4	6.88	0.37	0.748	20.55	27.1
MW-359	05/06/2013 10:47	1.26	-93	6.66	0.08	1.636	13.41	670.5
MW-359	06/05/2013 14:07	0.66	-73	6.24	0.13	2.468	20.37	15.66
MW-359	06/05/2013 14:51	0.65	89	7.08	0.13	2.512	14.91	246.50
MW-359	06/06/2013 10:52	0.27	-170.00	6.57	0.11	2.169	14.08	173.80
MW-359	09/12/2013 14:54	0.84	-438	6.66	0.09	1.688	21.55	-0.82
MW-359	09/12/2013 15:45	1.22	-502	6.72	0.08	1.582	18.78	373.40
MW-359	09/13/2013 11:25	0.43	-523	6.55	0.18	3.309	19.23	215.90
MW-359	11/18/2013 14:13	0.75	-273	6.31	0.08	1.655	19.51	21.35
MW-359	11/18/2013 15:00	1.05	-55	5.73	0.09	1.729	19.37	2433.60
MW-359	11/19/2013 11:23	4.24	-275	6.46	0.19	3.499	18.75	209.10
MW-359	01/28/2014 11:40	1.27	-86	6.17	0.14	2.774	11.72	41.12
MW-359	01/28/2014 12:33	5.10	32	6.94	0.11	2.209	15.44	276.40
MW-359	01/29/2014 10:45	2.01	-20	6.60	0.09	1.843	15.82	211.30
MW-359	04/03/2014 09:53	0.98	-401	6.28	0.03	0.608	13.38	115.50
MW-359	04/03/2014 10:51	1.66	-453	6.51	0.03	0.611	13.09	685.70
MW-359	04/04/2014 11:42	-0.54	-571	6.47	0.10	2.011	13.08	67.80
MW-359	07/01/2014 14:38	1.46	49	6.80	0.08	1.642	27.88	3.80
MW-359	07/01/2014 15:31	1.30	177	6.58	0.07	1.435	15.42	80.10
MW-359	07/02/2014 13:15	0.28	48	6.41	0.08	1.540	15.94	92.10
MW-359	11/25/2014 14:20	2.00	-366	6.52	0.10	2.010	15.60	-0.18
MW-359	11/25/2014 15:06	2.46	-229	6.69	0.11	2.089	18.29	967.30
MW-359	11/26/2014 10:51	1.99	-372	6.53	0.10	1.996	18.26	225.00
MW-359	04/06/2015 10:46	2.13	-56	6.14	0.08	1810.000	16.35	37.09
MW-359	04/06/2015 12:02	4.72	-44	6.25	0.08	1652.000	12.59	1545.20
MW-359	04/07/2015 10:20	1.24	-41	6.28	0.08	1647.000	12.74	127.60
MW-359	05/13/2015 11:31	4.6	96	6.77	0.1	1.937	17.18	231
MW-359	05/13/2015 13:51	1.38	-36	6.51	0.26	4.863	13.74	1171.2
MW-359	08/18/2015 09:53	0.15	78	6.67	0.16	3.061	17.11	173.8
MW-359	08/18/2015 10:07	9.19	36	6.84	0.17	3.137	17.49	669.1
MW-359	10/27/2015 09:39	1.28	178	6.86	0.07	1.293	18.28	2722.6
MW-359	10/27/2015 10:05	5.76	229	6.54	0.06	1.135	19.22	12.9
MW-359	05/06/2016 10:15	3.24	-169	6.31	0.09	1.696	13.75	28.70
MW-359	05/06/2016 11:45	4.00	133	7.06	0.22	4.161	13.77	338.60
MW-359	11/01/2016 09:32	1.39	-35.00	6.74	0.04	0.903	19.68	24.90
MW-359	11/01/2016 09:40	3.27	-6	6.59	0.28	5.193	18.69	4743.00
MW-359	03/31/2017 10:44	2.12	151	6.23	0.14	2.765	13.29	206.90
MW-359	03/31/2017 14:48	1.22	86	6.78	0.19	3.519	14.33	3220.30
MW-359	09/20/2017 10:23	3.18	139.00	6.36	0.08	1.637	19.86	183.10
MW-359	09/20/2017 11:20	0.36	22.00	6.63	0.43	7.688	23.08	9.63
MW-359	09/20/2017 12:10	2.48	19.00	7.07	0.41	7.405	19.37	28.20
MW-359	04/19/2018 08:50	3.47	17	7.11	0.3031	5.5967	12.21	16.6
MW-359	04/19/2018 08:53	1.89	34	6.75	0.3271	6.0163	11.82	18
MW-359	04/19/2018 08:56	1.6	39	6.6	0.3259	5.9940	11.92	16.1
MW-359	04/19/2018 08:59	1.52	42	6.5	0.3323	6.1047	11.93	16.1
MW-359	04/19/2018 09:02	1.51	44	6.42	0.3464	6.3457	11.99	15.6
MW-359	04/19/2018 09:04	1.46	44	6.37	0.3490	6.3919	11.96	18.7

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-359	04/19/2018 09:07	1.43	45	6.32	0.3545	6.4843	12.05	22.1
MW-359	04/19/2018 09:10	1.39	46	6.29	0.3578	6.5409	12.03	22.2
MW-359	04/19/2018 09:13	1.41	46	6.26	0.3665	6.6906	12.01	22.1
MW-359	04/20/2018 09:13	1.41	46.00	6.26	0.36	6.712	11.89	22.07
MW-359	04/20/2018 09:15	1.99	-47.00	6.25	0.07	1.384	13.16	44.70
MW-359	04/20/2018 09:36	4.40	81.00	7.08	0.44	7.935	13.21	143.20
MW-359	11/01/2018 10:55	1.60	38.70	6.58	0.27	0.564	19.81	7.90
MW-359	11/01/2018 11:05	0.68	-8.10	6.78	0.62	1.242	19.94	2.50
MW-359	11/01/2018 11:15	0.47	-8.20	6.77	0.66	1.324	20.03	1.40
MW-359	05/02/2019 11:20	0.52	140.3	6.32	NM	3.92	14.74	12.1
MW-359	05/02/2019 11:44	0.44	96.2	6.33	1.6	3.038	13.37	6.7
MW-359	11/18/2019 10:30	2.12	49.6	7.02	NM	0.371	15.35	45
MW-359	11/18/2019 10:35	1.79	46.9	6.71	NM	0.359	15.36	44
MW-359	11/18/2019 10:40	1.97	48.5	6.6	NM	0.341	14.7	37.3
MW-359	11/18/2019 10:45	1.93	49.8	6.55	NM	0.342	14.77	33
MW-359	11/18/2019 10:50	1.78	50.8	6.52	NM	0.355	14.91	22.3
MW-359	11/18/2019 10:55	1.18	46.1	6.56	NM	0.401	15.31	10.5
MW-359	11/18/2019 11:00	0.92	40.1	6.6	NM	0.424	15.76	6.1
MW-359	11/18/2019 11:05	0.74	34.4	6.64	NM	0.442	16	3.6
MW-359	11/18/2019 11:10	0.67	30.7	6.66	NM	0.455	16.08	2
MW-359	11/18/2019 11:15	0.59	26.2	6.67	NM	0.466	16.25	1.1
MW-359	11/18/2019 11:40	4.36	-33.9	6.76	0.24	0.499	11.94	2.8
MW-359	11/18/2019 11:50	2.95	-25.8	6.72	0.24	0.499	14.17	21.2
MW-359	05/04/2020 11:40	0.1	32.3	6.28	NM	2.701	15.4	3.7
MW-359	05/04/2020 12:00	0.21	29.1	6.27	1.34	2.571	15.14	4.1
MW-359	11/23/2020 12:15	1.49	62.9	7.12	0.3	0.609	16.24	11.3
MW-359	11/23/2020 12:20	0.62	50.6	6.91	0.3	0.608	16.93	4.4
MW-359	11/23/2020 12:25	0.45	39.3	6.8	0.3	0.62	17.14	3.6
MW-359	11/23/2020 12:30	0.43	28.7	6.73	0.31	0.642	17.32	3.5
MW-359	11/23/2020 12:35	0.38	19.3	6.68	0.33	0.667	17.46	3.2
MW-359	11/23/2020 12:40	0.4	16	6.64	0.33	0.674	17.34	3
MW-359	11/23/2020 12:45	0.39	15.3	6.64	0.33	0.68	17.25	2.9
MW-359	11/23/2020 12:50	0.37	13.7	6.62	0.34	0.689	17.22	2.9
MW-359	11/23/2020 13:20	4.28	27.5	6.92	0.37	0.753	16.42	11.6
MW-359	11/23/2020 13:30	1.91	18.9	6.83	0.37	0.759	16.58	9.4
MW-359	02/19/2021 12:05	9.4	-44.8	6.6	0.87	1.72	10.83	174.6
MW-359	02/19/2021 12:10	0.52	-32.3	6.28	0.87	1.705	12.11	69.1
MW-359	02/19/2021 12:15	0.48	-32.9	6.29	0.84	1.663	12.01	53.2
MW-359	02/19/2021 12:20	0.56	-24.5	6.3	0.81	1.601	11.36	63.1
MW-359	02/19/2021 12:25	0.56	-15.6	6.25	0.75	1.481	10.56	47.6
MW-359	02/19/2021 12:30	0.43	-16.9	6.24	0.84	1.647	10.98	32.6
MW-359	02/19/2021 12:35	0.39	-18	6.24	0.89	1.75	11.16	26
MW-359	02/19/2021 12:40	0.37	-21.6	6.23	0.93	1.802	9.94	23.3
MW-359	02/19/2021 12:45	0.38	-16.1	6.23	0.92	1.816	8.56	23.6
MW-359	02/19/2021 12:50	0.33	-15.7	6.22	0.99	1.908	9.34	19
MW-359	02/19/2021 13:45	0.42	-1.5	6.29	1.08	2.096	11.03	1.3
MW-359	02/19/2021 14:12	0.6	-26.2	6.43	1.571	1.571	12.55	40
MW-359	09/15/2021 11:10	0.22	176	7.26	0.75	0.069	25.98	248.7
MW-359	09/15/2021 11:15	0.03	53.1	5.8	0.64	1.28	23.25	41.9
MW-359	09/15/2021 11:20	0.02	54	5.73	0.65	1.276	22.78	27.1
MW-359	09/15/2021 11:25	0.02	53	5.69	0.64	1.284	22.44	16.4
MW-359	09/15/2021 11:30	0.02	49.1	5.69	0.66	1.324	21.95	10.1
MW-359	09/15/2021 11:35	0.02	44.5	5.69	0.69	1.371	21.94	8
MW-359	09/15/2021 11:40	0.02	36.2	5.74	0.74	1.477	21.99	8.4
MW-359	09/15/2021 11:45	0.02	32.9	5.76	0.78	1.545	21.98	7.7
MW-359	09/15/2021 11:50	0.02	29.8	5.78	0.83	1.646	22.31	5.6
MW-359	09/15/2021 11:55	0.02	29	5.79	0.85	1.879	22.32	78
MW-360	05/06/2013 09:39	5.01	-11	4.71	0.16	3.097	11.53	23.3
MW-360	06/05/2013 15:45	0.54	-76	4.55	0.17	3.167	17.94	8.80
MW-360	06/05/2013 16:35	1.69	17	6.62	0.15	2.830	14.31	99.70

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-360	06/06/2013 11:48	3.67	-42.00	14.67	0.14	2.641	14.68	217.80
MW-360	09/16/2013 09:09	3.12	-146	4.49	0.13	2.435	19.51	9.51
MW-360	09/16/2013 09:49	7.03	-239	5.08	0.17	3.245	18.56	67.20
MW-360	09/17/2013 13:41	2.36	-225	4.59	0.25	4.639	18.66	48.40
MW-360	11/20/2013 09:28	1.39	-22	4.01	0.23	4.384	14.29	9.49
MW-360	11/20/2013 10:06	1.79	-63	5.18	0.25	4.567	16.85	103.10
MW-360	11/21/2013 10:10	4.55	-46	4.49	0.24	4.389	16.92	106.40
MW-360	01/28/2014 14:40	2.44	10	4.63	0.24	4.619	7.14	2.20
MW-360	01/28/2014 15:23	5.77	-7	5.84	0.21	3.966	12.12	20.80
MW-360	01/29/2014 11:30	6.87	33	4.91	0.15	2.944	11.50	100.40
MW-360	04/03/2014 11:26	1.36	-262	4.51	0.05	0.967	12.22	33.63
MW-360	04/04/2014 12:21	2.81	19	5.03	0.20	3.761	8.68	83.10
MW-360	06/30/2014 15:25	0.68	163	4.35	0.08	1.599	23.71	6.49
MW-360	06/30/2014 16:08	4.73	219	4.63	0.12	2.290	15.19	28.70
MW-360	07/01/2014 13:12	5.13	166	5.26	0.08	1.613	16.85	49.30
MW-360	11/25/2014 12:01	2.35	-106	4.28	0.09	1.811	14.74	1.08
MW-360	11/25/2014 12:41	2.89	-118	5.06	0.12	2.342	16.27	530.70
MW-360	11/26/2014 10:08	5.50	-82	4.47	0.11	2.043	15.81	210.00
MW-360	04/06/2015 13:33	5.44	357	5.87	0.07	23740.000	18.30	77.63
MW-360	04/06/2015 14:53	1.76	185	5.12	0.09	1.799	10.41	0.0000
MW-360	04/07/2015 11:13	6.99	280	4.81	0.08	1.654	9.47	1213.10
MW-360	05/13/2015 11:58	7.54	340	4.65	0.1	1.993	17.37	540.1
MW-360	05/13/2015 15:23	4.67	159	4.82	0.27	5.042	12.71	2989.6
MW-360	08/18/2015 10:37	5.89	311	4.6	0.2	3.767	19.46	262.5
MW-360	08/18/2015 11:18	4.6	111	4.89	0.19	3.502	18.47	2572.4
MW-360	10/27/2015 11:02	8.75	306	3.99	0.1	1.918	18.41	254.2
MW-360	10/27/2015 11:30	0.78	215	5.63	0.09	2.533	17.88	2723
MW-360	05/06/2016 09:24	11.78	198	4.55	0.10	1.981	12.33	331.90
MW-360	05/06/2016 10:15	9.38	210	6.62	0.24	4.513	12.13	3536.80
MW-360	11/01/2016 10:25	5.68	185.00	4.19	0.09	1.705	18.40	295.90
MW-360	11/01/2016 11:05	1.76	128	4.40	0.36	6.601	17.72	3230.30
MW-360	03/31/2017 09:59	6.70	182	5.61	0.10	1.958	10.13	268.20
MW-360	03/31/2017 13:36	7.22	142	6.50	0.11	2.147	11.60	2595.70
MW-360	09/20/2017 09:31	7.32	165.00	5.35	0.10	1.888	19.73	218.50
MW-360	09/20/2017 09:36	0.39	125.00	4.81	0.53	9.482	21.4	26.86
MW-360	09/20/2017 10:28	2.80	41.00	6.79	0.42	7.491	18.07	231.70
MW-360	04/19/2018 09:52	8.13	147	7.55	0.1686	3.2396	9.26	14.2
MW-360	04/19/2018 09:55	3.65	195	6.99	0.1713	3.2846	9.61	10.5
MW-360	04/19/2018 09:58	3.2	210	6.73	0.1719	3.2981	9.47	9.5
MW-360	04/19/2018 10:00	3.27	218	6.51	0.1688	3.2427	9.37	12.4
MW-360	04/19/2018 10:03	4.15	222	6.36	0.1583	3.0522	9.23	20.3
MW-360	04/19/2018 10:06	5.09	223	6.23	0.1518	2.9339	9.09	22.6
MW-360	04/19/2018 10:09	5.33	223	6.15	0.1521	2.9392	9.02	15.7
MW-360	04/19/2018 10:12	5.09	224	6.05	0.1544	2.9806	9.09	12.3
MW-360	04/19/2018 10:15	5.08	225	5.98	0.1540	2.9755	9.01	11.2
MW-360	04/19/2018 10:17	4.91	227	5.91	0.1548	2.9901	9.02	9.9
MW-360	04/19/2018 10:20	4.75	228	5.85	0.1565	3.0215	8.94	9.9
MW-360	04/19/2018 10:23	4.58	229	5.78	0.1580	3.0493	8.95	7.7
MW-360	04/19/2018 10:26	4.31	230	5.7	0.1598	3.0796	9.06	7.6
MW-360	04/19/2018 10:29	4.21	232	5.64	0.1624	3.1283	9.09	7.3
MW-360	04/19/2018 10:32	3.92	234	5.57	0.1657	3.1877	9.12	6.3
MW-360	04/19/2018 10:34	3.59	236	5.5	0.1675	3.2207	9.16	6
MW-360	04/19/2018 10:37	3.53	237	5.45	0.1663	3.1980	9.21	5.9
MW-360	04/19/2018 10:40	3.55	238	5.4	0.1677	3.2235	9.2	6.3
MW-360	04/20/2018 10:02	9.46	88.00	4.82	0.19	3.571	9.99	162.70
MW-360	04/20/2018 10:40	3.55	238.00	5.40	0.17	3.234	9.08	6.28
MW-360	04/20/2018 11:08	4.39	193.00	6.98	0.22	4.237	10.76	454.90
MW-360	11/01/2018 13:45	2.14	232.80	5.37	0.67	1.335	18.65	6.80
MW-360	11/01/2018 13:55	1.58	245.60	5.34	0.69	1.369	18.82	5.00
MW-360	11/01/2018 14:05	1.55	247.80	5.33	0.69	1.379	18.87	4.50

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-360	05/02/2019 09:45	0.83	135.6	6.04	NM	1.571	13.1	37.1
MW-360	05/02/2019 10:05	0.92	143.8	6.04	0.87	1.702	12	20.4
MW-360	11/05/2019 08:25	4.34	-61.6	5.86	NM	1.583	15.01	29.1
MW-360	11/05/2019 08:30	0.97	-97	5.31	NM	1.583	16.15	24.5
MW-360	11/05/2019 08:35	2.98	-125.9	5.21	NM	1.447	16.43	16.2
MW-360	11/05/2019 08:40	7.53	-151.9	5.06	NM	1.42	16.66	9.4
MW-360	11/05/2019 08:45	9.94	-204.2	4.97	NM	1.35	16.66	9.4
MW-360	11/05/2019 08:50	9.94	-204.6	5.04	NM	1.342	16.7	6.4
MW-360	11/05/2019 08:55	8.29	-175.5	5.06	NM	1.229	16.78	2.9
MW-360	11/05/2019 09:00	7.9	-153.2	5.04	NM	1.197	16.78	1
MW-360	11/05/2019 09:05	7.49	-142.8	4.94	NM	1.183	16.85	1
MW-360	11/05/2019 09:10	7.15	-163.2	4.9	NM	1.219	17.01	0.9
MW-360	11/05/2019 09:40	2.88	-222	4.63	0.65	1.298	17.25	0.6
MW-360	11/05/2019 09:55	1.34	-235.2	4.55	0.68	1.345	17.29	25.4
MW-360	05/04/2020 09:55	0.08	130.8	5.98	NM	1.796	12.15	17
MW-360	05/04/2020 10:15	0.17	131.4	5.79	1.02	1.995	11.95	9
MW-360	02/09/2021 08:25	11.2	109.9	7.45	0.61	1.217	6.45	68
MW-360	02/09/2021 08:30	10.62	136.6	7.25	0.6	1.199	6.64	38.5
MW-360	02/09/2021 08:35	10.02	145	7.22	0.6	1.197	6.74	26.2
MW-360	02/09/2021 08:40	9.71	151	7.21	0.6	1.199	6.88	18.8
MW-360	02/09/2021 08:45	9.69	153.6	7.21	0.6	1.211	6.76	18.4
MW-360	02/09/2021 08:50	9.7	154.7	7.21	0.61	1.219	6.68	20.8
MW-360	02/09/2021 08:55	9.67	156.9	7.21	0.61	1.229	6.57	16.5
MW-360	02/09/2021 09:00	9.68	157.4	7.21	0.62	1.234	6.54	16
MW-360	02/09/2021 09:05	9.7	157.3	7.22	1.238	1.238	6.58	16
MW-360	02/09/2021 09:10	9.72	157.5	7.22	0.62	1.242	6.56	17.2
MW-360	02/09/2021 09:45	9.98	148.3	7.32	0.623	1.329	6.65	17
MW-360	02/09/2021 09:55	10.25	155.3	7.03	0.68	1.424	7.03	32.4
MW-360	10/06/2021 08:55	1.75	-23.4	6.46	0.88	1.728	18.69	185.2
MW-360	10/06/2021 09:00	0.84	-21.6	6.44	0.9	1.76	18.73	177.5
MW-360	10/06/2021 09:05	0.65	-18.7	6.44	0.91	1.794	18.75	145.6
MW-360	10/06/2021 09:10	0.57	-17.2	6.43	0.92	1.803	18.75	134
MW-360	10/06/2021 09:15	0.55	-17.1	6.44	0.9	1.764	18.75	93.2
MW-360	10/06/2021 09:20	0.5	-18.4	6.46	0.87	1.717	18.82	68.5
MW-360	10/06/2021 09:25	0.48	-18.9	6.45	0.87	1.71	18.9	55.3
MW-360	10/06/2021 09:30	0.48	-19	6.45	0.87	1.721	18.95	51.2
MW-360	10/06/2021 09:35	0.44	-19	6.44	0.88	1.737	18.93	37.6
MW-360	10/06/2021 09:40	0.37	-19	6.44	0.88	1.739	18.94	14.5
MW-361	05/06/2013 11:45	3.44	-42	5.43	1.07	18.160	12.14	15.40
MW-361	06/06/2013 09:55	0.61	-58	5.41	1.04	17.490	16.09	15.81
MW-361	06/06/2013 10:38	1.39	-56	6.27	0.66	11.520	13.65	107.30
MW-361	06/07/2013 12:29	0.47	-71.00	5.45	1.12	18.870	12.83	46.30
MW-361	09/16/2013 10:31	0.82	-284	5.41	1.77	28.600	17.96	6.01
MW-361	09/16/2013 11:24	2.12	-146	5.51	2.66	41.360	16.60	45.60
MW-361	09/17/2013 14:26	0.86	-274	5.42	3.08	47.130	16.58	45.30
MW-361	11/20/2013 10:56	1.05	-164	5.45	2.72	42.420	14.65	12.96
MW-361	11/20/2013 11:59	2.02	-86	5.97	2.93	45.100	16.62	24.30
MW-361	11/21/2013 10:57	0.85	-173	5.29	2.91	44.700	17.20	26.50
MW-361	04/07/2014 13:43	1.11	-249	5.37	1.23	20.580	10.59	55.69
MW-361	04/07/2014 14:31	3.82	-72	5.57	1.28	21.350	11.64	58.60
MW-361	04/08/2014 11:36	4.80	-15	3.96	1.22	20.410	15.26	57.40
MW-361	06/30/2014 13:52	0.86	25	5.36	0.45	8.068	20.95	4.95
MW-361	06/30/2014 14:44	1.16	83	5.45	0.53	9.431	15.22	8.40
MW-361	07/01/2014 12:39	2.50	147	4.20	0.48	8.499	14.89	17.50
MW-361	02/11/2015 11:11	1.63	128	4.82	0.97	16.880	5.74	26.67
MW-361	02/11/2015 11:58	1.57	-3.9	5.54	3.43	52.610	13.99	2843.50
MW-361	02/12/2015 10:20	13.05	122	5.79	1.78	30.210	1.75	62.40
MW-361	05/15/2015 10:46	2.41	252	3.74	1.42	23.51	12.3	56.1
MW-361	05/15/2015 12:04	2.99	-70	5.58	1.56	25.49	13.9	2300.9
MW-361	08/18/2015 11:22	1.96	245	4.02	3.53	53.21	16.74	85.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-361	08/18/2015 13:56	1.11	-40	6.16	3.48	52.58	17.28	2316.1
MW-361	11/04/2015 11:13	3.17	298	3.13	0.5	8.818	16.84	11.7
MW-361	11/04/2015 15:03	9.89	-71	5.88	0.96	16.2	16.56	808.1
MW-361	05/10/2016 15:53	3.03	148	5.96	NM	20.890	14.86	2712.20
MW-361	11/01/2016 11:21	1.26	284.00	3.44	0.31	5.610	17.62	44.70
MW-361	11/01/2016 13:35	1.74	-39	5.55	0.42	7.484	16.82	1213.10
MW-362	05/06/2013 13:57	5.70	-14	4.87	0.05	0.977	14.70	50.10
MW-362	06/06/2013 11:38	0.47	208	3.80	0.06	1.213	16.97	11.94
MW-362	06/06/2013 12:26	1.21	40	5.63	0.05	0.974	14.79	47.20
MW-362	06/07/2013 13:20	0.39	-78.00	5.26	0.10	1.968	14.43	75.40
MW-362	09/18/2013 09:24	0.80	-329	5.51	0.07	1.378	15.93	13.48
MW-362	09/18/2013 10:36	1.28	-337	5.88	0.06	1.222	14.97	1673.60
MW-362	09/19/2013 10:10	2.83	11	5.08	0.11	2.051	14.98	27.10
MW-362	11/20/2013 14:43	1.05	-157	4.68	0.13	2.514	13.73	8.49
MW-362	11/20/2013 16:04	1.96	-106	5.84	0.12	2.362	14.58	34.80
MW-362	11/21/2013 11:45	1.99	-142	5.21	0.14	2.712	15.24	13.00
MW-362	01/30/2014 09:48	3.23	-181	5.12	0.08	1.659	9.21	9.05
MW-362	01/30/2014 10:40	2.41	-195	5.58	0.10	1.943	14.86	25.00
MW-362	01/31/2014 09:45	3.90	46	5.11	0.10	1.931	14.90	27.90
MW-362	04/16/2014 14:33	2.25	-131	4.41	0.20	0.450	13.26	20.22
MW-362	04/16/2014 15:15	5.46	-124	5.63	0.20	0.390	13.42	33.20
MW-362	04/17/2014 12:50	4.97	-52	5.50	0.20	0.421	13.53	31.10
MW-362	07/24/2014 10:55	1.71	234	3.82	0.03	0.525	18.36	62.22
MW-362	07/24/2014 11:58	2.96	179	5.34	0.02	0.491	15.28	243.00
MW-362	07/25/2014 10:02	2.23	227	4.20	0.02	0.502	14.06	88.00
MW-362	11/25/2014 09:36	2.74	-223	5.17	0.03	0.629	14.25	10.27
MW-362	11/25/2014 10:39	2.51	-74	5.31	0.04	0.724	14.79	212.20
MW-362	11/26/2014 09:20	2.59	-219	5.20	0.03	0.610	14.96	802.00
MW-362	04/01/2015 09:32	2.80	179	4.78	0.03	0.638	9.68	2.63
MW-362	04/01/2015 10:27	3.44	11	5.35	0.06	1.175	13.80	2469.00
MW-362	04/02/2015 09:39	3.97	80	5.22	0.06	1.108	14.32	180.50
MW-362	06/16/2015 11:58	4.15	96	4.8	0.07	1.409	13.75	199.8
MW-362	06/16/2015 15:23	3.66	-4	5.75	0.06	1.111	16.2	436.4
MW-362	08/20/2015 09:50	3.7	74	3.68	0.17	3.236	14.67	101.4
MW-362	08/20/2015 10:34	3.73	58	6.57	0.1	2.015	16.02	415.7
MW-362	11/04/2015 10:21	2.4	268	5.22	0.03	0.6	15.08	51.7
MW-362	11/04/2015 13:15	5.85	-37	6.4	0.03	0.693	18.74	59.1
MW-362	05/10/2016 10:52	4.29	181	6.11	0.03	0.675	15.30	90.20
MW-362	11/02/2016 09:30	4.66	127.00	5.22	0.02	0.493	15.55	97.60
MW-362	11/02/2016 10:41	4.10	-8	6.03	0.30	5.486	14.99	2241.70
MW-362	04/06/2017 10:27	3.04	101	4.94	0.03	0.596	14.48	122.70
MW-362	04/06/2017 11:53	2.12	130	5.76	0.10	1.981	14.56	71.90
MW-362	09/21/2017 09:19	0.48	109.00	4.88	0.45	8.042	18.7	21.71
MW-362	09/21/2017 09:26	6.43	201.00	4.79	0.03	0.634	15.73	237.60
MW-362	09/21/2017 10:22	1.00	-1.00	6.76	0.49	8.711	15.05	1618.20
MW-362	05/02/2018 12:57	3.74	76	7.14	0.0314	0.6399	24.24	28.7
MW-362	05/02/2018 13:00	1.12	101	6.06	0.0300	0.6108	21.09	65.8
MW-362	05/02/2018 13:04	1.04	103	5.8	0.0324	0.6600	21.16	17.6
MW-362	05/02/2018 13:07	0.94	111	5.46	0.0323	0.6566	21.28	14.9
MW-362	05/02/2018 13:10	0.84	114	5.27	0.0325	0.6606	21.37	11.9
MW-362	05/02/2018 13:14	0.86	119	5.11	0.0328	0.6660	21.15	11.4
MW-362	05/02/2018 13:17	0.77	124	4.97	0.0314	0.6386	21.2	11.8
MW-362	05/02/2018 13:20	0.7	120	5.03	0.0319	0.6485	21.89	14.6
MW-362	05/02/2018 13:24	0.75	126	4.9	0.0317	0.6456	21.52	10.2
MW-362	05/02/2018 13:27	0.74	131	4.82	0.0319	0.6484	21.08	8.8
MW-362	05/02/2018 13:30	0.7	132	4.83	0.0316	0.6442	21.02	11.7
MW-362	05/02/2018 13:33	0.73	129	4.89	0.0334	0.6795	21.36	8.3
MW-362	05/02/2018 13:37	0.79	135	4.79	0.0330	0.6714	21.05	10.5
MW-362	05/02/2018 13:40	0.7	135	4.82	0.0321	0.6533	21.21	8.4
MW-362	05/02/2018 13:43	0.7	137	4.8	0.0328	0.6671	21.15	10.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-362	05/02/2018 13:47	0.71	140	4.76	0.0325	0.6602	20.81	8.9
MW-362	05/03/2018 11:14	1.66	-13.00	5.03	0.03	0.626	15.09	115.30
MW-362	05/03/2018 13:47	0.71	140.00	4.76	0.03	0.662	20.69	8.93
MW-362	05/03/2018 14:36	2.47	83.00	6.92	0.03	0.649	17.07	84.20
MW-362	11/26/2018 11:15	1.82	101.80	5.04	0.35	0.709	15.31	11.20
MW-362	11/26/2018 11:45	1.52	56.90	5.53	0.36	0.714	15.47	10.20
MW-362	11/26/2018 12:00	1.54	57.20	5.47	0.34	0.717	15.46	10.90
MW-362	05/10/2019 09:45	1.68	206.4	4.56	NM	0.668	15.27	22.2
MW-362	05/10/2019 10:05	0.81	179.6	4.78	0.36	0.723	14.81	5.9
MW-362	11/22/2019 09:25	1.26	8.6	5.29	NM	0.235	15.14	24.3
MW-362	11/22/2019 09:30	0.97	11.4	5.2	NM	0.233	15.22	27.4
MW-362	11/22/2019 09:35	0.88	20.7	5.08	NM	0.229	15.39	25.5
MW-362	11/22/2019 09:40	0.87	37.3	4.98	NM	0.209	15.5	15
MW-362	11/22/2019 09:45	1.22	37.7	5.12	NM	0.192	15.52	15.5
MW-362	11/22/2019 09:50	3.41	40.1	5.48	NM	0.168	15.56	22.8
MW-362	11/22/2019 09:55	2.61	48.1	5.33	NM	0.193	15.6	15.5
MW-362	11/22/2019 10:00	1.69	56.7	5.15	NM	0.211	15.49	8.8
MW-362	11/22/2019 10:05	1.28	61	5.1	NM	0.218	15.44	5.5
MW-362	11/22/2019 10:10	2.67	63.7	5.07	NM	1.28	15.43	2.8
MW-362	11/22/2019 11:15	3.25	64.4	5.33	0.12	0.244	14.81	5.5
MW-362	11/22/2019 11:25	5.68	39.6	5.38	0.11	0.231	14.23	84.9
MW-362	05/08/2020 09:10	1.91	190.2	4.59	NM	0.418	13.71	9.5
MW-362	05/08/2020 09:25	2.07	165.3	4.8	0.2	0.415	13.93	50.2
MW-362	11/20/2020 08:25	7.86	98.7	6.57	0.23	0.475	11.99	51.3
MW-362	11/20/2020 08:30	4.39	130.9	5.33	0.18	0.367	12.74	34.2
MW-362	11/20/2020 08:35	4.73	135.9	5.3	0.15	0.321	13.09	31.9
MW-362	11/20/2020 08:40	3.97	146.8	5.18	0.15	0.311	13.35	25.7
MW-362	11/20/2020 08:45	2.73	161.1	4.99	0.18	0.376	13.52	20.6
MW-362	11/20/2020 08:50	2.06	173.9	4.86	0.18	0.38	13.76	17.7
MW-362	11/20/2020 08:55	1.91	184.5	4.78	0.2	0.415	13.75	16.4
MW-362	11/20/2020 09:00	1.52	195.1	4.68	0.21	0.432	14.02	13.4
MW-362	11/20/2020 09:05	1.27	199.7	4.64	0.21	0.443	14.22	12.6
MW-362	11/20/2020 09:10	1.07	196.7	4.68	0.22	0.458	14.2	12
MW-362	11/20/2020 09:35	4.09	179.8	4.96	0.27	0.553	14.17	12.1
MW-362	11/20/2020 09:45	1.61	160.1	5	0.27	0.558	13.55	10.7
MW-362	05/03/2021 10:05	3.4	7.8	6.54	0.5	1.033	15.79	229.6
MW-362	05/03/2021 10:10	1.8	94.1	4.55	0.38	0.774	14.85	220.5
MW-362	05/03/2021 10:15	1.73	111.6	4.37	0.37	0.758	14.12	77.1
MW-362	05/03/2021 10:20	1.87	114	4.41	0.38	0.779	14.4	50.9
MW-362	05/03/2021 10:25	1.87	124.7	4.44	0.4	0.815	14.22	34.3
MW-362	05/03/2021 10:30	2.07	153.8	4.55	0.41	0.835	14.77	55.5
MW-362	05/03/2021 10:35	2.06	156.8	4.52	0.41	0.831	14.55	32.4
MW-362	05/03/2021 10:40	2.08	158.5	4.5	0.41	0.832	14.48	31
MW-362	05/03/2021 10:45	2.06	159.7	4.48	0.41	0.833	14.48	25.3
MW-362	05/03/2021 10:50	1.91	157.1	4.46	0.41	0.835	14.02	18.2
MW-362	10/28/2021 11:10	8.55	69.6	6.24	0.08	0.16	17.08	1240.3
MW-362	10/28/2021 11:15	8.01	82.8	6.2	0.06	0.132	16.71	1238.1
MW-362	10/28/2021 11:20	7.05	80.8	5.92	0.09	0.212	16.85	1239.7
MW-362	10/28/2021 11:25	5.69	79.7	5.76	0.13	0.272	17	1240.7
MW-362	10/28/2021 11:30	5.83	75.5	5.82	0.12	0.254	17.24	1243.1
MW-362	10/28/2021 11:35	4.34	89.2	5.56	0.15	0.322	17.52	1029.5
MW-362	10/28/2021 11:40	5.63	86.5	5.63	0.15	0.302	17.15	1187.5
MW-362	10/28/2021 11:45	4.56	88.5	5.6	0.15	0.304	16.68	1019
MW-362	10/28/2021 11:50	4.07	103.7	5.28	0.19	0.433	16.57	350.7
MW-362	10/28/2021 11:55	3.13	128.5	4.97	0.24	0.498	16.81	374.9
MW-362	04/27/2022 10:55	2.56	61.4	4.96	0.2	0.43	14.74	508.9
MW-362	04/27/2022 11:00	2.97	76.7	4.82	0.19	0.393	14.61	455.5
MW-362	04/27/2022 11:05	3.03	119.3	4.58	0.2	0.42	14.41	298.1
MW-362	04/27/2022 11:10	2.8	129.2	4.52	0.21	0.432	14.29	258.2
MW-362	04/27/2022 11:15	1.93	198.8	4.13	0.26	0.525	13.97	117.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-362	04/27/2022 11:20	1.92	202.8	4.12	0.26	0.529	13.97	112.8
MW-362	04/27/2022 11:25	1.82	215.9	4.18	0.27	0.55	14.4	66.3
MW-362	04/27/2022 11:30	1.78	216.7	4.18	0.27	0.552	14.42	61.7
MW-362	04/27/2022 11:35	1.84	216.9	4.19	0.27	0.553	14.45	60.1
MW-363	05/06/2013 14:50	6.08	-37	5.23	0.05	1.035	13.71	31.20
MW-363	06/06/2013 13:21	0.65	-45	4.85	0.10	1.919	16.49	62.69
MW-363	06/06/2013 14:16	1.05	29	5.67	0.07	1.437	14.61	134.00
MW-363	06/07/2013 15:12	0.41	-104.00	5.01	0.13	2.562	14.12	94.80
MW-363	09/18/2013 11:30	5.10	-176	5.43	0.06	1.105	19.55	13.55
MW-363	09/18/2013 12:35	1.36	-329	5.57	0.11	2.100	15.61	56.70
MW-363	09/19/2013 11:00	1.51	-24	5.10	0.17	3.182	15.39	22.60
MW-363	11/25/2013 10:00	0.81	-207	4.84	0.15	2.891	14.13	28.62
MW-363	11/25/2013 11:07	2.99	-93	4.92	0.14	2.703	14.85	12.80
MW-363	11/26/2013 09:53	3.85	-143	4.76	0.14	2.732	15.57	19.20
MW-363	01/30/2014 11:14	1.88	-39	3.97	0.18	3.507	8.85	20.60
MW-363	01/30/2014 15:15	5.08	-170	5.30	0.16	3.151	11.43	25.70
MW-363	01/31/2014 10:27	1.98	35	4.78	0.14	2.610	14.51	12.70
MW-363	04/03/2014 13:42	3.82	-46	3.89	0.02	0.350	13.19	161.50
MW-363	04/03/2014 14:44	3.92	-165	4.41	0.02	0.399	14.41	22.80
MW-363	04/04/2014 13:03	1.34	87	3.80	0.08	1.642	13.47	61.60
MW-363	06/30/2014 10:59	0.45	73	5.11	0.05	0.975	17.58	14.96
MW-363	06/30/2014 12:00	1.03	41	5.54	0.05	0.946	15.00	357.70
MW-363	07/01/2014 12:08	3.57	139	4.73	0.04	0.898	14.19	25.40
MW-363	04/01/2015 11:32	4.68	223	4.61	0.07	1.355	11.62	8.01
MW-363	04/01/2015 12:23	7.03	34	5.07	0.08	1.539	13.78	1116.60
MW-363	04/02/2015 10:00	5.18	166	4.56	0.07	1.447	13.85	124.00
MW-363	06/16/2015 09:52	4.55	177	3.82	0.12	2.261	13.57	38
MW-363	06/16/2015 10:28	5.58	100	4.78	0.1	1.917	14.55	74.6
MW-363	08/20/2015 10:18	3.66	281	3.67	1.11	18.69	14.48	12.7
MW-363	08/20/2015 12:45	4.88	71	6.93	0.22	4.028	16.9	2704.6
MW-363	11/04/2015 09:44	5.84	362	3.66	0.05	0.97	15.66	17
MW-363	11/04/2015 11:08	2.02	-11	5.32	0.06	1.23	15.65	165.4
MW-363	05/10/2016 12:21	5.22	141	6.09	0.25	4.607	16.04	1161.00
MW-363	11/02/2016 10:23	4.65	172.00	4.66	0.05	1.091	16.13	33.30
MW-363	11/02/2016 12:38	0.89	12	5.18	0.41	7.378	15.94	239.10
MW-363	04/06/2017 09:57	1.05	96	5.01	0.07	1.429	13.20	10.10
MW-363	04/06/2017 10:23	1.78	76	5.56	0.09	1.683	13.06	3.60
MW-363	09/21/2017 10:27	8.30	219.00	4.58	0.07	1.405	16.13	35.10
MW-363	09/21/2017 11:35	0.47	114.00	4.61	0.80	13.790	21.58	18.17
MW-363	09/21/2017 12:33	5.63	-34.00	6.76	0.80	13.777	19.25	1284.70
MW-363	05/02/2018 10:28	2.56	54	7.03	0.0791	1.5523	23.92	10.6
MW-363	05/02/2018 10:31	1.39	84	6.18	0.0828	1.6240	19.56	7.7
MW-363	05/02/2018 10:34	1.07	93	5.89	0.0796	1.5638	19.7	9.2
MW-363	05/02/2018 10:38	1.03	93	5.69	0.0787	1.5464	19.35	8.2
MW-363	05/02/2018 10:41	1	93	5.56	0.0811	1.5918	19.07	8.5
MW-363	05/02/2018 10:44	0.84	91	5.5	0.0785	1.5424	19.35	7.6
MW-363	05/02/2018 10:48	0.8	87	5.44	0.0780	1.5326	19.84	8.9
MW-363	05/02/2018 10:51	0.85	89	5.35	0.0810	1.5895	20.2	6.8
MW-363	05/02/2018 10:54	0.83	92	5.3	0.0777	1.5272	19.79	6.6
MW-363	05/02/2018 10:57	0.76	91	5.28	0.0773	1.5203	19.62	6.3
MW-363	05/02/2018 11:01	0.79	90	5.28	0.0804	1.5792	19.97	6
MW-363	05/02/2018 11:04	0.79	93	5.22	0.0787	1.5476	19.43	6.1
MW-363	05/02/2018 11:07	0.72	91	5.23	0.0775	1.5243	20.04	5.9
MW-363	05/02/2018 11:11	0.7	93	5.21	0.0799	1.5687	20.54	5.8
MW-363	05/03/2018 10:26	8.12	88.00	4.13	0.07	1.440	14.64	18.60
MW-363	05/03/2018 11:11	0.70	93.00	5.21	0.08	1.573	20.42	5.82
MW-363	05/03/2018 12:05	2.88	91.00	7.01	0.08	1.578	16.75	51.70
MW-363	11/26/2018 11:15	0.35	141.90	5.13	0.66	1.317	15.76	0.0000
MW-363	11/26/2018 11:27	0.33	141.10	5.24	0.70	1.380	15.59	2.30
MW-363	05/10/2019 11:00	0.72	108.8	5.22	NM	1.431	14.14	18.4

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-363	05/10/2019 11:24	1.27	114.7	5.14	0.72	1.431	13.51	2.5
MW-363	11/22/2019 12:55	2.7	98.3	5.25	NM	0.451	15.05	114.6
MW-363	11/22/2019 13:00	2.06	94	5.25	NM	0.449	15.1	76
MW-363	11/22/2019 13:05	1.52	90.9	5.24	NM	0.444	15.16	55
MW-363	11/22/2019 13:10	1.11	83.5	5.23	NM	0.434	15.37	188.7
MW-363	11/22/2019 13:15	0.91	83.8	5.11	NM	0.384	15.75	26.1
MW-363	11/22/2019 13:20	0.94	94.4	4.88	NM	0.371	15.77	64.8
MW-363	11/22/2019 13:25	1.51	101.5	4.9	NM	0.351	15.84	15.7
MW-363	11/22/2019 13:30	1.24	99.5	5.05	NM	0.394	15.79	16.9
MW-363	11/22/2019 13:35	0.97	95.1	5.11	NM	0.41	15.52	2
MW-363	11/22/2019 13:40	0.94	94.2	5.11	NM	0.41	15.44	1.9
MW-363	11/22/2019 14:35	6.27	89.2	5.3	0.21	0.425	14.44	14.9
MW-363	11/22/2019 14:45	4.76	70.9	5.33	0.21	0.436	12.93	49
MW-363	05/08/2020 10:40	0.15	104.8	5.13	NM	0.828	13.09	8.7
MW-363	05/08/2020 11:05	0.11	117.8	5.06	0.4	0.82	13.5	17.6
MW-363	11/20/2020 10:00	5.19	252	4.38	0.11	0.23	14.77	13
MW-363	11/20/2020 10:05	4.16	269.3	4.34	0.22	0.452	14.96	55.9
MW-363	11/20/2020 10:10	4.23	220.2	4.61	0.23	0.473	15.21	43.8
MW-363	11/20/2020 10:15	3.62	195.4	4.8	0.3	0.621	15.4	60.9
MW-363	11/20/2020 10:20	3.54	192.4	4.83	0.3	0.622	15.46	69.7
MW-363	11/20/2020 10:25	3.56	181.2	4.92	0.31	0.633	15.8	64.1
MW-363	11/20/2020 10:30	3.46	173	5.01	0.31	0.64	16.11	24.2
MW-363	11/20/2020 10:35	3.11	161.3	5.12	0.32	0.652	15.95	55.6
MW-363	11/20/2020 10:40	3.47	151	5.22	0.32	0.664	15.94	23
MW-363	11/20/2020 10:45	3	146.1	5.29	0.33	0.669	15.95	21.7
MW-363	11/20/2020 11:25	2.12	156.1	5.5	0.65	1.303	16.65	22
MW-363	11/20/2020 11:35	0.49	103.6	5.4	0.65	1.301	16.05	13.8
MW-363	05/03/2021 11:40	6.19	165.3	4.78	0.73	1.437	15.67	109.6
MW-363	05/03/2021 11:45	2.06	125.4	5.12	0.83	1.634	14.16	112.9
MW-363	05/03/2021 11:50	1.17	108.1	5.16	0.84	1.661	13.61	115
MW-363	05/03/2021 11:55	1.64	117.5	5.03	0.8	1.581	13.32	62.5
MW-363	05/03/2021 12:00	1.81	112.9	5.11	0.77	1.524	13.06	28.6
MW-363	05/03/2021 12:05	1.58	108.9	5.14	0.78	1.545	13.38	20.2
MW-363	05/03/2021 12:10	1.45	104.1	5.2	0.8	1.583	13.63	14.9
MW-363	05/03/2021 12:15	1.44	99	5.23	0.82	1.607	13.8	18.1
MW-363	05/03/2021 12:20	1.4	97	5.24	0.83	1.624	13.94	10.5
MW-363	05/03/2021 12:25	1.38	94.7	5.26	0.84	1.646	13.95	7.3
MW-363	10/28/2021 11:40	5.96	183.2	5.23	0.14	0.291	18.64	79.8
MW-363	10/28/2021 11:45	6.42	169	5.53	0.11	0.233	19.08	32
MW-363	10/28/2021 11:50	6.4	168.6	5.58	0.11	0.232	19.24	23.9
MW-363	10/28/2021 11:55	6.25	167.4	5.58	0.11	0.234	20.67	19.5
MW-363	10/28/2021 12:00	6.15	166	5.31	0.11	0.236	21.86	14.6
MW-363	10/28/2021 12:05	6.1	165	5.43	0.11	0.237	22.77	13.9
MW-363	10/28/2021 12:10	6.05	164.6	5.43	0.12	0.244	23.49	12
MW-363	10/28/2021 12:15	5.73	163.4	5.36	0.12	0.264	24.75	10.5
MW-363	10/28/2021 12:20	5.7	163.1	5.33	0.13	0.267	24.82	16.1
MW-363	10/28/2021 12:25	40	163	5.3	0.13	0.27	24.94	12.7
MW-363	04/26/2022 10:30	4.67	-70.5	6.67	1.04	2.041	14.56	199.4
MW-363	04/26/2022 10:35	1.43	-45.6	5.6	0.9	1.776	14.62	140.5
MW-363	04/26/2022 10:40	1.23	-26.9	5.45	0.86	1.687	14.85	116.3
MW-363	04/26/2022 10:45	1.16	-15.3	5.4	0.83	1.631	15.03	128.8
MW-363	04/26/2022 10:50	1.16	-8.7	5.37	0.82	1.61	15.06	99.7
MW-363	04/26/2022 10:55	1.14	-2.7	5.36	0.81	1.602	15.12	105.4
MW-363	04/26/2022 11:00	1.07	0.5	5.34	0.81	1.598	15.16	101.8
MW-364	05/08/2013 11:36	2.08	-21	5.48	0.06	1.170	11.73	100.40
MW-364	06/18/2013 09:26	0.73	-75	5.99	0.10	1.875	17.90	93.25
MW-364	06/18/2013 10:11	1.43	-50	6.20	0.08	1.565	15.34	24.30
MW-364	06/19/2013 09:55	2.41	-122.00	5.90	0.08	1.500	15.78	185.20
MW-364	09/18/2013 13:48	0.86	-346	5.86	0.09	1.694	22.00	15.03
MW-364	09/18/2013 14:41	1.24	-408	5.97	0.10	2.025	19.30	53.10

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-364	09/19/2013 11:55	1.92	-50	5.80	0.19	3.482	20.32	288.40
MW-364	11/25/2013 13:06	0.85	-182	5.88	0.21	3.999	14.86	21.45
MW-364	11/25/2013 13:55	5.16	-157	5.95	0.23	4.214	15.89	114.00
MW-364	11/26/2013 10:39	1.76	-248	5.66	0.19	3.620	16.16	83.50
MW-364	04/07/2014 15:26	5.88	-121	6.10	0.09	1.780	8.15	31.69
MW-364	04/07/2014 16:16	5.42	-127	6.41	0.06	1.296	8.90	75.60
MW-364	04/08/2014 12:29	5.13	-163	5.97	0.06	1.244	12.23	238.90
MW-364	06/30/2014 08:59	0.63	227	5.99	0.05	1.093	23.66	12.34
MW-364	06/30/2014 09:54	1.23	281	6.04	0.05	1.045	15.91	192.70
MW-364	07/01/2014 11:41	1.73	124	5.75	0.06	1.103	17.82	62.40
MW-364	04/08/2015 09:26	1.98	69	6.07	0.08	1.564	8.21	7.26
MW-364	04/08/2015 10:15	4.56	193	5.88	0.07	1.461	9.18	142.90
MW-364	04/09/2015 09:52	-0.27	303	5.87	0.04	0.893	8.42	299.20
MW-364	09/03/2015 10:55	5.4	1220	5.87	0.02	0.35	21.59	170.2
MW-364	09/03/2015 12:11	4.33	1062	7.55	0.01	0.306	19.43	2804.5
MW-364	10/30/2015 09:45	5	294	5.59	0.06	1.236	18.13	280.3
MW-364	10/30/2015 10:33	3.83	68	5.86	0.07	1.477	18.14	2157.9
MW-364	05/10/2016 14:15	2.96	138	6.60	0.28	5.244	12.46	3505.90
MW-364	06/25/2016 10:03	4.72	273	5.57	0.12	2.249	17	327.5
MW-364	06/25/2016 10:16	11.83	242	6.22	0.12	2.348	14.81	2747
MW-364	11/11/2016 09:30	4.19	-15.00	5.85	0.18	3.418	17.15	334.80
MW-364	11/11/2016 10:20	3.51	-11	6.24	0.18	3.432	16.06	1808.90
MW-364	04/06/2017 09:13	7.61	265	5.71	0.06	1.142	9.18	427.20
MW-364	04/06/2017 14:11	9.73	123	6.85	0.14	2.738	9.89	57.10
MW-364	09/21/2017 11:25	6.92	104.00	5.60	0.06	1.164	18.98	370.10
MW-364	09/21/2017 14:26	0.84	30.00	5.73	0.63	11.070	22.89	65.10
MW-364	09/21/2017 15:04	1.33	-46.00	6.66	0.90	15.260	17.84	55.10
MW-364	05/02/2018 08:39	2.87	206	7.09	0.0632	1.2529	20	34
MW-364	05/02/2018 08:43	2.08	199	6.61	0.0628	1.2477	18.1	28.8
MW-364	05/02/2018 08:46	1.66	197	6.39	0.0602	1.2010	15.92	25.1
MW-364	05/02/2018 08:50	1.59	195	6.28	0.0599	1.1939	15.66	22.1
MW-364	05/02/2018 08:53	1.74	191	6.23	0.0615	1.2258	15.79	26
MW-364	05/02/2018 08:57	1.98	194	6.08	0.0594	1.1846	15.47	25.1
MW-364	05/02/2018 09:00	2.45	194	6.04	0.0582	1.1610	15.82	27.9
MW-364	05/02/2018 09:04	2.89	194	6.01	0.0598	1.1928	15.95	31.4
MW-364	05/02/2018 09:07	3.43	197	5.99	0.0577	1.1521	16	28.1
MW-364	05/02/2018 09:11	3.59	198	6	0.0577	1.1513	16.15	27.6
MW-364	05/02/2018 09:14	3.59	201	5.97	0.0578	1.1530	16.36	23.6
MW-364	05/02/2018 09:18	3.53	205	5.92	0.0574	1.1460	16.26	21.5
MW-364	05/02/2018 09:21	3.38	206	5.92	0.0571	1.1403	16.73	18.5
MW-364	05/02/2018 09:25	3.23	207	5.91	0.0574	1.1455	17.2	17.7
MW-364	05/02/2018 09:28	3.04	206	5.91	0.0608	1.2092	17.61	18
MW-364	05/03/2018 09:25	8.64	31.00	5.60	0.06	1.174	10.75	172.90
MW-364	05/03/2018 09:28	3.04	206.00	5.91	0.06	1.212	17.49	17.98
MW-364	05/03/2018 10:10	4.07	202.00	7.53	0.06	1.252	11.74	43.50
MW-364	11/30/2018 09:25	2.54	228.00	5.71	0.54	1.090	13.89	15.10
MW-364	11/30/2018 09:35	2.61	234.70	5.81	0.54	1.094	13.06	16.20
MW-364	11/30/2018 09:55	2.32	253.00	5.90	0.55	1.097	12.18	6.90
MW-364	05/09/2019 13:40	2.39	149.1	5.86	NM	2.266	12.35	3.4
MW-364	05/09/2019 14:00	3.63	172.8	5.8	1.13	2.198	11.94	4.2
MW-364	11/07/2019 11:25	6.95	-52.6	6.65	NM	0.38	16.39	26.8
MW-364	11/07/2019 11:30	3.3	-40.3	6.15	NM	0.325	16.73	6.4
MW-364	11/07/2019 11:35	4.23	-50.7	6.04	NM	0.311	16.69	5.8
MW-364	11/07/2019 11:40	4.35	-61.6	5.98	NM	0.305	16.79	3.9
MW-364	11/07/2019 11:45	3.97	-72.1	5.92	NM	0.302	16.83	2.9
MW-364	11/07/2019 11:50	3.33	-87.8	5.87	NM	0.3	16.85	2.9
MW-364	11/07/2019 11:55	2.97	-103.1	5.85	NM	0.299	16.89	4.9
MW-364	11/07/2019 12:00	2.77	-117	5.82	NM	0.299	16.93	3.5
MW-364	11/07/2019 12:05	2.66	-124.1	5.81	NM	0.298	16.98	4.1
MW-364	11/07/2019 12:10	2.5	-131.4	5.8	NM	0.298	17.03	3.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-364	11/07/2019 12:30	2.08	-167.2	5.78	0.14	0.292	17.3	4
MW-364	11/07/2019 12:50	6.43	-183.6	5.77	0.14	0.287	17.08	72
MW-364	05/07/2020 10:05	5.28	226.2	5.76	NM	0.776	12.38	9.8
MW-364	05/07/2020 10:20	7.07	228.3	5.72	0.39	0.787	12.16	9.2
MW-364	11/24/2020 12:20	6.34	126.5	6.39	0.58	1.143	14.82	26.5
MW-364	11/24/2020 12:25	3.57	143.3	6.15	0.57	1.142	14.8	26.7
MW-364	11/24/2020 12:30	1.03	165	5.98	0.56	1.123	14.84	24.7
MW-364	11/24/2020 12:35	0.95	176.8	5.93	0.56	1.116	15.08	23.9
MW-364	11/24/2020 12:40	0.93	185	5.9	0.55	1.107	15.07	22.4
MW-364	11/24/2020 12:45	0.89	188.5	5.89	0.55	1.098	14.84	21.9
MW-364	11/24/2020 12:50	0.87	196	5.87	0.55	1.097	15.32	21.6
MW-364	11/24/2020 12:55	0.9	198.1	5.85	0.55	1.097	15.25	20.6
MW-364	11/24/2020 13:00	0.89	201.6	5.84	0.54	1.091	15.17	20.5
MW-364	11/24/2020 13:05	0.89	204.4	5.83	0.54	1.088	15.14	20.4
MW-364	11/24/2020 13:30	1.18	145.6	6.04	0.55	1.099	15.98	10.2
MW-364	11/24/2020 13:40	4.44	174.9	5.89	0.56	1.123	15.66	9.7
MW-364	06/25/2021 08:55	4.33	182.8	5.73	0.5	1.001	19.14	11.8
MW-364	06/25/2021 09:00	4.13	191.8	5.5	0.48	0.99	19.32	7.4
MW-364	06/25/2021 09:05	3.94	207.3	5.33	0.46	0.936	19.8	7
MW-364	06/25/2021 09:10	3.7	223.4	5.14	0.46	0.925	20.78	10.7
MW-364	06/25/2021 09:15	3.56	231	5.06	0.46	0.922	20.73	8.4
MW-364	06/25/2021 09:20	3.2	244.7	4.94	0.46	0.926	20.73	6.3
MW-364	06/25/2021 09:25	2.89	254.2	4.88	0.46	0.934	21.38	5
MW-364	06/25/2021 09:30	2.92	255.8	4.87	0.46	0.932	21.86	4.9
MW-364	06/25/2021 09:35	2.83	256.6	4.88	0.46	0.938	22.47	2
MW-364	06/25/2021 09:40	2.78	257.9	4.9	0.46	0.941	22.96	1.8
MW-364	10/29/2021 14:30	2.64	151.3	5.73	0.57	1.145	18.11	72.3
MW-364	10/29/2021 14:35	2.36	174.1	5.63	0.57	1.145	18.2	44
MW-364	10/29/2021 14:40	1.87	184	5.58	0.57	1.149	17.83	30
MW-364	10/29/2021 14:45	1.85	184.4	5.57	0.57	1.15	17.83	28.3
MW-364	10/29/2021 14:50	16.2	188.4	5.55	0.57	1.151	17.72	18.6
MW-364	10/29/2021 14:55	1.51	188.7	5.55	0.57	1.151	17.72	21.7
MW-364	10/29/2021 15:00	1.69	191.9	5.55	0.57	1.149	17.73	18.3
MW-364	10/29/2021 15:05	1.75	193	5.56	0.57	1.15	17.61	19.4
MW-364	10/29/2021 15:10	1.82	193	5.57	0.57	1.15	17.58	19.2
MW-364	04/13/2022 08:50	5.81	210.3	6.06	0.6	1.185	14.03	65.5
MW-364	04/13/2022 08:55	3.28	197.3	5.87	0.58	1.166	12.83	77.4
MW-364	04/13/2022 09:00	5.89	192.4	5.88	0.58	1.153	12.33	91.3
MW-364	04/13/2022 09:05	5.43	191	5.92	0.58	1.152	12.25	19.4
MW-364	04/13/2022 09:10	4.29	192	5.91	0.57	1.135	12.31	11.4
MW-364	04/13/2022 09:15	4.95	195.9	5.85	0.56	1.116	12.16	8.7
MW-364	04/13/2022 09:20	4.49	200.1	5.82	0.55	1.105	12.23	84.4
MW-364	04/13/2022 09:25	5.31	202.7	5.82	0.55	1.103	12.28	71.1
MW-364	04/13/2022 09:30	5.5	206	5.8	0.55	1.092	12.26	68
MW-364	04/13/2022 09:35	5.26	207.4	5.89	0.55	1.092	12.36	65.7
MW-365	06/26/2013 10:01	0.38	-277	5.94	0.07	1.452	20.56	284.20
MW-365	06/26/2013 10:45	0.54	-183	6.13	0.09	1.817	16.16	2886.90
MW-365	06/27/2013 09:32	0.33	-275.00	5.98	0.07	1.474	15.20	2801.00
MW-367	06/14/2013 09:55	10.22	86	6.18	0.12	0.197	14.72	23.8
MW-367	06/14/2013 11:15	6.71	152.4	5.49	0.17	0.303	16.02	40.2
MW-367	06/14/2013 11:35	6.05	148.7	5.53	0.16	0.29	NM	86.2
MW-367	10/21/2015 14:50	9.52	11	5.72	0.30	0.637	27.92	0.0000
MW-367	10/21/2015 15:15	7.60	110	5.57	0.30	0.595	25.80	0.0000
MW-367	02/04/2016 10:05	0.51	69.3	7	0.5	0.997	14.8	643.4
MW-367	02/04/2016 10:10	2.08	123.2	6.49	0.22	0.448	14.77	1560.3
MW-367	05/09/2016 14:15	2.06	124.6	5.30	0.41	0.841	15.93	45.60
MW-367	05/09/2016 15:00	1.65	150.8	5.05	0.39	0.620	19.71	67.10
MW-367	08/05/2016 09:05	0.90	-7.2	6.08	0.62	1.239	18.12	46.01
MW-367	08/05/2016 09:20	2.05	208.7	4.96	0.38	0.773	17.02	990.40
MW-367	11/02/2016 14:50	3.31	103.3	6.13	0.39	0.793	18.48	102.50

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-367	11/02/2016 15:15	2.94	155.9	5.79	0.39	0.787	17.62	1172.90
MW-367	05/25/2017 13:20	3.25	177.70	5.17	0.35	0.717	14.02	11.90
MW-367	05/25/2017 14:40	2.00	82.00	5.54	0.38	0.779	14.82	27.40
MW-367	05/25/2017 15:00	2.92	169.20	5.28	0.36	0.723	14.71	577.60
MW-367	11/14/2017 09:30	1.90	183.40	6.47	0.44	0.890	16.38	24.60
MW-367	11/14/2017 10:15	3.25	240.80	5.40	0.39	0.801	15.08	1985.70
MW-367	11/14/2017 10:30	0.36	205.60	5.24	0.31	0.679	14.71	14.50
MW-367	02/19/2018 09:30	1.28	93.40	5.90	0.35	0.718	11.7	17.00
MW-367	02/19/2018 11:20	3.31	86.07	6.78	0.39	0.795	13.7	5.00
MW-367	02/19/2018 11:35	6.32	90.30	6.14	0.36	0.724	14.32	1529.10
MW-367	05/11/2018 13:55	0.97	237.60	5.00	0.43	0.860	15.71	2.20
MW-367	05/11/2018 14:45	7.26	195.70	5.13	0.43	0.885	17.66	7.30
MW-367	05/11/2018 15:10	9.95	215.70	4.90	0.43	0.877	17.31	1250.40
MW-367	12/17/2018 09:15	3.43	-81.90	6.52	0.94	1.835	9.44	365.00
MW-367	12/17/2018 10:55	7.55	-88.60	6.63	1.10	2.126	13.68	226.70
MW-367	12/17/2018 11:30	5.15	-103.30	6.60	0.57	1.138	13.31	1382.80
MW-367	02/22/2019 08:45	3.19	-15.90	7.53	0.25	0.514	10.08	320.60
MW-367	02/22/2019 09:25	2.62	-20.80	6.28	0.33	0.671	9.97	410.40
MW-367	02/22/2019 09:35	3.73	-30.80	7.02	0.22	0.510	10.44	288.50
MW-367	04/26/2019 09:10	0.95	-74.8	6.49	NM	1.28	13.07	117.6
MW-367	04/26/2019 10:25	4.47	5.1	6.81	0.65	1.276	13.37	161.9
MW-367	10/30/2019 13:10	0.67	-62.7	6.73	NM	1.396	17.31	75.9
MW-367	10/30/2019 13:15	0.44	-77.4	6.75	NM	1.406	17.46	266.4
MW-367	10/30/2019 13:20	0.4	-84	6.76	NM	1.409	17.62	116.5
MW-367	10/30/2019 13:25	0.4	-86.5	6.76	NM	1.41	17.61	102.1
MW-367	10/30/2019 13:30	0.4	-87.9	6.76	NM	1.413	17.66	131.2
MW-367	10/30/2019 13:35	0.41	-97.6	6.76	NM	1.416	17.88	291.3
MW-367	10/30/2019 13:40	0.56	-86.5	6.75	NM	1.354	18.01	308.6
MW-367	10/30/2019 13:45	2.16	-37.4	6.96	NM	1.414	18.73	280.1
MW-367	10/30/2019 13:50	2.54	-29.9	6.79	NM	1.407	18.44	598.7
MW-367	10/30/2019 14:00	1.23	-46.9	6.79	NM	1.414	17.88	442.6
MW-367	10/31/2019 13:10	3.13	-9.9	7.1	0.21	0.442	16.67	65.7
MW-367	10/31/2019 13:30	2.43	-53.6	7.14	0.23	0.467	16.46	83.2
MW-367	05/05/2020 09:30	4.59	-101.8	6.54	NM	1.654	14.07	49.2
MW-367	05/06/2020 08:10	3.4	-88.2	6.51	0.8	1.572	12.92	37.7
MW-367	07/29/2020 12:15	1	-124.9	6.39	0.84	1.667	23.23	48.4
MW-367	07/29/2020 12:20	0.59	-123	6.34	0.83	1.636	22.32	46.6
MW-367	07/29/2020 12:25	0.43	-125.1	6.41	0.82	1.633	21.37	52
MW-367	07/29/2020 12:30	0.43	-125.2	6.42	0.82	1.63	21.37	52.5
MW-367	07/29/2020 12:35	0.43	-126.1	6.44	0.82	1.631	22.31	55.6
MW-367	07/29/2020 12:40	0.47	-125.8	6.42	0.82	1.629	22.12	58.6
MW-367	07/29/2020 12:45	0.49	-125.5	6.42	0.82	1.626	22.49	67.4
MW-367	07/29/2020 12:50	0.53	-125.3	6.42	0.82	1.624	23.05	71.5
MW-367	07/29/2020 12:55	0.51	-124.7	6.41	0.82	1.624	23.1	84.9
MW-367	07/29/2020 13:00	0.5	-124.1	6.39	0.82	1.623	23.06	84.4
MW-367	07/30/2020 12:40	3.43	-109.8	6.77	0.84	1.787	20.82	32.9
MW-367	07/30/2020 12:50	2.86	-110.8	6.58	0.85	1.677	20.11	44.4
MW-367	03/24/2021 12:45	4.54	-45.1	7.47	0.82	2.077	12.42	12.7
MW-367	03/24/2021 12:50	0.94	-70	6.82	0.96	1.863	12.32	11.4
MW-367	03/24/2021 12:55	0.54	-74.9	6.66	0.95	1.869	12.4	20.3
MW-367	03/24/2021 13:00	0.46	-79.8	6.64	0.96	1.875	12.56	21.6
MW-367	03/24/2021 13:05	0.42	-82.9	6.64	0.96	1.877	12.74	26
MW-367	03/24/2021 13:10	0.42	-85	6.64	0.96	1.882	12.91	26.8
MW-367	03/24/2021 13:15	0.43	-87.6	6.63	0.96	1.879	13.11	27.7
MW-367	03/24/2021 13:20	0.45	-89.4	6.64	0.96	1.882	13.22	27.5
MW-367	03/24/2021 13:25	0.53	-89.5	6.64	0.96	1.883	13.36	37.9
MW-367	03/24/2021 13:30	0.63	-88.7	6.64	0.96	1.88	13.48	50.5
MW-367	03/25/2021 10:55	2.2	-83.6	6.85	0.54	1.084	11.82	20.3
MW-367	03/25/2021 11:05	2.95	-76.9	6.84	0.49	0.994	13.03	36.6
MW-367	03/25/2021 13:30	0.63	-88.7	6.64	0.96	1.88	13.48	50.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-367	06/29/2021 12:15	2.08	-52.5	6.48	0.6	1.227	29.79	30.6
MW-367	06/29/2021 12:20	1.04	-11.7	6.07	0.6	1.222	28.94	22.7
MW-367	06/29/2021 12:25	0.72	7.2	5.87	0.61	1.225	27.39	14.4
MW-367	06/29/2021 12:30	2.45	16.8	5.74	0.62	1.242	26.1	32.4
MW-367	06/29/2021 12:35	1.09	13.3	5.78	0.62	1.252	26.22	4.2
MW-367	06/29/2021 12:40	1.34	11.8	5.76	0.62	1.253	26.44	4.1
MW-367	06/29/2021 12:45	1.34	8.8	5.77	0.63	1.262	26.46	4
MW-367	06/29/2021 12:50	1.32	7.6	5.77	0.63	1.268	26.57	4
MW-367	09/22/2021 08:55	9.58	209.7	7.31	0.03	0.064	23.31	42.9
MW-367	09/22/2021 09:00	1.88	-92.1	6.61	0.49	0.989	20.84	23.2
MW-367	09/22/2021 09:05	0.95	-98.3	6.61	0.48	0.979	21.08	18.1
MW-367	09/22/2021 09:10	0.87	-99.8	6.61	0.48	0.973	21.12	18.9
MW-367	09/22/2021 09:15	0.73	-102	6.61	0.48	0.962	20.78	22.9
MW-367	09/22/2021 09:20	0.69	-102.7	6.62	0.47	0.959	20.7	21.9
MW-367	09/22/2021 09:25	0.68	-103.6	6.62	0.47	0.957	20.68	19.3
MW-367	09/22/2021 09:30	0.66	-104.5	6.62	0.47	0.952	20.65	18.1
MW-367	09/22/2021 09:35	0.64	-105.2	6.62	0.47	0.952	20.64	17.6
MW-367	02/25/2022 10:05	3.39	-127.7	6.36	0.65	1.32	10.56	20.7
MW-367	02/25/2022 10:10	3.39	-125.7	6.35	0.65	1.291	10.5	21.6
MW-367	02/25/2022 10:15	4.43	-114.8	6.32	0.62	1.23	9.85	17.6
MW-367	02/25/2022 10:20	4.72	-114.7	6.32	0.61	1.22	9.84	16.9
MW-367	02/25/2022 10:25	5.02	-118.4	6.35	0.6	1.192	9.89	15.1
MW-367	02/25/2022 10:30	6.3	-114.1	6.3	0.59	1.173	10.01	13.2
MW-367	02/25/2022 10:35	7.06	-109.9	6.26	0.58	1.158	10.63	13.4
MW-367	02/25/2022 10:40	7.64	-110.5	6.26	0.58	1.158	10.82	11.2
MW-367	02/25/2022 10:45	7.99	-110.8	6.27	0.58	1.158	10.42	11.5
MW-367	02/25/2022 10:50	8	-110.9	6.27	0.58	1.154	10.52	12
MW-368	06/06/2013 09:55	11.24	44.2	5.53	0.35	0.601	15.1	114.8
MW-368	06/06/2013 10:35	3.68	50.5	5.43	0.36	0.594	15.04	10.1
MW-368	06/06/2013 10:45	4.66	57.9	5.55	0.36	0.579	14.69	9.20
MW-368	06/07/2013 10:45	4.66	57.9	5.55	0.36	0.579	14.69	9.2
MW-368	06/24/2014 12:20	2.43	-103.7	6.10	0.74	1.472	22.32	26.90
MW-368	06/24/2014 13:10	2.47	104.2	6.10	0.74	1.452	20.46	129.70
MW-368	06/24/2014 13:29	2.99	-103.7	6.09	0.74	1.421	17.88	458.20
MW-368	08/28/2014 10:40	1.65	-92.4	6.55	0.99	1.928	18.36	283.30
MW-368	10/30/2014 10:35	7.70	-106.1	6.68	0.92	1.816	17.16	139.50
MW-368	10/30/2014 11:15	8.25	-102.5	6.84	0.91	1.786	17.01	363.30
MW-368	10/30/2014 12:25	4.48	-124.1	6.70	0.92	1.808	15.89	1116.80
MW-368	11/24/2014 10:23	0.57	-117.8	6.35	0.88	1.729	16.60	260.90
MW-368	11/24/2014 10:59	3.02	-102.1	6.40	0.88	1.738	17.29	848.20
MW-368	11/24/2014 11:02	2.18	-114.8	6.45	0.87	1.718	19.21	1274.20
MW-368	01/16/2015 08:50	8.66	-116.2	6.60	1.44	2.767	11.77	85.20
MW-368	01/16/2015 09:40	4.98	-132.7	6.62	1.47	2.811	11.87	68.50
MW-368	01/16/2015 11:00	11.46	-59.2	6.61	0.78	1.551	6.93	174.30
MW-368	04/23/2015 09:40	4.14	-85.8	6.77	0.67	1.333	10.87	52.20
MW-368	04/23/2015 10:45	6.62	18.5	6.90	0.64	1.267	11.90	239.10
MW-368	07/09/2015 13:20	1.23	-84.7	6.77	0.61	1.208	16.52	240.60
MW-368	07/09/2015 13:40	3.52	-91.3	6.77	0.61	1.215	15.89	1670.00
MW-368	10/12/2015 12:15	2.28	-151.2	6.83	0.83	1.648	18.95	267.10
MW-368	10/12/2015 12:35	5.25	-147.5	6.50	0.59	1.193	18.54	309.30
MW-368	02/01/2016 14:28	3.78	-177.5	6.61	0.56	1.128	14.35	48.1
MW-368	02/01/2016 14:45	2.15	-133.6	6.63	0.56	1.128	14.43	277.3
MW-368	05/10/2016 14:15	3.68	-90.7	6.71	0.59	1.178	15.21	32.20
MW-368	05/10/2016 14:30	4.56	-68.4	6.73	0.55	1.109	13.19	298.70
MW-368	08/05/2016 13:00	0.81	-129.2	7.05	0.51	1.034	25.63	84.20
MW-368	08/05/2016 13:15	0.95	-87.6	7.68	0.48	0.976	19.37	784.70
MW-368	10/31/2016 11:30	2.47	-138	6.65	0.63	1.252	17.84	111.40
MW-368	10/31/2016 11:45	2.43	-96	6.58	0.51	1.017	17.68	714.20
MW-368	05/23/2017 10:10	0.72	222.70	6.35	0.53	1.059	14.79	105.90
MW-368	05/23/2017 11:05	3.62	219.40	6.48	0.64	1.276	16.04	48.70

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-368	05/23/2017 11:20	4.74	221.90	6.33	0.53	1.072	13.94	440.20
MW-368	08/28/2017 09:50	2.62	-82.10	7.16	0.43	0.867	18.61	49.40
MW-368	08/28/2017 10:00	2.58	-69.20	6.87	0.43	0.870	18.69	47.10
MW-368	11/15/2017 13:50	0.70	-104.40	6.35	0.47	0.933	17.21	13.10
MW-368	11/15/2017 14:40	2.92	-88.30	6.50	0.46	0.931	16.42	439.10
MW-368	11/15/2017 15:00	3.16	-81.90	6.47	0.48	0.963	16.68	113.80
MW-368	02/20/2018 13:20	0.74	-72.50	7.00	0.51	1.031	14.85	20.00
MW-368	02/20/2018 14:10	2.70	-114.00	7.16	0.52	1.050	15.63	16.40
MW-368	02/20/2018 14:30	5.44	-79.80	6.91	0.52	1.035	13.61	189.90
MW-368	05/11/2018 09:40	0.05	-80.80	6.26	0.46	0.929	13.77	5.00
MW-368	05/11/2018 10:45	1.58	-102.10	6.46	0.24	0.480	16.42	11.40
MW-368	05/11/2018 11:05	5.80	-70.70	6.28	0.47	0.948	14.34	155.40
MW-368	12/14/2018 09:00	4.81	95.60	6.15	0.27	0.554	12.62	51.30
MW-368	12/14/2018 10:40	3.84	65.20	6.33	0.26	0.553	12.86	5.90
MW-368	12/14/2018 10:55	2.62	51.70	6.28	0.26	0.530	15.03	83.70
MW-368	02/22/2019 10:05	2.20	-66.10	6.07	0.38	0.767	13.34	34.00
MW-368	02/22/2019 11:15	2.95	-31.60	6.28	0.40	0.813	12.25	4.30
MW-368	02/22/2019 11:40	1.82	-37.10	6.29	0.40	0.812	11.73	54.40
MW-368	04/23/2019 13:15	0.52	-59.80	6.28	0.46	0.921	13.88	12.80
MW-368	04/23/2019 14:15	2.26	-51.00	6.24	0.46	0.931	17.72	6.10
MW-368	04/23/2019 14:35	2.86	-42.60	6.29	0.47	0.944	14.89	115.00
MW-368	11/01/2019 08:40	3.6	64.4	6.24	NM	0.471	14.81	428.5
MW-368	11/01/2019 08:45	0.75	29.8	6.08	NM	0.453	15.35	121.6
MW-368	11/01/2019 08:50	0.59	16	6.12	NM	0.443	15.72	52.1
MW-368	11/01/2019 08:55	0.55	10.2	6.16	NM	0.443	15.96	17.6
MW-368	11/01/2019 09:00	0.5	8.1	6.17	NM	0.446	16.21	5.5
MW-368	11/01/2019 09:05	0.49	7.1	6.18	NM	0.446	16.18	3.5
MW-368	11/01/2019 09:10	0.48	8.3	6.19	NM	0.447	16.15	3.4
MW-368	11/01/2019 09:15	0.47	7.9	6.2	NM	0.449	16.31	2
MW-368	11/01/2019 09:20	0.4	8.5	6.21	NM	0.45	16.38	2
MW-368	11/01/2019 09:25	0.47	7.9	6.21	NM	0.452	16.17	0.5
MW-368	11/01/2019 10:30	5.42	67.7	6.23	0.22	0.453	16.17	8.3
MW-368	11/01/2019 11:00	5.16	14	6.33	0.21	0.433	17.32	48.4
MW-368	01/20/2020 10:30	2.72	-83.9	6.61	NM	0.892	12.4	13.1
MW-368	01/20/2020 10:35	1.5	-81.8	6.21	NM	0.832	12.1	6.9
MW-368	01/20/2020 10:40	1.15	-78.8	6.16	NM	0.827	11.89	8.8
MW-368	01/20/2020 10:45	1.11	-78.1	6.23	NM	0.822	12.45	12.9
MW-368	01/20/2020 10:50	1.01	-77.9	6.27	NM	0.822	12.76	15.6
MW-368	01/20/2020 10:55	1.04	-77.2	6.23	NM	0.825	12.44	17.9
MW-368	01/20/2020 11:00	1.01	-76.2	6.21	NM	0.823	12.49	16.2
MW-368	01/20/2020 11:05	0.94	-74.6	6.25	NM	0.823	12.32	14.7
MW-368	01/20/2020 11:10	0.88	-74.6	6.25	NM	0.821	12.55	12.2
MW-368	01/20/2020 11:15	0.87	0.821	6.22	NM	0.821	12.68	9.8
MW-368	01/20/2020 12:03	2.06	-79.9	6.23	0.41	0.84	8.84	6.3
MW-368	01/20/2020 12:37	2.99	-40.9	6.23	0.4	0.815	12.59	43.9
MW-368	05/06/2020 12:20	0.43	-52	6.31	NM	0.876	12.37	19
MW-368	05/06/2020 13:10	2.8	-20.6	6.32	0.44	0.887	12.81	22
MW-368	07/30/2020 08:50	1.87	-64.8	6.44	0.43	0.882	23.73	29.8
MW-368	07/30/2020 08:55	1.15	-49.4	6.12	0.42	0.857	21.23	9.4
MW-368	07/30/2020 09:00	0.91	-49.8	6.08	0.42	0.862	20.66	6
MW-368	07/30/2020 09:05	0.78	-52.6	6.08	0.42	0.863	20.93	5.5
MW-368	07/30/2020 09:10	0.69	-54.5	6.11	0.865	0.865	20.99	4.6
MW-368	07/30/2020 09:15	0.65	-55.4	5.97	0.43	0.886	21.1	4.6
MW-368	07/30/2020 09:20	0.57	-56.3	5.97	0.43	0.862	21.61	5.1
MW-368	07/30/2020 09:25	0.45	-55.4	5.96	0.43	0.867	20.78	4.6
MW-368	07/30/2020 09:30	0.41	-56.4	5.96	0.43	0.868	20.84	3.5
MW-368	07/30/2020 09:35	0.41	-57.4	5.98	0.43	0.87	20.93	4.1
MW-368	07/30/2020 10:30	2.44	-48.9	6.05	0.44	0.891	21.03	0.3
MW-368	07/30/2020 10:40	2.58	-48.1	6.09	0.44	0.889	20.78	33.4
MW-368	11/13/2020 09:35	4.89	8	6.3	0.25	0.509	15.01	32.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-368	11/13/2020 10:30	6.1	39.1	6.2	0.25	0.515	16.3	18
MW-368	11/13/2020 10:40	2.49	14.2	6.39	0.25	0.524	15.71	16.3
MW-368	03/26/2021 11:35	1.02	-23.4	6.35	0.4	0.82	15.69	11.2
MW-368	03/26/2021 11:40	0.6	-24.6	6.22	0.41	0.821	14.57	6.3
MW-368	03/26/2021 11:45	0.5	-25.9	6.22	0.41	0.824	14.54	11.3
MW-368	03/26/2021 11:50	0.49	-29.5	6.25	0.41	0.827	14.66	10.4
MW-368	03/26/2021 11:55	0.51	-30.2	6.26	0.41	0.83	14.59	9
MW-368	03/26/2021 12:00	0.53	-31	6.27	0.31	0.832	14.58	6
MW-368	03/26/2021 12:05	0.55	-31.7	6.28	0.41	0.833	14.63	5.6
MW-368	03/26/2021 12:10	0.57	-31.6	6.27	0.41	0.833	14.73	5.4
MW-368	03/26/2021 12:15	0.57	-31.8	6.28	0.41	0.835	14.59	5.6
MW-368	03/26/2021 12:40	0.61	-29.8	6.32	0.41	0.837	13.55	10.1
MW-368	03/26/2021 13:05	0.65	-32.3	6.26	0.42	0.842	13.44	10.9
MW-368	06/22/2021 12:10	4.89	-30.7	6.36	0.38	0.769	17.94	57.3
MW-368	06/22/2021 12:15	4.13	-22.7	6.08	0.38	0.765	18.82	55.8
MW-368	06/22/2021 12:20	2.92	-23.4	5.98	0.39	0.786	17.64	40.8
MW-368	06/22/2021 12:25	2.49	-23.8	5.96	0.38	0.781	17.07	36.5
MW-368	06/22/2021 12:30	2.03	-27.2	5.96	0.38	0.776	16.99	34.1
MW-368	06/22/2021 12:35	1.57	-30.9	5.98	0.38	0.771	16.6	29.4
MW-368	06/22/2021 12:40	1.43	-33.3	5.97	0.38	0.757	16.5	21.6
MW-368	06/22/2021 12:45	1.35	-36.6	6.02	0.37	0.753	17.85	15
MW-368	06/22/2021 12:50	1.26	-36.6	6.02	0.37	0.763	17.59	11.5
MW-368	06/22/2021 12:55	1.17	-40.4	6.06	0.38	0.764	17.78	9.8
MW-368	09/23/2021 10:05	3.37	-33	6.2	0.38	0.782	20.77	68.4
MW-368	09/23/2021 10:10	2.4	-41.6	6.21	0.38	0.782	21.15	85.8
MW-368	09/23/2021 10:15	1.92	-44.1	6.19	0.38	0.775	20.55	60.3
MW-368	09/23/2021 10:20	1.75	-44.1	6.19	0.38	0.773	20.48	38.7
MW-368	09/23/2021 10:25	0.98	-45.3	6.18	0.38	0.772	20.59	22.6
MW-368	09/23/2021 10:30	1.02	-46.5	6.18	0.38	0.772	20.64	14.4
MW-368	09/23/2021 10:35	0.77	-47.9	6.19	0.38	0.775	20.76	11.2
MW-368	09/23/2021 10:40	0.75	-48.9	6.19	0.38	0.775	20.6	6.7
MW-368	09/23/2021 10:45	0.71	-50.3	6.19	0.38	0.776	20.71	7.3
MW-368	09/23/2021 10:50	71	-51.4	6.19	0.38	0.776	20.63	9.2
MW-368	12/29/2021 09:10	1.81	-74	5.97	0.38	0.763	13.65	81.6
MW-368	12/29/2021 09:15	1.27	-61.6	6.02	0.37	0.758	14.34	163.4
MW-368	12/29/2021 09:20	1.17	-58.7	6.05	0.37	0.755	14.7	275.9
MW-368	12/29/2021 09:25	0.99	-58.3	6.1	0.37	0.755	14.86	277.1
MW-368	12/29/2021 09:30	1.1	-59.5	6.12	0.37	0.758	14.92	215.3
MW-368	12/29/2021 09:35	1.02	-61.1	6.14	0.38	0.763	14.86	171.4
MW-368	12/29/2021 09:40	0.98	-63.5	6.15	0.38	0.771	14.87	158.2
MW-368	12/29/2021 09:45	1.03	-65.7	6.16	0.38	0.777	15.02	94.6
MW-368	12/29/2021 09:50	1.02	-68.1	6.17	0.39	0.783	15	76.5
MW-368	12/29/2021 09:55	1.06	-69.3	6.18	0.39	0.784	15.06	62.4
MW-368	03/28/2022 11:25	17.05	68.4	5.06	0.46	0.934	7.17	359.3
MW-368	03/28/2022 11:30	11.5	-23.1	5.96	0.42	0.846	11.12	261.4
MW-368	03/28/2022 11:35	11.04	-21.5	5.97	0.42	0.846	11.01	101.6
MW-368	03/28/2022 11:40	11.53	-24.1	6.02	0.42	0.849	11.99	67.3
MW-368	03/28/2022 11:45	12.19	-28.4	5.99	0.42	0.849	11.86	54
MW-368	03/28/2022 11:50	12.47	-28.8	5.98	0.42	0.847	11.12	54.1
MW-368	03/28/2022 11:55	11.79	-27.7	6.03	0.42	0.851	11.34	34.4
MW-368	03/28/2022 12:00	9	-28.5	6.03	0.42	0.851	11.24	26.1
MW-368	03/28/2022 12:05	14.53	-28.4	6	0.42	0.851	11.39	21
MW-368	03/28/2022 12:10	12.69	-36.7	6.02	0.42	0.851	11.52	13.4
MW-369	06/06/2013 13:35	15.18	-29.4	5.9	0.35	0.575	15.13	137.4
MW-369	06/06/2013 14:15	3.94	-4.3	5.81	0.35	0.566	14.81	4.1
MW-369	06/06/2013 14:30	5.46	10.9	5.89	0.34	0.567	14.91	4.70
MW-369	06/07/2013 14:30	5.46	10.9	5.89	0.34	0.567	14.91	4.7
MW-369	10/28/2014 10:55	4.96	-16.1	6.23	0.34	0.699	18.17	46.80
MW-369	10/28/2014 11:40	5.68	-53.1	6.37	0.35	0.710	18.40	9.40
MW-369	10/28/2014 12:32	3.72	-44	6.38	0.36	0.720	20.94	22.90

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-369	11/25/2014 10:50	0.22	-71.5	6.34	0.35	0.710	16.46	202.40
MW-369	11/25/2014 11:19	0.07	-70.3	6.08	0.36	0.724	16.42	15.90
MW-369	11/25/2014 11:24	0.55	-63	6.05	0.35	0.720	15.60	38.80
MW-369	01/13/2015 12:40	1.14	-35.6	6.44	0.31	0.645	10.55	256.60
MW-369	01/13/2015 13:25	0.23	-53.8	6.32	0.32	0.659	12.00	4.20
MW-369	01/13/2015 14:20	2.92	-1.2	6.38	0.34	0.701	12.84	41.70
MW-369	04/21/2015 13:15	0.66	-46.9	6.51	0.37	0.754	12.16	60.80
MW-369	04/21/2015 13:50	5.43	-54.6	6.64	0.39	0.785	13.08	136.70
MW-369	07/10/2015 10:10	0.59	9.4	6.67	0.59	1.179	17.06	63.80
MW-369	07/10/2015 10:30	3.62	0	6.57	0.35	0.716	15.95	76.80
MW-369	10/09/2015 14:35	6.44	17.6	6.33	0.34	0.694	19.86	53.70
MW-369	10/09/2015 14:50	4.45	-32.2	6.11	0.34	0.705	19.78	56.60
MW-369	02/02/2016 09:45	5.13	-87.5	6.25	0.19	0.401	14.23	34.4
MW-369	02/02/2016 10:00	3.34	-77.8	6.35	0.18	0.379	13.85	90.2
MW-369	05/12/2016 11:05	0.54	-14.4	6.43	0.35	0.733	14.21	32.40
MW-369	05/12/2016 12:10	3.71	17.5	6.28	0.39	0.798	14.45	184.20
MW-369	12/14/2018 09:00	5.59	61.60	6.28	0.21	0.426	14.9	9.40
MW-369	12/14/2018 10:30	3.99	103.60	6.22	0.24	0.504	14.3	9.80
MW-369	12/14/2018 10:45	3.44	56.40	6.35	0.20	0.417	14.77	201.40
MW-369	02/21/2019 13:10	9.03	-20.70	6.65	0.18	0.374	11.2	225.00
MW-369	02/21/2019 14:00	5.69	-29.20	6.45	0.32	0.661	13.51	10.00
MW-369	02/21/2019 14:30	5.77	-30.20	6.42	0.30	0.615	13.94	235.60
MW-369	04/23/2019 13:10	1.13	-61.9	6.64	NM	0.872	27.45	398.8
MW-369	04/23/2019 14:15	4.44	49.1	6.79	0.44	0.896	19.38	125.9
MW-369	07/16/2019 10:05	2.61	-43	7.23	NM	1.13	19.23	44.6
MW-369	07/16/2019 10:10	0.18	-49.2	6.1	NM	0.912	16.67	0.6
MW-369	07/16/2019 10:15	0.53	-34.1	5.85	NM	0.938	16.6	5
MW-369	07/16/2019 10:20	0.34	-38.7	5.87	NM	0.92	16.66	4.1
MW-369	07/16/2019 10:25	0.27	-42.6	5.96	NM	0.915	16.66	2.2
MW-369	07/16/2019 10:30	0.23	-45.3	6.02	NM	0.915	16.6	2.2
MW-369	07/16/2019 10:35	0.21	-46.1	6.03	NM	0.913	16.64	1.4
MW-369	07/16/2019 10:40	0.2	-48.2	6.05	NM	0.911	16.64	1.1
MW-369	07/16/2019 10:45	1.71	-58.5	6.28	0.53	1.064	20.59	10.5
MW-369	07/16/2019 10:50	0.18	-49.2	6.1	NM	0.912	16.67	0.6
MW-369	07/16/2019 11:15	3.01	-24	6.12	0.45	0.907	18.9	59.3
MW-369	10/30/2019 13:10	0.61	19.3	6.82	NM	0.252	15.18	76
MW-369	10/30/2019 13:15	0.38	13	6.65	NM	0.253	15.16	38.7
MW-369	10/30/2019 13:20	0.25	5.7	6.53	NM	0.255	15.23	45.6
MW-369	10/30/2019 13:25	0.18	-1.7	6.48	NM	0.253	15.23	14.5
MW-369	10/30/2019 13:30	0.15	-9.1	6.43	NM	0.253	15.25	11.6
MW-369	10/30/2019 13:35	0.15	-13.3	6.41	NM	0.252	15.22	9.1
MW-369	10/30/2019 13:40	0.13	-16.2	6.38	NM	0.25	15.19	20.1
MW-369	10/30/2019 13:45	0.14	-17.7	6.39	NM	0.251	15.27	59.3
MW-369	10/30/2019 13:50	0.13	-21.4	6.4	NM	0.251	15.2	11
MW-369	10/30/2019 13:55	0.13	-23.8	6.42	NM	0.249	15.25	7.9
MW-369	10/30/2019 14:15	0.13	-18.7	6.4	0.12	0.248	15.16	10.4
MW-369	10/30/2019 14:40	0.33	-23.8	6.41	0.12	0.244	15.15	169.3
MW-369	01/20/2020 13:15	2.86	-16.5	6.37	NM	0.772	13.33	285.4
MW-369	01/20/2020 13:20	1	-33.5	6.34	NM	0.776	13.17	14.6
MW-369	01/20/2020 13:25	1	-36.1	6.34	NM	0.779	13.05	17.1
MW-369	01/20/2020 13:30	0.87	-39.3	6.33	NM	0.777	12.97	10.7
MW-369	01/20/2020 13:35	0.76	-40.9	6.33	NM	0.778	13.21	11.3
MW-369	01/20/2020 13:40	0.72	-42.2	6.39	NM	0.778	13.45	2.7
MW-369	01/20/2020 13:45	0.7	-42.9	6.33	NM	0.777	13.52	0.5
MW-369	01/20/2020 13:50	0.69	-42.8	6.36	NM	0.778	13.32	0.1
MW-369	01/20/2020 13:55	0.67	-41.4	6.31	NM	0.779	13.42	0.1
MW-369	01/20/2020 14:29	3.39	-18.1	6.42	0.38	0.766	6.97	14.6
MW-369	01/20/2020 14:50	4.3	-26.5	6.44	0.37	0.759	9.81	128.3
MW-369	07/29/2020 13:15	0.82	-47.5	6.11	0.41	0.848	23.43	17.3
MW-369	07/29/2020 13:20	0.49	-40.6	5.98	0.4	0.823	21.66	15.6

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-369	07/29/2020 13:25	0.36	-53.8	6.05	0.4	0.82	21.33	13.2
MW-369	07/29/2020 13:30	0.34	-56	6.06	0.4	0.824	20.14	9.5
MW-369	07/29/2020 13:35	0.34	-56.8	6.08	0.41	0.826	20.81	7.5
MW-369	07/29/2020 13:40	0.35	-59.1	6.13	0.41	0.831	21.46	6.2
MW-369	07/29/2020 13:45	0.37	-59.8	6.12	0.41	0.841	22.11	5.1
MW-369	07/29/2020 13:50	0.38	-57.6	6.12	0.41	0.838	20.66	6.1
MW-369	07/29/2020 13:55	0.33	-52.7	6.07	0.41	0.843	20.19	6.6
MW-369	07/29/2020 14:00	0.33	-52.5	6.06	0.41	0.843	19.96	6.7
MW-369	07/30/2020 12:50	3.36	-78.4	6.23	0.45	0.993	22.54	32.1
MW-369	07/30/2020 13:20	0.65	-77.8	6.12	0.43	0.883	19.99	23.1
MW-369	07/30/2020 13:30	2.44	-45.1	6.13	0.4	0.878	20.36	2.3
MW-369	11/13/2020 08:30	0.53	28.2	7.77	0.34	0.708	16.41	21
MW-369	11/13/2020 09:15	5.49	16.4	6.27	0.25	0.552	15.79	16.8
MW-369	11/13/2020 09:25	2.89	-1.8	6.41	0.26	0.525	15.62	16.5
MW-369	03/26/2021 14:10	9.94	24.6	6.89	0.12	0.248	15.17	81.8
MW-369	03/26/2021 14:15	9.55	28.8	6.74	0.12	0.249	14.66	88.4
MW-369	03/26/2021 14:20	4.18	-13.7	6.35	0.36	0.729	14.93	42.1
MW-369	03/26/2021 14:25	1.96	-23.9	6.34	0.38	0.778	15.2	38.4
MW-369	03/26/2021 14:30	1.35	-28.6	6.35	0.39	0.789	15.39	32.5
MW-369	03/26/2021 14:35	1.12	-29.7	6.36	0.39	0.792	15.12	29.2
MW-369	03/26/2021 14:40	1.13	-30.4	6.41	0.39	0.794	15.17	19.1
MW-369	03/26/2021 14:45	14.3	-29.8	6.43	0.39	0.793	14.99	13.5
MW-369	03/26/2021 14:50	1.32	-30.1	6.46	0.39	0.797	15.22	11.5
MW-369	03/26/2021 14:55	1.39	-29.3	6.47	0.39	0.799	15.12	11.1
MW-369	03/26/2021 15:10	1.57	-24	6.39	0.39	0.8	14.29	6.1
MW-369	03/26/2021 15:25	1.73	-33.3	6.43	0.4	0.804	14.3	3.6
MW-369	06/24/2021 10:10	4.46	-25.2	6.35	0.37	0.754	19.8	32.1
MW-369	06/24/2021 10:15	0.76	5.9	5.9	0.36	0.739	17.28	4.6
MW-369	06/24/2021 10:20	0.55	-18.6	6.04	0.36	0.743	16.92	1.9
MW-369	06/24/2021 10:25	0.33	-35.6	6.14	0.37	0.748	16.55	1.4
MW-369	06/24/2021 10:30	0.4	-39.5	6.15	0.37	0.751	16.56	1
MW-369	06/24/2021 10:35	0.41	-42.8	6.18	0.37	0.753	16.71	0.9
MW-369	06/24/2021 10:40	0.23	-44	6.2	0.37	0.753	16.61	0.9
MW-369	06/24/2021 10:45	0.24	-45.5	6.2	0.37	0.753	16.62	0.7
MW-369	06/24/2021 10:50	0.22	-46.1	6.21	0.37	0.754	16.8	0.5
MW-369	11/08/2021 12:35	2.88	-10.7	6.22	0.37	0.755	19.67	89.6
MW-369	11/08/2021 12:40	0.96	-33.8	6.2	0.38	0.783	19.04	45.3
MW-369	11/08/2021 12:45	0.57	-38.9	6.2	0.39	0.803	19.99	15.1
MW-369	11/08/2021 12:50	0.52	-44	6.22	0.4	0.814	20.11	8.2
MW-369	11/08/2021 12:55	0.49	-47.4	6.2	0.4	0.816	20.18	6.3
MW-369	11/08/2021 13:00	0.45	-49	6.23	0.4	0.814	19.61	5.4
MW-369	11/08/2021 13:05	0.45	-50.2	6.24	0.4	0.814	20.04	4.5
MW-369	11/08/2021 13:10	0.45	-50.8	6.23	0.4	0.817	19.98	4.4
MW-369	11/08/2021 13:15	0.46	-51.6	6.29	0.4	0.814	20.07	4.4
MW-369	01/11/2022 11:45	1.09	-8.1	6.32	0.38	0.78	10.99	132.1
MW-369	01/11/2022 11:50	0.5	-21.5	6.29	0.39	0.788	11.53	290.7
MW-369	01/11/2022 11:55	0.36	-30.1	6.28	0.39	0.797	12.8	297.8
MW-369	01/11/2022 12:00	0.31	-35.4	6.29	0.4	0.802	13.11	214
MW-369	01/11/2022 12:05	0.29	-39	6.29	0.4	0.807	13.2	150.1
MW-369	01/11/2022 12:10	0.28	-40.7	6.29	0.4	0.807	13.24	115.8
MW-369	01/11/2022 12:15	0.27	-43.1	6.27	0.4	0.811	13.04	68.2
MW-369	01/11/2022 12:20	0.26	-43.9	6.28	0.4	0.812	13.03	59.1
MW-369	01/11/2022 12:25	0.26	-45.1	6.28	0.4	0.812	13.06	48.7
MW-369	01/11/2022 12:30	0.25	-46.3	6.28	0.4	0.814	13.07	35.9
MW-369	01/11/2022 12:35	0.24	-46.2	6.27	0.4	0.818	13.39	22.7
MW-369	01/11/2022 12:40	0.26	-47	6.26	0.4	0.817	13.22	22.3
MW-369	01/11/2022 12:45	0.26	-47.4	6.28	0.4	0.816	13.28	21.9
MW-370	06/05/2013 12:18	1.84	-52.9	6.25	0.22	0.39	17.34	1151.1
MW-370	06/05/2013 13:13	1.09	-24.1	6.14	0.15	0.316	18.01	80.4
MW-370	06/05/2013 13:30	1.68	-18.8	6.23	0.15	0.311	18.04	180.40

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Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-370	06/06/2013 13:30	1.68	-18.8	6.23	0.15	0.311	18.04	180.4
MW-370	01/19/2015 13:35	0.12	-26	6.59	0.19	0.386	13.09	19.50
MW-370	01/19/2015 14:25	0.0000	-48.6	6.38	0.15	0.316	13.06	58.30
MW-370	01/19/2015 15:50	0.56	-23.2	6.43	0.18	0.382	13.27	63.40
MW-370	04/24/2015 09:45	2.37	22.4	6.36	0.17	0.348	11.75	179.50
MW-370	04/24/2015 11:50	11.49	9.3	7.90	0.16	0.330	13.42	57.80
MW-370	07/08/2015 10:15	4.98	84.7	6.92	0.44	0.892	16.87	60.40
MW-370	07/08/2015 10:30	7.58	55.6	7.04	0.18	0.366	15.28	52.10
MW-370	10/09/2015 11:55	6.15	116.1	6.80	0.16	0.339	16.06	75.70
MW-370	10/09/2015 12:10	5.01	187.2	6.28	0.15	0.322	16.29	105.50
MW-370	02/09/2016 15:25	6.23	-11.5	6.69	0.2	0.418	12.7	66.3
MW-370	02/09/2016 15:35	5.6	-9	6.68	0.17	0.351	12.28	51.1
MW-370	05/12/2016 14:15	7.68	95.7	6.88	0.17	0.359	18.30	82.10
MW-370	05/12/2016 14:40	7.15	91.9	6.99	0.16	0.323	16.24	100.50
MW-370	08/09/2016 11:20	4.81	213.2	6.51	0.20	0.417	22.94	614.00
MW-370	08/09/2016 11:30	4.40	207.1	6.40	0.16	0.339	16.50	79.90
MW-370	11/10/2016 10:50	0.12	-134.9	8.18	0.96	1.880	16.19	29.50
MW-370	11/10/2016 11:10	0.94	-90.3	7.83	0.31	0.630	15.28	35.20
MW-370	05/31/2017 09:15	0.64	-65.10	6.33	0.20	0.420	15.45	106.90
MW-370	05/31/2017 13:30	2.58	-46.30	6.25	0.17	0.349	17.82	28.60
MW-370	05/31/2017 13:50	2.50	-12.00	6.45	0.14	0.294	15.45	36.60
MW-370	11/08/2017 10:35	4.38	135.70	6.46	0.13	0.201	15.05	3.30
MW-370	11/08/2017 12:15	9.94	-59.50	6.39	0.20	0.426	17.03	1767.70
MW-370	11/08/2017 12:45	5.62	14.50	6.23	0.14	0.295	16.2	1754.20
MW-370	05/08/2018 10:30	4.83	7.30	6.51	0.18	0.366	16.48	638.60
MW-370	05/08/2018 11:55	2.86	-18.50	6.16	0.17	0.354	19.85	1276.20
MW-370	05/08/2018 12:10	3.62	-19.60	6.43	0.17	0.327	19.91	390.20
MW-370	12/17/2018 13:20	7.21	-89.20	7.05	0.25	0.509	13.41	49.20
MW-370	12/17/2018 14:50	6.84	-60.00	7.28	0.18	0.382	12.95	1323.10
MW-370	12/17/2018 15:10	7.21	-19.40	6.48	0.19	0.383	11.98	130.40
MW-370	04/19/2019 09:15	0.83	-16.1	6.4	NM	0.45	16.06	48.3
MW-370	04/19/2019 10:40	0.67	-8.7	6.45	0.18	0.382	16.52	1315.6
MW-370	10/31/2019 09:15	0.42	4.5	6.31	NM	0.296	16.65	2008.9
MW-370	10/31/2019 09:20	0.39	-15.4	6.34	NM	0.275	16.83	2012.5
MW-370	10/31/2019 09:25	0.34	-22.2	6.41	NM	0.253	18.63	1966.5
MW-370	10/31/2019 09:30	0.35	-21.5	6.41	NM	0.238	17.32	1955
MW-370	10/31/2019 09:35	0.34	-19	6.4	NM	0.221	17.57	2016.1
MW-370	10/31/2019 09:40	0.31	-16.3	6.38	NM	0.215	17.48	2023
MW-370	10/31/2019 09:45	0.27	-14.3	6.35	NM	0.236	17.46	2023.4
MW-370	10/31/2019 09:50	0.25	-15.2	6.38	NM	0.214	17.25	2019.2
MW-370	10/31/2019 09:55	0.23	-15.3	6.38	NM	0.214	17.32	2020.5
MW-370	10/31/2019 10:00	0.25	-15.2	6.37	NM	0.212	17.39	2022.7
MW-370	10/31/2019 11:35	2.76	59.9	6.5	0.08	0.161	16.83	684.6
MW-370	10/31/2019 11:50	3.7	-28.1	6.52	0.09	0.196	16.57	243.5
MW-370	04/30/2020 12:40	0.24	-27.7	6.43	NM	0.394	15.22	144.5
MW-370	04/30/2020 14:05	0.8	13.3	6.45	0.17	0.357	16.17	1241.5
MW-370	06/22/2021 08:30	9.49	185.7	7.16	0.19	0.405	17.42	59.3
MW-370	06/22/2021 08:35	9.15	192.8	6.9	0.18	0.378	17.56	84.1
MW-370	06/22/2021 08:40	8.53	200.6	6.41	0.17	0.344	18.71	96
MW-370	06/22/2021 08:45	8.37	194.7	6.42	0.17	0.354	19.45	81.3
MW-370	06/22/2021 08:50	8.29	181.9	6.54	0.16	0.335	19.68	84.2
MW-370	06/22/2021 08:55	8.23	171.7	6.65	0.16	0.324	19.89	73.4
MW-370	06/22/2021 09:00	8.15	168.5	6.66	0.15	0.318	20.26	66.8
MW-370	06/22/2021 09:05	8.1	162	6.75	0.15	0.318	20.65	60.9
MW-370	06/22/2021 09:10	7.98	162.7	6.75	0.15	0.316	21.07	57.2
MW-370	06/22/2021 09:15	8	161.3	6.74	0.15	0.317	21.15	56.3
MW-370	09/21/2021 10:20	2.2	202.2	6.34	0.16	0.345	21.35	135.1
MW-370	09/21/2021 10:25	2.14	193.7	6.32	0.16	0.34	21.13	140.5
MW-370	09/21/2021 10:30	1.84	163.3	6.38	0.16	0.339	21.51	124
MW-370	09/21/2021 10:35	1.68	127.5	6.37	0.16	0.336	21.24	128.8

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-370	09/21/2021 10:40	1.49	101.4	6.38	16	0.335	20.88	127.8
MW-370	09/21/2021 10:45	1.48	92.8	6.39	0.16	0.335	21.89	136.7
MW-370	09/21/2021 10:50	1.49	83.6	6.4	0.16	0.336	22.4	132.5
MW-370	09/21/2021 10:55	1.39	76.3	6.42	0.16	0.338	25.15	146.3
MW-370	09/21/2021 11:00	1.39	74.4	6.42	0.16	0.339	26.17	155.4
MW-370	09/21/2021 11:05	1.76	78.6	6.44	0.16	0.339	23.06	151.7
MW-370	11/08/2021 11:10	2.39	-44.7	6.36	0.24	0.489	18.13	1383.9
MW-370	11/08/2021 11:15	1.26	-56.2	6.33	0.25	0.51	18.83	1255.3
MW-370	11/08/2021 11:20	0.77	-60.6	6.36	0.25	0.519	19.15	1395.7
MW-370	11/08/2021 11:25	1.85	-48.6	6.34	0.21	0.44	18.54	1389.1
MW-370	11/08/2021 11:30	0.52	-46.2	6.33	0.21	0.439	18.18	286.3
MW-370	11/08/2021 11:35	0.4	-42.3	6.3	0.21	0.44	18.13	92
MW-370	11/08/2021 11:40	0.35	-43.2	6.29	0.22	0.451	17.99	126.9
MW-370	11/08/2021 11:45	0.34	-45.7	6.29	0.23	0.456	18.01	123
MW-370	11/08/2021 11:50	0.34	-47.6	6.29	0.22	0.452	17.96	119.7
MW-370	04/01/2022 09:10	1.4	-48.2	6.64	0.34	0.686	12.77	91.6
MW-370	04/01/2022 09:15	1.3	-9.4	5.67	0.24	0.506	12.85	92.3
MW-370	04/01/2022 09:20	0.99	-9.3	5.76	0.22	0.453	12.97	44.8
MW-370	04/01/2022 09:25	0.99	-9.3	5.76	0.22	0.453	12.97	44.8
MW-370	04/01/2022 09:30	0.82	-27.3	5.92	0.24	0.491	13.32	41.2
MW-370	04/01/2022 09:35	0.71	-35.8	6	0.26	0.534	13.09	100.9
MW-370	04/01/2022 09:40	0.64	-32	5.93	0.24	0.49	12.94	944.9
MW-370	04/01/2022 09:45	0.62	-28.7	5.89	0.22	0.45	12.95	1113.4
MW-370	04/01/2022 09:50	0.54	-25.8	5.96	0.19	0.387	13.08	479.3
MW-370	04/01/2022 09:55	0.55	-25.7	6.96	0.19	0.387	13.03	371.5
MW-371	07/10/2013 12:30	3.02	136	11.68	0.87	1.719	21.55	14.1
MW-371	07/10/2013 14:27	0.48	124.9	11.67	0.89	1.75	18.22	0
MW-371	07/10/2013 15:00	1.42	43.4	11.83	0.85	1.685	21.64	0.0000
MW-371	07/11/2013 15:00	1.42	43.4	11.83	0.85	1.685	21.64	0
MW-371	01/14/2015 13:00	3.11	-89.7	11.32	0.27	0.543	21.64	39.80
MW-371	01/14/2015 13:45	5.01	-63.6	11.64	0.30	0.619	10.10	10.40
MW-371	01/14/2015 14:40	3.57	-68	11.20	0.24	0.491	10.69	46.40
MW-371	04/27/2015 14:10	0.53	-129.2	9.84	0.18	0.380	14.05	22.70
MW-371	04/27/2015 15:20	5.20	34.7	7.66	0.30	0.633	14.34	99.40
MW-371	07/07/2015 11:30	2.85	-138.2	8.17	0.23	0.474	18.34	64.22
MW-371	07/07/2015 11:40	6.82	-125.4	8.87	0.15	0.378	15.14	35.50
MW-371	10/12/2015 15:30	4.37	47.2	8.10	0.22	0.464	15.74	72.00
MW-371	10/12/2015 15:35	4.11	39.3	8.52	0.16	0.329	15.38	36.60
MW-371	02/03/2016 12:10	5.93	-179.9	8.2	0.08	0.171	14.02	33.6
MW-371	02/03/2016 12:25	3.1	-139.1	9.35	0.08	0.164	14.03	51.8
MW-371	05/17/2016 09:00	3.35	-184.4	10.33	0.58	1.156	14.98	31.50
MW-371	08/12/2016 09:10	0.84	-103.5	9.45	0.17	0.324	20.11	17.90
MW-371	11/10/2016 15:00	0.31	-154.7	10.43	0.30	0.555	14.91	37.70
MW-371	05/31/2017 10:10	0.22	-328.60	9.12	0.15	0.310	17.44	4.60
MW-371	05/31/2017 14:40	3.01	-33.70	9.17	0.17	0.323	17	27.30
MW-371	05/31/2017 15:00	3.51	-40.70	9.15	0.16	0.324	17.37	25.20
MW-371	11/10/2017 11:25	5.92	-268.80	9.19	0.14	0.301	15.65	24.10
MW-371	11/10/2017 13:35	3.44	-198.60	9.29	0.26	0.525	11	55.90
MW-371	11/10/2017 14:00	3.96	-206.00	9.38	0.24	0.492	12.37	45.10
MW-371	05/08/2018 13:30	9.19	-79.10	9.19	0.16	0.331	16.87	54.00
MW-371	05/08/2018 14:40	0.24	-84.70	8.29	0.17	0.361	17.37	341.70
MW-371	05/08/2018 15:00	0.09	-60.30	8.01	0.16	0.368	17.44	398.20
MW-371	12/12/2018 10:00	0.72	-169.3	9.3	NM	0.19	12.72	6.9
MW-371	12/18/2018 09:30	9.70	-159.50	7.25	0.20	0.407	11.82	12.30
MW-371	12/18/2018 09:45	5.00	-162.40	8.47	0.18	0.373	10.98	10.50
MW-371	12/18/2018 13:10	5.73	-114.80	8.49	0.19	0.385	10.84	169.40
MW-371	04/18/2019 09:25	4.63	-205.3	8.25	NM	0.312	12.96	4.5
MW-371	04/18/2019 11:00	0.87	5.5	8.4	0.2	0.423	13.29	32.5
MW-371	10/24/2019 09:45	3.05	-192.2	8.88	0.08	0.177	14.91	163.7
MW-371	10/24/2019 10:05	3.41	-207.6	8.77	0.08	0.177	15.45	185.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-371	10/24/2019 10:30	1.41	-238.8	8.23	NM	0.245	18.39	17.3
MW-371	10/24/2019 10:35	0.87	-274.5	8.62	NM	0.215	18	7
MW-371	10/24/2019 10:40	0.57	-305.9	8.83	NM	0.193	17.88	2.2
MW-371	10/24/2019 10:45	0.44	-313.8	8.88	NM	0.178	18.28	1.7
MW-371	10/24/2019 10:50	0.36	-319.6	8.92	NM	0.176	18.32	1.4
MW-371	10/24/2019 10:55	0.34	-331.9	8.95	NM	0.176	18.2	5.6
MW-371	10/24/2019 11:00	0.33	-338.5	8.94	NM	0.176	18.12	4.7
MW-371	10/24/2019 11:05	0.61	-312.8	9.01	NM	0.186	18.68	8.2
MW-371	10/24/2019 11:10	0.94	-287.6	8.76	NM	0.197	19.14	10.2
MW-371	10/24/2019 11:15	0.51	-233.1	8.61	NM	0.238	18.98	9.7
MW-371	05/06/2020 09:05	0.64	-188.9	8.44	NM	0.36	13.36	9.3
MW-371	05/06/2020 10:10	7.36	-42.4	7.88	0.19	0.4	13.23	44.2
MW-371	06/22/2021 09:55	4.9	168.8	7.47	0.15	0.324	19.1	25.7
MW-371	06/22/2021 10:00	1.36	92.3	7.08	0.15	0.314	17.29	52.3
MW-371	06/22/2021 10:05	1.12	73.2	6.9	0.15	0.32	17.19	47.9
MW-371	06/22/2021 10:10	0.86	72.6	6.42	0.15	0.326	17.12	41.7
MW-371	06/22/2021 10:15	0.75	85.9	6.18	0.15	0.326	16.84	37.2
MW-371	06/22/2021 10:20	0.7	100.8	6.05	0.16	0.32	16.8	37
MW-371	06/22/2021 10:25	0.62	105.4	6.01	0.13	0.327	16.62	33.9
MW-371	06/22/2021 10:30	0.62	104.7	6.01	0.18	0.327	16.57	28.3
MW-371	06/22/2021 10:35	0.59	100.1	6.04	0.16	0.324	16.52	19.1
MW-371	06/22/2021 10:40	0.56	92.9	6.09	0.1	0.325	16.4	16.4
MW-371	09/21/2021 13:05	2.17	104.2	7.12	0.16	0.34	33.04	33
MW-371	09/21/2021 13:10	0.84	-75.2	6.45	0.17	0.353	23.56	43.5
MW-371	09/21/2021 13:15	0.68	-68.8	6.46	0.17	0.364	22.36	38
MW-371	09/21/2021 13:20	0.68	-67.3	6.28	0.17	0.36	22.99	39
MW-371	09/21/2021 13:25	0.71	-71.4	6.3	0.17	0.355	22.88	33.3
MW-371	09/21/2021 13:30	1.61	-68.9	6.3	0.17	0.364	22.7	33.4
MW-371	09/21/2021 13:35	1.29	-73.9	6.42	0.18	0.371	17.12	53.2
MW-371	09/21/2021 13:40	1.02	-76.4	6.42	0.18	0.366	16.41	42.4
MW-371	09/21/2021 13:45	1.06	-71.2	6.36	0.18	0.373	16.02	55.3
MW-371	09/21/2021 13:50	1.22	-68.8	6.32	0.18	0.378	16.09	60.6
MW-371	12/16/2021 13:10	1.12	-210.9	8.46	0.12	0.26	15.4	15.5
MW-371	12/16/2021 13:15	0.66	-224.3	8.46	0.12	0.261	15.39	15.8
MW-371	12/16/2021 13:20	0.36	-256.7	8.48	0.12	0.261	15.39	14.1
MW-371	12/16/2021 13:25	0.3	-271.1	8.49	0.13	0.261	15.37	10.7
MW-371	12/16/2021 13:30	0.25	-281.3	8.47	0.13	0.262	15.38	9.8
MW-371	12/16/2021 13:35	0.23	-291.4	8.46	0.13	0.262	15.39	8.2
MW-371	12/16/2021 13:40	0.19	-291.9	8.45	0.13	0.263	15.37	6.4
MW-371	12/16/2021 13:45	0.2	-293.4	8.43	0.13	0.263	15.34	5.7
MW-371	12/16/2021 13:50	0.22	-287.5	8.23	0.13	0.264	15.31	6.2
MW-371	12/16/2021 13:55	0.22	-273.4	7.95	0.13	0.264	15.32	7.5
MW-371	03/11/2022 12:15	0.81	-125.3	8.13	0.12	0.255	13.27	53.8
MW-371	03/11/2022 12:20	0.41	-193	8.22	0.12	0.253	13.35	67
MW-371	03/11/2022 12:25	0.34	-220.3	8.28	0.12	0.253	13.19	65.3
MW-371	03/11/2022 12:30	0.29	-237.1	8.29	0.12	0.253	13.07	68.3
MW-371	03/11/2022 12:35	0.26	-241.3	8.31	0.12	0.253	12.98	57.9
MW-371	03/11/2022 12:40	0.23	-252.1	8.39	0.12	0.252	12.93	59.7
MW-371	03/11/2022 12:45	0.23	-251.6	8.43	0.12	0.252	12.92	57
MW-371	03/11/2022 12:50	0.22	-251	8.45	0.12	0.252	12.89	59.8
MW-372	06/14/2013 10:25	4.26	67.8	6.45	NM	0.536	14.47	-1.9
MW-372	06/14/2013 11:55	1.92	79.2	6.39	NM	0.532	15.48	-4
MW-372	06/14/2013 12:25	1.71	75.4	6.42	NM	0.533	16.90	-3.50
MW-372	06/15/2013 12:25	1.71	75.4	6.42	NM	0.533	16.9	-3.5
MW-372	09/20/2013 15:05	2.91	-34.3	6.80	0.15	0.313	3.49	16.30
MW-372	09/24/2013 08:45	5.00	119.8	6.50	0.29	0.597	14.34	8.50
MW-372	09/24/2013 09:40	3.71	39.3	6.63	0.30	0.607	14.49	5.30
MW-372	09/24/2013 11:50	7.16	58.5	6.42	0.30	0.613	18.09	143.10
MW-372	09/25/2013 11:50	7.16	58.5	6.42	0.30	0.613	18.09	143.10
MW-372R	10/30/2014 08:30	11.79	202.4	7.12	0.51	1.023	14.88	37.10

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-372R	10/30/2014 09:15	9.97	-67	6.88	0.57	1.130	14.88	14.00
MW-372R	10/30/2014 10:10	8.60	-54.9	6.82	0.54	1.090	15.52	459.10
MW-372R	11/25/2014 09:40	2.18	-78.3	6.27	0.60	1.188	15.06	295.60
MW-372R	11/25/2014 10:16	0.09	-94.7	6.49	0.56	1.130	15.43	233.40
MW-372R	11/25/2014 10:23	0.10	-93.2	6.50	0.56	1.124	14.47	573.20
MW-372R	01/15/2015 09:05	2.75	-1.6	6.87	0.56	1.117	13.47	132.50
MW-372R	01/15/2015 09:45	0.98	-89.6	6.85	0.49	0.995	13.59	17.60
MW-372R	01/15/2015 11:10	2.75	-63.5	6.90	0.37	0.748	12.02	55.20
MW-372R	04/24/2015 12:45	1.61	-35.5	7.03	0.43	0.908	12.64	11.60
MW-372R	04/24/2015 14:05	8.06	13.6	8.00	0.51	1.033	13.38	24.40
MW-372R	07/07/2015 13:20	3.55	-119.5	6.65	0.52	1.050	17.37	37.50
MW-372R	07/07/2015 13:35	6.32	-74.9	7.05	0.46	0.924	15.43	40.60
MW-372R	10/12/2015 15:00	5.22	45.2	7.03	0.48	0.955	16.90	50.60
MW-372R	10/12/2015 15:15	4.15	-45.4	6.64	0.52	1.042	15.79	8.90
MW-372R	02/03/2016 11:30	7.85	-20.7	7.26	0.27	0.549	14.31	30.1
MW-372R	02/03/2016 11:40	5.62	-85.7	6.97	0.25	0.506	14.61	37.8
MW-372R	05/11/2016 05:50	1.61	48	6.86	0.47	0.951	14.90	72.50
MW-372R	05/11/2016 15:20	2.08	73.4	6.93	0.49	0.987	18.65	96.30
MW-372R	08/11/2016 11:00	2.02	-109.8	6.69	0.50	0.997	18.33	24.30
MW-372R	11/04/2016 14:35	3.33	-93.4	7.12	0.52	1.042	18.23	3.20
MW-372R	11/04/2016 14:50	4.03	-77.1	6.73	0.50	1.000	16.69	23.80
MW-372R	05/31/2017 09:15	1.80	-6.70	6.40	0.52	1.042	14.87	8.10
MW-372R	05/31/2017 09:20	2.99	193.80	6.78	0.28	0.467	14.67	10.10
MW-372R	05/31/2017 09:40	4.34	-36.80	6.46	0.36	0.725	14.12	29.70
MW-372R	11/19/2017 09:40	1.45	-55.20	6.71	0.35	0.707	15.26	4.10
MW-372R	11/19/2017 10:25	1.74	-41.80	6.87	0.61	1.211	15.32	13.40
MW-372R	11/19/2017 10:40	9.39	76.10	6.97	0.11	0.230	16.04	146.20
MW-372R	05/08/2018 10:35	1.94	-11.00	6.74	0.34	0.692	15.47	26.60
MW-372R	05/08/2018 11:25	2.29	-31.00	6.92	0.32	0.655	14.9	2.90
MW-372R	05/08/2018 11:55	1.14	-39.70	6.99	0.32	0.658	16.29	33.50
MW-372R	12/06/2018 13:35	4.60	-91.50	7.69	0.13	0.280	12.51	45.30
MW-372R	12/06/2018 14:35	13.69	33.50	8.31	0.04	0.077	13.61	38.30
MW-372R	12/06/2018 14:50	8.41	-36.30	7.09	0.09	0.190	13.37	34.10
MW-372R	04/18/2019 13:45	0.59	-35.80	7.22	0.37	0.762	14.56	3.60
MW-372R	04/18/2019 14:30	5.24	-34.30	7.15	0.33	0.678	17.09	5.50
MW-372R	04/18/2019 14:50	7.22	-27.80	7.01	0.31	0.639	15.32	54.20
MW-372R	10/24/2019 13:10	5.8	-50.9	8.07	NM	0.073	21.28	3.2
MW-372R	10/24/2019 13:15	5.06	56.8	6.91	NM	0.06	18.93	34.8
MW-372R	10/24/2019 13:20	1.72	-50.5	6.71	NM	0.32	17.13	112.9
MW-372R	10/24/2019 13:25	0.79	-79.1	6.8	NM	0.368	16.77	39.4
MW-372R	10/24/2019 13:30	0.67	-84.8	6.84	NM	0.344	16.44	15.3
MW-372R	10/24/2019 13:35	0.53	-83.3	6.84	NM	0.335	16.37	7.2
MW-372R	10/24/2019 13:40	0.44	-80.5	6.81	NM	0.323	16.34	3
MW-372R	10/24/2019 13:45	0.42	-82.3	6.84	NM	0.317	16.58	1
MW-372R	10/24/2019 13:50	0.38	-82.9	6.83	NM	0.314	16.43	1.1
MW-372R	10/24/2019 13:55	0.37	-83.6	6.87	NM	0.312	16.87	1
MW-372R	10/24/2019 14:24	0.7	-95.1	6.87	0.14	0.301	16.16	0.3
MW-372R	10/24/2019 14:25	0.7	-95.1	6.87	0.14	0.301	16.16	0.3
MW-372R	10/24/2019 14:45	0.49	-92.6	6.81	0.14	0.303	16.19	49
MW-372R	05/01/2020 10:35	0.53	-2.7	7.09	NM	0.649	14.18	6.3
MW-372R	05/01/2020 11:22	4.25	20.1	7.05	0.25	0.525	15.83	5.1
MW-372R	06/21/2021 14:30	9.03	96.3	7.77	0.09	0.182	20.88	13.9
MW-372R	06/21/2021 14:35	4.78	106.9	6.53	0.17	0.358	18.66	12
MW-372R	06/21/2021 14:40	2.8	80.3	6.36	0.21	0.432	18.31	22.1
MW-372R	06/21/2021 14:45	1.86	74.5	6.32	0.21	0.432	18.46	6.3
MW-372R	06/21/2021 14:50	1.77	89.4	6.18	0.2	0.415	17.71	6.5
MW-372R	06/21/2021 14:55	1.61	98.9	6.11	0.2	0.413	17.57	7.2
MW-372R	06/21/2021 15:00	1.41	102.4	6.09	0.2	0.42	16.96	7.7
MW-372R	06/21/2021 15:05	1.29	102.5	6.06	0.2	0.422	17.16	7.3
MW-372R	06/21/2021 15:10	1.27	103.4	6.08	0.2	0.426	17.12	7.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-372R	06/21/2021 15:15	1.22	105.5	6.09	0.2	0.431	17.12	7.2
MW-372R	09/21/2021 15:50	4.33	12.2	7.35	0.04	0.093	21.75	91
MW-372R	09/21/2021 15:55	3.65	111.5	5.76	0.04	0.083	18.82	82.1
MW-372R	09/21/2021 16:00	3.58	118.7	5.71	0.04	0.08	17.92	63.1
MW-372R	09/21/2021 16:05	3.5	113.6	5.74	0.04	0.086	17.63	64
MW-372R	09/21/2021 16:10	2.37	54.8	5.91	0.13	0.278	17.19	52.9
MW-372R	09/21/2021 16:15	0.89	18.1	6.21	0.2	0.405	17.11	26.4
MW-372R	09/21/2021 16:20	0.25	29.9	6.1	0.4	0.034	23.33	34.5
MW-372R	09/21/2021 16:25	0.08	0.35	6.21	0.09	0.045	23.36	57
MW-372R	09/21/2021 16:30	0.21	0.29	6.29	0.04	0.034	23.34	53.12
MW-372R	09/21/2021 16:35	0.01	25.98	6.34	0.09	0.03	22.22	53.33
MW-372R	11/02/2021 13:00	6.15	132.5	5.39	0.08	0.172	15.91	77
MW-372R	11/02/2021 13:05	4.56	147.7	5.41	0.12	0.244	16.06	64.5
MW-372R	11/02/2021 13:10	2.16	156.6	5.36	0.12	0.262	16.19	44.6
MW-372R	11/02/2021 13:15	1.09	170	5.32	0.13	0.278	16.13	39.9
MW-372R	11/02/2021 13:20	0.87	163.3	5.38	0.14	0.291	16.21	30.8
MW-372R	11/02/2021 13:25	0.66	171.8	5.36	0.14	0.295	16.13	27.9
MW-372R	11/02/2021 13:30	0.64	172.6	5.37	0.14	0.301	16.15	25.7
MW-372R	11/02/2021 13:35	0.61	172	5.38	0.15	0.314	16.02	23.3
MW-372R	11/02/2021 13:40	0.6	169.7	5.42	0.16	0.327	15.96	21.6
MW-372R	11/02/2021 13:45	0.61	169.4	5.4	0.16	0.334	16.02	22.9
MW-372R	04/01/2022 10:40	3.36	-3.9	6.5	0.29	0.598	12.99	282.9
MW-372R	04/01/2022 10:45	3.28	3.1	6.4	0.29	0.591	12.89	239.6
MW-372R	04/01/2022 10:50	3.22	4.2	6.39	0.29	0.591	12.92	206.3
MW-372R	04/01/2022 10:55	2.03	0.9	6.43	0.32	0.661	12.99	99.7
MW-372R	04/01/2022 11:00	0.85	-24	6.52	0.36	0.741	12.96	48.2
MW-372R	04/01/2022 11:05	0.83	-25.2	6.52	0.36	0.739	12.98	24.2
MW-372R	04/01/2022 11:10	0.7	-30.1	6.58	0.35	0.721	13.19	24.7
MW-372R	04/01/2022 11:15	0.64	-31.3	6.62	0.33	0.683	13.13	48.9
MW-372R	04/01/2022 11:20	0.57	-31.9	6.66	0.31	0.627	13.28	27.7
MW-372R	04/01/2022 11:25	0.56	-32.9	6.67	0.31	0.625	13.32	31.7
MW-390	01/08/2014 14:11	1.60	-212	12.19	0.12	2.355	5.55	15.69
MW-390	01/08/2014 15:03	6.12	-164	5.35	0.08	1.666	14.67	19.90
MW-390	01/09/2014 11:30	136.00	-237	11.77	0.05	1.098	15.24	133.80
MW-390	04/16/2014 16:00	1.89	-292	4.77	0.02	0.460	13.51	20.37
MW-390	04/16/2014 16:41	5.18	-120	5.98	0.02	0.400	12.82	21.60
MW-390	04/17/2014 13:05	4.88	-180	5.31	0.03	0.599	13.06	91.50
MW-390	07/14/2014 14:59	0.89	177	4.47	0.02	0.323	22.85	17.74
MW-390	07/14/2014 15:58	1.80	237	5.76	0.02	0.321	18.18	1324.60
MW-390	07/15/2014 12:14	0.69	214	4.77	0.02	0.344	18.22	63.30
MW-390	02/11/2015 09:17	2.13	251	4.77	0.04	0.815	7.15	2.38
MW-390	02/11/2015 09:57	2.71	167	6.14	0.04	0.805	13.18	81.70
MW-390	02/12/2015 09:30	1.87	-231	5.22	0.02	0.381	14.07	190.50
MW-390	05/13/2015 11:44	1.83	191	5.10	0.02	0.509	15.55	130.50
MW-390	05/13/2015 15:05	3.33	126	6.87	0.02	0.376	16.02	1583.90
MW-390	05/15/2015 09:55	7.05	256	4.83	0.03	0.708	14.53	134.5
MW-390	05/15/2015 10:27	1.5	263	4.83	0.02	0.349	14.5	1716.3
MW-390	08/27/2015 10:02	0.66	339	4.17	0.09	1.723	19.02	144.6
MW-390	08/27/2015 10:18	6.17	236	6.23	0.08	1.623	19.01	2658
MW-390	10/01/2015 11:14	5.47	109	4.62	0.03	0.707	19.38	304.1
MW-390	10/01/2015 15:31	3.55	147	5.12	0.02	0.442	18.39	2847.4
MW-390	11/11/2016 10:31	0.83	14.00	4.96	0.11	2.087	19.66	116.30
MW-390	11/11/2016 11:57	3.50	-4	6.38	0.10	1.907	18.84	914.10
MW-390	04/05/2017 10:11	1.36	266	4.67	0.02	0.406	13.86	105.70
MW-390	04/05/2017 10:50	1.85	256	5.70	0.06	1.210	14.03	961.30
MW-390	09/22/2017 12:14	0.57	140.00	5.82	0.09	1.754	20.45	86.80
MW-390	09/22/2017 13:51	0.79	88.00	4.71	0.06	1.130	24.66	12.34
MW-390	09/22/2017 14:44	0.83	-47.00	6.70	0.05	1.060	20.79	16.80
MW-390	04/24/2018 10:11	5.42	142	6.02	0.0175	0.3636	17.28	14.6
MW-390	04/24/2018 10:14	1.83	73	4.92	0.0180	0.3741	15.48	9.6

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-390	04/24/2018 10:18	1.4	27	4.72	0.0181	0.3745	15.4	9.4
MW-390	04/24/2018 10:21	1.09	-2	4.66	0.0180	0.3734	15.22	8.1
MW-390	04/24/2018 10:24	0.96	-15	4.65	0.0181	0.3749	15.42	8.8
MW-390	04/24/2018 10:27	0.97	-20	4.66	0.0180	0.3743	15.32	10.5
MW-390	04/24/2018 10:30	0.95	-25	4.67	0.0180	0.3732	15.46	10.1
MW-390	04/24/2018 10:33	0.88	-32	4.67	0.0178	0.3697	15.51	10.7
MW-390	04/24/2018 10:36	0.78	-35	4.68	0.0179	0.3705	15.49	16.5
MW-390	04/24/2018 10:39	0.72	-37	4.68	0.0179	0.3711	15.45	15.1
MW-390	04/24/2018 10:43	0.66	-41	4.69	0.0179	0.3723	15.54	16.2
MW-390	04/24/2018 10:46	1.91	-42	4.67	0.0180	0.3729	15.61	17
MW-390	04/24/2018 10:49	1.97	-40	4.68	0.0179	0.3717	15.57	15.7
MW-390	04/24/2018 10:52	1.91	-41	4.68	0.0180	0.3732	15.72	17.3
MW-390	04/25/2018 10:20	5.52	23.00	4.83	0.02	0.375	13.93	57.70
MW-390	04/25/2018 10:52	1.91	-41.00	4.68	0.02	0.372	15.9	17.29
MW-390	04/25/2018 11:17	2.01	101.00	5.12	0.02	0.363	15.74	326.20
MW-390	11/05/2018 14:30	0.05	276.30	4.75	0.16	0.332	17.29	-1.70
MW-390	11/05/2018 14:40	0.06	277.40	4.75	0.16	0.330	17.28	-2.40
MW-390	11/05/2018 14:50	0.06	279.60	4.76	0.16	0.326	17.27	-3.00
MW-390	03/28/2019 13:00	0.45	305.4	4.78	NM	0.367	14.48	26.1
MW-390	03/28/2019 13:25	0.25	308.4	4.8	0.17	0.354	14.24	15.4
MW-390	11/01/2019 10:55	4.37	84.9	7.47	NM	0.342	17.91	3.9
MW-390	11/01/2019 11:00	1.64	186.6	5.21	NM	0.328	17.98	8.4
MW-390	11/01/2019 11:05	1.52	218.4	5.18	NM	0.33	17.59	6.1
MW-390	11/01/2019 11:10	1.32	246.4	4.63	NM	0.326	17.62	6.8
MW-390	11/01/2019 11:15	1.24	256.8	4.67	NM	0.325	17.44	6.2
MW-390	11/01/2019 11:20	1.2	273.2	4.66	NM	0.322	17.51	17.6
MW-390	11/01/2019 11:25	1.17	282.6	4.55	NM	0.321	17.54	17.1
MW-390	11/01/2019 11:30	1.13	292.3	4.62	NM	0.32	17.66	24.4
MW-390	11/01/2019 11:35	1.18	297.8	4.61	NM	0.319	17.62	55.9
MW-390	11/01/2019 11:40	1.63	301.6	4.59	NM	0.319	17.64	511.1
MW-390	11/01/2019 12:12	1.53	313.2	4.53	0.15	0.317	17.26	1.3
MW-390	11/01/2019 12:38	5.53	291.1	4.64	0.16	339	18.39	70.3
MW-390	02/19/2020 11:30	0.37	325.7	4.76	NM	0.11	14.26	5.7
MW-390	02/19/2020 13:10	0.48	308.7	4.78	0.05	0.109	14.94	6.4
MW-390	10/20/2020 13:40	NM	NM	NM	NM	NM	NM	0
MW-390	10/29/2020 12:35	4.24	255.1	4.94	0.15	0.319	15.53	3.7
MW-390	10/29/2020 12:40	2.97	282.3	4.79	0.15	0.322	16.22	31.3
MW-390	10/29/2020 12:45	3.01	288.7	4.73	0.16	0.326	16.25	10.2
MW-390	10/29/2020 12:50	3.11	291.1	4.71	0.16	0.326	16.31	3
MW-390	10/29/2020 12:55	3.41	292.4	4.7	0.16	0.326	16.31	0
MW-390	10/29/2020 13:00	3.14	293.4	4.69	0.16	0.326	16.42	0
MW-390	10/29/2020 13:05	3.43	293.9	4.7	0.16	0.326	16.43	0
MW-390	10/29/2020 13:10	3.43	294.1	4.69	0.16	0.326	16.41	0
MW-390	10/29/2020 13:30	3.33	263.5	4.77	0.18	0.328	15.98	0
MW-390	10/29/2020 13:40	3.88	267.4	4.88	0.16	0.338	16.32	NM
MW-390	06/23/2021 10:20	1.93	163.8	5.72	0.16	0.345	19.92	1294.3
MW-390	06/23/2021 10:25	1.81	180.3	5.41	0.16	0.342	19.97	1291.2
MW-390	06/23/2021 10:30	1.42	209.7	4.9	0.16	0.334	20.55	1301.2
MW-390	06/23/2021 10:35	1.25	223	4.74	0.16	0.33	20.59	1299.1
MW-390	06/23/2021 10:40	1.02	237.5	4.67	0.16	0.326	20.59	773.2
MW-390	06/23/2021 10:45	0.93	257.8	4.61	0.15	0.324	20.5	434
MW-390	06/23/2021 10:50	0.77	265.2	4.6	0.15	0.324	20.41	169.2
MW-390	06/23/2021 10:55	0.73	275.5	4.57	0.16	0.325	20.4	215.5
MW-390	06/23/2021 11:00	0.68	288.9	4.56	0.16	0.325	20.5	112.6
MW-390	06/23/2021 11:05	0.66	298.3	4.56	0.15	0.324	20.62	119.2
MW-390	10/27/2021 14:40	1.88	296.1	4.55	0.21	0.429	20.33	21.2
MW-390	10/27/2021 14:45	1.52	343.6	4.61	0.21	0.429	20.12	9.1
MW-390	10/27/2021 14:50	0.88	372.4	4.11	0.21	0.431	19.38	7.3
MW-390	10/27/2021 14:55	0.9	381.9	4.47	0.21	0.433	19.13	1.5
MW-390	10/27/2021 15:00	0.87	381.4	4.21	0.21	0.433	19.12	1.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-390	10/27/2021 15:05	0.86	381.9	4.24	0.21	0.433	19.11	0.9
MW-390	10/27/2021 15:10	0.75	381.1	4.23	0.21	0.434	19.1	0.5
MW-390	10/27/2021 15:15	0.8	383.1	4.29	0.21	0.433	19.05	-0.7
MW-390	10/27/2021 15:20	0.79	382.6	4.24	0.21	0.433	19.06	-0.5
MW-390	04/27/2022 08:50	6.33	79.3	8.75	0.25	0.293	16	0
MW-390	04/27/2022 08:55	0.87	193.1	5.64	0.24	0.491	15.61	0
MW-390	04/27/2022 09:00	0.6	199	5.1	0.24	0.487	15.06	2.6
MW-390	04/27/2022 09:05	0.49	197.4	4.86	0.23	0.482	15.13	0
MW-390	04/27/2022 09:10	0.5	196.6	4.77	0.23	0.479	15.3	0
MW-390	04/27/2022 09:15	0.48	198.6	4.75	0.23	0.479	15.26	0
MW-390	04/27/2022 09:20	0.47	203.2	4.74	0.23	0.477	15.3	0
MW-416	05/19/2015 11:15	0.81	205	3.89	0.7	12.25	12.56	23.1
MW-416	05/19/2015 11:46	3.41	177	3.48	0.31	5.789	12.4	17.8
MW-416	08/20/2015 11:25	0.48	42	5.23	5.05	73.3	15.61	15.7
MW-416	08/20/2015 14:50	3.91	25	6.83	1.77	28.37	19.91	22.7
MW-416	10/28/2015 09:15	7.34	184	4.8	0.6	10.88	17.25	29.8
MW-416	10/28/2015 10:40	2.61	-43	5.28	0.38	6.813	16.45	131.7
MW-416	03/02/2016 10:01	4.70	72	4.17	0.18	3.358	13.30	14.40
MW-416	03/02/2016 11:34	0.98	-22	5.30	0.88	14.980	14.62	305.90
MW-416	05/18/2016 10:07	5.39	497	4.33	0.27	4.941	13.52	30.00
MW-416	05/18/2016 12:08	4.65	81	6.28	0.84	14.360	14.62	7.20
MW-416	06/07/2016 10:10	2.10	-29	4.91	0.89	15.250	15.16	424.90
MW-416	06/07/2016 13:30	0.92	324	3.46	1.03	17.390	13.80	5.40
MW-416	08/12/2016 09:22	2.75	117	3.98	1.44	23.570	16.22	16.90
MW-416	08/12/2016 10:41	3.35	56	5.91	1.07	17.880	17.72	294.90
MW-416	11/15/2016 10:15	3.58	319.00	4.08	0.21	3.941	17.54	16.90
MW-416	11/15/2016 11:59	5.53	-45	5.78	0.24	4.415	17.81	27.20
MW-416	12/07/2016 11:27	2.02	-36	5.56	0.13	2.569	16.99	17.1
MW-416	12/07/2016 13:13	1.33	112	3.02	0.11	2.074	16.69	20.3
MW-416	03/31/2017 09:07	3.72	247	3.46	0.22	4.122	12.26	53.50
MW-416	03/31/2017 11:26	4.20	2	3.72	0.25	4.694	12.92	7.80
MW-416	06/22/2017 10:13	4.38	190.00	4.22	3.05	46.910	14.31	16.70
MW-416	06/22/2017 11:19	0.52	119.00	4.27	0.23	4.376	22.19	1.62
MW-416	06/22/2017 12:00	4.19	1.00	7.27	1.29	21.300	16.23	106.00
MW-416	09/22/2017 09:38	0.79	92.00	4.97	0.74	12.820	21.19	9.34
MW-416	09/22/2017 10:22	1.33	32.00	6.03	0.80	13.770	17.65	237.50
MW-416	09/22/2017 11:06	3.50	286.00	3.22	2.87	44.690	17.51	15.30
MW-416	04/19/2018 11:58	6.54	243	4.42	0.4045	7.3669	10.32	3.6
MW-416	04/19/2018 12:02	2.57	197	4.44	0.4193	7.6091	10.87	2.8
MW-416	04/19/2018 12:05	2.02	197	4.55	0.3895	7.1060	10.57	3.8
MW-416	04/19/2018 12:08	1.92	218	4.49	0.2848	5.3004	10.32	3.1
MW-416	04/19/2018 12:11	1.86	354	4.16	0.2599	4.8628	10.21	2.7
MW-416	04/19/2018 12:14	1.91	476	3.38	0.2453	4.6078	10.1	2.5
MW-416	04/19/2018 12:17	2.74	502	2.86	0.2526	4.7379	9.89	2.9
MW-416	04/19/2018 12:20	3.16	519	2.76	0.2541	4.7657	9.89	2.6
MW-416	04/19/2018 12:24	2.5	377	3.4	0.4089	7.4461	10.13	3.3
MW-416	04/19/2018 12:27	2.74	498	2.87	0.3106	5.7525	10.11	2.5
MW-416	04/19/2018 12:30	3.04	508	2.81	0.2720	5.0808	9.92	2.5
MW-416	04/19/2018 12:33	2.72	496	2.88	0.2437	4.5800	9.91	2.3
MW-416	04/19/2018 12:36	2.49	492	2.91	0.2484	4.6632	10.04	2.2
MW-416	04/19/2018 12:39	2.41	486	2.94	0.2433	4.5732	9.98	2.1
MW-416	04/19/2018 12:42	2.29	479	2.97	0.2387	4.4923	9.84	1.9
MW-416	04/19/2018 12:46	2.18	472	3.01	0.2363	4.4488	10.02	2.1
MW-416	04/19/2018 12:49	2.14	466	3.07	0.2339	4.4059	10.03	2.2
MW-416	04/20/2018 10:46	4.70	26.00	4.70	0.42	7.679	12.58	9.40
MW-416	04/20/2018 12:49	2.14	466.00	3.07	0.23	4.420	9.91	2.23
MW-416	04/20/2018 14:17	7.55	246.00	4.38	0.44	7.973	12.57	12.80
MW-416	06/12/2018 13:24	4.4	-14	5.79	0.1793	3.3769	25.44	9.3
MW-416	06/12/2018 13:27	1.85	69	4.7	0.1463	2.7888	19.8	6.3
MW-416	06/12/2018 13:30	1.58	85	4.4	0.1159	2.2370	19.67	7.1

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-416	06/12/2018 13:33	1.5	113	4.04	0.1084	2.0992	19.07	9.7
MW-416	06/12/2018 13:36	1.44	162	3.84	0.1099	2.1250	21.03	9.4
MW-416	06/12/2018 13:39	1.4	195	3.67	0.1194	2.2979	21.86	7
MW-416	06/12/2018 13:45	1.43	231	3.46	0.1197	2.3049	21.76	5.5
MW-416	06/12/2018 13:48	1.47	233	3.44	0.1261	2.4205	21.9	5.3
MW-416	06/12/2018 13:51	1.49	241	3.4	0.1269	2.4347	22.16	6.5
MW-416	06/12/2018 13:54	1.55	247	3.36	0.1293	2.4797	21.84	4.3
MW-416	06/12/2018 13:57	1.59	257	3.31	0.1306	2.5023	21.79	3.8
MW-416	06/12/2018 14:01	1.71	265	3.28	0.1269	2.4362	21.78	4.6
MW-416	06/12/2018 14:04	1.74	251	3.36	0.1246	2.3942	21.93	3.5
MW-416	06/12/2018 14:07	1.72	241	3.41	0.1218	2.3430	21.79	3.5
MW-416	06/12/2018 14:10	1.66	238	3.44	0.1206	2.3195	22.17	3.6
MW-416	06/13/2018 12:35	4.18	191.00	4.03	0.46	8.277	14.67	15.30
MW-416	06/13/2018 14:10	1.66	238.00	3.44	0.12	2.311	22.35	3.62
MW-416	06/13/2018 14:48	4.06	-21.00	5.52	0.25	4.665	15.71	6.50
MW-416	10/03/2018 09:15	2.44	390.40	3.42	1.09	2.136	19.12	1.20
MW-416	10/03/2018 09:50	2.16	391.90	3.46	1.10	2.316	19.06	0.0000
MW-416	10/03/2018 10:05	4.06	346.80	3.71	1.10	2.114	20.1	3.60
MW-416	10/05/2018 10:20	5.72	170.20	6.50	0.56	1.123	20.62	7.00
MW-416	12/04/2018 11:00	3.42	361.20	3.79	1.21	2.173	15.34	0.0000
MW-416	12/04/2018 11:10	1.98	129.20	5.09	2.24	4.165	16.5	6.90
MW-416	12/04/2018 11:20	1.88	122.10	5.12	2.34	4.379	16.48	6.40
MW-416	04/26/2019 09:10	1.11	321.6	3.71	NM	2.86	12.44	6
MW-416	04/26/2019 09:40	0.68	87.7	5.26	2.24	4.19	12.52	4.3
MW-416	06/18/2019 10:05	3.09	186.3	4.47	NM	4.216	15.67	0.7
MW-416	06/18/2019 10:10	0.97	360.4	3.39	NM	2.289	15.9	1.4
MW-416	06/18/2019 10:15	0.96	239.6	3.93	NM	2.842	15.84	0.4
MW-416	06/18/2019 10:20	0.96	294.1	3.61	NM	2.217	15.78	0.2
MW-416	06/18/2019 10:25	0.96	367.6	3.31	NM	2.291	15.92	1.5
MW-416	06/18/2019 10:30	0.77	238.6	4.21	2.25	4.202	14.28	1.1
MW-416	06/18/2019 10:35	0.97	360.4	3.39	NM	2.289	15.9	1.4
MW-416	06/18/2019 10:40	0.77	238.6	4.21	2.25	4.202	14.28	NM
MW-416	06/18/2019 10:45	0.75	219.5	4.34	2.34	4.37	NM	1.1
MW-416	06/18/2019 10:50	NM	NM	NM	NM	NM	14.88	0.6
MW-416	09/05/2019 12:20	1.41	50.6	5.52	NM	2.344	19.35	0.5
MW-416	09/05/2019 12:25	1.45	172.1	3.97	NM	2.136	20.11	3.1
MW-416	09/05/2019 12:30	1.16	105.4	4.62	NM	2.076	19.47	1
MW-416	09/05/2019 12:35	1.03	78.8	4.82	NM	2.432	19.46	0.4
MW-416	09/05/2019 12:40	0.89	66.6	4.94	NM	2.941	19.25	0.2
MW-416	09/05/2019 12:45	2.06	76.9	4.85	NM	3.581	19.5	0.8
MW-416	09/05/2019 12:50	1.44	56.9	5.22	NM	4.42	17.79	0.1
MW-416	09/05/2019 12:55	0.98	27.2	5.08	NM	3.994	18.28	0.1
MW-416	09/05/2019 13:00	1.06	36.9	5.1	NM	4.029	18.48	0.1
MW-416	09/05/2019 13:05	1.2	47.1	5.05	NM	4.135	18.38	0.1
MW-416	09/05/2019 13:22	3.85	68.2	5.01	2.4	4.496	21	6.2
MW-416	09/05/2019 13:40	4.29	59.6	5.48	2.51	4.669	17.97	88.6
MW-416	12/05/2019 09:00	0.56	35.4	5.04	NM	2.723	12.7	34.8
MW-416	12/05/2019 09:05	0.51	181.9	4.79	NM	1.746	12.73	35.4
MW-416	12/05/2019 09:10	1.48	397.5	4.75	NM	1.44	12.24	35.4
MW-416	12/05/2019 09:15	1.26	375	4.25	NM	1.38	12.34	35.5
MW-416	12/05/2019 09:20	0.87	344.5	4.55	NM	1.354	12.49	35.7
MW-416	12/05/2019 09:25	0.54	320.1	4.69	NM	1.561	12.62	35.7
MW-416	12/05/2019 09:30	0.35	285.8	4.86	NM	1.822	12.7	35.9
MW-416	12/05/2019 09:35	0.24	268.6	4.96	NM	2.033	12.7	35.6
MW-416	12/05/2019 09:40	0.16	252.4	5.02	NM	2.233	12.67	38.7
MW-416	12/05/2019 09:45	0.12	239.4	5.07	0.68	2.402	12.63	36.9
MW-416	12/05/2019 10:20	2.56	158.8	5.32	NM	1.355	8.23	31.8
MW-416	12/05/2019 13:40	2.56	158.8	5.32	0.68	1.355	8.23	31.8
MW-416	12/05/2019 13:50	2.01	114.2	5.77	1.51	2.89	11.53	48.9
MW-416	03/25/2020 09:30	1.87	249.3	4.88	NM	1.837	10.6	NM

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-416	03/25/2020 10:00	1.77	248.7	4.78	1.45	1.893	10.87	0
MW-416	12/29/2020 09:20	3.28	97	6.57	0.87	1.716	10.65	6
MW-416	12/29/2020 09:25	3.18	101.8	6.61	0.87	1.715	10.66	8.5
MW-416	12/29/2020 09:30	2.92	104.1	6.63	0.87	1.713	10.46	8.2
MW-416	12/29/2020 09:35	2.61	105.7	6.64	0.87	1.708	10.31	7.2
MW-416	12/29/2020 09:40	2.09	102.9	6.61	0.85	1.678	10.96	6.6
MW-416	12/29/2020 09:45	2.07	98.5	6.62	0.85	1.67	11.61	7.4
MW-416	12/29/2020 09:50	2.14	102.1	6.65	0.85	1.671	9.33	7
MW-416	12/29/2020 09:55	1.06	42.6	6.38	0.8	1.586	11.21	7.2
MW-416	12/29/2020 10:00	5.74	34.5	6.32	0.77	1.55	10.96	10.5
MW-416	12/29/2020 10:05	6.06	34.2	6.32	0.81	1.606	10.88	8
MW-416	12/29/2020 10:40	3.42	55.6	6.55	0.83	1.756	11	7.6
MW-416	12/29/2020 10:50	3.4	67.4	6.88	0.76	1.55	11.04	12.3
MW-416	03/18/2021 11:10	12.31	113.7	5.37	1.72	3.277	10.21	0.5
MW-416	03/18/2021 11:15	2.21	136	5.06	1.54	2.912	10.97	1.7
MW-416	03/18/2021 11:20	2.58	321.2	4.16	1.32	2.523	10.22	0.8
MW-416	03/18/2021 11:25	3.15	406.5	3.42	1.01	1.943	10.14	0.7
MW-416	03/18/2021 11:30	3.31	398.8	3.411	0.85	1.671	10.24	0.7
MW-416	03/18/2021 11:35	2.95	385.2	3.48	0.77	1.524	10.3	0.6
MW-416	03/18/2021 11:40	2.84	384.5	3.37	0.8	1.589	10.39	0.5
MW-416	03/18/2021 11:45	2.75	347.2	3.56	0.93	1.813	10.43	0.9
MW-416	03/18/2021 11:50	2.3	308.8	3.86	1.05	2.044	10.6	0.4
MW-416	03/18/2021 11:55	2.32	285.3	4.11	1.11	2.174	10.51	0.5
MW-416	03/18/2021 12:05	2.11	180.4	4.8	1.39	2.679	11.22	0.3
MW-416	03/18/2021 12:20	2.24	159.3	5	1.43	2.74	9.3	0.4
MW-416	05/28/2021 12:55	1.18	321.8	3.71	1	2.065	14.96	14.2
MW-416	05/28/2021 13:00	1.02	354.2	3.58	0.96	1.886	14.83	10.8
MW-416	05/28/2021 13:05	1.57	364.9	3.54	0.92	1.826	15.49	5.8
MW-416	05/28/2021 13:10	1.41	378.7	3.52	0.92	1.809	18.24	7
MW-416	05/28/2021 13:15	1.74	376.6	3.52	0.96	1.882	17.3	7.7
MW-416	05/28/2021 13:20	1.67	365.8	3.57	0.88	1.744	15.57	4
MW-416	05/28/2021 13:25	1.61	347.9	3.67	0.86	1.691	15.6	0.8
MW-416	05/28/2021 13:30	1.79	340.2	3.73	0.84	1.662	16.22	1.3
MW-416	05/28/2021 13:35	2.7	319.8	3.81	0.88	1.728	14.93	0
MW-416	09/02/2021 10:20	3.24	212.6	4.11	1.86	3.518	21.87	7.3
MW-416	09/02/2021 10:25	1.25	125	4.9	2.13	3.991	20.71	4.1
MW-416	09/02/2021 10:30	1	99	5.01	2.18	4.092	21.15	0
MW-416	09/02/2021 10:35	0.97	93.9	5.03	2.18	4.097	21.84	0
MW-416	09/02/2021 10:40	0.83	93.2	5.02	2.16	4.08	22.59	0
MW-416	09/02/2021 10:45	0.84	96	5	2.15	4.064	22.64	0
MW-416	09/02/2021 10:50	0.84	97.5	4.98	2.13	4.024	22.69	0
MW-416	11/23/2021 13:30	4.08	60.2	4.95	1.26	2.439	14.24	54.7
MW-416	11/23/2021 13:35	0.85	84.7	4.36	1.19	2.303	15.73	65.6
MW-416	11/23/2021 13:40	0.79	137.9	3.67	0.98	1.913	16.1	31.6
MW-416	11/23/2021 13:45	0.94	183.8	3.6	0.95	1.86	16.15	20.4
MW-416	11/23/2021 13:50	0.73	198.9	3.9	0.9	1.757	15.94	15.1
MW-416	11/23/2021 13:55	0.53	168	4.4	0.89	1.747	15.8	18.4
MW-416	11/23/2021 14:00	0.41	109.2	5.23	1.93	3.665	15.97	8.3
MW-416	11/23/2021 14:05	0.42	91.4	5.13	1.83	3.454	16.14	12.1
MW-416	11/23/2021 14:10	0.47	98.3	4.79	1.32	2.55	15.95	8.3
MW-416	11/23/2021 14:15	0.48	104.1	4.77	1.28	2.46	16.02	5.4
MW-416	02/18/2022 10:05	2.81	370	3.48	1.44	2.741	13.56	17.7
MW-416	02/18/2022 10:10	3.17	399.3	3.28	1.05	2.157	13.04	14.5
MW-416	02/18/2022 10:15	3.78	411.5	3.21	1.04	2.019	12.33	13.5
MW-416	02/18/2022 10:20	2.5	414	3.18	1.01	1.962	11.66	13.2
MW-416	02/18/2022 10:25	3.19	396.4	3.3	0.92	1.812	12.55	8.7
MW-416	02/18/2022 10:30	3.19	386.4	3.34	0.9	1.775	12.7	8
MW-416	02/18/2022 10:35	2.37	364.5	3.44	0.89	1.751	13.07	7
MW-416	02/18/2022 10:40	1.68	362.2	3.44	0.9	1.744	12.94	6.6
MW-416	02/18/2022 10:45	2.01	352.4	3.51	0.84	1.787	13.06	5.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-416	02/18/2022 10:50	2.12	350.7	3.52	0.91	1.788	13.37	5.3
MW-416	04/27/2022 11:35	3.95	312.4	3.85	1.11	2.168	16.43	0
MW-416	04/27/2022 11:40	1.4	221.8	4.5	2.15	4.031	15.85	0
MW-416	04/27/2022 11:45	0.81	139.4	5	2.28	4.263	15.97	1.8
MW-416	04/27/2022 11:50	0.65	119.8	5.12	2.31	4.313	16.26	0
MW-416	04/27/2022 11:55	0.48	107	5.19	2.29	4.279	15.71	1.5
MW-416	04/27/2022 12:00	0.46	110.5	5.17	2.29	4.27	15.67	1.6
MW-416	04/27/2022 12:05	0.45	112.4	5.15	2.29	4.264	15.62	1.5
MW-417	05/19/2015 10:17	3.22	69	3.47	1.71	27.9	12.56	41.8
MW-417	05/19/2015 10:27	1.48	117	4.28	2.32	36.84	12.7	40.1
MW-417	08/20/2015 11:00	6.27	123	4.47	11.92	149.8	16.49	88.4
MW-417	08/20/2015 15:13	3.75	-15	6.48	3.29	49.73	20.14	110.9
MW-417	10/28/2015 09:46	10.55	249	3.64	1.97	31.36	17.9	45.9
MW-417	10/28/2015 12:18	6.19	65	4.5	1.06	17.84	16.79	913.7
MW-417	03/02/2016 09:29	4.27	98	3.90	0.72	12.580	13.21	16.40
MW-417	03/02/2016 10:15	2.38	-27	5.06	4.89	71.530	13.60	91.00
MW-417	05/18/2016 09:28	6.48	552	3.78	0.99	16.830	13.51	24.00
MW-417	05/18/2016 10:19	0.75	121	5.63	1.59	26.050	13.83	55.80
MW-417	06/07/2016 09:25	3.41	45	4.34	1.64	26.650	14.70	222.50
MW-417	06/07/2016 13:03	1.20	1.67	3.49	2.14	34.140	14.22	5.50
MW-417	08/12/2016 10:04	4.11	147	3.44	2.72	42.120	16.59	31.30
MW-417	08/12/2016 12:17	5.38	24	5.32	2.35	36.780	18.63	548.30
MW-417	11/15/2016 09:47	3.02	196.00	4.11	0.84	14.351	17.58	10.80
MW-417	11/15/2016 10:22	4.56	-16	5.60	0.27	5.029	17.76	42.50
MW-417	12/07/2016 11:24	3.28	-45	5.56	0.15	2.871	16.69	19.1
MW-417	12/07/2016 13:43	1.24	69	3.41	0.12	2.384	17.06	12.5
MW-417	03/31/2017 08:41	3.38	202	3.77	0.71	12.460	12.40	50.30
MW-417	03/31/2017 10:23	4.87	-18	5.19	0.98	16.630	12.84	82.30
MW-417	06/22/2017 09:13	0.39	200.00	3.48	1.43	23.490	20.84	1.66
MW-417	06/22/2017 09:30	5.65	2.27	3.29	4.86	71.000	14.47	11.60
MW-417	06/22/2017 10:02	0.13	116.00	5.88	3.29	50.070	15.96	148.20
MW-417	09/22/2017 11:25	0.45	152.00	3.73	5.20	74.820	22.41	6.96
MW-417	09/22/2017 11:35	1.90	308.00	2.79	10.74	137.400	17.82	16.60
MW-417	09/22/2017 12:06	2.73	9.00	5.96	1.81	29.110	17.89	197.70
MW-417	12/05/2017 09:41	1.32	166.00	4.02	4.91	72.200	14.68	11.53
MW-417	12/05/2017 10:34	6.68	44.00	3.76	4.57	66.970	15.9	33.40
MW-417	12/05/2017 14:20	3.04	381.00	2.99	1.81	29.060	17.41	8.80
MW-417	04/19/2018 13:28	6.08	294	3.89	1.9173	0.0312	9.46	2.3
MW-417	04/19/2018 13:31	3.19	331	3.83	1.9007	0.0310	8.96	2.1
MW-417	04/19/2018 13:33	2.23	337	3.75	1.8985	0.0309	9.67	2.3
MW-417	04/19/2018 13:36	2	342	3.72	1.8979	0.0309	9.6	2.2
MW-417	04/19/2018 13:39	1.91	342	3.7	1.8969	0.0309	9.46	2.1
MW-417	04/19/2018 13:42	1.88	344	3.68	1.8899	0.0308	9.5	2.4
MW-417	04/19/2018 13:45	1.78	344	3.67	1.8963	0.0309	9.64	2
MW-417	04/19/2018 13:48	1.79	344	3.67	1.9000	0.0310	9.57	1.9
MW-417	04/19/2018 13:50	1.75	344	3.67	1.8907	0.0308	9.53	2.4
MW-417	04/19/2018 13:53	1.69	344	3.66	1.8941	0.0309	9.58	1.8
MW-417	04/19/2018 13:56	1.68	344	3.66	1.8886	0.0308	9.4	1.8
MW-417	04/19/2018 13:59	1.68	343	3.66	1.8879	0.0308	9.51	2.2
MW-417	04/19/2018 14:02	1.64	343	3.66	1.8874	0.0308	9.28	1.9
MW-417	04/19/2018 14:05	1.61	342	3.66	1.8872	0.0308	9.29	2
MW-417	04/19/2018 14:07	1.59	341	3.67	1.8800	0.0307	9.17	2
MW-417	04/20/2018 11:13	6.27	337.00	3.32	2.04	32.760	12.29	31.00
MW-417	04/20/2018 14:08	1.59	341.00	3.67	1.88	30.790	9.05	1.98
MW-417	04/20/2018 14:49	6.88	231.00	3.96	1.89	30.680	11.86	12.20
MW-417	06/12/2018 14:46	2.83	17	4.83	1.0205	0.0171	23.31	4.5
MW-417	06/12/2018 14:50	2.01	64	4.3	1.0062	0.0169	21.04	5.8
MW-417	06/12/2018 14:53	1.73	201	3.31	0.9596	0.0162	19.99	4.1
MW-417	06/12/2018 14:56	1.69	317	2.91	0.9532	0.0161	19.87	4.6
MW-417	06/12/2018 14:59	1.71	356	2.83	0.9539	0.0161	20.09	7.1

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-417	06/12/2018 15:02	1.75	372	2.82	0.9523	0.0161	20.07	7.4
MW-417	06/12/2018 15:05	1.8	376	2.83	0.9569	0.0162	20.11	7.7
MW-417	06/12/2018 15:08	1.72	375	2.84	0.9580	0.0162	19.98	8.7
MW-417	06/12/2018 15:12	1.7	355	3.01	0.9759	0.0165	20.44	6.6
MW-417	06/12/2018 15:15	1.59	330	3.16	0.9805	0.0165	20.14	6.5
MW-417	06/12/2018 15:18	1.51	316	3.28	0.9812	0.0165	20.55	6.7
MW-417	06/12/2018 15:21	1.48	307	3.35	0.9867	0.0166	20.7	7.3
MW-417	06/12/2018 15:24	1.47	304	3.4	0.9901	0.0167	21.12	6.1
MW-417	06/12/2018 15:27	1.47	290	3.54	0.9968	0.0168	21.16	8.1
MW-417	06/12/2018 15:30	1.44	281	3.61	1.0032	0.0169	20.96	8.2
MW-417	06/12/2018 15:34	1.43	278	3.67	1.0051	0.0169	21.01	9.8
MW-417	06/13/2018 12:55	1.79	173.00	3.84	2.34	37.010	14.27	16.50
MW-417	06/13/2018 15:34	1.43	278.00	3.67	1.01	16.830	21.19	9.76
MW-417	06/13/2018 16:07	4.67	-23.00	5.47	1.04	17.630	15.31	23.70
MW-417	04/26/2019 10:50	0.78	231.6	4.01	NM	17.41	12.07	4.7
MW-417	04/26/2019 11:16	0.64	137.2	4.7	10.32	17.47	11.93	4.4
MW-417	06/18/2019 10:05	1.41	184.8	4.53	NM	17.56	16.3	8.9
MW-417	06/18/2019 10:10	0.66	188.7	4.4	NM	17.51	16.06	9.2
MW-417	06/18/2019 10:15	0.58	356.5	3.22	NM	15.6	16.09	6.1
MW-417	06/18/2019 10:20	0.66	348.8	3.31	NM	15.99	16.45	3.7
MW-417	06/18/2019 10:25	0.63	331.4	3.46	NM	16.33	16.55	2.5
MW-417	06/18/2019 10:30	0.62	330.6	3.51	NM	16.34	16.54	2.4
MW-417	06/18/2019 10:35	0.61	324.2	3.52	NM	16.35	16.53	2.3
MW-417	06/18/2019 10:40	0.18	176.9	4.64	10.43	17.6	14.27	NM
MW-417	06/18/2019 10:45	0.11	175.4	4.63	7.51	16.57	NM	0.6
MW-417	06/18/2019 10:50	NM	NM	NM	NM	NM	14.8	1.1
MW-417	06/18/2019 11:30	0.61	324.2	3.52	NM	16.35	16.53	2.3
MW-417	06/18/2019 11:46	0.18	176.9	4.64	10.43	17.6	14.27	0.6
MW-417	09/05/2019 12:15	4.3	7.7	6.4	NM	16.87	20.47	3.6
MW-417	09/05/2019 12:20	1.13	127.9	4.92	NM	16.38	20.16	6.1
MW-417	09/05/2019 12:25	1	267.4	3.83	NM	15.46	20.59	3.6
MW-417	09/05/2019 12:30	1.04	299.6	3.36	NM	14.9	21.12	3.3
MW-417	09/05/2019 12:35	1.03	298.2	3.28	NM	14.95	21.18	1.9
MW-417	09/05/2019 12:40	0.99	284.9	3.34	NM	15.28	21.13	3
MW-417	09/05/2019 12:45	0.92	259.3	3.52	NM	15.71	21.06	2.1
MW-417	09/05/2019 12:50	0.87	240.3	3.67	NM	16.03	21.09	1.2
MW-417	09/05/2019 12:55	0.87	204.3	3.94	NM	16.53	21.04	0.6
MW-417	09/05/2019 13:00	0.87	172.3	4.12	NM	16.85	21.11	0.5
MW-417	09/05/2019 13:25	5.27	87.1	4.62	9.64	16.32	22.36	0.2
MW-417	09/05/2019 13:39	2.93	96.8	4.76	10.44	17.52	18.35	171.2
MW-417	12/04/2019 09:20	25.59	145.00	4.54	10.54	17.780	14.13	1.90
MW-417	12/04/2019 09:30	28.56	99.20	4.99	10.62	17.920	13.76	30.30
MW-417	12/04/2019 09:40	31.32	98.00	5.01	10.61	17.910	13.69	1.10
MW-417	12/05/2019 12:25	0.77	152.3	4.53	NM	10.81	11.61	85.9
MW-417	12/05/2019 12:30	0.37	136.3	4.67	NM	10.86	12.01	84
MW-417	12/05/2019 12:35	0.4	208.3	4.45	NM	10.28	12.45	89.7
MW-417	12/05/2019 12:40	0.72	314.1	4.42	NM	9.851	12.88	85
MW-417	12/05/2019 12:45	0.41	258.2	4.94	NM	10.27	13.02	87.9
MW-417	12/05/2019 12:50	0.2	207.4	4.3	NM	10.61	12.41	87
MW-417	12/05/2019 12:55	0.16	174.7	4.52	NM	10.79	12.42	87
MW-417	12/05/2019 13:00	0.13	163.1	4.59	NM	10.82	12.47	87.1
MW-417	12/05/2019 13:05	0.16	145.8	4.7	NM	10.88	12.48	87.4
MW-417	12/05/2019 13:10	0.14	136.6	4.75	NM	10.88	12.56	82.8
MW-417	12/05/2019 13:40	1.25	115.3	5.06	6.26	11.07	6.33	54.7
MW-417	12/05/2019 13:50	0.76	106.1	4.97	6.19	10.86	10.99	124.6
MW-417	03/25/2020 12:50	8.09	356	4.26	NM	13.41	10.15	NM
MW-417	03/26/2020 13:10	6.69	223.1	4.34	7.23	13.48	10.44	0
MW-417	09/22/2020 12:30	8.59	28.9	5.51	8.32	14.04	21.08	4.5
MW-417	09/22/2020 12:35	7.35	96.9	4.64	8.7	14.94	20.66	2.4
MW-417	09/22/2020 12:40	8.4	214.7	3.51	7.85	13.57	20.68	0

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-417	09/22/2020 12:45	9.22	267.3	3.43	7.83	13.53	20.76	0
MW-417	09/22/2020 12:50	9.82	272.5	3.56	8.12	13.97	20.61	0
MW-417	09/22/2020 12:55	10.39	241.3	3.86	8.54	14.65	20.38	0
MW-417	09/22/2020 13:00	10.63	205.7	4.34	8.85	15.13	20.31	0
MW-417	09/22/2020 13:05	10.83	182.8	4.3	9.06	15.47	20.3	0
MW-417	09/22/2020 13:10	11.13	139.4	4.59	9.29	15.85	20.24	0
MW-417	09/22/2020 13:15	11.13	135.8	4.63	9.32	15.87	20.21	0
MW-417	09/22/2020 13:30	10.25	101.8	4.89	9.62	16.36	22.26	0
MW-417	09/22/2020 13:40	9.76	89.3	4.95	9.67	16.46	22.21	NM
MW-417	10/28/2020 13:40	NM	NM	NM	NM	NM	NM	0
MW-417	12/29/2020 12:20	5.77	90.3	6.31	7.86	13.54	8.89	13.8
MW-417	12/29/2020 12:25	3.37	22.7	6.56	7.83	13.57	8.9	14
MW-417	12/29/2020 12:30	3.61	27.9	6.67	7.77	13.47	9.21	13.1
MW-417	12/29/2020 12:35	3.69	28.7	6.69	7.77	13.47	9.3	12.9
MW-417	12/29/2020 12:40	3.78	29.3	6.71	7.79	13.49	9.43	12.3
MW-417	12/29/2020 12:45	3.85	28.3	6.72	7.81	13.52	9.46	12.2
MW-417	12/29/2020 12:50	3.9	28.8	6.72	7.82	13.55	9.35	11.8
MW-417	12/29/2020 12:55	3.94	29.3	6.72	7.82	13.54	9.27	11.7
MW-417	12/29/2020 13:30	3.35	34.5	6.65	7.75	10.55	9.3	10.5
MW-417	12/29/2020 13:40	4.4	29.2	6.68	7.71	12.66	9.5	11.7
MW-417	03/18/2021 09:40	8.22	49.2	5.06	4.58	8.33	9.74	4.7
MW-417	03/18/2021 09:45	4.51	287.2	3.54	4.79	8.583	9.79	6.1
MW-417	03/18/2021 09:50	4.79	311.2	3.51	4.9	8.776	9.68	3.2
MW-417	03/18/2021 09:55	3.47	289.8	3.74	5.29	9.432	9.74	0.9
MW-417	03/18/2021 10:00	2.08	4.37	4.42	5.65	9.982	9.96	0.8
MW-417	03/18/2021 10:05	1.67	178.7	4.6	5.28	10.21	10.03	0.9
MW-417	03/18/2021 10:10	3.02	168.5	4.8	6.12	10.78	10.08	0.6
MW-417	03/18/2021 10:15	4.63	156.1	4.84	6.14	10.86	9.82	0.6
MW-417	03/18/2021 10:20	3.95	135.6	4.93	6.35	11.16	10.56	0.8
MW-417	03/18/2021 10:25	1.93	124.7	4.97	6.4	11.22	10.78	0.4
MW-417	03/18/2021 10:40	1.21	103.5	5.04	6.69	11.68	11.23	0.9
MW-417	03/18/2021 10:55	3.17	91.3	5.17	6.89	11.57	9.81	7.8
MW-417	05/28/2021 10:30	2.64	360	3.43	7.76	13.44	15.42	76.8
MW-417	05/28/2021 10:35	1.37	315	3.72	7.84	13.49	13.09	14.1
MW-417	05/28/2021 10:40	1.22	287.1	3.92	7.9	13.61	14.87	8.3
MW-417	05/28/2021 10:45	0.95	221.4	4.39	8.21	14.09	14.78	1.9
MW-417	05/28/2021 10:50	0.71	203.8	4.49	8.34	14.31	15.71	-0.9
MW-417	05/28/2021 10:55	1.28	189.8	4.53	8.38	14.36	17.52	3.5
MW-417	05/28/2021 11:00	1.15	183.1	4.54	8.39	14.42	18.75	0.1
MW-417	05/28/2021 11:05	2.89	178.9	4.55	8.43	14.47	19.61	2.9
MW-417	05/28/2021 11:10	4.24	173.3	4.59	8.51	14.62	18.83	-6.5
MW-417	05/28/2021 11:15	4.23	159.1	4.7	8.48	14.59	19.21	-4.3
MW-417	09/02/2021 08:45	3.9	262.7	3.32	8.38	14.3	20.12	13.7
MW-417	09/02/2021 08:50	1.14	271.3	3.51	8.59	14.74	19.86	10.6
MW-417	09/02/2021 08:55	0.75	296.2	3.4	8.33	14.34	20.64	7.4
MW-417	09/02/2021 09:00	0.7	296.1	3.39	8.31	14.3	21.4	5.3
MW-417	09/02/2021 09:05	0.71	298.7	3.4	8.31	14.31	22.31	4.4
MW-417	09/02/2021 09:10	0.68	294.6	3.44	8.31	14.33	22.38	4.4
MW-417	09/02/2021 09:15	0.66	292.2	3.46	8.32	14.36	22.25	4.4
MW-417	12/21/2021 13:00	2.71	-11.8	5.17	9.47	16.12	12.53	32
MW-417	12/21/2021 13:05	0.73	9.4	5.12	9.6	16.3	14	22
MW-417	12/21/2021 13:10	0.85	29.3	5	9.51	16.15	14.51	54.2
MW-417	12/21/2021 13:15	1.98	259.8	3.92	8.85	15.13	14.1	54.2
MW-417	12/21/2021 13:20	1.75	280.5	3.79	8.48	14.53	14.19	48.1
MW-417	12/21/2021 13:25	1.16	243.1	4.14	8.56	14.67	14.4	60.3
MW-417	12/21/2021 13:30	1.03	216.8	4.41	8.68	14.84	13.93	59.2
MW-417	12/21/2021 13:35	0.91	187.1	4.62	8.83	15.11	13.48	115.6
MW-417	12/21/2021 13:40	0.75	147.7	4.82	9.11	15.33	13.54	139.4
MW-417	12/21/2021 13:45	0.74	133.6	4.87	9.15	15.6	13.53	115.4
MW-417	02/18/2022 08:35	2.93	295.1	3.18	7.52	13.41	12.04	28.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-417	02/18/2022 08:40	2.38	296	3.4	7.84	13.5	12.26	27.1
MW-417	02/18/2022 08:45	1.8	270.5	3.58	7.93	13.7	12.02	24
MW-417	02/18/2022 08:50	1.32	219.8	4.05	8.14	14.02	11.41	15.9
MW-417	02/18/2022 08:55	1.46	195.3	4.05	8.13	14	11.8	9.9
MW-417	02/18/2022 09:00	1.83	217.5	4.07	8.17	14.05	13.24	10.2
MW-417	02/18/2022 09:05	1.88	219.8	4.09	8.17	14.05	13.31	9.8
MW-417	02/18/2022 09:10	1.87	219.6	4.09	8.18	14.06	13.34	9.7
MW-417	04/27/2022 10:05	4.6	313.6	3.41	9.8	16.45	14.11	10.5
MW-417	04/27/2022 10:10	1.48	295.3	3.74	10.38	17.53	13.34	18.8
MW-417	04/27/2022 10:15	2.08	340.2	3.3	10.03	16.99	14.01	13.7
MW-417	04/27/2022 10:20	2.37	347.6	3.22	9.86	16.72	14.46	10.2
MW-417	04/27/2022 10:25	2.43	352.3	3.2	9.84	16.68	14.58	10.4
MW-417	04/27/2022 10:30	2.46	351	3.21	9.82	16.66	14.61	9.8
MW-417	04/27/2022 10:35	2.47	351	3.22	9.83	16.66	14.66	10
MW-418	05/19/2015 13:51	4.09	142	4.29	0.42	7.69	11.68	10.9
MW-418	05/19/2015 14:41	1.06	81	4.51	0.21	3.99	11.57	2681.8
MW-418	08/18/2015 11:50	6.4	47	5.36	1.09	18.21	21.3	34.2
MW-418	08/18/2015 15:44	2.52	-35	6.67	2.04	32.48	17.54	1651.6
MW-418	10/28/2015 10:28	8.81	129	4.82	0.32	5.779	18.71	25.9
MW-418	10/28/2015 14:00	11.07	-22	5.56	0.2	3.825	17.79	2662.8
MW-418	03/02/2016 10:57	3.69	7	5.07	0.12	2.289	10.39	47.80
MW-418	03/02/2016 13:41	4.80	-56	5.61	0.67	11.720	14.02	2436.10
MW-418	05/18/2016 10:54	13.02	509	4.93	0.15	2.842	12.58	15.30
MW-418	05/18/2016 14:17	1.13	54	6.82	0.94	16.070	13.02	517.90
MW-418	06/07/2016 11:16	0.37	-37	5.13	0.16	3.112	14.47	3053.60
MW-418	06/07/2016 13:58	0.56	63	4.44	0.15	2.926	18.23	17.20
MW-418	08/12/2016 10:53	2.33	124	4.16	0.83	14.240	19.28	16.40
MW-418	08/12/2016 14:48	4.46	-52	6.37	0.98	16.520	18.21	374.70
MW-418	11/15/2016 12:37	2.00	256.00	4.36	0.12	2.340	17.37	25.90
MW-418	11/15/2016 14:48	2.06	-53	6.39	0.24	4.517	17.70	200.00
MW-418	12/07/2016 11:35	3.94	-76	6.33	0.12	2.255	16.42	77.5
MW-418	12/07/2016 12:42	1.66	93	3.29	0.1	1.877	15.04	19
MW-434	10/06/2015 12:55	0.74	46.1	5.53	0.46	0.928	23.74	0.2
MW-434	10/06/2015 13:30	0.99	47.1	6	0.5	0.981	24.32	30.2
MW-434	12/07/2015 13:35	0.98	35	6.03	0.40	0.759	21.25	47.00
MW-434	12/07/2015 14:22	0.92	44	6.04	0.40	0.763	18.04	325.00
MW-434R	04/28/2017 09:10	3.28	652.80	2.77	10.32	17.430	15.32	14.10
MW-434R	04/28/2017 09:35	3.20	694.80	2.90	8.72	14.880	15.48	125.40
MW-434R	04/28/2017 09:45	6.05	654.00	2.89	7.36	12.750	15.4	286.90
MW-434R	08/21/2017 11:10	1.16	288.30	3.02	1.11	2.168	22.64	1.80
MW-434R	08/21/2017 12:55	1.28	282.70	3.27	1.11	2.175	23.83	1.30
MW-434R	08/21/2017 13:20	1.21	279.60	3.43	1.11	2.177	23.79	0.70
MW-434R	10/31/2017 09:15	0.28	621.40	2.74	1.90	3.611	16.74	4.10
MW-434R	10/31/2017 09:50	2.33	569.30	2.86	1.26	2.437	17.29	7.40
MW-434R	10/31/2017 10:10	2.05	613.30	2.80	1.46	2.796	17.05	138.10
MW-434R	02/05/2018 13:35	0.43	565.80	2.70	2.41	5.498	11.65	4.00
MW-434R	02/05/2018 14:15	3.60	538.10	2.78	2.17	4.078	11.51	9.10
MW-434R	02/05/2018 14:35	4.77	464.00	3.62	2.56	5.621	12.38	19.70
MW-434R	08/10/2018 09:30	1.34	44.30	5.12	1.22	2.359	24.74	29.70
MW-434R	08/10/2018 10:10	2.41	77.20	4.77	0.63	1.261	21.47	12.30
MW-434R	08/10/2018 10:20	1.81	563.10	4.19	1.69	3.221	22.34	546.50
MW-434R	11/07/2018 13:15	1.02	431.90	2.16	0.65	1.291	19.13	0.0000
MW-434R	11/07/2018 13:40	1.42	433.60	2.19	0.65	1.266	19.21	0.0000
MW-434R	11/07/2018 14:05	3.36	431.10	2.32	0.65	1.314	19.36	0.0000
MW-434R	02/06/2019 09:20	0.59	130.2	2.81	NM	3.971	12.24	4.21
MW-434R	02/06/2019 10:15	2.94	154.2	2.88	1.89	3.158	12.09	2.32
MW-434R	03/03/2021 11:20	1.66	-16.2	4.6	1.98	3.737	10.76	2.7
MW-434R	03/03/2021 11:30	1.48	-15.4	4.74	1.98	3.725	12.31	5.8
MW-434R	03/04/2022 12:45	1.21	69.5	5.14	0.89	1.75	10.23	307.7
MW-434R	03/04/2022 12:50	0.89	79.8	5.04	0.87	1.71	10.06	6.4

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-434R	03/04/2022 12:55	1	78.9	5.01	0.88	1.718	10.22	44.6
MW-434R	03/04/2022 13:00	1.13	79.2	5.01	0.88	1.723	10.26	107.2
MW-434R	03/04/2022 13:05	1.1	79.4	5.03	0.88	1.729	10.31	40
MW-434R	03/04/2022 13:10	0.9	84.4	5	0.89	1.74	10.75	-8.2
MW-434R	03/04/2022 13:15	0.89	83.7	4.99	0.89	1.741	10.78	-9.6
MW-434R	03/04/2022 13:20	1.15	85.6	4.98	0.89	1.741	10.89	-9.1
MW-434R	03/04/2022 13:25	1.2	86.5	5	0.89	1.746	10.76	-10.1
MW-434R	03/04/2022 13:30	1.22	87	5.04	0.89	1.751	10.61	-10.2
MW-435	10/06/2015 14:07	0.55	213.4	4.01	0.78	1.571	22.62	6.6
MW-435	12/07/2015 13:55	43.20	36	5.60	0.40	0.741	19.50	3.00
MW-435	12/07/2015 14:45	40.10	44	5.59	0.40	0.775	17.94	4.50
MW-435R	05/01/2017 13:25	1.73	212.30	6.57	1.87	3.664	16.61	0.0000
MW-435R	05/01/2017 13:50	2.59	340.40	6.37	2.41	3.492	17.46	4.50
MW-435R	05/01/2017 14:00	2.77	360.20	6.55	2.41	3.417	17.41	58.70
MW-435R	08/23/2017 13:35	2.75	165.90	5.97	0.64	1.147	26.12	0.0000
MW-435R	08/23/2017 14:05	1.97	174.40	5.47	1.48	2.863	26.53	48.20
MW-435R	08/23/2017 14:20	2.48	228.70	5.42	1.31	2.546	25.15	275.50
MW-435R	10/31/2017 11:00	4.07	271.40	6.84	1.02	1.988	15.89	0.0000
MW-435R	10/31/2017 13:10	3.81	207.90	6.51	0.88	1.733	17.88	7.70
MW-435R	10/31/2017 13:25	1.97	192.30	7.06	1.21	2.350	17.5	79.20
MW-435R	02/08/2018 13:00	11.65	84.80	7.76	0.63	1.277	1.72	15.20
MW-435R	02/08/2018 14:15	13.11	111.00	7.65	0.81	1.615	2.8	18.60
MW-435R	02/08/2018 14:35	12.92	120.30	7.78	0.67	1.327	4.99	581.00
MW-435R	05/02/2018 13:05	3.02	66.10	7.17	0.64	1.291	15.28	46.10
MW-435R	05/02/2018 13:50	2.46	83.20	7.26	0.64	1.266	15.21	30.10
MW-435R	05/02/2018 14:05	4.91	80.10	7.14	0.63	1.234	16	163.70
MW-435R	08/10/2018 13:30	2.39	398.40	5.43	1.00	1.957	24.22	44.60
MW-435R	08/10/2018 14:20	1.04	254.20	5.10	1.35	2.623	23.34	17.10
MW-435R	08/10/2018 14:30	1.82	215.30	5.18	1.25	2.423	20.89	1335.80
MW-435R	11/08/2018 13:50	6.84	125.10	6.91	0.33	0.654	16.84	16.90
MW-435R	11/08/2018 14:20	7.87	95.20	7.02	0.45	0.914	17.43	20.50
MW-435R	11/08/2018 14:35	6.89	100.50	6.99	0.46	0.930	17.07	1261.20
MW-435R	02/06/2019 09:15	7.50	10.30	6.77	0.79	1.562	5.66	75.80
MW-435R	02/06/2019 10:15	7.62	49.00	7.18	1.09	2.119	9.75	204.30
MW-435R	02/06/2019 10:25	7.88	52.90	7.22	1.01	2.017	9.64	201.70
MW-435R	03/03/2021 12:50	2.34	-42.8	6.63	5.65	7.58	10.04	25.4
MW-435R	03/03/2021 13:20	1.25	-46.6	6.95	4.33	7.805	9.71	44.8
MW-435R	03/03/2021 13:30	1.78	-45.1	6.99	4.78	8.501	10.48	72.5
MW-435R	03/31/2022 10:30	6.37	-51.8	6.52	2.63	4.87	12.63	381.3
MW-435R	03/31/2022 10:35	6.3	-53.7	6.61	2.6	4.819	12.5	290.6
MW-435R	03/31/2022 10:40	6.25	-54.4	6.65	2.54	4.736	12.34	249.3
MW-435R	03/31/2022 10:45	5.89	-54	6.75	2.43	4.528	11.96	283.7
MW-435R	03/31/2022 10:50	4.92	-56.6	6.76	2.01	3.828	11.65	124.7
MW-435R	03/31/2022 10:55	4.7	-58.7	6.76	1.98	3.711	11.66	114.9
MW-435R	03/31/2022 11:00	43	-59.6	6.76	1.94	3.662	11.62	109.3
MW-435R	03/31/2022 11:05	4.32	-62.5	6.73	1.92	3.625	11.79	124.9
MW-435R	03/31/2022 11:10	3.64	-69.6	6.66	2.07	3.899	11.78	908.5
MW-435R	03/31/2022 11:15	3.8	-68.7	6.66	2.13	3.998	11.95	394.5
MW-436	12/07/2015 15:00	0.0000	113	5.01	0.40	0.821	18.30	25.50
MW-436	12/07/2015 15:24	0.0000	110	4.96	0.40	0.808	18.05	27.40
MW-436R	05/03/2017 09:00	0.71	588.70	5.26	43.46	64.240	17.87	54.00
MW-436R	05/03/2017 09:40	2.51	658.00	1.73	78.52	106.900	16.89	311.70
MW-436R	05/03/2017 10:00	2.28	718.20	4.75	86.85	116.400	15.99	1216.60
MW-436R	08/22/2017 09:30	0.69	398.30	5.45	1.55	2.989	25.23	75.30
MW-436R	08/22/2017 13:45	0.53	404.50	5.30	1.47	2.888	26.56	65.70
MW-436R	11/01/2017 10:55	1.65	241.10	6.14	1.26	2.395	15.32	22.60
MW-436R	11/01/2017 11:25	5.15	344.70	6.04	1.86	3.510	16.71	23.70
MW-436R	11/01/2017 11:40	5.42	474.40	6.12	1.96	3.690	16.48	207.00
MW-436R	02/07/2018 09:30	5.49	215.30	7.02	0.67	1.137	3.21	51.40
MW-436R	02/07/2018 10:10	5.63	240.40	6.40	2.16	4.972	3.68	107.40

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-436R	02/07/2018 10:35	6.06	261.80	6.18	2.85	3.321	3.8	638.20
MW-436R	05/03/2018 13:15	0.90	254.10	5.70	2.02	3.800	19.03	26.00
MW-436R	05/03/2018 14:00	3.61	231.40	5.92	2.01	3.926	17.99	11.60
MW-436R	05/03/2018 14:15	2.42	221.60	5.88	2.00	3.814	18.38	24.90
MW-436R	08/15/2018 13:25	6.94	46.80	6.38	0.37	0.715	25.96	143.70
MW-436R	08/15/2018 14:25	1.24	10.20	5.88	1.49	2.890	24.74	145.20
MW-436R	08/15/2018 14:45	1.10	19.70	6.02	1.36	2.639	24.03	1014.90
MW-436R	11/19/2018 01:30	1.42	32.70	6.50	0.76	1.498	15.49	81.40
MW-436R	11/19/2018 01:40	0.68	57.60	6.51	0.79	1.558	16.19	86.90
MW-436R	11/19/2018 12:45	1.63	-9.90	6.55	0.68	1.351	15.21	109.40
MW-436R	02/11/2019 10:55	3.55	101.80	7.53	0.22	0.464	10.27	168.20
MW-436R	02/11/2019 11:20	6.73	142.50	7.65	0.25	0.522	9.07	102.30
MW-436R	02/11/2019 11:35	6.75	141.70	7.66	0.25	0.524	9.04	113.60
MW-436R	02/17/2020 09:45	6.11	110.4	7.23	0.43	0.546	9.33	122.5
MW-436R	03/11/2021 14:35	2.93	-94.6	7.77	0.88	1.733	11.52	168.9
MW-436R	03/11/2021 15:20	2.62	-30.6	7.1	0.98	1.907	13.46	136
MW-436R	03/11/2021 15:35	1.88	-46.1	6.93	0.98	1.921	14.2	140.3
MW-436R	05/24/2021 13:05	5.97	220.4	5.45	3.3	6.028	19.5	153.3
MW-436R	05/24/2021 13:10	1.38	314.4	4.73	3.38	6.175	17.36	225.5
MW-436R	05/24/2021 13:15	1.32	269.5	4.92	3.19	5.866	18.59	156.8
MW-436R	05/24/2021 13:20	1.47	242	4.99	3.11	5.714	19.61	98.4
MW-436R	05/24/2021 13:25	1.57	221.1	5.03	3.07	5.659	20.34	76.1
MW-436R	05/24/2021 13:30	1.69	155.2	5.09	3.08	5.669	21.07	52.4
MW-436R	05/24/2021 13:35	1.79	131.1	5.1	3.11	5.726	21.71	46.5
MW-436R	05/24/2021 13:40	1.81	123.7	5.13	3.14	5.791	21.92	43.7
MW-436R	05/24/2021 13:45	1.87	120.5	5.12	3.2	5.88	21.97	42
MW-436R	05/24/2021 13:50	1.84	114.7	5.11	3.27	5.951	21.97	42.6
MW-436R	09/22/2021 13:00	2.06	-4.8	5.72	3.63	6.623	25.06	224.9
MW-436R	09/22/2021 13:05	1.59	27.6	5.55	3.74	6.839	24.84	179.8
MW-436R	09/22/2021 13:10	2.62	23.6	5.56	3.68	6.749	25.88	160.4
MW-436R	09/22/2021 13:15	2.52	18.4	5.57	3.63	6.662	26.08	87
MW-436R	09/22/2021 13:20	1.77	8.5	5.59	3.6	6.604	26.17	64.3
MW-436R	09/22/2021 13:25	1.43	-3.1	5.62	3.52	6.469	26.12	50.2
MW-436R	09/22/2021 13:30	2.15	-17.9	5.65	3.41	6.276	25.95	44.8
MW-436R	09/22/2021 13:35	2.11	-19.9	5.69	3.4	6.251	25.91	43.4
MW-436R	09/22/2021 13:40	2.03	-21.4	5.72	3.4	6.244	25.96	42.5
MW-436R	03/30/2022 12:35	1.81	157.5	3.78	3.71	6.865	10.63	199.9
MW-436R	03/30/2022 12:40	1.03	167.1	3.77	3.98	7.161	10.69	201.4
MW-436R	03/30/2022 12:45	0.57	135	3.86	3.66	6.721	10.78	159.9
MW-436R	03/30/2022 12:50	0.54	116.9	3.96	3.6	6.505	10.75	149.2
MW-436R	03/30/2022 12:55	0.55	41.6	4.29	2.73	5.057	10.77	133.3
MW-436R	03/30/2022 13:00	0.54	35.9	4.29	2.72	5.038	10.76	126.2
MW-436R	03/30/2022 13:05	0.52	31	4.29	2.72	5.043	10.74	121
MW-436R	03/30/2022 13:10	0.49	18.9	4.26	2.99	5.485	10.95	78.1
MW-436R	03/30/2022 13:15	0.48	15.7	4.22	3.22	5.895	10.78	49.4
MW-436R	03/30/2022 13:20	0.49	3.9	4.18	3.41	6.233	10.77	36.1
MW-438	10/06/2015 15:10	0.45	-5.4	6	0.52	1.061	24.33	23.7
MW-438	10/06/2015 15:30	0.59	-40	6.05	0.51	1.017	24.22	75
MW-438	12/08/2015 13:40	0.0000	-70	6.71	0.40	0.846	16.32	30.70
MW-438	12/08/2015 14:30	0.0000	-54	6.71	0.40	0.833	16.21	389.00
MW-438	05/01/2017 10:30	3.00	30.10	6.55	1.19	2.300	14.96	6.70
MW-438	05/01/2017 10:50	6.23	69.10	6.66	1.27	2.453	14.26	41.40
MW-438	05/01/2017 11:00	1.93	31.60	6.50	1.30	2.501	14.24	75.20
MW-438	08/17/2017 10:10	1.64	-202.20	6.84	0.85	1.708	25.82	0.0000
MW-438	10/30/2017 13:35	1.21	0.20	6.55	0.18	0.368	17.74	13.70
MW-438	10/30/2017 14:10	4.53	-60.20	6.69	0.46	0.920	17.83	20.50
MW-438	10/30/2017 14:30	4.11	-90.50	6.86	0.57	0.993	18.14	59.70
MW-438	02/03/2018 13:40	4.97	-128.20	6.92	0.79	1.584	5.31	1.70
MW-438	02/03/2018 14:05	7.12	-101.20	6.98	0.90	1.789	5.07	82.00
MW-438	02/03/2018 14:30	7.89	-84.30	7.89	0.98	1.821	5.46	174.20

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-438	05/02/2018 10:05	2.12	-111.30	6.61	0.45	0.941	14.26	17.90
MW-438	05/02/2018 10:30	2.36	-121.40	6.73	0.46	0.931	14.12	6.90
MW-438	05/02/2018 10:45	4.09	-109.30	6.21	0.45	1.121	14.36	112.10
MW-438	08/09/2018 13:45	7.92	-57.30	6.15	0.65	1.303	24.63	37.30
MW-438	08/09/2018 14:25	7.89	-54.10	6.09	0.63	1.270	24.64	4.80
MW-438	08/09/2018 14:35	5.10	-56.40	5.86	0.63	1.262	23.08	438.10
MW-438	11/07/2018 10:25	0.75	-101.50	6.28	0.24	0.502	19.16	0.0000
MW-438	11/07/2018 10:55	0.51	-106.40	6.36	0.24	0.533	19.03	0.0000
MW-438	11/07/2018 11:10	2.45	-88.60	6.51	0.29	0.512	19.13	3.90
MW-438	02/06/2019 12:25	0.53	3	7	NM	0.837	9.1	8.9
MW-438	02/06/2019 13:10	1.22	-31.612	7.02	0.41	0.837	9.49	7.5
MW-438	03/03/2021 12:10	0.6	-57.3	6.38	0.94	1.852	8.63	8.2
MW-438	03/03/2021 12:20	1.68	-61.2	6.51	1.07	2.102	9.99	68.7
MW-439	12/07/2015 13:10	2.24	37	6.92	0.30	0.606	18.83	0.0000
MW-439	12/07/2015 13:35	2.15	72	6.90	0.30	0.586	19.71	0.0000
MW-439	03/01/2016 11:25	7.11	-64	6.62	0.02	0.338	9.16	2884.60
MW-439	03/01/2016 13:56	2.33	-95	6.88	0.04	0.891	11.90	1579.20
MW-439	08/24/2016 09:47	1.76	-42	6.24	0.04	0.765	22.67	774.00
MW-439	08/24/2016 11:16	2.64	-127	7.36	0.03	0.643	25.75	997.20
MW-439	04/27/2017 11:15	2.50	-58.80	7.26	0.50	1.001	15.25	3.10
MW-439	04/27/2017 11:40	4.45	-79.80	7.15	0.53	1.055	16.01	117.90
MW-439	04/27/2017 11:50	3.87	-90.40	7.33	0.54	1.067	16.44	433.70
MW-439	08/04/2017 09:11	3.58	111.00	7.14	NM	1.450	26.46	45.05
MW-439	08/04/2017 09:12	1.26	125.00	7.60	NM	1.013	20.54	258.20
MW-439	08/04/2017 10:01	3.45	115.00	7.02	NM	1.813	23.46	389.10
MW-439	11/02/2017 10:45	5.41	110.00	7.28	1.03	17.230	20.04	187.00
MW-439	11/02/2017 11:05	1.10	95.00	7.81	0.15	2.935	18.16	72.78
MW-439	11/02/2017 11:55	3.61	144.00	7.64	0.15	2.790	18.41	916.50
MW-439	02/05/2018 08:59	8.32	274	8.17	0.021	0.431	7.36	16.4
MW-439	02/05/2018 09:01	5.97	265	8.42	0.021	0.435	7.31	8.6
MW-439	02/05/2018 09:03	5.52	254	8.69	0.021	0.436	6.92	9.2
MW-439	02/05/2018 09:05	5.23	250	8.83	0.021	0.436	7.12	7.4
MW-439	02/05/2018 09:07	5.07	243	9.02	0.021	0.438	6.99	8.4
MW-439	02/05/2018 09:09	5.16	236	9.3	0.021	0.441	6.63	8
MW-439	02/05/2018 09:11	5.05	232	9.46	0.021	0.443	6.51	10.1
MW-439	02/05/2018 09:13	5.06	228	9.56	0.021	0.442	6.56	8.5
MW-439	02/05/2018 09:15	5.11	224	9.67	0.021	0.444	6.57	10.9
MW-439	02/05/2018 09:17	5.16	219	9.79	0.021	0.451	6.51	11.8
MW-439	02/05/2018 09:18	5.23	214	9.91	0.021	0.449	6.28	13.1
MW-439	02/05/2018 09:20	5.15	210	9.99	0.021	0.447	6.02	15.1
MW-439	02/05/2018 09:22	5.14	209	9.98	0.021	0.447	6.2	13.8
MW-439	02/05/2018 09:24	5.12	208	9.99	0.021	0.442	6.3	13.1
MW-439	02/05/2018 09:26	5.14	206	10.01	0.021	0.441	6.36	14.4
MW-439	02/07/2018 09:26	5.14	206.00	10.01	0.02	0.442	6.24	14.44
MW-439	02/07/2018 09:51	10.58	264.00	7.65	0.03	0.585	9.86	1889.30
MW-439	02/07/2018 09:54	10.34	313.00	7.52	0.02	0.369	5.74	95.90
MW-439	05/07/2018 12:05	5.69	1	7.31	0.031	0.630	22.32	26.1
MW-439	05/07/2018 12:07	2.86	-105	8.09	0.032	0.643	18.13	6.1
MW-439	05/07/2018 12:09	1.71	-155	8.42	0.032	0.645	18.09	5.3
MW-439	05/07/2018 12:11	1.45	-183	8.57	0.032	0.648	18.15	5.5
MW-439	05/07/2018 12:13	1.27	-199	8.64	0.032	0.647	18.17	7.4
MW-439	05/07/2018 12:16	1.19	-209	8.68	0.032	0.650	18.33	5.9
MW-439	05/07/2018 12:18	1.13	-217	8.71	0.032	0.648	18.68	7.2
MW-439	05/07/2018 12:20	1.15	-220	8.74	0.032	0.656	19.04	5.9
MW-439	05/07/2018 12:22	1.22	-219	8.77	0.033	0.664	19.26	5.5
MW-439	05/07/2018 12:24	1.4	-213	8.78	0.033	0.664	19.41	4.4
MW-439	05/07/2018 12:26	1.56	-209	8.81	0.033	0.670	19.68	4.5
MW-439	05/07/2018 12:29	1.67	-208	8.82	0.033	0.675	19.47	5.1
MW-439	05/07/2018 12:31	1.67	-209	8.84	0.033	0.673	19.41	4.5
MW-439	05/07/2018 12:33	1.63	-212	8.87	0.034	0.684	19.48	4.4

Appendix B4 Central Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-439	05/07/2018 12:35	1.54	-214	8.87	0.034	0.683	19.7	5.1
MW-439	05/07/2018 12:37	1.49	-217	8.9	0.034	0.686	19.71	5.2
MW-439	05/07/2018 12:39	1.45	-221	8.93	0.034	0.681	19.5	5.2
MW-439	05/08/2018 11:10	7.74	-101.00	7.39	0.04	0.782	14.5	436.10
MW-439	05/08/2018 12:39	1.45	-221.00	8.93	0.03	0.683	19.38	5.17
MW-439	05/08/2018 13:26	1.63	-121.00	8.13	0.03	0.669	14.47	746.00
MW-439	08/14/2018 10:59	5.26	155.00	7.80	0.03	0.551	26.33	34.90
MW-439	08/14/2018 14:50	0.21	70.00	8.27	0.04	0.795	25.8	3.04
MW-439	08/14/2018 15:13	0.35	-78.00	7.52	0.04	0.903	22.61	3655.60
MW-439	11/28/2018 10:45	0.31	-27.70	7.46	0.30	0.619	12.92	19.10
MW-439	11/28/2018 10:55	0.72	-35.60	7.61	0.27	0.544	12	20.60
MW-439	11/28/2018 11:05	1.05	-47.20	7.61	0.27	0.549	10.24	259.20
MW-439	02/15/2019 13:45	8.69	10.1	8.31	NM	0.314	7.95	33.9
MW-439	02/15/2019 14:15	9.98	11.4	8.14	0.19	0.399	7.98	137.7
MW-439	02/04/2020 10:40	1.34	204.3	7.71	0.2	0.421	8.33	10.4
MW-439	03/04/2021 09:45	6.41	96.5	7.17	0.17	0.346	7.87	35.2
MW-439	03/04/2021 10:00	7.21	97.4	7.28	0.16	0.328	8.51	122.5
MW-439	03/04/2022 11:10	1.18	-10.9	7.71	0.27	0.559	8.9	8.1
MW-439	03/04/2022 11:15	0.94	-16.5	7.64	0.27	0.548	8.8	0
MW-439	03/04/2022 11:20	0.99	-16.3	7.59	0.27	0.547	8.96	-1.4
MW-439	03/04/2022 11:25	0.98	-16.5	7.6	0.27	0.55	8.97	5.4
MW-439	03/04/2022 11:30	0.77	-16.6	7.58	0.27	0.55	8.9	10.3
MW-439	03/04/2022 11:35	0.87	-11.9	7.59	0.26	0.542	9.44	21.8
MW-439	03/04/2022 11:40	0.93	2.9	7.08	0.25	0.522	9.61	17.8
MW-439	03/04/2022 11:45	0.93	13.7	7.09	0.25	0.517	9.78	5
MW-439	03/04/2022 11:50	0.95	15.1	7.1	0.25	0.515	9.83	2.7
MW-439	03/04/2022 11:55	0.91	18.7	7.1	0.25	0.512	10.6	-4.2
MW-440	12/08/2015 11:00	9.03	163	5.36	0.0000	0.334	14.91	440.00
MW-440	04/28/2017 10:45	0.28	-3.30	5.25	0.34	0.722	16.91	88.10
MW-440	04/28/2017 11:15	4.07	146.60	5.29	0.42	0.860	16.49	12.50
MW-440	04/28/2017 11:30	5.07	72.10	5.47	0.41	0.816	15.54	216.10
MW-440	08/21/2017 10:00	1.99	-73.90	6.28	0.44	0.931	24.39	78.90
MW-440	08/21/2017 10:15	1.65	-70.30	6.32	0.44	0.901	24.41	68.70
MW-440	08/21/2017 14:35	1.43	-69.70	6.34	0.43	0.887	28.38	28.10
MW-440	11/02/2017 09:40	0.77	-28.60	6.22	0.27	0.538	18.95	140.70
MW-440	11/02/2017 10:25	3.71	-23.10	6.07	0.30	0.614	18.71	196.70
MW-440	11/02/2017 10:50	5.55	24.10	5.98	0.31	0.630	19.4	642.20
MW-440	02/06/2018 09:35	8.27	212.20	6.48	0.25	0.499	3.84	60.20
MW-440	02/06/2018 09:40	5.99	22.30	6.90	0.28	0.573	3.3	89.30
MW-440	02/06/2018 09:55	9.50	48.70	6.51	0.25	0.510	4.5	1484.00
MW-440	08/14/2018 08:35	3.52	110.40	6.37	0.08	0.176	26.1	62.40
MW-440	08/14/2018 09:40	2.67	150.70	6.46	0.17	0.355	25.52	116.80
MW-440	08/14/2018 09:55	2.52	154.80	7.11	0.17	0.368	25.5	194.20
MW-440	11/08/2018 09:20	1.10	105.20	5.78	0.04	0.086	18.1	19.30
MW-440	11/08/2018 09:50	4.99	92.50	6.05	0.05	0.114	18.42	58.70
MW-440	11/08/2018 10:05	3.95	69.80	5.96	0.06	0.124	18.69	1318.90
MW-440	02/04/2020 09:25	1.17	168.7	6.16	0.18	0.371	9.07	21.1
MW-440	03/05/2021 12:25	2.25	41.5	6.21	0.1	0.215	9.47	98
MW-440	03/05/2021 12:35	4.78	48.9	6.23	0.1	0.216	9.85	651.5
MW-440	06/01/2021 13:05	2.46	59.3	6.58	0.09	0.198	22.17	57.5
MW-440	06/01/2021 13:10	1.81	131.2	6.13	0.09	0.196	22.22	67.9
MW-440	06/01/2021 13:15	1.73	145.4	5.98	0.09	0.197	22.57	56.3
MW-440	06/01/2021 13:20	1.66	155.8	5.86	0.09	0.199	22.5	60.9
MW-440	06/01/2021 13:25	1.52	164	5.76	0.1	0.204	22.26	48.7
MW-440	06/01/2021 13:30	1.4	173.9	5.6	0.1	0.213	22.3	59.1
MW-440	06/01/2021 13:35	1.26	177.8	5.53	0.1	0.22	22.35	76.3
MW-440	06/01/2021 13:40	1.24	179.6	5.49	0.11	0.226	22.01	92.1
MW-440	06/01/2021 13:45	1.12	179.3	5.45	0.11	0.228	21.73	82.1
MW-440	06/01/2021 13:50	0.99	177	5.45	0.11	0.228	21.41	62.4
MW-440	03/30/2022 09:05	2.67	-20.3	6.93	0.44	0.894	8.97	1046

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-440	03/30/2022 09:10	1.34	-19.8	6.35	0.43	0.876	8.99	1125.4
MW-440	03/30/2022 09:15	1.01	11.3	5.43	0.26	0.535	8.64	1153.6
MW-440	03/30/2022 09:20	1.07	9.6	5.8	0.24	0.507	8.65	1142.1
MW-440	03/30/2022 09:25	3.78	24.8	5.82	0.2	0.409	8.29	524
MW-440	03/30/2022 09:30	3.57	28	5.87	0.2	0.411	8.31	403.6
MW-440	03/30/2022 09:35	3.08	29.8	5.82	0.21	0.441	8.34	471
MW-440	03/30/2022 09:40	2.94	27.2	5.99	0.22	0.462	8.52	663.1
MW-440	03/30/2022 09:45	2.2	7	6.08	0.29	0.591	8.69	475.2
MW-440	03/30/2022 09:50	2.15	4.7	6.09	0.29	0.595	8.87	449.8
MW-441	12/09/2015 10:05	0	63	5.91	0.6	1.14	16.9	51.6
MW-441	12/09/2015 10:45	7.95	195	5.43	0.5	1.07	14.92	0
MW-441R	05/02/2017 10:55	2.78	534.90	3.83	7.11	12.350	17.32	162.20
MW-441R	05/02/2017 11:20	2.91	537.20	3.24	7.27	12.620	17.49	282.40
MW-441R	05/02/2017 11:30	3.66	548.90	3.22	7.32	12.700	15.52	1250.00
MW-441R	08/22/2017 10:40	0.89	-14.50	5.98	4.95	8.890	26.17	17.20
MW-441R	08/22/2017 11:15	1.63	-15.30	6.12	5.32	9.321	26.62	23.40
MW-441R	08/22/2017 11:30	1.49	-16.50	6.10	5.79	10.300	26.34	21.10
MW-441R	10/30/2017 10:15	0.46	62.40	5.76	1.03	2.008	15.66	10.50
MW-441R	10/30/2017 10:55	4.25	-33.80	5.90	2.70	4.999	16.95	66.20
MW-441R	10/30/2017 11:15	3.13	-7.80	5.89	3.30	6.042	18.04	1191.50
MW-441R	02/07/2018 09:25	4.18	-27.50	6.39	3.61	6.513	6.17	4.20
MW-441R	02/07/2018 10:25	5.19	-43.70	6.41	3.51	6.487	4.17	29.80
MW-441R	02/07/2018 10:45	6.87	-60.80	6.87	4.60	6.128	4.62	54.10
MW-441R	05/03/2018 10:20	3.02	-40.00	6.09	2.65	4.865	16.43	23.10
MW-441R	05/03/2018 11:00	5.43	-51.50	6.28	2.81	5.202	18.3	30.90
MW-441R	05/03/2018 11:20	4.12	-36.90	6.39	2.81	5.107	17.49	114.20
MW-441R	08/14/2018 12:40	0.49	-2.50	6.04	3.81	7.226	25.74	32.80
MW-441R	08/14/2018 13:20	1.05	1.70	5.90	4.27	7.392	24.63	85.60
MW-441R	08/14/2018 13:35	1.18	2.10	5.97	4.22	7.397	24.51	182.20
MW-441R	11/09/2018 09:25	10.23	-40.70	6.15	2.57	4.776	16.52	41.40
MW-441R	11/09/2018 10:00	7.41	-36.90	6.16	2.70	4.995	16.45	97.80
MW-441R	11/09/2018 10:10	6.52	-31.20	6.17	2.75	4.822	16.55	89.20
MW-441R	02/03/2020 13:40	4.36	19.6	5.99	2.65	4.915	10.25	16.4
MW-441R	03/05/2021 10:25	2.36	-70.7	5.95	3.83	6.966	9.05	24.3
MW-441R	03/05/2021 10:35	1.67	-73.3	5.97	3.92	7.107	10.11	248.8
MW-441R	06/02/2021 13:30	2.11	-58	6.05	4.5	8.084	22.34	71.8
MW-441R	06/02/2021 13:35	1.31	-58.4	6.06	4.54	8.146	22.42	61.2
MW-441R	06/02/2021 13:40	0.81	-54.4	6.06	4.56	8.223	22.35	45.2
MW-441R	06/02/2021 13:45	0.65	-53.7	6.05	4.5	8.1	23.18	51.1
MW-441R	06/02/2021 13:50	0.6	-54.4	6.06	4.42	7.969	23.1	63.3
MW-441R	06/02/2021 13:55	0.6	-55.4	6.07	4.34	7.827	22.37	53.3
MW-441R	06/02/2021 14:00	0.57	-56.1	6.07	4.3	7.759	22.95	57
MW-441R	06/02/2021 14:05	0.55	-55.6	6.08	4.28	7.734	22.85	50.12
MW-441R	06/02/2021 14:10	0.6	-54.8	6.08	4.3	7.759	22.66	55.9
MW-441R	06/02/2021 14:15	0.55	-54.2	6.08	4.31	7.787	22.73	57.2
MW-441R	01/10/2022 09:50	1.81	-71.6	6.74	4.73	8.466	7.36	37.3
MW-441R	01/10/2022 09:55	0.72	-66.5	6.25	4.96	8.892	7.71	31.4
MW-441R	01/10/2022 10:00	0.49	-65.3	6.17	4.95	8.85	8.96	30.2
MW-441R	01/10/2022 10:05	0.46	-66.4	6.15	5.08	9.078	8.64	27.7
MW-441R	01/10/2022 10:10	0.44	-67.2	6.15	5.04	8.992	9.4	24.9
MW-441R	01/10/2022 10:15	0.46	-69.3	6.17	4.98	8.897	9.07	25.1
MW-441R	01/10/2022 10:20	0.48	-75.2	6.15	4.94	8.88	9.01	26.5
MW-441R	01/10/2022 10:25	0.47	-77.7	6.14	4.96	8.815	8.96	25.8
MW-441R	03/31/2022 09:15	1.08	-111.7	6.01	3.48	6.345	12.5	87.4
MW-441R	03/31/2022 09:20	0.92	-116.3	5.97	3.47	6.323	12.42	86.2
MW-441R	03/31/2022 09:25	0.83	-129.4	6.01	3.27	5.994	12.01	52.2
MW-441R	03/31/2022 09:30	0.8	-131.5	6.03	3.26	5.965	11.93	36.5
MW-441R	03/31/2022 09:35	0.75	-134.3	6.06	3.33	6.077	11.62	18.1
MW-441R	03/31/2022 09:40	0.75	-134.2	6.06	3.34	6.107	11.64	18.7
MW-441R	03/31/2022 09:45	0.75	-135.7	6.06	3.36	6.138	11.69	17.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-509	10/10/2016 11:05	6.35	71.5	5.45	0.27	0.559	21.73	13.80
MW-509	10/10/2016 13:30	1.43	-27	5.73	0.33	0.674	22.34	694.60
MW-509	11/10/2016 12:45	5.95	118.3	5.13	0.18	0.375	17.56	9.8
MW-509	11/10/2016 13:11	5.14	119.1	5.12	0.19	0.392	17.7	65.7
MW-509	05/02/2017 08:55	0.41	88.70	5.37	0.33	0.668	15.47	6.10
MW-509	05/02/2017 09:35	37.30	176.60	4.77	0.36	0.726	15.94	15.10
MW-509	05/02/2017 09:45	53.50	181.30	4.44	0.36	0.732	14.27	194.00
MW-509	08/21/2017 14:10	3.46	-22.50	6.20	0.28	0.580	27.31	26.40
MW-509	08/22/2017 09:20	0.94	-104.00	6.85	0.35	1.879	24.07	36.30
MW-509	08/22/2017 09:35	3.53	108.30	4.89	0.33	0.683	23.42	250.60
MW-509	11/02/2017 12:50	3.47	69.90	5.97	0.36	0.691	18.12	8.90
MW-509	11/02/2017 13:10	5.12	61.40	5.91	0.37	0.711	18.32	112.70
MW-509	11/02/2017 13:40	0.78	60.20	5.67	0.28	0.550	17.78	3.40
MW-509	02/07/2018 13:35	0.16	33.00	5.95	0.26	0.578	3.52	14.00
MW-509	02/07/2018 14:05	1.49	79.60	5.76	0.26	0.570	3.28	115.00
MW-509	02/07/2018 14:25	1.90	101.90	5.41	0.28	0.573	4.81	360.10
MW-509	11/08/2018 10:55	0.86	6.84	5.61	0.12	0.299	16.68	0.40
MW-509	11/08/2018 11:20	3.46	98.70	5.18	0.12	0.261	18.93	18.00
MW-509	11/08/2018 11:35	4.12	93.70	5.26	0.13	0.269	18.37	251.20
MW-509	03/05/2021 10:18	5.79	94.3	6.01	0.3	0.62	9.34	8.1
MW-509	03/05/2021 10:30	7.67	78.4	6.05	0.16	0.328	8.04	60.5
MW-509	06/03/2021 12:50	2.52	-42.4	6.28	0.27	0.557	20.4	75.6
MW-509	06/03/2021 12:55	1.8	-43.9	6.25	0.27	0.551	20.26	66.8
MW-509	06/03/2021 13:00	1.35	-45.2	6.25	0.27	0.549	20.23	66
MW-509	06/03/2021 13:05	1.2	-45.9	6.26	0.26	0.547	20.34	69.4
MW-509	06/03/2021 13:10	1.09	-42.6	6.24	0.26	0.546	20.2	58.9
MW-509	06/03/2021 13:15	1.05	-39.3	6.21	0.27	0.548	20.12	53.2
MW-509	06/03/2021 13:20	1.01	-37.8	6.2	0.27	0.554	20.11	46.5
MW-509	06/03/2021 13:25	0.98	-38	6.21	0.27	0.561	20.18	32.3
MW-509	06/03/2021 13:30	0.94	-38.2	6.21	0.27	0.564	20.08	35.4
MW-509	06/03/2021 13:35	0.99	-38.2	6.21	0.27	0.562	19.98	35.5
MW-513	08/14/2017 10:25	4.08	-30.60	6.41	0.21	0.444	19.84	49.80
MW-513	08/14/2017 14:00	4.31	-42.00	6.57	0.33	0.674	21.6	103.20
MW-513	08/14/2017 14:25	5.38	-37.50	6.57	0.30	0.622	16.67	217.70
MW-513	11/16/2017 10:45	1.12	-68.80	6.38	0.23	0.472	11.43	44.20
MW-513	11/16/2017 14:10	1.79	123.30	7.96	0.41	0.828	13.12	391.50
MW-513	11/16/2017 14:35	2.04	-73.60	6.47	0.32	0.646	11.05	323.80
MW-513	05/10/2018 10:40	1.91	-18.80	6.22	0.19	0.386	16.4	17.20
MW-513	05/10/2018 11:35	2.72	-40.70	6.34	0.23	0.481	23.32	88.00
MW-513	05/10/2018 12:00	3.13	-50.10	6.29	0.21	0.480	20.17	121.80
MW-513	12/10/2018 13:35	0.82	-66.80	6.38	0.29	0.602	12.57	147.30
MW-513	12/10/2018 15:15	0.96	-62.80	6.54	0.36	0.740	14.38	126.90
MW-513	12/10/2018 15:35	0.72	-53.20	6.61	0.42	0.859	13.34	126.80
MW-513	04/22/2019 10:40	0.37	-3.7	6.19	NM	0.387	15.43	200.6
MW-513	04/22/2019 14:00	3.28	-14.7	6.34	0.21	0.427	15.18	47.2
MW-513	11/01/2019 08:35	10.42	204	7.45	NM	0.047	7.84	168.1
MW-513	11/01/2019 08:40	7.36	198.5	7.13	NM	0.036	8.49	89.5
MW-513	11/01/2019 08:45	6.43	187.1	6.8	NM	0.036	8.14	52.1
MW-513	11/01/2019 08:50	6.11	167.4	6.71	NM	0.037	8.57	44.1
MW-513	11/01/2019 08:55	5.32	141.4	6.52	NM	0.042	8.56	69.9
MW-513	11/01/2019 09:00	4.63	113.7	6.5	NM	0.445	8.83	52.3
MW-513	11/01/2019 09:05	4.12	91.4	6.38	NM	0.053	8.55	37.6
MW-513	11/01/2019 09:10	3.8	75.7	6.29	NM	0.056	8.62	27
MW-513	11/01/2019 09:15	3.63	62.3	6.32	NM	0.058	8.62	26.7
MW-513	11/01/2019 09:20	3.41	54.2	6.35	NM	0.06	8.98	26.7
MW-513	11/01/2019 11:20	1.35	5	6.32	0.04	0.077	11.19	422.6
MW-513	11/01/2019 11:40	1.65	6.5	6.27	0.04	0.078	10.88	517.9
MW-513	05/07/2020 09:25	2.5	-28.3	6.36	NM	0.364	14.88	NM
MW-513	05/07/2020 10:30	7.25	-63.3	6.4	0.23	0.483	17.79	23.9
MW-513	06/22/2021 11:45	8.42	122.1	7.17	0.19	0.394	17.94	62.9

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-513	06/22/2021 11:50	0.94	-8.7	5.9	0.19	0.397	17.68	75
MW-513	06/22/2021 11:55	0.91	-13.4	5.99	0.19	0.392	18.16	104.8
MW-513	06/22/2021 12:00	0.91	-18.3	6.13	0.18	0.382	19.16	63.4
MW-513	06/22/2021 12:05	0.91	-17.5	6.13	0.18	0.377	19.81	85.2
MW-513	06/22/2021 12:10	0.89	-15.2	6.15	0.18	0.37	20.47	67.4
MW-513	06/22/2021 12:15	0.85	-14.2	6.12	0.18	0.366	20.81	52.6
MW-513	06/22/2021 12:20	0.79	-13.2	6.13	0.17	0.363	21.11	42.5
MW-513	06/22/2021 12:25	0.69	-12	6.12	0.17	0.36	20.62	52.6
MW-513	06/22/2021 12:30	0.61	-7.9	6.06	0.17	0.356	19.61	45
MW-513	06/22/2021 12:35	0.53	0.8	5.89	0.17	0.352	18.94	75.6
MW-513	06/22/2021 12:40	0.55	1.6	5.88	0.17	0.35	18.9	74.7
MW-513	06/22/2021 12:45	0.54	-0.8	5.9	0.17	0.348	18.86	70.9
MW-513	08/31/2021 11:45	4.05	12.2	6.13	0.22	0.464	23.69	57.3
MW-513	08/31/2021 11:50	1.25	-29.5	6.23	0.22	0.454	19.07	58.7
MW-513	08/31/2021 11:55	1.05	-37.6	6.22	0.22	0.454	20.64	59.5
MW-513	08/31/2021 12:00	1	-41.3	6.23	0.22	0.454	20.92	49.9
MW-513	08/31/2021 12:05	0.96	-43.4	6.21	0.22	0.455	21.1	40.4
MW-513	08/31/2021 12:10	0.94	-44.7	6.22	0.22	0.453	21.05	39.4
MW-513	08/31/2021 12:15	0.92	-46.1	6.21	0.22	0.452	21.12	38.5
MW-513	01/11/2022 10:25	0.85	-23.9	6.4	0.21	0.434	13.22	47.6
MW-513	01/11/2022 10:30	0.63	-28.8	6.46	0.22	0.444	12.81	47.8
MW-513	01/11/2022 10:35	0.54	-31.2	6.25	0.22	0.449	12.35	43.7
MW-513	01/11/2022 10:40	0.52	-32.9	6.25	0.21	0.443	12.17	46.2
MW-513	01/11/2022 10:45	0.5	-33.8	6.22	0.21	0.438	12.13	40.3
MW-513	01/11/2022 10:50	0.47	-34.8	6.23	0.21	0.435	12.07	38.7
MW-513	01/11/2022 10:55	0.45	-35.9	6.22	0.21	0.433	12.16	37.7
MW-513	01/11/2022 11:00	0.44	-36.3	6.21	0.21	0.43	12.12	37.1
MW-513	03/21/2022 13:20	2.28	-25	6.26	0.2	0.409	16.47	94.1
MW-513	03/21/2022 13:25	0.96	-27.3	6.07	0.22	0.457	16.42	11
MW-513	03/21/2022 13:30	0.72	-30.6	6.1	0.22	0.46	16.3	3.2
MW-513	03/21/2022 13:35	0.75	-34.4	6.1	0.22	0.448	16.65	0.1
MW-513	03/21/2022 13:40	0.92	-36.1	6.15	0.2	0.416	16.74	-1.2
MW-513	03/21/2022 13:45	1.09	-35	6.19	0.19	0.399	16.82	-2.9
MW-513	03/21/2022 13:50	1.24	-34	6.19	0.19	0.394	17	-3.7
MW-513	03/21/2022 13:55	1.26	-33.8	6.18	0.19	0.394	17.07	-3.8
MW-513	03/21/2022 14:00	1.31	-33.2	6.19	0.19	0.395	17.01	-3.5
MW-513	03/21/2022 14:05	1.31	-32.8	6.15	0.19	0.395	16.95	-1.4
MW-514	08/16/2017 09:25	1.63	-39.10	11.32	0.53	1.109	19.13	13.40
MW-514	08/16/2017 11:05	4.63	-99.70	7.89	0.27	0.699	18.99	60.50
MW-514	08/16/2017 11:15	9.80	-96.40	7.08	0.23	0.481	18.92	74.90
MW-514	11/14/2017 10:35	4.47	-59.20	6.68	0.17	0.360	15.32	324.10
MW-514	11/14/2017 11:10	5.44	-90.30	7.05	0.16	0.330	14.16	113.90
MW-514	11/14/2017 12:00	0.46	-215.80	8.66	0.16	0.340	14.74	96.20
MW-514	02/16/2018 09:00	1.38	26.30	11.56	0.21	0.491	14.11	42.50
MW-514	02/16/2018 11:00	6.02	-250.40	9.72	0.15	0.315	14.4	10.90
MW-514	02/16/2018 11:20	4.13	-228.10	11.30	0.21	0.444	15.83	62.90
MW-514	05/11/2018 13:55	4.28	66.10	11.58	0.40	1.007	11.64	0.90
MW-514	05/11/2018 15:15	1.13	-130.00	7.61	0.15	0.323	20.22	20.50
MW-514	05/11/2018 15:35	1.90	140.70	9.29	0.15	0.320	18.24	71.40
MW-514	12/13/2018 10:25	0.48	-151.20	7.88	0.38	0.775	8.68	49.50
MW-514	12/13/2018 11:55	3.98	-96.10	6.91	0.19	0.396	9.42	0.10
MW-514	12/13/2018 12:20	2.57	-89.70	6.88	0.17	0.348	11.24	75.40
MW-514	02/21/2019 10:00	2.99	-65.60	7.18	0.18	0.368	12.63	70.30
MW-514	02/21/2019 11:10	3.34	-81.30	6.91	0.15	0.307	14.17	16.10
MW-514	02/21/2019 11:40	3.97	-74.00	6.98	0.16	0.326	13.68	95.60
MW-514	04/23/2019 09:40	0.81	-108.60	7.12	0.22	0.450	15.71	74.90
MW-514	04/23/2019 10:55	2.30	-65.10	6.62	0.18	0.374	18.79	22.00
MW-514	04/23/2019 11:15	3.71	-61.80	6.65	0.17	0.359	17.55	83.50
MW-514	10/29/2019 14:15	0.26	-24.6	7	NM	0.137	13.01	1085.7
MW-514	10/29/2019 14:20	0.31	-25.5	6.96	NM	0.133	12.93	593.8

Appendix B4 Central Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-514	10/29/2019 14:25	0.37	-27.6	6.87	NM	0.135	12.91	460.4
MW-514	10/29/2019 14:30	0.4	-28.7	6.85	NM	0.135	12.9	483.1
MW-514	10/29/2019 14:35	0.53	-29.8	6.81	NM	0.137	12.83	396.9
MW-514	10/29/2019 14:40	0.61	-29.4	6.76	NM	0.14	12.82	454.2
MW-514	10/29/2019 14:45	0.32	-32	6.71	NM	0.143	12.46	219.7
MW-514	10/29/2019 14:50	0.33	-37.1	6.73	NM	0.142	12.45	254.9
MW-514	10/29/2019 14:55	0.37	-41	6.72	NM	0.14	12.46	173.4
MW-514	10/29/2019 15:00	0.4	-43	6.7	NM	0.138	12.49	101.3
MW-514	10/30/2019 10:40	2.92	42.4	6.31	0.08	0.178	16.64	56.1
MW-514	10/30/2019 11:25	4.04	15.9	6.59	0.09	0.18	16.31	118.8
MW-514	01/22/2020 10:40	3.39	-53	7.09	NM	0.317	14.18	23.2
MW-514	01/22/2020 10:45	2.57	-44.6	6.94	NM	0.315	13.66	34.2
MW-514	01/22/2020 10:50	2.41	-44.2	6.89	NM	0.313	13.72	32.2
MW-514	01/22/2020 10:55	2.29	-46.9	6.9	NM	0.313	13.2	35.5
MW-514	01/22/2020 11:00	1.64	-75.6	6.82	NM	0.35	13.04	29.7
MW-514	01/22/2020 11:05	1.2	-87.4	6.88	NM	0.349	13.03	29.5
MW-514	01/22/2020 11:10	1.03	-89.6	6.86	NM	0.345	13.14	26.8
MW-514	01/22/2020 11:15	0.95	-89.7	6.84	NM	0.338	13.35	23.8
MW-514	01/22/2020 11:20	0.88	-88.4	6.81	NM	0.333	13.46	20.4
MW-514	01/22/2020 11:25	0.82	-86.6	6.83	NM	0.328	13.53	16.3
MW-514	01/22/2020 13:08	2.73	-65.2	6.53	0.13	0.278	14.63	68.1
MW-514	01/22/2020 13:33	3.81	-54.4	6.54	0.12	0.261	14.46	161.1
MW-514	05/07/2020 12:40	1.9	-48.2	6.59	NM	0.314	17.63	20.4
MW-514	05/07/2020 14:00	2.96	-73.7	6.61	0.13	0.28	18.56	34.9
MW-514	07/28/2020 12:20	3.87	51.8	7.27	0.15	0.325	24.64	16.8
MW-514	07/28/2020 12:25	3.62	69.4	6.98	0.15	0.299	21.89	8.6
MW-514	07/28/2020 12:30	3.48	78.6	6.72	0.14	0.294	21.35	39.7
MW-514	07/28/2020 12:35	3.47	88.7	6.57	0.14	0.29	20.65	29.3
MW-514	07/28/2020 12:40	3.44	90	6.49	0.14	0.291	20.67	26.3
MW-514	07/28/2020 12:45	3.39	75.8	6.46	0.14	0.29	20.62	24.8
MW-514	07/28/2020 12:50	3.34	53.9	6.53	0.14	0.29	21.02	20.5
MW-514	07/28/2020 12:55	3.32	42.2	6.63	0.15	0.29	21.39	19
MW-514	07/28/2020 13:00	3.26	34.8	6.59	0.14	0.291	21.74	17.6
MW-514	07/28/2020 13:05	3.26	34.4	6.6	0.14	0.291	21.85	16.1
MW-514	07/28/2020 14:15	4.46	-92.7	7.23	0.15	0.307	19.8	0.3
MW-514	07/28/2020 14:25	2.13	-72	6.77	0.15	0.305	20.11	4.7
MW-514	03/26/2021 09:05	6.76	139.7	7.39	0.17	0.15	16.72	134.5
MW-514	03/26/2021 09:10	6.42	148.1	6.69	0.14	0.299	16.07	47.9
MW-514	03/26/2021 09:15	6.14	139.2	6.68	0.14	0.298	16.07	51.2
MW-514	03/26/2021 09:20	5.9	83.9	6.73	0.14	0.299	16.31	49.8
MW-514	03/26/2021 09:25	5.84	45.7	6.76	0.14	0.298	16.5	44.7
MW-514	03/26/2021 09:30	4.1	-8.5	6.57	0.14	0.294	16.44	29.8
MW-514	03/26/2021 09:35	3.11	-21.1	6.48	0.14	0.292	16.39	19.9
MW-514	03/26/2021 09:40	1.88	-31.5	6.44	0.14	0.282	16.29	40.1
MW-514	03/26/2021 09:45	1.34	-31.5	6.37	0.13	0.275	16.17	31.8
MW-514	03/26/2021 09:50	1.03	-32.5	6.35	0.13	0.27	16.14	14.5
MW-514	03/26/2021 10:30	0.58	-35.3	6.45	0.12	0.26	16.5	67.1
MW-514	03/26/2021 11:15	3.73	152.9	6.47	0.07	0.145	18.08	154.1
MW-514	07/01/2021 12:00	5.64	67.5	6.93	0.15	0.312	22.97	96.1
MW-514	07/01/2021 12:05	5.65	82.1	6.62	0.14	0.295	21.47	106.1
MW-514	07/01/2021 12:10	5.22	87	6.56	0.14	0.289	21.7	86
MW-514	07/01/2021 12:15	5.32	90.3	6.54	0.14	0.288	22.14	77
MW-514	07/01/2021 12:20	4.91	92.8	6.52	0.14	0.288	22.22	55.6
MW-514	07/01/2021 12:25	4.83	90.7	6.52	0.14	0.286	21.89	54.5
MW-514	07/01/2021 12:30	4.74	86.3	6.5	0.14	0.286	21.74	52.3
MW-514	08/26/2021 12:30	2.99	-21.9	6.65	0.14	0.29	24.88	114.8
MW-514	08/26/2021 12:35	2.37	-4	6.18	0.13	0.28	24.69	120.2
MW-514	08/26/2021 12:40	1.43	-8.8	6.08	0.12	0.263	24.43	144.1
MW-514	08/26/2021 12:45	1.14	-16.2	6.16	0.12	0.259	24.26	157.4
MW-514	08/26/2021 12:50	0.92	-19.4	6.15	0.12	0.257	23.99	139.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-514	08/26/2021 12:55	0.81	-21.6	6.16	0.12	0.257	22.92	133.6
MW-514	08/26/2021 13:00	0.76	-22.8	6.17	0.12	0.256	22.93	122.6
MW-514	08/26/2021 13:05	0.73	-23.9	6.19	150	0.256	22.92	123.4
MW-514	10/28/2021 13:25	4.61	41.5	6.58	0.13	0.269	18.92	156.2
MW-514	10/28/2021 13:30	3.3	53.8	6.58	0.12	0.259	18.29	148
MW-514	10/28/2021 13:35	2.66	68.4	6.57	0.12	0.253	18.17	136.1
MW-514	10/28/2021 13:40	2.39	76.9	6.57	0.12	0.252	18.2	123.6
MW-514	10/28/2021 13:45	2.16	77.9	6.56	0.12	0.252	18.15	116.6
MW-514	10/28/2021 13:50	1.99	60.4	6.55	0.12	0.252	18.02	85.4
MW-514	10/28/2021 13:55	1.9	43.1	6.55	0.12	0.252	17.95	75.4
MW-514	10/28/2021 14:00	1.8	15.4	6.53	0.12	0.251	17.93	68.6
MW-514	10/28/2021 14:05	1.71	10.4	6.53	0.12	0.251	17.9	64
MW-514	10/28/2021 14:10	1.59	0.7	6.52	0.12	0.251	17.81	50.4
MW-514	03/21/2022 11:30	6.5	-64.5	7.68	0.14	0.305	15.84	1015.3
MW-514	03/21/2022 11:35	0.77	-59	6.6	0.13	0.275	15.75	1488.9
MW-514	03/21/2022 11:40	0.65	-54.1	6.47	0.13	0.269	15.98	1431.7
MW-514	03/21/2022 11:45	0.42	-51	6.43	0.13	0.267	16.09	1492.8
MW-514	03/21/2022 11:50	0.19	-55.6	6.39	0.13	0.268	16.09	1474.7
MW-514	03/21/2022 11:55	0.16	-58.2	6.38	0.13	0.268	16.27	1337.5
MW-514	03/21/2022 12:00	0.17	-58.8	6.39	0.13	0.267	16.19	1320
MW-514	03/21/2022 12:05	0.21	-58.6	6.42	0.13	0.266	16.15	1182.7
MW-514	03/21/2022 12:10	0.32	-57	6.35	0.13	0.264	16.18	970.3
MW-514	03/21/2022 12:15	0.42	-54.7	6.37	0.13	0.262	16.27	713.1
MW-515	08/15/2017 13:15	3.54	-58.00	6.69	0.20	0.415	19.31	21.20
MW-515	08/15/2017 15:00	3.75	-18.20	6.54	0.17	0.344	17.51	940.60
MW-515	08/15/2017 15:20	3.56	-16.80	6.52	0.16	0.328	15.74	1449.50
MW-515	11/15/2017 10:45	0.76	-160.60	6.95	0.46	0.924	13.08	2073.50
MW-515	11/15/2017 11:13	2.28	-29.30	6.22	0.13	0.270	14.6	2034.60
MW-515	11/15/2017 15:15	0.60	-34.40	6.29	0.10	0.215	14.49	35.40
MW-515	05/10/2018 10:00	0.54	69.20	9.42	0.18	0.400	15.6	1234.20
MW-515	05/10/2018 11:05	1.52	-52.30	6.73	0.17	0.346	17.1	1248.60
MW-515	05/10/2018 11:20	2.60	-64.00	6.51	0.17	0.350	16.77	1244.20
MW-515	12/11/2018 10:13	0.24	-38.50	6.17	0.12	0.259	11.96	1599.40
MW-515	12/11/2018 11:30	2.20	-66.30	6.64	0.31	0.629	11.08	1590.60
MW-515	12/11/2018 11:40	4.33	-59.50	8.45	0.10	0.208	11.03	426.60
MW-515	04/25/2019 09:10	1.21	-70.4	7.93	NM	0.33	14.51	487.9
MW-515	04/25/2019 10:40	2.9	-122.9	8.65	0.16	0.341	17.09	1264.7
MW-515	10/30/2019 08:35	1.14	168.3	7.32	NM	0.144	13.02	66.4
MW-515	10/30/2019 08:40	0.42	147.6	6.79	NM	0.105	12.83	66.1
MW-515	10/30/2019 08:45	0.23	84	6.66	NM	0.086	12.71	53.5
MW-515	10/30/2019 08:50	0.17	40.3	6.64	NM	0.084	12.67	49.2
MW-515	10/30/2019 08:55	0.15	21.6	6.62	NM	0.083	12.64	50.7
MW-515	10/30/2019 09:00	0.14	9.5	6.61	NM	0.082	12.62	62.2
MW-515	10/30/2019 09:05	0.13	71.5	6.62	NM	0.082	12.6	72.3
MW-515	10/30/2019 09:10	0.12	-5.3	6.62	NM	0.082	12.6	69.4
MW-515	10/30/2019 09:15	0.11	-10.8	6.63	NM	0.081	12.59	67.9
MW-515	10/30/2019 09:20	0.11	-15.7	6.64	NM	0.081	12.59	63.7
MW-515	10/30/2019 10:40	0.05	-34.2	6.65	0.04	0.083	14.07	1345.2
MW-515	10/30/2019 11:00	0.2	-26.3	6.45	0.04	0.078	12.67	1257
MW-515	05/06/2020 13:10	0.76	-60.3	6.73	NM	0.322	13.36	446.1
MW-515	05/06/2020 14:11	10.39	-48	7.17	0.14	0.297	14.12	1532.4
MW-515	07/01/2021 10:40	2.17	-52.8	8.07	0.21	0.432	20.38	63.2
MW-515	07/01/2021 10:45	1.05	-132.3	7.81	0.2	0.423	18.94	77.3
MW-515	07/01/2021 10:50	1.51	-159.7	7.87	0.2	0.422	20.2	83.9
MW-515	07/01/2021 10:55	1.16	-167.2	7.71	0.2	0.419	21.06	80.6
MW-515	07/01/2021 11:00	0.99	-164.7	7.46	0.2	0.416	21.54	95.6
MW-515	07/01/2021 11:05	0.98	-164.1	7.36	0.2	0.413	21.83	136.3
MW-515	07/01/2021 11:10	0.97	-163.9	7.26	0.2	0.411	22.31	104.3
MW-515	07/01/2021 11:15	0.95	-163.3	7.24	0.2	0.409	22.37	99.5
MW-515	07/01/2021 11:20	0.96	-161.3	7.22	0.2	0.405	22.41	98.2

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-515	08/26/2021 13:50	2.25	-77.8	6.55	24.69	0.28	24.63	61.6
MW-515	08/26/2021 13:55	1.12	-57.3	6.09	0.13	0.269	23.7	64.4
MW-515	08/26/2021 14:00	0.86	-62.7	6.17	0.13	0.267	22.64	63.3
MW-515	08/26/2021 14:05	0.76	-64.5	6.2	0.13	0.267	22.56	61.1
MW-515	08/26/2021 14:10	0.71	-67.1	6.24	0.13	0.268	22.03	64.8
MW-515	08/26/2021 14:15	0.66	-70	6.31	0.13	0.268	22.4	62
MW-515	08/26/2021 14:20	0.61	-75.7	6.38	0.13	0.268	22.43	63.1
MW-515	08/26/2021 14:25	0.62	-74.7	6.37	0.13	0.267	22.03	59.9
MW-515	10/28/2021 13:30	2.96	-37.3	7.07	0.15	0.311	17.14	33.7
MW-515	10/28/2021 13:35	0.55	-20.6	6.59	0.14	0.283	16.65	45.1
MW-515	10/28/2021 13:40	0.49	-17.3	6.61	0.13	0.281	16.82	38
MW-515	10/28/2021 13:45	0.53	-10.6	6.6	0.13	0.28	16.99	35.4
MW-515	10/28/2021 13:50	0.56	-8.6	6.6	0.13	0.28	17.13	34.7
MW-515	10/28/2021 13:55	0.56	-11.1	6.58	0.13	0.28	17.96	42.2
MW-515	10/28/2021 14:00	0.63	-15.9	6.59	0.13	0.279	17.91	41.9
MW-515	10/28/2021 14:05	0.43	-19.5	6.58	0.13	0.281	17	59
MW-515	10/28/2021 14:10	0.38	-20.6	6.58	0.13	0.281	16.92	48.5
MW-515	10/28/2021 14:15	0.3	-22.6	6.59	0.13	0.281	16.84	48.5
MW-515	01/13/2022 10:30	3.32	-119.1	7.86	0.09	0.18	12.96	11.5
MW-515	01/13/2022 10:35	1.42	-79	6.82	0.12	0.256	13.18	11.5
MW-515	01/13/2022 10:40	1.03	-71.8	6.59	0.12	0.251	13.86	13.4
MW-515	01/13/2022 10:45	0.88	-69.1	6.51	0.12	0.249	14.21	12.3
MW-515	01/13/2022 10:50	0.68	-70.4	6.48	0.12	0.252	14.58	13.2
MW-515	01/13/2022 10:55	0.59	-76.2	6.54	0.12	0.259	14.89	18.2
MW-515	01/13/2022 11:00	0.43	-80	6.51	0.13	0.268	14.72	1286
MW-515	01/13/2022 11:05	0.4	-83.1	6.6	0.13	0.269	14.64	1277.9
MW-515	01/13/2022 11:10	0.38	-81.3	6.59	0.13	0.269	14.48	1271.9
MW-515	01/13/2022 11:15	0.39	-80.2	6.58	0.13	0.269	14.38	1268.2
MW-517	08/15/2017 10:15	3.81	155.00	5.25	0.56	1.132	20.15	0.0000
MW-517	08/15/2017 11:00	4.37	112.60	5.65	0.60	1.212	21.61	8.60
MW-517	08/15/2017 11:15	4.34	165.80	5.13	0.56	1.123	20.16	1360.00
MW-517	11/14/2017 13:50	2.68	28.30	5.96	0.58	1.161	16.36	10.90
MW-517	11/14/2017 14:20	1.98	45.30	5.63	0.60	1.200	17.94	2002.40
MW-517	11/14/2017 14:50	2.79	16.40	5.84	0.49	0.981	16.62	25.00
MW-517	02/14/2018 11:05	4.11	40.50	6.70	0.26	0.506	9.41	44.80
MW-517	02/14/2018 13:25	3.98	53.50	6.25	0.47	0.939	11.39	106.40
MW-517	02/14/2018 13:40	3.93	50.00	6.31	0.44	0.890	11.46	1129.00
MW-517	05/10/2018 13:35	0.85	170.10	4.36	0.62	1.240	13.75	7.50
MW-517	05/10/2018 14:15	3.30	103.70	5.18	0.62	1.234	14.56	536.90
MW-517	05/10/2018 14:30	9.88	107.30	5.33	0.60	1.196	14.94	1227.50
MW-517	12/14/2018 10:25	2.32	43.10	6.31	0.57	1.130	12.12	73.30
MW-517	12/14/2018 13:20	0.33	79.60	6.54	0.65	1.287	12.6	192.20
MW-517	12/14/2018 13:55	2.38	54.10	6.49	0.60	1.202	13.88	1347.60
MW-517	02/26/2019 09:05	1.07	-95.40	6.70	0.80	1.580	7.97	27.30
MW-517	02/26/2019 09:40	1.25	-90.60	7.11	0.57	1.147	8.13	90.00
MW-517	02/26/2019 10:00	3.02	-67.90	6.44	0.94	1.839	8.5	799.10
MW-517	04/25/2019 12:30	1.83	-70.20	6.39	0.98	1.910	18.37	31.00
MW-517	04/25/2019 13:10	3.40	-68.30	6.42	1.10	2.142	14.87	259.90
MW-517	04/25/2019 14:00	0.64	-81.80	6.41	0.67	1.328	14.29	5.40
MW-517	10/28/2019 14:20	1.01	-129	6.79	NM	1.245	16.28	31.2
MW-517	10/28/2019 14:25	0.39	-130.3	6.68	NM	1.247	16.22	30.7
MW-517	10/28/2019 14:30	1.3	-125.7	6.68	NM	1.242	16.55	34.3
MW-517	10/28/2019 14:35	1.13	-118.8	6.67	NM	1.243	16.34	35.6
MW-517	10/28/2019 14:40	0.42	-116	6.63	NM	1.238	16.31	30.7
MW-517	10/28/2019 14:45	0.4	-117.2	6.63	NM	1.234	16.5	32.3
MW-517	10/28/2019 14:50	0.4	-118.5	6.65	NM	1.241	16.39	33.4
MW-517	10/29/2019 09:14	4.53	-57.8	6.97	0.08	0.179	16.76	41.3
MW-517	10/29/2019 09:41	3.43	-15.5	6.69	0.07	0.155	16.12	478.1
MW-517	05/07/2020 10:05	1.9	-96.4	6.5	NM	1.56	14.03	64.1
MW-517	05/08/2020 09:20	3.51	-87.5	6.46	0.92	1.803	12.24	89.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-517	07/28/2020 08:55	1.43	-115.6	6.38	1.05	2.047	23.33	47.4
MW-517	07/28/2020 09:00	0.93	-106.4	6.32	1.04	2.031	21.68	35.8
MW-517	07/28/2020 09:05	0.84	-105	6.32	1.04	2.033	22.49	31.9
MW-517	07/28/2020 09:10	0.78	-105.5	6.33	1.04	2.043	22.13	43.6
MW-517	07/28/2020 09:15	0.67	-112.3	6.36	1.04	2.04	21.74	52.3
MW-517	07/28/2020 09:20	0.62	-111.3	6.36	1.04	2.038	21.54	58.9
MW-517	07/28/2020 09:25	0.6	-113.9	6.38	1.04	2.042	21.72	67.3
MW-517	07/28/2020 09:30	0.61	-114.2	6.39	1.04	2.04	21.64	68.7
MW-517	07/28/2020 09:35	0.62	-112.3	6.38	1.04	2.029	21.19	65.4
MW-517	07/28/2020 09:40	0.63	-111.9	6.37	1.04	2.031	21.32	64.7
MW-517	07/29/2020 09:30	2.47	-110.9	6.28	0.97	1.897	19.89	30.8
MW-517	03/25/2021 13:55	1.9	-65.5	7.02	0.57	1.122	14.37	74.2
MW-517	03/25/2021 14:00	0.86	-65	6.53	0.56	1.129	12.17	26.5
MW-517	03/25/2021 14:05	0.73	-66.7	6.5	0.57	1.131	12.39	19.6
MW-517	03/25/2021 14:10	0.61	-70.9	6.52	0.55	1.109	12.56	23.9
MW-517	03/25/2021 14:15	0.51	-72.8	6.53	0.54	1.09	12.54	22.3
MW-517	03/25/2021 14:20	0.46	-75.1	6.55	0.54	1.088	13.19	25.7
MW-517	03/25/2021 14:25	0.46	-76	6.55	0.55	1.096	13.63	28.9
MW-517	03/25/2021 14:30	0.49	-76	6.55	0.56	1.12	13.04	24.4
MW-517	03/25/2021 14:35	0.5	-76.8	6.54	0.57	1.134	13.52	22.4
MW-517	03/25/2021 14:40	0.54	-79	6.56	0.58	1.157	14.3	26.3
MW-517	03/26/2021 13:40	2.28	-116.9	6.54	0.66	1.319	14.4	21.9
MW-517	03/26/2021 13:55	3.23	-95.7	6.54	0.73	1.447	12.82	149.7
MW-517	03/26/2021 14:40	0.54	-79	6.56	0.58	1.157	14.3	26.3
MW-517	06/22/2021 08:35	2.82	-65	6.66	0.4	0.805	23.35	16.6
MW-517	06/22/2021 08:40	1.32	-49.2	5.8	0.46	0.938	21.29	16.5
MW-517	06/22/2021 08:45	1.18	-50.7	5.94	0.46	0.941	21.65	14.3
MW-517	06/22/2021 08:50	1.11	-46.4	5.94	0.46	0.933	21.94	12
MW-517	06/22/2021 08:55	0.95	-51.4	5.92	0.45	0.911	22.91	11
MW-517	06/22/2021 09:00	0.97	-53.6	5.94	0.45	0.911	22.99	10.8
MW-517	06/22/2021 09:05	0.97	-55.6	5.93	0.45	0.913	23.06	10.5
MW-517	10/28/2021 13:35	1.36	-87.4	6.64	0.41	0.832	19.53	24.5
MW-517	10/28/2021 13:40	1.22	-95.9	6.82	0.4	0.816	19.49	16.7
MW-517	10/28/2021 13:45	0.63	-107.2	6.53	0.4	0.808	19.33	14.4
MW-517	10/28/2021 13:50	0.59	-122.3	6.5	0.39	0.795	19.18	9.4
MW-517	10/28/2021 13:55	0.5	-130.6	6.53	0.38	0.773	19.19	11.7
MW-517	10/28/2021 14:00	0.47	-131.4	6.48	0.38	0.773	19.21	13.3
MW-517	10/28/2021 14:05	0.48	-131.7	6.49	0.38	0.77	19.2	10.6
MW-517	10/28/2021 14:10	0.52	-138.1	6.46	0.31	0.633	19.26	14
MW-518	08/16/2017 13:15	1.13	-38.00	6.29	0.57	1.147	22.9	0.0000
MW-518	08/16/2017 13:45	5.86	59.30	6.02	0.53	1.069	24.76	11.10
MW-518	08/16/2017 14:00	6.01	5.10	6.27	0.53	1.073	21.84	25.10
MW-518	11/15/2017 11:00	1.93	-65.30	6.47	0.44	0.897	12.98	18.70
MW-518	11/15/2017 11:20	0.70	42.90	6.70	0.54	1.081	13.02	81.70
MW-518	11/15/2017 11:45	3.15	-22.80	6.51	0.44	0.889	14.12	43.00
MW-518	02/16/2018 13:15	0.88	-19.80	6.80	0.42	0.840	11.7	22.10
MW-518	02/16/2018 13:50	5.98	6.60	6.93	0.49	0.977	12.19	6.80
MW-518	02/16/2018 14:05	7.02	-10.70	7.01	0.40	0.813	10.95	171.90
MW-518	05/14/2018 13:40	0.82	-200.20	7.23	0.47	0.945	12.4	7.10
MW-518	05/14/2018 14:15	1.93	-120.30	7.27	0.56	1.114	15.89	1.80
MW-518	05/14/2018 14:30	4.32	-91.70	6.98	0.46	0.927	14.71	75.30
MW-518	12/10/2018 10:30	1.78	39.10	6.75	0.21	0.423	14.11	119.30
MW-518	12/10/2018 11:05	0.19	5.20	6.74	0.22	0.460	15.1	1.00
MW-518	12/10/2018 11:15	0.52	41.70	6.82	0.21	0.432	13.42	94.80
MW-518	04/25/2019 13:10	2.45	-10.7	6.42	NM	0.562	14.54	6.2
MW-518	04/25/2019 14:05	4.13	54.4	6.82	0.27	0.548	13.39	26
MW-518	10/23/2019 08:55	5.37	189.5	6.7	NM	0.504	19.12	12.1
MW-518	10/23/2019 09:00	3.53	156.8	6.74	NM	0.381	19.52	8.8
MW-518	10/23/2019 09:05	1.76	-33.5	6.58	NM	0.381	19.39	2.9
MW-518	10/23/2019 09:10	0.78	-68.3	6.57	NM	0.39	19.39	1.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-518	10/23/2019 09:15	0.51	-81.7	6.63	NM	0.396	19.38	0.9
MW-518	10/23/2019 09:20	0.44	-87.5	6.64	NM	0.399	19.44	0.8
MW-518	10/23/2019 09:25	0.38	-91.3	6.65	NM	0.4	19.49	1
MW-518	10/23/2019 09:30	0.37	-94	6.66	NM	0.401	19.51	0.6
MW-518	10/23/2019 09:35	0.37	-95.4	6.67	NM	0.402	19.61	0.4
MW-518	10/23/2019 09:50	0.6	-81.7	6.71	0.19	0.402	19.87	1.6
MW-518	10/23/2019 10:25	1.33	-76.8	6.75	0.19	0.405	20.14	20
MW-518	05/04/2020 10:30	16.57	64.5	6.39	NM	0.456	14.8	4.7
MW-518	05/04/2020 11:05	20.98	83.6	6.69	0.26	0.526	14.31	3.5
MW-518	06/22/2021 10:10	1.91	-6	6.72	0.18	0.373	20.31	53
MW-518	06/22/2021 10:15	0.96	7.1	6.23	0.18	0.383	18.79	22.1
MW-518	06/22/2021 10:20	0.9	8.4	6.31	0.18	0.381	18.53	13.7
MW-518	06/22/2021 10:25	0.88	6.9	6.36	0.18	0.38	18.28	8.8
MW-518	06/22/2021 10:30	0.89	4.7	6.42	0.18	0.379	18.09	5.9
MW-518	06/22/2021 10:35	0.9	2.9	6.43	0.18	0.377	18.02	5.7
MW-518	06/22/2021 10:40	0.89	2.4	6.47	0.18	0.377	17.87	5.5
MW-518	09/21/2021 13:15	3.9	0.5	6.49	0.23	0.486	25.23	154.1
MW-518	09/21/2021 13:20	3.18	-16.3	6.32	0.25	0.51	24	155.8
MW-518	09/21/2021 13:25	2.71	-20.2	6.31	0.23	0.489	21.92	99.7
MW-518	09/21/2021 13:30	2.39	-21.7	6.46	0.21	0.44	21.81	34.9
MW-518	09/21/2021 13:35	2.29	-21.7	6.46	0.21	0.437	21.76	31.7
MW-518	09/21/2021 13:40	1.91	-21.9	6.57	0.21	0.428	21.99	10.4
MW-518	09/21/2021 13:45	1.8	-22.3	6.6	0.21	0.429	22.06	9.2
MW-518	09/21/2021 13:50	1.75	-22.7	6.62	0.21	0.43	22.01	8.8
MW-518	09/21/2021 13:55	1.78	-23.6	6.62	0.21	0.429	22.07	8.6
MW-518	12/14/2021 11:50	57.73	118.7	6.38	0.24	0.476	16.1	88.1
MW-518	12/14/2021 11:55	58.35	121.4	6.28	0.23	0.467	16.05	40.4
MW-518	12/14/2021 12:00	44.7	84.2	6.28	0.23	0.466	16.11	25.3
MW-518	12/14/2021 12:05	32.36	62.2	6.34	0.23	0.467	16.16	16.6
MW-518	12/14/2021 12:10	27.15	49.2	6.38	0.23	0.469	16.15	10.1
MW-518	12/14/2021 12:15	20.07	35	6.42	0.23	0.472	16.2	12.2
MW-518	12/14/2021 12:20	15.77	25.2	6.47	0.23	0.476	16.16	4.3
MW-518	12/14/2021 12:25	14.08	20.5	6.48	0.23	0.477	16.28	2.7
MW-518	12/14/2021 12:30	12.77	16.2	6.5	0.23	0.478	16.28	1.5
MW-518	12/14/2021 12:35	10.58	12.1	6.51	0.23	0.481	16.36	0.5
MW-518	03/14/2022 11:15	7.76	27.7	6.99	0.23	0.468	10.6	125.8
MW-518	03/14/2022 11:20	1.68	52.7	6.48	0.2	0.418	10.51	32.4
MW-518	03/14/2022 11:25	1.49	49.2	6.46	0.2	0.418	10.54	27.1
MW-518	03/14/2022 11:30	1.13	34.4	6.53	0.2	0.418	10.5	15.4
MW-518	03/14/2022 11:35	1.06	26.2	6.58	0.2	0.419	10.42	8.9
MW-518	03/14/2022 11:40	0.8	21.5	6.6	0.2	0.419	10.43	6.2
MW-518	03/14/2022 11:45	0.66	13.2	6.51	0.2	0.419	10.38	4.8
MW-518	03/14/2022 11:50	0.82	10.8	6.63	0.2	0.42	10.41	4
MW-518	03/14/2022 11:55	0.78	8.3	6.67	0.2	0.422	10.35	2.6
MW-518	03/14/2022 12:00	0.72	16.6	6.66	0.2	0.421	10.35	2.4
MW-519	08/16/2017 09:25	3.58	-100.40	12.74	5.14	9.145	19.04	38.60
MW-519	11/16/2017 09:35	3.35	-103.70	12.58	3.44	6.239	10.32	2.00
MW-519	11/16/2017 13:30	3.38	-107.60	12.29	3.13	5.748	13.01	48.20
MW-519	02/21/2018 09:30	9.37	-7.60	12.32	3.08	5.654	15.39	30.60
MW-519	02/21/2018 09:35	6.63	69.10	13.83	5.15	9.154	13	24.70
MW-519	02/21/2018 09:55	6.58	-59.80	12.91	3.19	5.848	15.55	34.80
MW-519	05/15/2018 09:00	4.97	228.80	12.56	2.83	5.226	15.76	7.90
MW-519	05/15/2018 09:30	4.43	176.80	14.90	3.05	5.607	15.12	10.40
MW-519	05/15/2018 10:25	3.64	-110.60	13.32	4.67	8.651	14.16	4.00
MW-519	04/30/2019 09:15	0.36	-241.60	8.20	0.70	1.381	13.16	50.30
MW-519	04/30/2019 09:35	5.13	-84.60	10.39	0.69	1.362	14.14	49.20
MW-519	04/30/2019 10:30	4.84	-78.20	9.73	0.17	0.359	13.82	954.70
MW-519	10/28/2019 14:20	1.28	-185.5	7.61	NM	0.738	17.99	7.5
MW-519	10/28/2019 14:25	0.73	-215	7.71	NM	0.784	17.6	5.6
MW-519	10/28/2019 14:30	0.51	-227.3	7.71	NM	0.786	17.46	5.5

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-519	10/28/2019 14:35	0.34	-227.6	7.62	NM	0.788	17.63	5.4
MW-519	10/28/2019 14:40	0.26	-218.7	7.49	NM	0.79	17.67	2.1
MW-519	10/28/2019 14:45	0.26	-216	7.43	NM	0.792	18.59	2.5
MW-519	10/28/2019 14:50	0.26	-207.5	7.41	NM	0.796	18.91	2.4
MW-519	10/28/2019 14:55	0.29	-209.4	7.29	NM	0.798	18.49	4.3
MW-519	10/28/2019 15:00	0.29	-203.7	7.22	NM	0.801	17.37	3.5
MW-519	10/28/2019 15:05	0.29	-203.7	7.22	NM	0.801	17.37	3.5
MW-519	10/30/2019 11:50	0.41	-31	8.09	0.34	0.694	16.73	22.4
MW-519	10/30/2019 12:25	4.73	-26.2	8.1	0.39	0.783	16.18	53.9
MW-519	05/06/2020 09:35	0.65	-169.5	7.36	NM	1.445	12.57	16
MW-519	05/07/2020 08:45	4.6	14.2	6.9	0.71	1.41	12.77	46.3
MW-519	07/28/2020 10:05	1.54	-112.4	7.03	0.8	1.594	24.4	14.6
MW-519	07/28/2020 10:10	1.12	-114.1	7.04	0.79	1.564	21.31	10.7
MW-519	07/28/2020 10:15	0.88	-111	7.04	0.78	1.553	21.42	9.9
MW-519	07/28/2020 10:20	0.83	-113.9	7.02	0.79	1.565	22.53	8.7
MW-519	07/28/2020 10:25	0.83	-115.8	7.04	0.78	1.558	22.55	10.7
MW-519	07/28/2020 10:30	0.72	-118.7	7.06	0.79	1.565	21.2	10.5
MW-519	07/28/2020 10:35	0.58	-122	7.04	0.79	1.556	20.73	10.6
MW-519	07/28/2020 10:40	0.51	-127.1	7.07	0.78	1.551	21	10.8
MW-519	07/28/2020 10:45	0.43	-131.1	7.07	0.78	1.548	20.6	10.9
MW-519	07/28/2020 10:50	0.4	-131.9	7.08	0.78	1.55	20.53	10.9
MW-519	07/29/2020 10:20	3.23	-100.7	7.02	0.76	1.873	19.98	33.8
MW-519	07/29/2020 10:30	2.87	-122.2	7.04	0.77	1.578	20.16	67.4
MW-519	03/24/2021 13:55	1.77	-55.3	7	0.98	1.911	13.38	13.7
MW-519	03/24/2021 14:00	0.72	-71.2	7.07	0.98	1.918	13.51	17
MW-519	03/24/2021 14:05	0.52	-77.3	7.11	0.98	1.917	13.42	23.1
MW-519	03/24/2021 14:10	0.53	-78.9	7.13	0.98	1.917	13.35	21.8
MW-519	03/24/2021 14:15	0.47	-80.6	7.14	0.98	1.918	13.35	17.4
MW-519	03/24/2021 14:20	0.44	-81	7.15	0.98	1.919	13.38	21.4
MW-519	03/24/2021 14:25	0.42	-84.2	7.15	0.98	1.919	13.35	17.5
MW-519	03/24/2021 14:30	0.39	-83.7	7.15	0.98	1.918	13.32	17.4
MW-519	03/24/2021 14:35	0.37	-84.8	7.15	0.98	1.998	13.26	15.7
MW-519	03/24/2021 14:40	0.39	-85.6	7.15	0.98	1.919	13.4	14
MW-519	03/25/2021 13:30	2.5	-99.8	7.06	0.65	1.29	13.19	41.9
MW-519	03/25/2021 13:40	2.25	-104.8	7.07	0.39	0.796	15.45	81.5
MW-519	03/25/2021 14:40	0.39	-85.6	7.15	0.98	1.919	13.4	14
MW-519	06/30/2021 11:45	0.98	-105.2	7.07	0.75	1.499	23.58	2.2
MW-519	06/30/2021 11:50	0.86	-101.9	7	0.75	1.499	24.44	1.3
MW-519	06/30/2021 11:55	0.82	-107.8	7.05	0.75	1.5	25.4	0
MW-519	06/30/2021 12:00	0.82	-109.3	7.05	0.75	1.499	25.64	0
MW-519	06/30/2021 12:05	0.82	-112.1	7.06	0.75	1.496	26	0
MW-519	06/30/2021 12:10	0.85	-112.4	7.06	0.75	1.498	26.3	0
MW-519	06/30/2021 12:15	0.83	-114.1	7.05	0.75	1.491	26.38	0
MW-519	09/23/2021 11:15	3.05	-98.3	6.94	0.75	1.502	22.54	3.9
MW-519	09/23/2021 11:20	0.93	-104.9	6.76	0.71	1.405	19.84	2.8
MW-519	09/23/2021 11:25	1.47	-112.5	6.87	0.7	1.402	20.87	2
MW-519	09/23/2021 11:30	1.64	-116.3	6.9	0.7	1.398	21.37	1.9
MW-519	09/23/2021 11:35	1.7	-117.3	6.9	0.7	1.399	21.8	2
MW-519	09/23/2021 11:40	1.71	-118.9	6.91	0.7	1.395	22.67	2.4
MW-519	09/23/2021 11:45	1.78	-122	6.92	0.7	1.396	22.56	2.5
MW-519	09/23/2021 11:50	1.82	-125.2	6.92	0.7	1.397	22.76	2.5
MW-519	12/14/2021 13:10	9.07	-126.1	6.81	0.75	1.493	16.05	23.1
MW-519	12/14/2021 13:15	4.55	-132.7	6.83	0.76	1.497	16.26	7.5
MW-519	12/14/2021 13:20	2.73	-138.3	6.84	0.76	1.5	16.32	6.6
MW-519	12/14/2021 13:25	2.52	-137.5	6.85	0.76	1.5	16.46	8.6
MW-519	12/14/2021 13:30	2.39	-136.5	6.86	0.76	1.511	16.6	9.7
MW-519	12/14/2021 13:35	2.26	-135.2	6.86	0.76	1.512	16.47	11.6
MW-519	12/14/2021 13:40	1.95	-134.4	6.86	0.76	1.513	16.48	12.3
MW-519	12/14/2021 13:45	1.5	-133.3	6.86	0.77	1.512	16.46	12.8
MW-519	12/14/2021 13:50	1.12	-132.5	6.86	0.76	1.512	16.53	14.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-519	12/14/2021 13:55	1.11	-133.2	6.85	0.77	1.513	16.59	11.9
MW-528	02/14/2018 09:10	0.37	214.60	4.99	0.23	0.475	8.56	0.0000
MW-528	02/14/2018 10:00	5.03	135.60	5.10	0.24	0.504	10.89	14.30
MW-528	02/14/2018 10:15	4.51	109.50	5.28	0.23	0.475	11.08	34.90
MW-528	05/15/2018 10:15	1.93	56.10	5.70	0.23	0.474	14.94	4.50
MW-528	05/15/2018 14:00	3.89	47.00	5.67	0.23	0.479	20.12	32.70
MW-528	05/15/2018 14:25	3.61	42.30	5.69	0.23	0.479	17.81	606.10
MW-528	12/18/2018 09:55	3.23	74.30	5.00	0.11	0.231	9.73	6.10
MW-528	12/18/2018 10:55	2.24	110.80	6.06	0.29	0.586	9.82	24.20
MW-528	12/18/2018 11:20	4.06	65.30	5.43	0.16	0.304	12.46	463.60
MW-528	04/25/2019 09:20	0.76	102.90	5.33	0.21	0.438	11.37	0.90
MW-528	04/25/2019 10:30	4.26	58.60	5.69	0.23	0.469	14.52	26.80
MW-528	04/25/2019 10:45	1.78	76.60	5.54	0.20	0.413	13.9	279.30
MW-528	10/29/2019 09:00	0.73	54.2	6.11	NM	0.177	12.99	78.7
MW-528	10/29/2019 09:05	0.5	46	5.77	NM	0.176	13.17	58.1
MW-528	10/29/2019 09:10	0.45	41.9	5.56	NM	0.175	13.4	56.9
MW-528	10/29/2019 09:15	1.19	42.2	5.47	NM	0.153	13.57	68.4
MW-528	10/29/2019 09:20	3.79	50.2	5.43	NM	0.103	13.57	58.6
MW-528	10/29/2019 09:25	3.59	61.7	5.38	NM	0.105	13.64	35.9
MW-528	10/29/2019 09:30	2.19	67.9	5.33	NM	0.115	13.65	18.4
MW-528	10/29/2019 09:35	1.57	73.3	5.28	NM	0.125	13.66	12.5
MW-528	10/29/2019 09:40	1.02	68.8	5.33	NM	0.148	13.73	9.2
MW-528	10/29/2019 09:45	0.81	61.5	5.4	NM	0.161	13.76	7
MW-528	10/30/2019 08:40	5.76	30.5	5.82	0.13	0.278	16.18	13.8
MW-528	10/30/2019 09:20	5.02	48.6	5.6	0.1	0.204	16.23	602.1
MW-528	05/04/2020 12:35	2.57	123.1	5.62	NM	0.458	16.71	29.8
MW-528	05/04/2020 13:07	5.36	115.5	5.63	0.23	0.469	14.95	191.4
MW-528	06/18/2021 11:15	2.9	32.4	5.88	0.25	0.519	18.92	26.2
MW-528	06/18/2021 11:20	2.29	41.5	5.68	0.24	0.496	19.13	26.8
MW-528	06/18/2021 11:25	1.08	54.4	5.48	0.22	0.464	19.94	22.8
MW-528	06/18/2021 11:30	0.79	58.6	5.28	0.22	0.457	20.03	19.4
MW-528	06/18/2021 11:35	0.64	60.8	5.24	0.22	0.451	20.12	25.3
MW-528	06/18/2021 11:40	0.61	61.2	5.23	0.22	0.447	20.02	27.7
MW-528	06/18/2021 11:45	0.62	61.7	5.23	0.21	0.439	20.08	23.2
MW-528	06/18/2021 11:50	0.67	63.8	5.24	0.2	0.424	20.07	11.6
MW-528	06/18/2021 11:55	1.01	68.9	5.23	0.18	0.381	20.26	9.6
MW-528	06/18/2021 12:00	1.31	70.2	5.27	0.17	0.366	20.39	5.4
MW-528	08/31/2021 09:10	5.49	8.9	6.79	0.3	0.632	21.74	51.4
MW-528	08/31/2021 09:15	1.31	31.2	5.52	0.21	0.436	19.51	63.7
MW-528	08/31/2021 09:20	1.12	36.1	5.51	0.21	0.436	19.76	53.2
MW-528	08/31/2021 09:25	1.08	43.6	5.47	0.21	0.44	19.78	41.1
MW-528	08/31/2021 09:30	1.02	52.3	5.42	0.21	0.444	19.83	26.5
MW-528	08/31/2021 09:35	1.01	54.2	5.38	0.21	0.445	19.83	25.8
MW-528	08/31/2021 09:40	1.05	58.9	5.36	0.21	0.443	19.9	25
MW-528	12/27/2021 11:25	4.23	-43.6	10.28	0.21	0.43	12.12	195.2
MW-528	12/27/2021 11:30	2.56	-80.5	10.36	0.24	0.487	11.53	129.9
MW-528	12/27/2021 11:35	1.89	-85.7	10.45	0.23	0.47	11.6	123.5
MW-528	12/27/2021 11:40	1.49	-88.1	10.26	0.21	0.437	11.22	97.7
MW-528	12/27/2021 11:45	1.43	-88.7	10.23	0.21	0.434	11.22	94.3
MW-528	12/27/2021 11:50	1.14	-99.8	10.54	0.23	0.475	11.29	71.7
MW-528	12/27/2021 11:55	1.09	-99.8	10.53	0.23	0.476	11.3	71.2
MW-528	12/27/2021 12:00	0.95	-105.6	10.61	0.26	0.535	11.52	81.8
MW-528	12/27/2021 12:05	0.76	-108.1	10.65	0.27	0.554	11.56	105.6
MW-528	12/27/2021 12:10	0.75	-113.4	10.77	0.27	0.561	11.81	127.6
MW-528	03/30/2022 10:55	5.79	-89.7	4.13	0.19	0.393	10.98	256.8
MW-528	03/30/2022 11:00	1.02	-116.9	3.99	0.17	0.35	10.7	231.6
MW-528	03/30/2022 11:05	0.5	-152.5	3.97	0.16	0.335	10.41	148.3
MW-528	03/30/2022 11:10	0.49	-157	3.97	0.16	0.335	10.47	167.6
MW-528	03/30/2022 11:15	0.72	-121.3	4.05	0.16	0.33	10.45	123.1
MW-528	03/30/2022 11:20	0.73	-113.9	4.12	0.16	0.334	10.44	110.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-528	03/30/2022 11:25	0.67	-109.6	4.59	0.18	0.365	10.45	81.3
MW-528	03/30/2022 11:30	0.63	-113.2	4.89	0.19	0.393	10.27	72.3
MW-528	03/30/2022 11:35	0.63	-114.9	4.97	0.19	0.4	10.25	76.9
MW-528	03/30/2022 11:40	0.65	-113.4	4.99	0.2	0.405	10.28	74.5
MW-529	02/13/2018 10:10	2.71	180.10	5.03	1.01	1.975	13.83	0.20
MW-529	02/13/2018 10:40	1.28	218.10	4.51	1.31	2.517	11.5	8.10
MW-529	02/13/2018 11:06	2.01	286.40	4.09	1.25	2.414	13.58	90.70
MW-529	05/16/2018 10:20	0.34	216.20	4.58	0.91	1.782	14.09	22.90
MW-529	05/16/2018 10:55	1.02	244.30	4.05	1.01	1.973	14.47	14.40
MW-529	05/16/2018 11:20	1.41	292.40	4.01	1.10	2.136	15.01	143.50
MW-529	12/12/2018 11:35	15.34	72.3	4.66	NM	1.257	13.44	2.3
MW-529	12/18/2018 13:00	5.20	119.80	4.60	1.12	2.189	11	147.60
MW-529	12/18/2018 13:30	2.52	212.60	3.96	1.38	2.657	13.39	7.40
MW-529	12/18/2018 13:45	2.65	205.10	4.31	1.33	2.567	15.65	246.10
MW-529	04/17/2019 12:45	2.77	159.9	5.18	NM	0.447	16.13	13.8
MW-529	04/17/2019 13:40	0.39	181.6	4.65	0.26	0.538	15.57	67.2
MW-529	10/23/2019 12:30	1.51	-57.3	6.72	NM	1.945	20.83	1447.5
MW-529	10/23/2019 12:35	0.72	-11	6.26	NM	1.944	20.92	1448.2
MW-529	10/23/2019 12:40	0.55	16.4	5.97	NM	1.911	20.54	1204.1
MW-529	10/23/2019 12:45	0.51	-84.3	6.33	NM	1.972	20.52	464.3
MW-529	10/23/2019 12:50	0.47	-150.8	6.65	NM	2.022	20.74	167.5
MW-529	10/23/2019 12:55	0.23	-372	7.74	NM	2.068	20.66	113.7
MW-529	10/23/2019 13:00	0.14	-404.6	8.35	NM	2.102	20.9	11.7
MW-529	10/23/2019 13:05	0.09	-394.2	8.68	NM	2.149	21.63	106.1
MW-529	10/23/2019 13:10	0.14	-371.3	8.8	NM	2.162	21.63	102.9
MW-529	10/23/2019 13:15	0.29	-343.6	8.75	NM	2.129	21.69	92.1
MW-529	10/23/2019 13:55	4.32	41.8	6.44	0.91	1.88	21.5	52.2
MW-529	10/23/2019 14:10	5.02	113	4.95	0.9	1.889	20.26	296.1
MW-529	05/04/2020 10:05	5.13	117	5.68	NM	1.298	16.06	38.6
MW-529	05/04/2020 10:28	10.38	220.4	4.14	1.06	2.058	16.51	46.9
MW-529	06/16/2021 13:45	1.96	141.5	4.95	1.08	2.097	21.26	102
MW-529	06/16/2021 13:50	0.89	177.7	4.21	1.11	2.156	19.28	105.1
MW-529	06/16/2021 13:55	0.7	175.4	4.43	1.1	2.137	21.07	162.4
MW-529	06/16/2021 14:00	0.77	175.9	4.45	1.09	2.131	21.18	228.9
MW-529	06/16/2021 14:05	0.7	181.1	4.43	1.11	2.165	20.98	61.9
MW-529	06/16/2021 14:10	0.73	191.5	4.31	1.15	2.235	21.05	26.4
MW-529	06/16/2021 14:15	0.65	212	4.09	1.2	2.32	20.95	13.8
MW-529	06/16/2021 14:20	0.64	215.1	4.07	1.2	2.333	20.9	12.9
MW-529	06/16/2021 14:25	0.62	217.6	4.06	1.2	2.341	20.82	13
MW-529	08/31/2021 10:25	5.98	140.1	4.57	0.54	1.116	27.53	202.5
MW-529	08/31/2021 10:30	1.76	203.9	4.1	1.14	2.22	23.2	363.6
MW-529	08/31/2021 10:35	1.23	210.6	4.15	1.14	2.219	23.57	605.1
MW-529	08/31/2021 10:40	1.07	206.3	4.18	1.16	2.256	23.78	1060
MW-529	08/31/2021 10:45	0.95	201.1	4.14	1.2	2.328	23.72	100.5
MW-529	08/31/2021 10:50	0.9	201.2	4.11	1.22	2.367	23.69	104.3
MW-529	08/31/2021 10:55	0.92	201.3	4.09	1.23	2.386	23.68	105.5
MW-529	12/27/2021 09:45	6.71	43.1	8.01	1.16	2.241	15	135.4
MW-529	12/27/2021 09:50	6.45	85	6.4	1.16	2.258	15.6	103.3
MW-529	12/27/2021 09:55	6.52	68.8	7.02	1.17	2.266	15.38	119.9
MW-529	12/27/2021 10:00	6.28	46.8	7.65	1.18	2.285	14.89	95.3
MW-529	12/27/2021 10:05	6.28	46.8	7.65	1.18	2.285	14.89	95.3
MW-529	12/27/2021 10:10	6.28	46.8	7.65	1.18	2.285	14.89	95.3
MW-529	12/27/2021 10:15	5.25	23.4	9.84	1.2	2.322	12.18	64.8
MW-529	12/27/2021 10:20	5.29	19.4	9.12	1.2	2.329	11.57	41.7
MW-529	12/27/2021 10:25	4.43	18	9.28	1.21	2.341	11.11	39.7
MW-529	12/27/2021 10:30	4.43	18.4	9.28	1.21	2.341	11.11	39.7
MW-529	03/30/2022 09:20	3.21	-66.2	5.53	0.82	1.627	10.56	1108.8
MW-529	03/30/2022 09:25	2	-60.1	3.94	0.82	1.607	10.24	1154.9
MW-529	03/30/2022 09:30	1.74	-57.7	3.73	0.81	1.604	10.81	993.8
MW-529	03/30/2022 09:35	1.64	-51.4	3.56	0.81	1.601	11.01	610.4

Appendix B4 Central Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-529	03/30/2022 09:40	1.66	-45.9	3.55	0.81	1.593	10.95	405.5
MW-529	03/30/2022 09:45	1.59	-42.3	3.57	0.8	1.582	10.98	159.4
MW-529	03/30/2022 09:50	1.4	-44	3.56	0.81	1.59	11.06	94.6
MW-529	03/30/2022 09:55	1.2	-46.8	3.53	0.82	1.607	11.03	65
MW-529	03/30/2022 10:00	0.97	-48.3	3.47	0.83	1.636	11.22	52.8
MW-529	03/30/2022 10:05	0.91	-49.8	3.44	0.84	1.646	11.18	52.6
MW-530	02/12/2018 11:15	3.19	153.10	7.92	0.44	0.891	9.63	114.20
MW-530	02/12/2018 11:40	1.33	26.20	6.37	0.68	1.355	8.41	35.40
MW-530	02/12/2018 12:15	3.80	23.40	6.29	0.51	1.033	10.1	43.30
MW-530	02/22/2018 12:45	1.02	78.10	6.88	0.51	0.926	11.91	18.20
MW-530	02/22/2018 13:40	7.67	57.90	6.54	0.49	0.990	10.42	4.40
MW-530	02/22/2018 13:55	6.74	55.70	6.41	0.53	1.058	10.65	19.80
MW-530	05/16/2018 10:05	1.59	233.40	5.71	0.36	0.735	14.94	83.20
MW-530	05/16/2018 11:10	0.57	134.10	5.51	0.39	0.786	14.44	9.60
MW-530	05/16/2018 11:30	0.79	85.40	5.67	0.41	0.832	14.22	361.90
MW-530	12/18/2018 12:55	5.41	101.40	5.23	0.70	1.394	10.21	80.50
MW-530	12/18/2018 13:35	7.93	170.10	4.72	0.67	1.325	10.96	12.50
MW-530	12/18/2018 13:55	6.23	147.50	4.85	0.67	1.145	13.35	107.60
MW-530	04/17/2019 09:15	0.8	187.7	4.55	NM	1.534	12.27	22.3
MW-530	04/17/2019 10:20	3.63	163.6	5.05	0.72	1.418	12.71	13.6
MW-530	10/23/2019 12:30	3.68	119.2	5.54	NM	1.083	21.38	29.6
MW-530	10/23/2019 12:35	2.31	152.8	5.43	NM	1.092	21.46	120.6
MW-530	10/23/2019 12:40	1.75	152.2	5.34	NM	1.101	20.95	74.8
MW-530	10/23/2019 12:45	1.35	136.4	5.28	NM	1.115	20.58	46.4
MW-530	10/23/2019 12:50	1.18	133.7	5.24	NM	1.13	21.04	53
MW-530	10/23/2019 12:55	0.96	138.6	5.17	NM	1.156	20.73	29.9
MW-530	10/23/2019 13:00	0.87	139.2	5.13	NM	1.145	20.88	6.1
MW-530	10/23/2019 13:05	0.74	139.1	5.11	NM	1.144	21.53	1.1
MW-530	10/23/2019 13:10	0.7	141.2	5.08	NM	1.14	21.73	0.8
MW-530	10/23/2019 13:15	0.65	145.9	5.04	NM	1.107	21.84	0.7
MW-530	10/23/2019 13:45	0.94	120.7	4.96	0.55	1.108	21.02	4.1
MW-530	10/23/2019 14:20	1	110.8	4.98	0.55	1.114	22.14	69.9
MW-530	04/30/2020 12:35	0.67	270.8	4.47	NM	1.54	13.61	4.7
MW-530	04/30/2020 13:00	3.11	209.7	4.71	0.8	1.574	14.27	11
MW-530	05/26/2021 08:20	5.72	165.1	5.9	0.47	0.948	18.36	356.1
MW-530	05/26/2021 08:25	3.92	200.6	5.31	0.52	1.027	18.2	385.2
MW-530	05/26/2021 08:30	3.34	220.8	4.86	0.54	1.073	18.14	368.4
MW-530	05/26/2021 08:35	2.93	222.8	4.58	0.58	1.153	17.86	346.1
MW-530	05/26/2021 08:40	2.98	222.6	4.5	0.6	1.198	17.59	258.4
MW-530	05/26/2021 08:45	2.8	221.7	4.43	0.61	1.217	17.57	187.5
MW-530	05/26/2021 08:50	3.03	225.1	4.4	0.61	1.227	17.63	140.6
MW-530	05/26/2021 08:55	3.08	232.5	4.4	0.61	1.226	17.66	104.5
MW-530	05/26/2021 09:00	3.26	231.7	4.38	0.61	1.222	17.74	97.6
MW-530	05/26/2021 09:05	3.31	226.2	4.38	0.61	1.213	17.91	75.3
MW-530	09/16/2021 09:05	4.03	151.7	6.8	0.15	0.345	22.51	989.3
MW-530	09/16/2021 09:10	3.65	157.8	6.4	0.14	0.289	22.51	989.9
MW-530	09/16/2021 09:15	3.37	165.2	6.44	0.11	0.239	22.69	1153.1
MW-530	09/16/2021 09:20	3.24	156.4	6.39	0.11	0.236	22.77	1091.1
MW-530	09/16/2021 09:25	3.27	156	6.26	0.11	0.235	22.85	929.4
MW-530	09/16/2021 09:30	3.26	155.9	6.24	0.11	0.234	22.92	816.2
MW-530	09/16/2021 09:35	3.29	156.6	6.22	0.11	0.234	23.13	642
MW-530	09/16/2021 09:40	2.95	157.9	6.11	0.12	0.247	23.68	62.4
MW-530	09/16/2021 09:45	2.39	155.4	6.07	0.12	0.26	24.47	47.8
MW-530	09/16/2021 09:50	2.19	154.7	6.05	0.13	0.265	24.52	28.3
MW-530	12/28/2021 10:50	6.22	45.2	6.03	0.23	0.47	13.2	1020.7
MW-530	12/28/2021 10:55	4.11	86.3	5.84	0.23	0.469	13.74	976.3
MW-530	12/28/2021 11:00	3.97	100.8	5.82	0.23	0.469	13.65	1089.7
MW-530	12/28/2021 11:05	3.77	103.7	5.82	0.23	0.469	13.69	912.3
MW-530	12/28/2021 11:10	2.86	114.3	5.76	0.22	0.455	13.49	648.1
MW-530	12/28/2021 11:15	2.09	126	5.68	0.22	0.453	13.46	613

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-530	12/28/2021 11:20	1.8	137	5.6	0.22	0.453	13.57	617
MW-530	12/28/2021 11:25	1.73	143.2	5.55	0.23	0.469	13.61	541.7
MW-530	12/28/2021 11:30	1.6	153.5	5.46	0.24	0.485	13.65	378.8
MW-530	12/28/2021 11:35	1.48	176.9	5.27	0.25	0.52	13.73	200.5
MW-530	03/29/2022 12:00	12.95	-77.9	6.18	0.48	0.968	11.51	17.7
MW-530	03/29/2022 12:05	12.58	112.8	5.64	0.35	0.716	10.65	1092.3
MW-530	03/29/2022 12:10	10.98	151.6	5.53	0.35	0.713	10.93	972.5
MW-530	03/29/2022 12:15	11.03	155	5.53	0.35	0.714	11.01	908.3
MW-530	03/29/2022 12:20	13.52	165.2	5.54	0.35	0.721	11.07	862.4
MW-530	03/29/2022 12:25	10.18	194	5.29	0.4	0.802	11.39	343.7
MW-530	03/29/2022 12:30	10.14	195.8	5.28	0.4	0.809	11.36	339
MW-530	03/29/2022 12:35	9.43	207.3	5.24	0.41	0.828	10.81	427
MW-530	03/29/2022 12:40	10.02	219.5	5.22	0.4	0.85	9.8	484.2
MW-530	03/29/2022 12:45	9.73	220.3	5.21	0.4	0.806	9.79	486.7
MW-531	05/17/2018 13:30	1.73	-54.70	6.64	0.86	1.627	15.48	66.00
MW-531	05/17/2018 15:00	0.92	-87.70	6.86	0.60	1.207	14.69	11.90
MW-531	05/17/2018 15:15	1.41	-55.10	6.82	0.38	0.775	13.8	91.40
MW-531	12/10/2018 13:50	4.07	28.60	6.61	0.43	0.873	12.12	118.20
MW-531	12/10/2018 15:20	2.90	24.40	6.72	0.48	0.960	14.23	21.10
MW-531	12/10/2018 15:45	2.32	-23.10	6.63	0.40	0.806	13.34	109.20
MW-531	04/22/2019 12:50	3.71	-64.80	6.67	0.58	1.156	15.13	47.40
MW-531	04/22/2019 14:05	3.68	-74.40	6.62	0.36	0.665	14.05	5.80
MW-531	04/22/2019 14:20	2.68	-65.00	6.54	0.58	1.163	13.25	47.80
MW-531	10/23/2019 08:45	3.97	-14.2	7.59	NM	0.318	16.8	43.2
MW-531	10/23/2019 08:50	3.7	-13.3	7.46	NM	0.312	16.7	35.1
MW-531	10/23/2019 08:55	3.17	14.6	7.06	NM	0.305	16.62	32
MW-531	10/23/2019 09:00	2.62	-24.9	6.83	NM	0.305	16.62	24.9
MW-531	10/23/2019 09:05	1.69	-47	6.55	NM	0.404	16.71	18.2
MW-531	10/23/2019 09:10	1.5	-59.4	6.44	NM	0.538	16.72	14.6
MW-531	10/23/2019 09:15	1.38	-67.6	6.39	NM	0.68	16.77	13.8
MW-531	10/23/2019 09:20	1.3	-71.3	6.37	NM	0.766	16.79	11.2
MW-531	10/23/2019 09:25	1.17	-72.8	6.36	NM	0.803	16.82	12
MW-531	10/23/2019 09:30	1.11	-74.3	6.36	NM	0.835	16.9	9.9
MW-531	10/23/2019 10:35	6.44	-64.3	6.71	0.95	2.138	17.11	3
MW-531	10/23/2019 10:50	8.62	-75.3	6.51	0.98	2.341	17.49	81.1
MW-531	05/07/2020 12:50	1.11	-84	6.52	NM	0.913	14.27	2.8
MW-531	05/07/2020 13:46	8.54	-174.3	6.64	0.52	1.047	15.9	10.2
MW-531	06/18/2021 13:35	1.93	115.4	6.09	0.16	0.342	19.39	34.8
MW-531	06/18/2021 13:40	1.34	127.9	5.83	0.17	0.357	19.07	44.3
MW-531	06/18/2021 13:45	1.09	128.1	5.82	0.18	0.369	19.26	21.9
MW-531	06/18/2021 13:50	0.78	121.4	5.87	0.2	0.405	18.53	26.8
MW-531	06/18/2021 13:55	0.64	16.8	5.96	0.26	0.51	18.38	22
MW-531	06/18/2021 14:00	0.57	-25	6.08	0.34	0.697	17.97	41.8
MW-531	06/18/2021 14:05	0.54	-38.5	6.13	0.39	0.78	17.9	17.3
MW-531	06/18/2021 14:10	0.49	-47.5	6.15	0.41	0.83	17.4	39.5
MW-531	06/18/2021 14:15	0.47	-51	6.17	0.41	0.838	17.62	42.1
MW-531	06/18/2021 14:20	0.48	-52	6.18	0.42	0.843	17.6	12.8
MW-531	10/04/2021 10:45	1.36	-107.4	6.42	0.33	0.666	20.41	103.4
MW-531	10/04/2021 10:50	0.98	-94.3	6.45	0.38	0.764	20.04	70.8
MW-531	10/04/2021 10:55	0.94	-91.6	6.47	0.39	0.799	19.82	52.9
MW-531	10/04/2021 11:00	0.85	-89.2	6.48	0.4	0.821	19.65	53.7
MW-531	10/04/2021 11:05	0.83	-87.5	6.49	0.41	0.83	19.64	41.2
MW-531	10/04/2021 11:10	0.82	-86	6.5	0.41	0.833	19.66	28.8
MW-531	10/04/2021 11:15	0.81	-85.2	6.5	0.41	0.832	19.63	27.7
MW-531	10/04/2021 11:20	0.8	-84.5	6.5	0.41	0.832	19.53	28.1
MW-531	12/20/2021 10:10	6.96	-63	6.1	0.3	0.635	11.24	619.6
MW-531	12/20/2021 10:15	5.87	-102.7	6.54	0.36	0.704	12.72	375
MW-531	12/20/2021 10:20	4.8	-108.7	6.59	0.36	0.74	13.32	298.7
MW-531	12/20/2021 10:25	4.36	-110	6.6	0.37	0.753	13.84	190.7
MW-531	12/20/2021 10:30	4.52	-108.7	6.6	0.37	0.755	14.25	161.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-531	12/20/2021 10:35	4.42	-108.1	6.61	0.37	0.755	14.36	107.9
MW-531	12/20/2021 10:40	4.34	-106.9	6.61	0.37	0.76	14.26	72
MW-531	12/20/2021 10:45	4.14	-104.9	6.59	0.37	0.758	14.44	90.9
MW-531	12/20/2021 10:50	4.18	-103.1	6.6	0.37	0.755	14.45	75.6
MW-531	12/20/2021 10:55	1.1	101.2	6.59	0.37	0.754	14.35	54.6
MW-532	02/13/2018 13:20	0.07	25.80	5.84	0.39	0.792	13.16	136.50
MW-532	02/13/2018 14:35	0.64	20.50	6.01	0.42	0.848	13.68	598.30
MW-532	02/13/2018 14:55	1.50	20.20	6.10	0.33	0.774	13.75	1261.10
MW-532	05/15/2018 09:10	1.18	65.80	6.00	0.41	0.823	15.84	101.70
MW-532	05/15/2018 10:25	4.11	30.30	6.08	0.44	0.888	16.51	107.60
MW-532	05/15/2018 10:50	4.76	67.70	5.77	0.36	0.736	18.31	287.20
MW-532	12/07/2018 12:25	4.40	12.50	6.12	0.16	0.325	11.89	33.60
MW-532	12/07/2018 14:15	3.93	29.30	5.87	0.16	0.330	14.58	40.20
MW-532	12/07/2018 14:30	1.93	63.10	5.66	0.15	0.310	15.77	506.70
MW-532	04/22/2019 08:30	0.88	69.00	6.31	0.42	0.855	13.52	81.90
MW-532	04/22/2019 10:10	2.52	93.80	5.58	0.36	0.725	14.23	7.80
MW-532	04/22/2019 10:30	2.72	74.60	5.76	0.34	0.711	15.11	10.20
MW-532	10/31/2019 09:15	2.46	175.2	7.12	NM	0.161	15.19	17
MW-532	10/31/2019 09:20	0.95	161.4	6.17	NM	0.15	14.82	10.2
MW-532	10/31/2019 09:30	1.15	155	5.66	NM	0.139	14.82	43.4
MW-532	10/31/2019 09:35	0.69	140	5.71	NM	0.14	14.8	17.2
MW-532	10/31/2019 09:40	0.58	133.9	5.73	NM	0.135	14.44	6.4
MW-532	10/31/2019 09:45	0.5	126.8	5.77	NM	0.136	14.37	5.4
MW-532	10/31/2019 09:50	0.47	122.2	5.84	NM	0.143	14.21	2.3
MW-532	10/31/2019 09:55	0.42	117.4	5.8	NM	0.138	14.29	2.2
MW-532	10/31/2019 10:00	0.4	115.6	5.8	NM	0.136	14.27	1.3
MW-532	10/31/2019 10:05	0.39	114.8	5.79	NM	0.134	14.24	1.1
MW-532	10/31/2019 10:40	0.92	112.2	5.82	0.06	0.13	13.91	715.7
MW-532	10/31/2019 11:15	4.19	110.4	5.79	0.06	0.134	13.55	1458.6
MW-532	05/05/2020 09:35	2.02	72.6	5.66	NM	0.618	13.59	97
MW-532	05/05/2020 10:49	5.45	107	5.77	0.3	0.623	14.29	1486.9
MW-532	06/18/2021 15:00	1.71	80	5.52	0.29	0.6	19.63	160.7
MW-532	06/18/2021 15:05	1.2	92	5.25	0.29	0.589	19.96	178.3
MW-532	06/18/2021 15:10	0.93	100.3	5.09	0.28	0.584	19.86	187.5
MW-532	06/18/2021 15:15	0.79	103.7	5.07	0.28	0.582	19.44	245
MW-532	06/18/2021 15:20	0.63	110.5	5.01	0.28	0.58	18.64	121.9
MW-532	06/18/2021 15:25	0.61	110.2	5.01	0.28	0.58	18.58	128.7
MW-532	06/18/2021 15:30	0.57	111.2	5.01	0.28	0.58	18.31	149.8
MW-532	06/18/2021 15:35	0.54	111.4	5.03	0.28	0.579	18.15	106.2
MW-532	06/18/2021 15:40	0.51	112.1	5.03	0.28	0.579	17.82	108.4
MW-532	06/18/2021 15:45	0.49	112.1	5.05	0.28	0.577	17.94	109.3
MW-532	09/29/2021 10:50	2.99	4.7	6.54	0.24	0.495	18.87	4.2
MW-532	09/29/2021 10:55	1.69	25.1	5.87	0.27	0.549	18.6	2.3
MW-532	09/29/2021 11:00	0.11	40.2	5.62	0.25	0.511	18.5	1.5
MW-532	09/29/2021 11:05	0.09	45.2	5.63	0.21	0.436	18.39	0
MW-532	09/29/2021 11:10	0.05	50.8	5.6	0.23	0.473	18.3	0.4
MW-532	09/29/2021 11:15	0.04	58.3	5.54	0.26	0.527	18.45	0
MW-532	09/29/2021 11:20	0.02	60.5	5.53	0.26	0.543	18.29	0
MW-532	09/29/2021 11:25	0.18	64.2	5.5	0.27	0.554	18.27	0
MW-532	09/29/2021 11:30	0.41	67.4	5.48	0.27	0.558	18.11	0
MW-532	09/29/2021 11:35	0.66	70.3	5.47	0.27	0.557	18.29	0
MW-532	12/28/2021 09:10	2.52	-0.9	15.61	0.22	0.446	15.16	12.6
MW-532	12/28/2021 09:15	2.32	-0.5	15.6	0.22	0.451	15.22	13.5
MW-532	12/28/2021 09:20	2.32	6	15.44	0.22	0.456	14.89	12.2
MW-532	12/28/2021 09:25	2.36	1.2	15.37	0.22	0.463	14.82	7.8
MW-532	12/28/2021 09:30	0.07	-6.3	15.65	0.29	0.595	15.06	4
MW-532	12/28/2021 09:35	1.82	-10.2	15.34	0.26	0.538	15.16	2.5
MW-532	12/28/2021 09:40	1.17	-12.7	14	0.27	0.545	15.39	-1.9
MW-532	12/28/2021 09:45	1.11	-13.5	13.96	0.27	0.546	15.34	0.9
MW-532	12/28/2021 09:50	0.87	-23.2	13.14	0.29	0.589	14.79	0.9

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-532	12/28/2021 09:55	0.01	-21.7	13.24	0.29	0.599	15	0.2
MW-532	12/28/2021 10:00	0.35	-20.9	13.82	0.3	0.609	15.2	-0.4
MW-533	02/12/2018 13:55	0.79	-189.80	8.04	0.62	1.231	13.58	59.30
MW-533	02/12/2018 14:45	2.79	-115.40	8.03	0.64	1.278	14.5	227.20
MW-533	02/12/2018 15:05	3.44	-80.00	7.42	0.71	1.411	14.17	1278.20
MW-533	05/17/2018 08:55	3.42	120.40	7.27	0.66	1.317	13.82	163.80
MW-533	05/17/2018 10:50	17.15	-72.00	7.28	0.77	1.514	14.95	151.40
MW-533	05/17/2018 11:00	5.76	-51.00	7.13	0.78	1.548	15.09	1571.30
MW-533	12/10/2018 10:20	5.47	18.30	6.26	0.54	1.079	13.81	25.90
MW-533	12/10/2018 11:40	0.28	66.90	6.45	0.71	1.412	12.05	114.60
MW-533	12/10/2018 12:00	2.02	48.10	6.26	0.45	0.904	15.18	1702.70
MW-533	04/16/2019 10:10	1.26	21.30	6.26	0.45	0.910	12.46	45.90
MW-533	04/16/2019 11:20	1.50	106.50	6.43	0.47	0.949	14.99	143.70
MW-533	04/16/2019 11:45	4.82	55.50	6.42	0.51	1.022	14.11	1598.10
MW-533	10/25/2019 08:05	10.39	61.1	6.3	NM	0.453	16.38	27
MW-533	10/25/2019 08:10	10.09	60.6	6.06	NM	0.452	16.48	25.1
MW-533	10/25/2019 08:15	10.13	62.1	5.88	NM	0.453	16.4	19.6
MW-533	10/25/2019 08:20	9.61	64.3	5.81	NM	0.453	16.55	14.4
MW-533	10/25/2019 08:25	9.06	67.2	5.77	NM	0.455	16.48	10.7
MW-533	10/25/2019 08:30	8.55	68.7	5.76	NM	0.458	16.62	6.8
MW-533	10/25/2019 08:35	8.71	69.7	5.77	NM	0.463	16.58	5.5
MW-533	10/25/2019 08:40	8.41	73.2	5.78	NM	0.469	16.58	4.2
MW-533	10/25/2019 08:45	8.21	72.2	5.8	NM	0.475	16.66	3.5
MW-533	10/25/2019 08:50	8.17	71.9	5.82	NM	0.48	16.74	3.4
MW-533	10/25/2019 10:10	12.81	28.8	6.78	0.36	0.784	17.64	135.2
MW-533	10/25/2019 10:25	15.45	10.4	6.44	0.39	0.82	16.94	1450.2
MW-533	04/30/2020 09:35	0.72	125.4	5.92	NM	0.554	12.42	5.2
MW-533	04/30/2020 10:21	4.69	49.7	6.34	0.36	0.73	13.36	424.7
MW-533	06/29/2021 10:35	4.33	95.2	7.28	0.1	0.221	27.15	211.4
MW-533	06/29/2021 10:40	1.76	78	6.41	0.19	0.404	23.57	490.9
MW-533	06/29/2021 10:45	1.27	86	6.11	0.19	0.402	25.01	444.5
MW-533	06/29/2021 10:50	1.05	88.9	6.04	0.2	0.409	25.56	314.2
MW-533	06/29/2021 10:55	0.92	92.2	6	0.2	0.411	27.77	284.2
MW-533	06/29/2021 11:00	0.92	91.5	5.97	0.2	0.425	28.28	286.2
MW-533	06/29/2021 11:05	0.88	94.7	5.94	0.2	0.427	28.25	280.5
MW-533	06/29/2021 11:10	0.86	95.3	5.95	0.2	0.429	28.18	297.5
MW-533	06/29/2021 11:15	0.85	95.1	5.95	0.2	0.428	28.15	285.7
MW-533	09/16/2021 10:50	2.05	96.6	6.05	0.18	0.368	20.99	227.9
MW-533	09/16/2021 10:55	1.61	97.8	5.94	0.18	0.368	21.23	227.3
MW-533	09/16/2021 11:00	0.58	125.7	5.54	0.18	0.37	21.74	292.4
MW-533	09/16/2021 11:05	1.03	151.9	5.16	0.19	0.388	22.01	280.9
MW-533	09/16/2021 11:10	1.15	160.5	5.07	0.19	0.393	21.91	289.9
MW-533	09/16/2021 11:15	1.2	171.4	5.01	0.19	0.401	21.95	198.8
MW-533	09/16/2021 11:20	1.37	178.4	5.04	0.2	0.419	22.2	201.1
MW-533	09/16/2021 11:25	1.41	181.6	4.98	0.21	0.427	22.32	208.6
MW-533	09/16/2021 11:30	1.45	184.2	4.97	0.21	0.444	22.29	180.2
MW-533	09/16/2021 11:35	1.54	184	4.97	0.22	0.455	22.45	169.4
MW-533	12/20/2021 12:35	4.11	78.5	6.31	0.17	0.35	13.59	65.3
MW-533	12/20/2021 12:40	3.21	3.32	6.12	0.17	0.349	14.33	68
MW-533	12/20/2021 12:45	2.85	104.1	6.09	0.16	0.34	14.5	33
MW-533	12/20/2021 12:50	2.91	109	6.08	0.16	0.34	14.51	27.1
MW-533	12/20/2021 12:55	2.78	110.9	6.08	0.17	0.345	14.13	20.1
MW-533	12/20/2021 13:00	2.77	109	6.08	0.16	0.348	14.05	20.8
MW-533	12/20/2021 13:05	2.72	105.6	6.09	0.17	0.355	14.18	13.4
MW-533	12/20/2021 13:10	2.68	103.5	6.09	0.17	0.362	14.09	12.2
MW-533	12/20/2021 13:15	2.67	102.5	6.1	0.18	0.365	14.14	17
MW-533	12/20/2021 13:20	2.66	101.3	6.09	0.18	0.367	14.25	15.5
MW-533	03/29/2022 08:35	4.29	90.5	6.45	0.21	0.428	8.51	342.6
MW-533	03/29/2022 08:40	4.3	101.3	5.75	0.2	0.417	9.23	608.1
MW-533	03/29/2022 08:45	4.74	115.8	5.72	0.2	0.417	8.98	219.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-533	03/29/2022 08:50	4.04	116.2	5.92	0.2	0.418	9.14	147.6
MW-533	03/29/2022 08:55	5.35	124.7	5.75	0.2	0.418	8.85	122.7
MW-533	03/29/2022 09:00	6.72	126.2	5.75	0.21	0.419	7.39	123.3
MW-533	03/29/2022 09:05	5.18	127	5.87	0.21	0.423	5.66	136.4
MW-533	03/29/2022 09:10	6.33	138.9	5.7	0.21	0.428	7.31	122.5
MW-533	03/29/2022 09:15	6.57	131.4	5.8	0.21	0.427	7.39	97.6
MW-533	03/29/2022 09:20	6.5	116.3	5.93	0.21	0.429	8.14	76.4
TP2-018	06/28/2012 13:03	0.7	-83	6.88	0.08	1.57455	33.69	24
TP2-018	06/28/2012 13:05	0.79	-95	7.07	0.09	1.76599	27.3	20.8
TP2-018	06/28/2012 13:08	0.56	-101	7.13	0.09	1.72566	25.47	20
TP2-018	06/28/2012 13:10	0.45	-105	7.09	0.09	1.72621	25.66	20.1
TP2-018	06/28/2012 13:13	0.39	-108	7.1	0.09	1.73728	25.58	19.7
TP2-018	06/28/2012 13:15	0.35	-110	7.08	0.09	1.73865	25.68	19.6
TP2-018	06/28/2012 13:17	0.32	-111	7.09	0.09	1.73288	25.97	19.2
TP2-018	06/28/2012 13:20	0.3	-113	7.08	0.09	1.74347	26.21	19.9
TP2-018	06/28/2012 13:22	0.28	-114	7.1	0.09	1.73717	26	20.7
TP2-018	06/28/2012 13:24	0.27	-116	7.11	0.09	1.72869	26.06	20.6
TP2-018	06/28/2012 13:27	0.25	-117	7.1	0.09	1.7426	26.54	20.4
TP2-018	06/28/2012 13:29	0.24	-118	7.11	0.09	1.74522	26.44	19.5
TP2-018	06/28/2012 13:31	0.24	-118	7.15	0.09	1.72985	25.80	19.9
TP2-018	09/10/2012 12:54	4.47	-29	6.28	0.1	1.81	24.5	45.6
TP2-018	09/10/2012 12:56	3.15	-50	6.22	0.1	1.78	25.6	39.9
TP2-018	09/10/2012 12:58	2.93	-72	6.28	0.1	1.81	24.4	33.2
TP2-018	09/10/2012 13:00	2.46	-81	6.29	0.1	1.91	24.6	25.0
TP2-018	09/10/2012 13:02	2.24	-88	6.29	0.1	1.81	24.8	37.3
TP2-018	09/10/2012 13:04	2.07	-93	6.27	0.1	1.81	25.0	23.2
TP2-018	09/10/2012 13:06	1.97	-97	6.28	0.1	1.81	25.2	26.7
TP2-018	09/10/2012 13:08	1.90	-99	6.29	0.1	1.81	24.7	26.1
TP2-018	09/10/2012 13:10	1.78	-100	6.29	0.1	1.81	25.2	26.9
TP2-018	09/10/2012 13:12	1.75	-100	6.27	0.10	1.820	25.10	27.10
TP2-018	08/20/2013 10:19	4.22	-63.2	6.80	0.72	1.448	23.30	238.70
TP2-018	08/20/2013 10:52	0.33	-90.3	6.68	0.87	1.709	20.24	143.80
TP2-018	08/21/2013 11:15	0.34	-81.8	6.70	1.00	1.934	21.50	261.80
TP2-018	10/31/2013 13:47	0.98	-152	6.16	0.10	1.859	20.35	4.42
TP2-018	02/11/2014 11:09	0.75	-89	6.45	0.17	3.362	7.80	37.36
TP2-018	02/11/2014 12:20	1.65	-84	6.28	0.16	3.066	12.52	442.70
TP2-018	11/05/2014 15:04	-0.51	-109	6.32	0.18	3.477	18.94	4.44
TP2-018	12/08/2015 13:40	20.80	-81	10.52	0.70	1.330	19.50	5.50
TP2-018	12/08/2015 14:08	32.20	-81	6.55	0.60	1.300	19.72	93.10
TP2-018	03/30/2016 12:40	0.83	-63	7.93	0.50	1.020	18.39	189.00
TP2-018	03/30/2016 14:20	0.0000	-98	7.89	0.50	0.926	20.31	218.00
TP2-018R	05/03/2017 10:55	0.63	387.70	3.56	15.91	26.000	17.94	166.30
TP2-018R	05/03/2017 11:25	3.25	412.80	2.88	16.29	26.520	17.93	210.20
TP2-018R	05/03/2017 11:35	4.96	441.60	4.54	14.85	24.370	16.72	323.00
TP2-018R	08/23/2017 10:35	0.45	84.30	5.13	24.75	38.850	22.14	74.70
TP2-018R	08/23/2017 11:20	2.02	52.40	5.42	24.09	38.680	23.79	281.70
TP2-018R	08/23/2017 11:30	1.89	50.80	5.52	23.74	37.460	24.19	305.10
TP2-018R	02/06/2018 10:00	0.54	-38.60	6.10	17.00	27.880	11.81	29.80
TP2-018R	02/06/2018 10:45	3.83	-68.90	6.12	14.81	21.810	11.21	77.80
TP2-018R	02/06/2018 11:00	2.45	-74.40	6.20	15.36	25.250	10.95	165.40
TP2-018R	08/15/2018 09:05	0.16	-43.70	6.03	19.73	31.610	20.88	37.50
TP2-018R	08/15/2018 10:20	1.12	-29.50	5.97	19.23	31.020	21.47	7.60
TP2-018R	08/15/2018 10:45	1.20	-50.00	6.14	18.61	29.990	21.1	467.80
TP2-018R	11/09/2018 09:05	0.38	-45.00	5.94	8.28	14.220	16.51	37.60
TP2-018R	11/09/2018 09:45	0.30	-48.80	5.91	8.27	14.220	16.61	32.10
TP2-018R	11/09/2018 09:55	3.91	-60.20	5.99	8.27	14.160	16.35	341.60
TP2-018R	02/06/2019 12:10	3.58	-30.4	6.29	NM	17.84	12.98	66.3
TP2-018R	02/06/2019 13:00	3.63	-19.7	6.16	10.34	17.87	12.37	13.7
TP2-018R	07/26/2019 09:30	0.23	-74	6.01	NM	29.47	20.45	40
TP2-018R	07/26/2019 10:05	0.65	-86	5.98	NM	17.01	19.69	83.9

Appendix B4 Central Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
TP2-018R	07/26/2019 10:10	0.5	-84.9	6	NM	31.54	20.14	93.6
TP2-018R	07/26/2019 10:15	0.4	-82	6.01	NM	31.64	20.58	106.6
TP2-018R	07/26/2019 10:20	0.35	-80.3	6.02	NM	31.71	20.69	75.4
TP2-018R	07/26/2019 10:25	0.31	-79.4	6.02	NM	31.58	20.75	44.9
TP2-018R	07/26/2019 10:30	2.19	-48	5.88	18.64	30.03	21	49.9
TP2-018R	07/26/2019 10:35	0.24	-74.5	6.02	NM	30.14	20.69	36
TP2-018R	07/26/2019 10:40	0.23	-74.9	6.01	18.19	29.9	20.87	31.8
TP2-018R	07/26/2019 10:45	0.23	-74.3	6.01	NM	29.57	20.62	38.1
TP2-018R	07/26/2019 10:50	0.23	-74	6.01	NM	29.47	20.45	40
TP2-018R	07/26/2019 13:00	2.78	-54.3	6.16	NM	29.35	19.2	540.6
TP2-018R	03/04/2021 10:25	0.2	-45.2	6.41	11.24	18.91	11.31	12.8
TP2-018R	03/04/2021 10:50	0.55	-39.6	6.4	11.37	19.1	12.64	327.9
TP2-018R	05/11/2021 11:20	1.76	247.3	3.88	2.62	4.877	14.58	14.4
TP2-018R	05/11/2021 11:25	1.44	253.8	3.87	2.52	4.672	14.75	7.6
TP2-018R	05/11/2021 11:30	1.39	255.9	3.86	2.48	4.618	14.47	6
TP2-018R	05/11/2021 11:35	1.13	255.8	3.85	2.34	4.384	14.65	3.1
TP2-018R	05/11/2021 11:40	1.03	257	3.87	2.24	4.224	14.7	1.8
TP2-018R	05/11/2021 11:45	0.95	255.3	3.99	2.1	3.929	14.42	0.9
TP2-018R	05/11/2021 11:50	0.89	252.9	3.34	1.97	3.697	14.49	-0.8
TP2-018R	05/11/2021 11:55	0.81	247.9	3.95	1.83	3.462	14.52	-0.8
TP2-018R	05/11/2021 12:00	0.79	247.5	3.96	1.81	3.422	14.53	-1
TP2-018R	04/01/2022 09:10	5.1	-16	6.28	1.3	2.539	12.27	1380.3
TP2-018R	04/01/2022 09:15	5.02	3.1	6.21	1.23	2.366	11.82	1375.4
TP2-018R	04/01/2022 09:20	4.94	-0.8	6.21	1.25	2.469	11.82	1375.2
TP2-018R	04/01/2022 09:25	4.4	-11.8	6.2	3.403	3.391	12.01	1252
TP2-018R	04/01/2022 09:30	4.26	-14.5	6.2	1.91	3.629	12	1093.4
TP2-018R	04/01/2022 09:35	4.03	-20.5	6.21	2.22	4.145	12.56	786.1
TP2-018R	04/01/2022 09:40	4	-23.6	6.22	2.37	4.412	12.08	648.2
TP2-018R	04/01/2022 09:45	3.99	-24	6.22	2.49	4.603	12.1	585.2
TP2-018R	04/01/2022 09:50	3.39	-27.2	6.19	2.97	5.432	11.95	470.8
TP2-018R	04/01/2022 09:55	3.26	-28.3	6.19	3.02	5.564	11.99	439.1

Notes:
1. mg/L - milligrams per liter
2. ppt - parts per trillion
3. mS/cm - milliSiemens per centimeter
4.NTU - nephelometric turbidity unit
5. NM - No Measured

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MP-01R	09/01/2016 14:47	1.41	-49.3	8.31	3.07	5.666	21.74	0.00
MP-01R	09/01/2016 14:55	0.83	-85.9	7.90	3.05	5.622	22.79	0.60
MP-01R	10/18/2016 14:00	2.17	-128.2	7.19	2.03	3.834	22.91	5.30
MP-01R	10/18/2016 14:15	5.32	-114.2	7.54	1.88	3.569	21.69	16.00
MP-01R	12/07/2016 09:25	1.84	-114.6	7.65	3.1	5.685	12.79	6
MP-01R	12/07/2016 09:45	3.7	-151.2	7.64	2.43	4.515	12.35	242.1
MP-01R	01/19/2017 11:00	4.03	-159.4	7.97	3.51	5.782	13.00	7.40
MP-01R	01/19/2017 11:30	6.07	-141.3	8.07	2.96	5.454	11.48	261.10
MP-01R	04/25/2017 09:25	2.92	-212.90	7.26	3.36	6.131	11.26	0.60
MP-01R	04/25/2017 10:05	3.74	-111.50	7.15	3.30	6.045	11.35	3.00
MP-01R	04/25/2017 10:15	4.11	-100.60	7.42	2.49	4.638	11.43	135.70
MP-01R	01/09/2018 09:45	0.01	-136.20	7.12	4.21	8.113	10.94	1.00
MP-01R	01/09/2018 10:29	0.44	-128.60	7.37	4.25	7.698	11.63	42.00
MP-01R	01/09/2018 10:50	3.53	-126.60	7.34	3.64	6.630	12.15	55.70
MP-01R	08/17/2018 12:40	0.09	-233.30	7.42	1.84	3.491	21.59	2.00
MP-01R	08/17/2018 13:30	0.80	-141.00	7.53	1.83	3.507	23.5	8.80
MP-01R	08/17/2018 13:50	0.94	-123.50	7.62	1.83	3.505	23.68	17.90
MP-01R	11/12/2018 09:25	2.92	-212.9	7.2	NM	6.131	11.26	0.6
MP-01R	11/12/2018 10:05	3.74	-111.5	7.15	3.3	6.045	11.35	3
MP-01R	02/08/2019 09:40	0.60	-92.70	7.55	2.88	5.333	8.69	0.80
MP-01R	02/08/2019 10:30	0.63	-132.30	7.56	3.02	5.561	10.05	2.60
MP-01R	02/08/2019 10:50	0.98	-121.90	7.47	2.58	5.401	9.97	27.60
MP-01R	05/06/2019 09:50	0.52	-165.7	7.55	NM	4.989	12.66	8.1
MP-01R	05/06/2019 10:40	8.5	-117.7	7.78	2.71	5.008	14.28	2.5
MP-01R	05/31/2019 14:14	7	7	7	NM	7	7	7
MP-01R	05/31/2019 14:19	7	7	7	NM	7	7	7
MP-01R	05/31/2019 14:24	7	7	7	NM	7	7	7
MP-01R	05/31/2019 14:29	7	7	7	NM	7	7	7
MP-01R	06/03/2019 15:32	6	6	6	6	6	6	6
MP-01R	06/03/2019 15:33	6	6	6	6	6	6	6
MP-01R	06/03/2019 15:38	6	6	6	6	6	6	6
MP-01R	08/02/2019 10:05	0.39	-156.3	7.24	NM	6.124	19.62	5.7
MP-01R	08/02/2019 10:10	0.25	-176	7.22	NM	5.761	18.76	5.9
MP-01R	08/02/2019 10:15	0.2	-185.5	7.19	NM	5.464	18.6	6.1
MP-01R	08/02/2019 10:20	0.18	-191	7.13	NM	5.237	18.41	7.6
MP-01R	08/02/2019 10:25	0.19	-195.6	7.12	NM	5.17	18.41	5.7
MP-01R	08/02/2019 10:30	0.12	-205.6	7.07	NM	4.683	18.32	1.4
MP-01R	08/02/2019 10:35	0.17	-198.9	7.1	NM	5.014	18.41	3.2
MP-01R	08/02/2019 10:40	0.18	-202.8	7.09	NM	4.951	18.35	2.2
MP-01R	08/02/2019 10:45	0.11	-205.4	7.08	NM	4.909	18.36	2
MP-01R	08/02/2019 10:50	0.12	-205.6	7.07	NM	4.683	18.32	1.4
MP-01R	08/02/2019 10:55	1.32	-137.3	7.16	1.96	3.712	20.63	2.9
MP-01R	08/02/2019 11:13	2.06	-121.9	7.46	2.48	4.641	22.94	20.2
MP-01R	09/23/2019 13:15	0.75	-111.4	7.17	NM	4.532	21.85	1.8
MP-01R	09/23/2019 13:45	0.35	-147.2	6.99	2.26	4.221	20.04	0.4
MP-01R	09/23/2019 14:00	0.36	-119.8	6.89	2.28	4.278	20.44	8.9
MP-01R	02/18/2020 10:55	0.74	-4.6	6.65	NM	28.67	9.85	0.7
MP-01R	02/18/2020 12:40	13.8	224.8	7.47	26.02	40.96	9.88	62.7
MP-01R	05/15/2020 13:10	0.64	-96.5	6.61	NM	14.22	20.97	NM
MP-01R	05/15/2020 14:10	6.4	-34.1	7.49	17.69	28.6	18.3	50.5
MP-01R	11/06/2020 12:20	0.09	-87.2	7.04	4.4	7.905	19.94	24.6
MP-01R	11/06/2020 12:25	0.09	95.4	6.9	7.22	12.46	20.52	18.7
MP-01R	11/06/2020 12:30	0.22	-70.4	6.85	12.2	11.87	20.46	33.1
MP-01R	11/06/2020 12:35	0.3	-19.5	6.73	10.48	17.48	20.45	88.2
MP-01R	11/06/2020 12:40	0.32	10.4	6.71	14.64	23.9	20.5	114.4
MP-01R	11/06/2020 12:45	0.22	0.6	6.72	16.39	26.88	21.5	110

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MP-01R	11/06/2020 12:50	0.2	-7.8	6.75	15.64	26.02	20.46	99.3
MP-01R	11/06/2020 12:55	0.2	-13.3	6.71	16.19	26.16	20.05	75.4
MP-01R	11/06/2020 13:00	0.24	-7	6.71	17.47	27.78	19.73	72.5
MP-01R	11/06/2020 13:05	0.28	-2.2	6.71	17.35	28.63	19.7	82.1
MP-01R	11/06/2020 14:00	0.79	41.3	6.82	17.13	27.99	19.23	134.9
MP-01R	11/06/2020 14:15	1.27	-42.8	6.8	8.24	14.18	18.59	233.6
MP-01R	02/04/2021 10:25	0.68	-79	6.64	4.3	8.431	7.55	26.4
MP-01R	02/04/2021 10:30	0.34	-86.1	6.59	13.44	22.95	8.33	62.7
MP-01R	02/04/2021 10:35	0.22	-85.8	6.8	23.79	37.97	8.29	78.7
MP-01R	02/04/2021 10:40	0.18	-85.3	6.91	26.33	41.83	8.25	73.1
MP-01R	02/04/2021 10:45	0.15	-84.7	6.92	27.32	43.67	8.32	69.3
MP-01R	02/04/2021 10:50	0.14	-82.2	6.92	31.75	48.73	8.79	50.7
MP-01R	02/04/2021 10:55	0.1	-75.4	6.9	34.7	53.13	8.65	59.7
MP-01R	02/04/2021 11:00	0.1	-69.6	6.86	36.28	55.33	8.87	26
MP-01R	02/04/2021 11:05	0.09	-62.7	6.81	37.28	58.76	8.85	19.2
MP-01R	02/04/2021 11:10	0.09	-56.3	6.76	38.31	58.02	9.15	18.5
MP-01R	02/04/2021 11:30	0.17	-46	6.62	35.82	55.44	9.97	38.3
MP-01R	02/04/2021 11:50	0.39	-29.5	6.54	33.38	51.8	9.46	205.2
MP-01R	08/25/2021 14:30	0.23	15.4	5.91	13.36	22.52	25.3	1720
MP-01R	08/25/2021 14:35	0.09	15	5.84	16.5	25.48	25.95	1756.5
MP-01R	08/25/2021 14:40	0.03	23	5.94	19.17	30.12	25.88	1741.8
MP-01R	08/25/2021 14:45	0.05	-33.9	6.1	24.07	37.24	25.82	2314.8
MP-01R	08/25/2021 14:50	0.04	-48.5	6.27	25.31	39.6	25.77	2312.4
MP-01R	08/25/2021 14:55	0.01	-55.3	6.36	25.54	39.91	25.13	2193
MP-01R	08/25/2021 15:00	0.01	-61.9	6.43	25.57	39.78	25.01	1815.1
MP-01R	08/25/2021 15:05	0.01	-77.7	6.55	25.16	39.35	25.2	1268.9
MP-01R	08/25/2021 15:10	0.02	-82.4	6.6	24.97	39.25	25.1	1140
MP-01R	08/25/2021 15:15	0.02	-90.3	6.67	24.74	40.59	25.02	945.5
MP-01R	02/08/2022 13:00	1.58	-57.7	6.68	23.72	37.51	10.31	132.1
MP-01R	02/08/2022 13:05	1.53	-54.4	6.51	23.66	37.44	10.26	117.3
MP-01R	02/08/2022 13:10	1.37	-54	6.48	23.63	37.44	10.16	110.3
MP-01R	02/08/2022 13:15	1.25	-49.8	6.39	22.76	36.18	10.2	87
MP-01R	02/08/2022 13:20	0.79	-36.7	6.42	21.62	34.53	10.13	126.4
MP-01R	02/08/2022 13:25	1.11	-19.8	6.32	20.89	33.47	10.19	63.9
MP-01R	02/08/2022 13:30	1.06	-20.1	6.33	20.88	33.43	10.19	102.1
MP-01R	02/08/2022 13:35	0.7	-31.9	6.37	19.95	32.1	9.89	49
MP-01R	02/08/2022 13:40	0.69	-24.7	6.23	18.95	30.61	9.69	41.6
MP-01R	02/08/2022 13:45	0.68	-26.6	6.31	18.93	30.58	9.68	43.7
MP-03R	07/26/2016 10:30	2.24	-89.5	7.18	4.07	7.419	22.90	10.40
MP-03R	07/26/2016 10:35	2.19	-89	7.16	4.09	7.423	22.94	10.70
MP-03R	08/29/2016 10:56	0.75	-70.2	6.95	4.53	8.226	23.04	0.10
MP-03R	08/29/2016 11:05	0.81	-74.3	6.92	3.98	7.878	22.98	4.20
MP-03R	10/20/2016 14:45	1.44	-84.3	6.71	4.28	8.550	20.31	0.0000
MP-03R	10/20/2016 15:00	1.29	-92	6.93	2.74	5.086	19.75	282.00
MP-03R	12/05/2016 10:30	0.27	-96.8	6.83	3.63	6.589	14.91	218.8
MP-03R	12/05/2016 11:50	2.3	-104.5	6.99	2.72	5.037	13.77	154.3
MP-03R	01/17/2017 09:50	4.50	-41.6	6.88	3.29	6.019	10.52	6.20
MP-03R	01/17/2017 10:05	4.34	-75.9	7.13	2.26	4.243	9.18	100.90
MP-03R	04/18/2017 13:45	0.08	100.70	5.93	2.51	4.650	11.61	7.10
MP-03R	04/18/2017 14:15	0.47	101.70	6.32	0.04	0.089	14.94	29.90
MP-03R	04/18/2017 14:30	0.90	108.00	6.34	2.14	4.070	12.92	46.90
MP-03R	01/09/2018 13:10	7.57	-32.40	6.66	4.44	5.900	10.91	0.0000
MP-03R	01/09/2018 13:35	5.66	-33.40	6.84	5.56	9.817	12.45	0.0000
MP-03R	01/09/2018 14:15	4.69	-98.10	6.76	5.96	10.490	12.44	0.0000
MP-03R	08/27/2018 11:30	0.02	-390.20	6.65	3.94	7.197	21.59	0.0000
MP-03R	08/27/2018 12:05	6.99	63.00	7.40	0.01	0.270	37.76	19.80

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MP-03R	08/27/2018 12:27	6.44	63.00	7.40	0.01	0.027	37.76	19.80
MP-03R	02/08/2019 12:00	0.60	-72.30	7.14	2.26	4.199	8.73	1.30
MP-03R	02/08/2019 12:45	1.05	-76.80	6.93	4.00	7.249	9.89	1.50
MP-03R	02/08/2019 12:55	4.83	-86.20	7.85	1.15	2.232	7.89	6.20
MP-03R	05/09/2019 09:25	0.3	-100.1	6.8	NM	9.507	13.14	NM
MP-03R	05/09/2019 10:30	2.82	-114	7.01	3.89	7.042	12.02	2.8
MP-03R	08/05/2019 10:05	2.57	-96.6	6.84	NM	4.344	2.34	-0.9
MP-03R	08/05/2019 10:10	1.35	-93.3	6.72	NM	6.859	19.92	-0.6
MP-03R	08/05/2019 10:15	0.96	-99.1	6.7	NM	7.536	20.09	-0.7
MP-03R	08/05/2019 10:20	0.81	-104.1	6.72	NM	7.925	20.42	-1
MP-03R	08/05/2019 10:25	0.74	-107	6.73	NM	7.984	20.31	-0.8
MP-03R	08/05/2019 10:30	0.96	-109.2	6.73	NM	8.093	20.49	-0.7
MP-03R	08/05/2019 10:35	1.08	-111.3	6.74	NM	8.007	20.16	-0.6
MP-03R	08/05/2019 10:40	0.84	-113	6.74	NM	8.549	19.66	-0.3
MP-03R	08/05/2019 10:45	0.75	-115.1	6.74	NM	8.547	19.92	-4
MP-03R	08/05/2019 10:50	0.74	-116.2	6.76	NM	8.491	19.96	-0.6
MP-03R	08/05/2019 15:20	11.15	-92	7.01	2.57	4.783	20.51	1.6
MP-03R	08/05/2019 15:26	9.27	-123.9	7.45	0.55	1.124	24.25	3.7
MP-03R	02/04/2021 12:20	0.76	-82.7	6.9	37.88	57.1	9.14	33.4
MP-03R	02/04/2021 12:25	0.16	-88.8	6.65	11.77	19.94	9.52	10.7
MP-03R	02/04/2021 12:30	0.13	-87	6.57	10.76	18.19	9.02	8.1
MP-03R	02/04/2021 12:35	0.11	-87.7	6.5	10.76	18.25	8.74	8.9
MP-03R	02/04/2021 12:40	0.1	-88.8	6.48	11.02	18.66	8.42	9.6
MP-03R	02/04/2021 12:45	0.09	-90.5	6.47	11.78	19.89	8.08	9.4
MP-03R	02/04/2021 12:50	0.08	-92.5	6.46	11.98	20.15	8.14	9
MP-03R	02/04/2021 12:55	0.07	-94.5	6.46	12.36	20.62	8.15	20.8
MP-03R	02/04/2021 13:00	0.09	-95.7	6.48	10.09	16.41	8.49	7.6
MP-03R	02/04/2021 13:05	0.09	-97.8	6.45	11.71	19.74	8.37	7.7
MP-03R	02/04/2021 13:20	0.05	-106.2	6.46	13.2	22.31	8.56	4.3
MP-03R	02/04/2021 13:35	0.04	-113	6.48	18.72	29.85	9.4	15.5
MP-03R	02/04/2022 12:05	0.36	-116.1	7.28	78.21	108.6	8.27	72.2
MP-03R	02/04/2022 12:10	0.31	-93.2	6.83	35.36	54.87	8.63	85.5
MP-03R	02/04/2022 12:15	0.33	-92.2	6.87	27.25	43	8.21	66.7
MP-03R	02/04/2022 12:20	0.28	-94.9	6.99	25.13	39.77	7.97	52.5
MP-03R	02/04/2022 12:25	0.28	-97.1	7.05	24.99	39.62	7.95	36.8
MP-03R	02/04/2022 12:30	0.18	-99	7.08	24.52	38.74	7.62	20
MP-03R	02/04/2022 12:35	0.17	-100.3	7.09	24.7	39.15	7.54	16.1
MP-03R	02/04/2022 12:40	0.17	-100.8	7.09	24.79	39.12	7.52	15.5
MP-03R	02/04/2022 12:45	0.16	-101.1	7.09	24.78	39.07	7.48	15.1
MP-04RR	07/27/2016 10:40	1.60	-86.5	7.15	5.15	9.177	22.12	0.30
MP-04RR	07/27/2016 10:47	1.53	-83	7.07	5.14	9.170	23.22	1.40
MP-04RR	08/29/2016 15:31	1.13	-23.9	6.75	4.83	8.930	23.40	0.0000
MP-04RR	08/29/2016 15:40	0.96	-26.5	6.70	4.78	8.687	23.44	0.0000
MP-04RR	10/19/2016 11:10	1.66	-75.1	6.60	5.79	10.240	21.84	0.0000
MP-04RR	10/19/2016 11:20	2.97	-42.6	6.52	2.60	4.854	21.77	20.70
MP-04RR	12/07/2016 08:50	2.51	-80.4	6.56	4.18	7.52	13.82	37.2
MP-04RR	12/07/2016 09:30	2.2	-49.5	6.59	2.34	4.36	12.58	31.2
MP-04RR	01/25/2017 10:10	1.46	-72.1	7.01	4.26	7.684	10.36	3.50
MP-04RR	01/25/2017 10:40	2.94	-69.6	6.95	4.32	7.779	10.48	46.00
MP-04RR	04/17/2017 09:30	0.23	5.90	6.44	3.81	6.910	11.16	4.10
MP-04RR	04/17/2017 10:10	1.89	2.50	6.72	4.85	8.610	12.26	1.20
MP-04RR	04/17/2017 10:20	2.21	-11.60	6.70	2.49	4.630	12.24	135.60
MP-04RR	01/10/2018 13:40	0.06	-211.30	6.81	4.75	8.458	10.77	4.00
MP-04RR	01/10/2018 14:10	0.70	-186.00	7.09	5.13	9.148	9.82	0.20
MP-04RR	01/10/2018 14:25	0.56	-175.10	6.93	4.02	7.278	9.77	201.70
MP-04RR	08/27/2018 14:20	0.03	73.80	6.67	4.29	7.754	29.4	15.30

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MP-04RR	08/27/2018 14:58	1.59	-69.80	6.79	2.61	4.879	25.13	44.80
MP-04RR	08/27/2018 15:15	1.63	-82.40	6.71	4.87	8.714	21.72	192.20
MP-04RR	05/07/2019 09:50	0.06	-242.4	6.89	NM	25.53	13.45	16.5
MP-04RR	05/07/2019 10:55	2.2	-137.4	7.99	5.29	9.385	14.06	6.3
MP-04RR	08/05/2019 10:05	0.58	-125.9	6.8	NM	7.191	20.1	198.7
MP-04RR	08/05/2019 10:10	0.66	-127.8	6.78	NM	6.814	20.39	186.1
MP-04RR	08/05/2019 10:15	0.63	-126.8	6.79	NM	6.543	20.81	124.9
MP-04RR	08/05/2019 10:20	0.69	-125	6.8	NM	6.375	20.61	98.5
MP-04RR	08/05/2019 10:25	0.75	-117.9	6.8	NM	6.183	20.51	69.9
MP-04RR	08/05/2019 10:30	0.78	-110.4	6.79	NM	6.023	20.52	52.5
MP-04RR	08/05/2019 10:35	0.79	-104.3	6.78	NM	5.927	20.47	45.3
MP-04RR	08/05/2019 10:40	0.79	-94.5	6.77	NM	5.781	20.37	39.8
MP-04RR	08/05/2019 10:45	0.8	-91.4	6.77	NM	5.722	20.49	34.8
MP-04RR	08/05/2019 10:50	0.8	-88.4	6.77	NM	5.658	20.52	29.3
MP-04RR	08/05/2019 15:20	0.13	-73.4	7.01	3.12	5.752	21.41	8.5
MP-04RR	08/05/2019 15:35	1.39	-80.4	7.04	1.87	3.556	23.29	387.1
MP-04RR	02/05/2021 08:55	11.99	206.3	7.45	0.05	0.103	11.68	1237.9
MP-04RR	02/05/2021 09:00	1.25	-37.7	6.69	2.91	5.379	8.96	22.4
MP-04RR	02/05/2021 09:05	1.13	-46.9	6.67	2.92	5.393	9.13	19.9
MP-04RR	02/05/2021 09:10	0.84	-66.5	6.72	3.37	5.966	7.02	21.7
MP-04RR	02/05/2021 09:15	0.57	-76.2	6.74	3.85	6.998	7.54	20.2
MP-04RR	02/05/2021 09:20	0.49	-83.8	6.79	4.07	7.383	7.52	13.7
MP-04RR	02/05/2021 09:25	0.47	-90	6.82	4.49	8.072	7.54	6.8
MP-04RR	02/05/2021 09:30	0.47	-93.8	6.84	4.89	8.761	7.66	5.1
MP-04RR	02/05/2021 09:35	0.47	-96.7	6.85	5.04	9.004	7.68	3.1
MP-04RR	02/05/2021 09:40	0.47	-98.1	6.86	5.1	9.115	7.64	3
MP-04RR	02/05/2021 10:20	1.52	-86.6	6.99	11.35	19.09	10.94	3.2
MP-04RR	02/05/2021 10:35	2.98	-90	7.38	2.22	4.184	7.41	31.1
MP-04RR	08/24/2021 14:20	2.64	-116.8	6.69	37.54	57.04	26.28	76.1
MP-04RR	08/24/2021 14:25	1.03	-119.4	6.63	48.06	70.3	21.35	41.8
MP-04RR	08/24/2021 14:30	0.9	-120.8	6.62	45.27	66.63	20.77	23.2
MP-04RR	08/24/2021 14:35	0.17	-125.8	6.62	44.21	65.18	20.73	13.1
MP-04RR	08/24/2021 14:40	0.06	-134.6	6.65	42.14	62.7	20.73	6.8
MP-04RR	08/24/2021 14:45	0.02	-141.7	6.68	38.82	58.5	20.72	4.2
MP-04RR	08/24/2021 14:50	0.01	-144.1	6.7	36.75	55.35	20.79	3.4
MP-04RR	08/24/2021 14:55	0	-146.3	6.71	34.33	52.57	20.79	3.4
MP-04RR	08/24/2021 15:00	0	-147.7	6.73	31.84	48.61	20.88	3.5
MP-04RR	08/24/2021 15:05	0	-149.6	6.75	30.1	47.03	20.88	3.4
MP-04RR	02/03/2022 12:25	2.89	-71.4	6.97	36.14	55.28	8.62	54.4
MP-04RR	02/03/2022 12:30	0.78	-85.3	6.95	48.55	71.59	9.83	72.7
MP-04RR	02/03/2022 12:35	0.29	-92.2	6.9	51.85	75.63	10.15	90.9
MP-04RR	02/03/2022 12:40	0.21	-94.5	6.87	51.17	74.72	10.21	73.4
MP-04RR	02/03/2022 12:45	0.18	-96.5	6.86	50.54	73.96	10.28	49.2
MP-04RR	02/03/2022 12:50	0.15	-99	6.85	50.2	73.51	10.27	35.2
MP-04RR	02/03/2022 12:55	0.14	-100.7	6.86	50	73.22	10.32	22.7
MP-04RR	02/03/2022 13:00	0.12	-103.2	6.87	49.72	72.93	10.29	17
MP-04RR	02/03/2022 13:05	0.11	-104.7	6.87	49.6	72.74	10.31	13.8
MP-04RR	02/03/2022 13:10	0.1	-106.3	6.88	49.43	72.48	10.31	9.6
MW-0043	04/30/2012 14:32	3.6	0	7.07	0.02	0.38699	16.51	73.9
MW-0043	04/30/2012 14:34	2.01	3	7.13	0.02	0.37184	15.76	21.6
MW-0043	04/30/2012 14:36	1.71	7	7.13	0.02	0.36971	15.3	12.1
MW-0043	04/30/2012 14:39	1.57	10	7.12	0.02	0.3685	15.08	8.3
MW-0043	04/30/2012 14:41	1.49	12	7.1	0.02	0.36838	15.12	6.5
MW-0043	04/30/2012 14:43	1.44	14	7.09	0.02	0.36781	15.18	7
MW-0043	04/30/2012 14:46	1.42	16	7.08	0.02	0.36838	15.07	7.2
MW-0043	04/30/2012 15:13	5.53	12	6.89	0.03	0.595	12.61	29.40

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0043	05/01/2012 11:45	6.84	64	6.77	0.0000	0.322	12.69	20.90
MW-0043	08/27/2012 14:51	1.18	-37	6.73	0.03	0.56021	25.33	15.9
MW-0043	08/27/2012 14:53	0.55	-51	6.78	0.03	0.54993	24.26	10.8
MW-0043	08/27/2012 14:55	0.34	-57	6.77	0.03	0.54838	24.1	17.3
MW-0043	08/27/2012 14:57	0.24	-61	6.77	0.03	0.5495	23.99	10.3
MW-0043	08/27/2012 15:00	0.16	-64	6.76	0.03	0.54925	23.91	10
MW-0043	08/27/2012 15:02	0.13	-65	6.76	0.03	0.54908	23.93	9.5
MW-0043	08/27/2012 15:04	0.1	-67	6.75	0.03	0.54795	23.91	11
MW-0043	08/27/2012 15:06	0.05	-68	6.76	0.03	0.54751	23.84	11
MW-0043	08/27/2012 15:09	0.03	-68	6.75	0.03	0.54824	23.88	10.9
MW-0043	08/27/2012 15:11	0.01	-68	6.75	0.03	0.54831	23.93	11
MW-0043	08/27/2012 15:13	0.02	-68	6.75	0.03	0.54733	24.03	60.8
MW-0043	08/27/2012 15:15	0.01	-68	6.75	0.03	0.54975	24.21	12.3
MW-0043	08/27/2012 15:18	0.02	-67	6.75	0.03	0.54827	24.26	13
MW-0043	08/27/2012 15:20	0	-67	6.74	0.03	0.54712	24	14.1
MW-0043	08/27/2012 15:22	0.03	-66	6.74	0.03	0.54657	24.33	14.7
MW-0043	08/27/2012 15:24	0.03	-66	6.74	0.03	0.54729	24.41	14.9
MW-0043	08/27/2012 15:27	0.04	-65	6.74	0.03	0.5446	24.25	14.9
MW-0043	08/27/2012 15:29	0.06	-65	6.74	0.03	0.54424	24.25	16.7
MW-0043	08/27/2012 15:31	0.07	-65	6.74	0.03	0.5461	24.36	15.5
MW-0043	08/27/2012 15:33	0.08	-66	6.74	0.03	0.54532	24.57	13
MW-0043	08/27/2012 15:36	0.1	-67	6.74	0.03	0.55034	24.46	12.3
MW-0043	08/27/2012 15:38	0.12	-68	6.75	0.03	0.55055	24.41	13.1
MW-0043	08/28/2012 15:58	0.12	-68	6.75	0.03	0.551	24.41	13.10
MW-0043	08/28/2012 16:12	2.90	-66	7.21	0.04	0.789	21.43	7.60
MW-0043	08/29/2012 11:21	13.20	-98	7.18	0.04	0.760	21.53	25.30
MW-0043	06/24/2013 08:47	2.16	-36	6.34	0.16	3.05963	23.19	82.1
MW-0043	06/24/2013 08:50	2.11	-70	6.47	0.16	2.95774	20.69	18.9
MW-0043	06/24/2013 08:52	1.75	-67	6.15	0.15	2.9202	20.09	35.2
MW-0043	06/24/2013 08:54	1.56	-102	6.64	0.15	2.91259	20.08	12.6
MW-0043	06/24/2013 08:57	1.47	-109	6.67	0.15	2.92289	20.18	10.5
MW-0043	06/24/2013 08:59	1.41	-128	6.97	0.15	2.9204	20.43	8.7
MW-0043	06/24/2013 09:01	1.35	-130	6.96	0.15	2.92668	20.59	12.2
MW-0043	06/24/2013 09:04	1.33	-124	6.78	0.16	2.97728	20.21	14
MW-0043	06/24/2013 09:06	1.29	-130	6.83	0.16	3.0034	20.24	11.3
MW-0043	06/24/2013 09:08	1.28	-136	6.89	0.16	3.04094	20.13	11.7
MW-0043	06/24/2013 09:11	1.26	-134	6.81	0.16	3.07179	20.16	12.1
MW-0043	06/24/2013 09:54	1.58	-117	6.43	0.29	5.393	15.51	38.50
MW-0043	06/25/2013 10:04	0.22	-207.00	6.70	0.25	4.554	17.19	9.20
MW-0043	06/16/2014 08:33	1.40	-172	6.98	NM	0.807	19.65	15.50
MW-0043	06/16/2014 08:35	0.76	-252	6.83	NM	0.868	18.70	11.50
MW-0043	06/16/2014 08:38	0.61	-281	6.87	NM	1.057	18.88	10.00
MW-0043	06/16/2014 08:40	0.57	-296	6.88	NM	1.267	19.35	9.80
MW-0043	06/16/2014 08:42	0.56	-311	6.87	NM	1.284	19.49	9.00
MW-0043	06/16/2014 08:45	0.54	-317	6.84	NM	1.351	19.73	8.70
MW-0043	06/16/2014 08:47	0.54	-323	6.81	NM	1.371	19.76	9.40
MW-0043	06/16/2014 08:49	0.52	-328	6.80	NM	1.415	19.90	9.20
MW-0043	06/16/2014 08:52	0.52	-335	6.79	NM	1.429	19.99	8.50
MW-0043	06/16/2014 08:54	0.52	-340	6.78	NM	1.442	19.95	9.80
MW-0043	06/16/2014 08:57	0.52	-345	6.77	NM	1.464	19.99	8.60
MW-0043	06/16/2014 08:59	0.52	-345	6.76	NM	1.505	20.12	20.20
MW-0043	06/16/2014 09:01	0.51	-347	6.76	NM	1.502	20.27	11.90
MW-0043	06/16/2014 09:04	0.51	-347	6.76	NM	1.519	20.42	14.10
MW-0043	06/16/2014 09:06	0.51	-349	6.76	NM	1.510	20.52	9.70
MW-0043	06/16/2014 09:08	0.52	-357	6.77	NM	1.499	20.26	10.20
MW-0043	06/16/2014 09:11	0.52	-365	6.74	NM	1.543	19.86	9.80

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0043	06/16/2014 09:13	0.51	-371	6.74	NM	1.560	19.71	9.50
MW-0043	06/16/2014 09:15	0.51	-378	6.75	NM	1.570	19.56	11.90
MW-0043	06/16/2014 09:18	0.50	-383	6.76	NM	1.598	13.53	9.50
MW-0043	06/16/2014 09:20	0.50	-380	6.76	NM	1.621	19.68	9.50
MW-0043	06/16/2014 09:22	0.50	-377	6.76	NM	1.635	19.89	10.10
MW-0043	06/16/2014 09:23	0.50	-377	6.76	0.09	1.811	19.89	10.07
MW-0043	06/16/2014 09:55	1.13	0.299	6.95	0.10	1.989	13.91	19.30
MW-0043	06/17/2014 09:20	1.13	-206	6.84	0.10	2.129	-5.49	10.30
MW-0043	11/04/2014 13:00	-0.40	-0.1	6.69	NM	5.269	20.19	16.00
MW-0043	11/04/2014 13:02	-0.55	-0.1	6.65	NM	5.070	18.60	8.20
MW-0043	11/04/2014 13:05	-0.55	-0.11	6.65	NM	5.045	18.45	4.10
MW-0043	11/04/2014 13:07	-0.55	-0.11	6.65	NM	5.040	18.39	2.90
MW-0043	11/04/2014 13:09	-0.55	-0.11	6.66	NM	5.048	18.51	3.80
MW-0043	11/04/2014 13:12	-0.54	-113	6.66	0.31	5.752	18.68	4.70
MW-0043	11/04/2014 13:48	0.54	-136	6.73	0.23	4.231	17.51	7.60
MW-0043	11/05/2014 12:30	1.23	-113	6.88	0.35	6.350	16.47	43.50
MW-0043	07/09/2015 08:58	0.91	100	6.35	0.0767	0.0015	22.9	8.1
MW-0043	07/09/2015 09:00	0.69	82	6.43	0.0811	0.0016	21.44	6.2
MW-0043	07/09/2015 09:01	0.41	64	6.49	0.0897	0.0018	19.98	4.8
MW-0043	07/09/2015 09:03	0.68	59	6.51	0.0940	0.0018	19.92	7.9
MW-0043	07/09/2015 09:04	0.64	54	6.53	0.0949	0.0018	19.82	7.3
MW-0043	07/09/2015 09:06	0.57	52	6.54	0.0959	0.0019	19.88	4.3
MW-0043	07/09/2015 09:07	0.47	48	6.55	0.0977	0.0019	19.63	6.1
MW-0043	07/09/2015 09:09	0.41	47	6.56	0.0984	0.0019	19.65	6.8
MW-0043	07/09/2015 09:10	0.36	46	6.57	0.0987	0.0019	19.67	5.3
MW-0043	07/09/2015 09:12	0.33	46	6.56	0.0991	0.0019	19.68	4.1
MW-0043	07/09/2015 09:13	0.31	46	6.57	0.0988	0.0019	19.78	3.8
MW-0043	07/09/2015 09:15	0.27	46	6.58	0.0987	0.0019	19.82	5.6
MW-0043	07/09/2015 09:16	0.25	47	6.57	0.0988	0.0019	19.81	4.7
MW-0043	07/09/2015 09:18	0.24	47	6.58	0.0995	0.0019	19.78	4.7
MW-0043	07/09/2015 09:19	0.21	46	6.58	0.0999	0.0019	19.69	5.4
MW-0043	07/09/2015 09:21	0.17	46	6.59	0.1006	0.0020	19.61	4.5
MW-0043	07/09/2015 09:22	0.16	45	6.59	0.1010	0.0020	19.63	4.3
MW-0043	07/09/2015 09:24	0.15	44	6.59	0.1010	0.0020	19.74	23.1
MW-0043	07/09/2015 09:25	0.12	43	6.59	0.1013	0.0020	19.68	21.2
MW-0043	07/09/2015 09:27	0.11	40	6.6	0.1017	0.0020	19.55	9.9
MW-0043	07/09/2015 09:28	0.09	38	6.59	0.1024	0.0020	19.57	5.9
MW-0043	07/09/2015 09:30	0.07	36	6.59	0.1030	0.0020	19.49	4.5
MW-0043	07/09/2015 09:31	0.06	33	6.6	0.1041	0.0020	19.43	5.6
MW-0043	07/09/2015 09:33	0.05	30	6.6	0.1044	0.0020	19.46	5.1
MW-0043	07/09/2015 09:34	0.05	26	6.6	0.1043	0.0020	19.52	7
MW-0043	07/09/2015 09:36	0.03	21	6.6	0.1044	0.0020	19.54	4.6
MW-0043	07/09/2015 09:37	0.01	15	6.6	0.1048	0.0020	19.42	4.9
MW-0043	07/09/2015 09:39	0	8	6.6	0.1057	0.0020	19.39	6.8
MW-0043	07/09/2015 09:40	-0.03	2	6.59	0.1061	0.0021	19.41	4.3
MW-0043	07/09/2015 09:42	-0.04	-4	6.59	0.1066	0.0021	19.41	6.6
MW-0043	07/09/2015 09:44	-0.05	-9	6.59	0.1068	0.0021	19.43	6.9
MW-0043	07/09/2015 09:45	-0.06	-13	6.59	0.1071	0.0021	19.5	4.1
MW-0043	07/09/2015 09:47	-0.07	-17	6.59	0.1073	0.0021	19.48	4.5
MW-0043	07/10/2015 09:34	0.17	-104	6.64	0.65	11.35	16.53	17.2
MW-0043	07/10/2015 10:20	3.56	-72	6.33	1.33	22.02	15.12	61.7
MW-0043	03/17/2016 10:29	2.880	-115.000	6.970	0.386	7.023	12.520	367.500
MW-0043	03/17/2016 10:31	9.950	-91.000	7.100	0.000000	0.007	14.990	1.100
MW-0043	03/17/2016 10:34	9.240	-104.000	7.270	0.370	6.725	13.510	89.900
MW-0043	03/17/2016 10:36	1.180	-143.000	7.040	0.436	7.886	11.300	101.700
MW-0043	03/17/2016 10:38	0.550	-143.000	7.010	0.447	8.072	11.270	35.300

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Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0043	03/17/2016 10:41	0.400	-142.000	7.010	0.451	8.146	11.310	27.700
MW-0043	03/17/2016 10:43	0.350	-142.000	7.010	0.454	8.192	11.300	31.700
MW-0043	03/17/2016 10:46	0.330	-141.000	7.010	0.455	8.200	11.330	27.300
MW-0043	03/17/2016 10:48	0.320	-141.000	7.010	0.456	8.219	11.310	21.300
MW-0043	03/17/2016 10:50	0.310	-138.000	7.000	0.455	8.196	11.390	19.900
MW-0043	03/17/2016 10:53	0.300	-141.000	7.010	0.456	8.224	11.310	19.200
MW-0043	03/17/2016 10:55	0.280	-140.000	7.010	0.456	8.226	11.290	25.000
MW-0043	03/17/2016 10:58	0.260	-140.000	7.000	0.455	8.200	11.390	43.100
MW-0043	03/17/2016 11:00	0.250	-140.000	7.000	0.454	8.192	11.400	18.500
MW-0043	03/17/2016 11:02	0.230	-141.000	7.000	0.454	8.183	11.430	17.400
MW-0043	03/17/2016 11:05	0.220	-140.000	7.000	0.453	8.169	11.480	14.700
MW-0043	03/17/2016 11:07	0.210	-140.000	7.000	0.454	8.185	11.440	18.600
MW-0043	03/17/2016 11:10	0.190	-140.000	7.000	0.453	8.167	11.510	23.200
MW-0043	03/17/2016 11:12	0.180	-141.000	6.990	0.452	8.157	11.620	15.300
MW-0043	03/17/2016 11:14	0.170	-142.000	6.990	0.453	8.159	11.620	23.900
MW-0043	03/17/2016 11:17	0.170	-142.000	6.990	0.452	8.148	11.730	28.500
MW-0043	03/18/2016 09:20	0.41	-129	6.59	0.06	1.291	9.04	43.00
MW-0043	03/18/2016 11:50	1.93	-154	6.84	0.43	7.814	9.93	32.00
MW-0043	09/27/2016 08:59	1.010	-24.000	6.870	0.103	2.001	21.350	12.200
MW-0043	09/27/2016 09:01	0.690	-53.000	6.880	0.107	2.078	20.630	5.800
MW-0043	09/27/2016 09:04	0.460	-72.000	6.900	0.108	2.090	21.150	5.600
MW-0043	09/27/2016 09:06	0.420	-81.000	6.900	0.110	2.123	20.980	5.300
MW-0043	09/27/2016 09:09	0.390	-86.000	6.900	0.112	2.164	20.880	4.800
MW-0043	09/27/2016 09:11	0.370	-89.000	6.900	0.114	2.192	20.890	4.000
MW-0043	09/27/2016 09:14	0.360	-92.000	6.900	0.116	2.236	20.900	4.600
MW-0043	09/27/2016 09:16	0.350	-94.000	6.900	0.117	2.254	20.940	8.500
MW-0043	09/27/2016 09:19	0.340	-95.000	6.900	0.118	2.282	20.830	3.900
MW-0043	09/27/2016 09:22	0.330	-97.000	6.900	0.120	2.317	20.870	5.900
MW-0043	09/27/2016 09:24	0.320	-98.000	6.900	0.122	2.353	20.860	7.200
MW-0043	09/27/2016 09:27	0.310	-99.000	6.890	0.126	2.425	20.820	4.300
MW-0043	09/27/2016 09:29	0.290	-100.000	6.890	0.127	2.437	21.070	13.200
MW-0043	09/27/2016 09:32	0.270	-102.000	6.900	0.127	2.440	21.090	20.900
MW-0043	09/27/2016 09:34	0.250	-102.000	6.880	0.130	2.489	21.020	4.400
MW-0043	09/27/2016 09:37	0.250	-103.000	6.870	0.134	2.564	20.990	4.400
MW-0043	09/27/2016 09:39	0.250	-104.000	6.880	0.133	2.549	20.970	8.200
MW-0043	09/27/2016 09:42	0.260	-105.000	6.880	0.137	2.622	21.040	4.600
MW-0043	09/27/2016 09:45	0.250	-106.000	6.880	0.145	2.757	21.130	4.400
MW-0043	09/27/2016 09:47	0.260	-106.000	6.870	0.140	2.675	21.210	4.400
MW-0043	09/28/2016 09:47	0.77	-145	6.50	0.18	3.482	19.97	18.50
MW-0043	09/28/2016 10:14	1.17	-53	7.07	0.12	2.391	21.37	23.40
MW-0043	03/28/2017 09:21	0.73	-66	7.13	0.1403	0.0272	9.28	15.6
MW-0043	03/28/2017 09:23	0.33	-70	7.13	0.1394	0.0271	9.19	17.3
MW-0043	03/28/2017 09:26	0.16	-86	7.13	0.1388	0.0269	9.14	61
MW-0043	03/28/2017 09:29	0.07	-107	7.12	0.1380	0.0268	9.13	63.1
MW-0043	03/28/2017 09:31	0	-104	7.12	0.1383	0.0268	9.09	29.4
MW-0043	03/28/2017 09:34	-0.05	-106	7.13	0.1379	0.0268	9.06	24.7
MW-0043	03/28/2017 09:37	-0.06	-109	7.12	0.1377	0.0267	9.05	31.4
MW-0043	03/28/2017 09:39	-0.04	-100	7.13	0.1380	0.0268	9	16.8
MW-0043	03/28/2017 09:42	-0.06	-100	7.14	0.1379	0.0268	9.06	37.1
MW-0043	03/28/2017 09:45	-0.09	-99	7.14	0.1379	0.0268	8.94	28
MW-0043	03/28/2017 09:47	-0.07	-98	7.15	0.1377	0.0268	8.9	23.8
MW-0043	03/28/2017 09:50	-0.09	-95	7.15	0.1378	0.0268	8.92	27.6
MW-0043	03/28/2017 09:53	-0.1	-98	7.15	0.1375	0.0267	8.93	30.5
MW-0043	03/28/2017 09:55	-0.1	-102	7.15	0.1371	0.0266	8.96	32.7
MW-0043	03/28/2017 09:58	-0.11	-100	7.14	0.1374	0.0267	8.93	22.2
MW-0043	03/28/2017 10:00	-0.11	-102	7.15	0.1376	0.0267	8.89	23.4

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0043	03/28/2017 10:03	-0.09	-101	7.15	0.1373	0.0267	8.89	31.2
MW-0043	03/28/2017 10:06	-0.09	-100	7.15	0.1373	0.0267	8.84	25.3
MW-0043	03/28/2017 10:08	-0.09	-100	7.15	0.1371	0.0267	8.86	35
MW-0043	03/28/2017 10:11	-0.09	-103	7.15	0.1371	0.0266	8.81	20.5
MW-0043	03/29/2017 09:48	2.19	-142	6.81	0.11	2.460	8.21	48.40
MW-0043	03/29/2017 11:58	10.08	-169	6.88	0.12	2.295	8.88	47.50
MW-0043	02/21/2018 09:30	4.64	273	6.73	0.0779	1.5401	13.92	33.6
MW-0043	02/21/2018 09:32	3.71	266	6.74	0.0944	1.8526	12.73	147.7
MW-0043	02/21/2018 09:35	3.38	259	6.74	0.1100	2.1437	12.66	54.2
MW-0043	02/21/2018 09:37	3.43	165	6.75	0.1142	2.2202	12.82	31
MW-0043	02/21/2018 09:40	3.66	98	6.76	0.1191	2.3126	12.66	35.2
MW-0043	02/21/2018 09:42	3.68	84	6.77	0.1213	2.3524	12.75	40.6
MW-0043	02/21/2018 09:44	3.66	79	6.77	0.1238	2.3982	12.79	67.6
MW-0043	02/21/2018 09:47	3.57	71	6.78	0.1246	2.4122	13.07	52.9
MW-0043	02/21/2018 09:49	3.59	62	6.78	0.1287	2.4890	12.73	62
MW-0043	02/21/2018 09:52	3.6	58	6.78	0.1292	2.4970	12.94	30.4
MW-0043	02/21/2018 09:54	3.5	55	6.79	0.1303	2.5176	12.91	55
MW-0043	02/21/2018 09:56	3.49	52	6.79	0.1308	2.5248	13.15	57.8
MW-0043	02/21/2018 09:59	3.5	53	6.79	0.1315	2.5385	13.16	27.8
MW-0043	02/21/2018 10:01	3.48	53	6.8	0.1317	2.5415	13.33	36.3
MW-0043	02/21/2018 10:04	3.44	49	6.8	0.1331	2.5672	13.34	35
MW-0043	02/21/2018 10:06	3.45	48	6.8	0.1352	2.6054	13.2	52.9
MW-0043	02/21/2018 10:08	3.41	45	6.8	0.1370	2.6392	13.16	37.5
MW-0043	02/21/2018 10:11	3.4	42	6.8	0.1376	2.6491	13.29	29.6
MW-0043	02/21/2018 10:13	3.38	41	6.8	0.1388	2.6709	13.25	36.7
MW-0043	02/21/2018 10:16	3.36	39	6.81	0.1411	2.7146	13.03	27.5
MW-0043	02/21/2018 10:18	3.3	32	6.81	0.1413	2.7171	13.24	27
MW-0043	02/22/2018 09:25	2.36	86.00	6.49	0.04	0.790	7.84	18.20
MW-0043	02/22/2018 10:18	3.30	32.00	6.81	0.14	2.727	13.1	27.00
MW-0043	02/22/2018 10:53	1.72	-116.00	6.75	0.22	4.192	9.38	10.70
MW-0043	05/09/2018 12:31	4.77	12	6.9	0.0854	1.6710	19.89	29.6
MW-0043	05/09/2018 12:34	2.99	-34	6.69	0.0880	1.7251	16.17	17.8
MW-0043	05/09/2018 12:37	2.86	-49	6.64	0.0947	1.8503	15.98	28.2
MW-0043	05/09/2018 12:40	2.82	-57	6.64	0.0960	1.8758	15.79	33.3
MW-0043	05/09/2018 12:42	2.8	-63	6.64	0.0984	1.9211	15.43	32.9
MW-0043	05/09/2018 12:45	2.73	-66	6.63	0.1007	1.9636	15.25	39.9
MW-0043	05/09/2018 12:48	2.64	-69	6.63	0.1027	2.0003	15.38	43.2
MW-0043	05/09/2018 12:50	2.59	-71	6.63	0.1046	2.0351	15.33	34.7
MW-0043	05/09/2018 12:53	2.54	-72	6.63	0.1061	2.0625	15.49	54
MW-0043	05/09/2018 12:56	2.52	-73	6.63	0.1074	2.0875	15.46	50.2
MW-0043	05/09/2018 12:59	2.5	-75	6.64	0.1079	2.0954	15.56	48.2
MW-0043	05/09/2018 13:01	2.47	-76	6.64	0.1091	2.1182	15.67	36.1
MW-0043	05/09/2018 13:04	2.44	-77	6.64	0.1102	2.1394	15.65	41.2
MW-0043	05/09/2018 13:07	2.37	-77	6.64	0.1105	2.1428	16.03	46.8
MW-0043	05/09/2018 13:10	2.36	-78	6.65	0.1129	2.1884	15.72	38.5
MW-0043	05/09/2018 13:12	2.34	-79	6.66	0.1132	2.1941	15.68	46.1
MW-0043	05/09/2018 13:15	2.29	-81	6.67	0.1146	2.2203	15.52	46
MW-0043	05/09/2018 13:18	2.26	-84	6.67	0.1147	2.2235	15.16	38.9
MW-0043	05/09/2018 13:21	2.24	-84	6.67	0.1159	2.2445	15.19	46.9
MW-0043	05/10/2018 10:05	2.56	105.00	7.36	0.16	3.003	11.35	18.60
MW-0043	05/10/2018 13:20	2.24	-84.00	6.67	0.12	2.235	15.37	46.87
MW-0043	05/10/2018 13:55	5.52	-121.00	6.81	0.13	2.429	12.09	20.40
MW-0043	08/01/2018 10:08	4.31	-35	7.85	0.07	1.374	24.51	39.24
MW-0043	08/01/2018 10:10	1.27	-84	7.28	0.07	1.378	23.15	36.02
MW-0043	08/01/2018 10:13	1.1	-96	6.97	0.08	1.587	23.62	58.2
MW-0043	08/01/2018 10:15	1.07	-108	6.87	0.08	1.531	23.68	60.9

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0043	08/01/2018 10:18	1.08	-116	6.81	0.07	1.424	23.72	62.04
MW-0043	08/01/2018 10:20	1.13	-122	6.76	0.07	1.432	23.8	54.15
MW-0043	08/01/2018 10:23	1.14	-125	6.69	0.07	1.456	23.75	61.19
MW-0043	08/01/2018 10:25	1.13	-129.00	6.68	0.08	1.478	23.72	57.33
MW-0043	08/01/2018 10:58	2.77	-120.00	7.57	0.07	1.375	20.53	28.20
MW-0043	08/01/2018 11:33	0.95	-148.00	6.89	0.07	1.443	20.97	30.00
MW-0043	11/27/2018 09:30	1.53	154.1	6.74	0.95	1.83	13.08	50.3
MW-0043	11/27/2018 09:35	0.7	158.6	6.66	1.04	2.033	13.25	79.3
MW-0043	11/27/2018 09:40	0.54	154.1	6.72	1.02	1.993	13.33	72
MW-0043	11/27/2018 09:45	0.75	151.1	6.74	1.05	2.034	13.48	70.9
MW-0043	11/27/2018 09:50	0.72	144.3	6.82	1.1	2.143	13.43	75.9
MW-0043	11/27/2018 09:55	0.4	141	6.76	1.14	2.205	13.83	45.3
MW-0043	11/27/2018 10:00	0.34	137.5	6.74	1.2	2.323	13.91	36.2
MW-0043	11/27/2018 10:05	0.34	137	6.73	1.21	2.335	13.94	35.6
MW-0043	11/27/2018 10:10	0.33	134.5	6.72	1.25	2.418	13.84	30.4
MW-0043	11/28/2018 10:15	0.26	125.00	6.73	1.39	2.661	14.46	21.40
MW-0043	11/28/2018 10:45	0.27	101.80	6.66	1.74	3.290	14.82	9.50
MW-0043	11/28/2018 10:55	0.28	80.70	6.65	2.00	3.761	14.8	4.10
MW-0043	02/22/2019 10:55	12.16	42.7	7.17	NM	0.656	8.59	28.2
MW-0043	02/22/2019 12:05	0.46	-5	6.75	1.39	2.674	9.4	1.1
MW-0043	05/13/2019 13:30	0.47	-84.3	6.63	NM	2.693	10.47	17.1
MW-0043	05/13/2019 14:30	0.12	-89.3	6.6	1.4	2.692	10.83	5.5
MW-0043	08/21/2019 08:15	0.97	-118.4	6.7	NM	2.678	21.8	225.4
MW-0043	08/21/2019 08:20	0.73	-119.2	6.7	NM	2.647	22.28	159.9
MW-0043	08/21/2019 08:25	0.68	-112.8	6.71	NM	2.589	22.91	113.1
MW-0043	08/21/2019 08:30	0.64	-105.4	6.72	NM	2.572	23.28	66.3
MW-0043	08/21/2019 08:35	0.59	-109.7	6.73	NM	2.517	22.26	22.3
MW-0043	08/21/2019 08:40	0.39	-115.6	6.71	NM	2.569	21.38	13.9
MW-0043	08/21/2019 08:45	0.32	-118.7	6.71	NM	2.62	21.52	13.4
MW-0043	08/21/2019 08:50	0.33	-119.3	6.71	NM	2.721	21.64	14.8
MW-0043	08/21/2019 08:55	0.23	-119.4	6.7	NM	2.798	21.71	14.8
MW-0043	08/21/2019 09:00	0.3	-119.9	6.7	NM	2.845	21.64	16.2
MW-0043	08/21/2019 10:35	3.94	-121.8	7.04	1.69	3.225	22.38	5.1
MW-0043	08/21/2019 10:55	3.04	-110.2	7.08	0.77	1.523	22.37	28.6
MW-0043	11/07/2019 08:50	8.02	-75.7	6.67	NM	0.772	14.78	27.9
MW-0043	11/07/2019 08:55	3.46	-161.8	6.7	NM	0.734	15.37	13.1
MW-0043	11/07/2019 09:00	1.63	-169.9	6.74	NM	0.737	16.26	21.8
MW-0043	11/07/2019 09:05	1.48	-164	6.74	NM	0.758	16.41	14.9
MW-0043	11/07/2019 09:10	1.23	-181.4	6.74	NM	0.777	16.6	14.7
MW-0043	11/07/2019 09:15	1.18	-158.7	6.73	NM	0.791	16.5	23
MW-0043	11/07/2019 09:20	1.12	-148.2	6.74	NM	0.805	16.75	23.8
MW-0043	11/07/2019 09:25	1.12	-165.8	6.73	NM	0.819	16.71	14.7
MW-0043	11/07/2019 09:30	1.06	-158	6.74	NM	0.83	16.52	14.6
MW-0043	11/07/2019 09:35	1.04	-149.8	6.73	NM	0.837	16.52	13.2
MW-0043	11/07/2019 10:35	1.9	-224	6.76	0.42	0.86	17.36	5.9
MW-0043	11/07/2019 10:45	1.76	-227.7	6.74	0.43	0.875	17.36	7.8
MW-0043	05/15/2020 12:55	1.85	-108.1	6.86	NM	2.424	14.9	3.1
MW-0043	05/15/2020 13:40	1.91	-103	6.85	1.44	2.748	12.49	1.6
MW-0043	11/11/2020 08:25	0.99	-24.7	6.85	0.65	1.289	17.9	26.6
MW-0043	11/11/2020 08:30	0.55	-50.5	6.77	0.63	1.258	17.79	31
MW-0043	11/11/2020 08:35	0.36	-65.3	6.81	0.62	1.273	17.81	30.4
MW-0043	11/11/2020 08:40	0.46	-74.6	6.86	0.61	1.221	17.85	29.7
MW-0043	11/11/2020 08:45	0.28	-80.1	6.88	0.6	1.206	17.79	29.1
MW-0043	11/11/2020 08:50	0.44	-83	6.89	0.6	1.196	17.72	28.8
MW-0043	11/11/2020 08:55	0.35	-85.8	6.89	0.6	1.19	17.77	25.8
MW-0043	11/11/2020 09:00	0.31	-88.9	6.91	0.59	1.181	17.76	25.4

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0043	11/11/2020 09:05	0.3	-89	6.9	0.59	1.18	17.76	25.3
MW-0043	11/11/2020 09:10	0.32	-90.4	6.91	0.59	1.174	17.84	25
MW-0043	11/11/2020 10:30	6.26	92.1	7.19	0.76	1.505	18.39	15.1
MW-0043	11/11/2020 10:40	1.74	-35.5	6.87	0.75	1.481	19.08	15.9
MW-0043	05/12/2021 13:05	1.49	-56.3	6.85	0.61	1.205	13.61	23.5
MW-0043	05/12/2021 13:10	1.03	-56.5	6.87	0.6	1.206	13.12	27.2
MW-0043	05/12/2021 13:15	1.52	-58.9	6.88	0.61	1.217	12.85	24.3
MW-0043	05/12/2021 13:20	1.28	-60.6	6.9	0.63	1.261	12.77	21.8
MW-0043	05/12/2021 13:25	1.32	-65.8	6.94	0.67	1.333	12.69	21
MW-0043	05/12/2021 13:30	1.31	-68.6	6.96	0.71	1.399	12.66	18.3
MW-0043	05/12/2021 13:35	1.46	-71.3	6.97	0.76	1.491	12.69	16
MW-0043	05/12/2021 13:40	1.6	-74.5	7	0.77	1.517	12.64	16.2
MW-0043	05/12/2021 13:45	1.9	-74.1	7.01	0.81	1.579	12.63	14.6
MW-0043	12/27/2021 09:25	1.87	1.9	6.88	0.78	1.536	7.41	18.4
MW-0043	12/27/2021 09:30	1.81	2.3	6.89	0.76	1.515	7.17	23.9
MW-0043	12/27/2021 09:35	1.37	1	6.81	0.75	1.478	8.22	24.6
MW-0043	12/27/2021 09:40	0.96	-17.3	6.88	0.75	1.492	9.08	15.4
MW-0043	12/27/2021 09:45	0.83	-26.8	6.89	0.76	1.51	9.38	9.4
MW-0043	12/27/2021 09:50	0.76	-34.5	6.89	0.77	1.518	9.51	7.7
MW-0043	12/27/2021 09:55	0.73	-37.3	6.89	0.77	1.524	9.53	6.1
MW-0043	12/27/2021 10:00	0.69	-42.8	6.89	0.78	1.537	9.84	5.5
MW-0043	12/27/2021 10:05	0.68	-46.2	6.89	0.78	1.546	9.91	5.2
MW-0043	12/27/2021 10:10	0.65	-51.3	6.89	0.79	1.566	10.06	4.7
MW-0043	02/03/2022 11:35	4.48	146.9	7.06	0.31	0.634	9.22	25.6
MW-0043	02/03/2022 11:40	2.43	148.6	6.87	0.31	0.632	8.36	18.3
MW-0043	02/03/2022 11:45	2.4	141.9	6.84	0.31	0.629	8.37	17.7
MW-0043	02/03/2022 11:50	2.12	119.4	6.81	0.31	0.63	8.41	14.4
MW-0043	02/03/2022 11:55	2.12	94	6.8	0.31	0.63	8.38	14.8
MW-0043	02/03/2022 12:00	2.03	78.9	6.77	0.31	0.632	8.35	14.6
MW-0043	02/03/2022 12:05	1.94	71.9	6.76	0.31	0.634	8.29	14
MW-0043	02/03/2022 12:10	1.93	67.3	6.75	0.31	0.635	8.36	14.6
MW-0043	02/03/2022 12:15	1.89	55.9	6.76	0.31	0.639	8.4	14.4
MW-0043	02/03/2022 12:20	1.9	51.6	6.79	0.31	0.64	8.39	14.5
MW-0051	05/08/2012 12:56	0.33	-37	6.23	0.08	1.533	15.51	0.96
MW-0051	07/02/2013 15:26	0.99	-132	5.97	0.19	3.533	19.90	6.23
MW-0073	05/07/2012 12:04	4.99	-45	6.65	0.04	0.848	15.21	683.30
MW-0073	05/08/2012 10:51	0.05	-102	6.91	0.04	0.780	15.43	41.20
MW-0073	11/25/2015 11:47	0.16	-120	6.66	0.09	1.675	16.61	90.90
MW-0073	11/25/2015 14:46	2.06	-97	6.75	0.07	1.398	17.17	778.00
MW-0073	05/20/2016 11:23	6.03	141	NM	0.13	2.558	14.77	32.90
MW-0073	05/20/2016 12:36	2.39	175	NM	0.13	2.570	14.02	934.50
MW-0073	06/14/2017 09:02	0.67	-171.00	6.48	0.04	0.726	19.83	63.20
MW-0073	06/14/2017 09:59	2.15	74.00	7.73	0.09	1.841	15.84	445.10
MW-0090	08/01/2012 09:22	1.01	-98	12.1	0.02	0.49394	25.38	13.2
MW-0090	08/01/2012 09:24	0.76	-99	12.01	0.02	0.49108	24.6	13.7
MW-0090	08/01/2012 09:26	0.54	-97	12.24	0.02	0.48905	23.63	11.2
MW-0090	08/01/2012 09:29	0.45	-97	12.2	0.02	0.48919	23.52	13.2
MW-0090	08/01/2012 09:31	0.42	-95	12.24	0.02	0.48754	23.93	35.6
MW-0090	08/01/2012 09:33	0.33	-98	12.32	0.02	0.48723	23.29	9
MW-0090	08/01/2012 09:36	0.32	-100	12.39	0.02	0.48461	22.95	8.2
MW-0090	08/01/2012 09:38	0.33	-101	12.47	0.02	0.48637	22.67	7.4
MW-0090	08/01/2012 09:40	0.32	-102	12.46	0.02	0.48556	22.74	8.1
MW-0090	08/01/2012 09:41	0.32	-102	12.46	0.20	0.486	22.74	8.06
MW-0090	12/18/2012 09:42	8.45	33.7	5.95	0.43	0.865	13.89	17.00
MW-0090	12/18/2012 10:50	0.19	-89	6.22	0.70	1.382	14.73	1.70
MW-0090	12/19/2012 11:16	2.82	71.6	6.13	0.65	1.287	14.68	29.00

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0090	11/25/2013 15:07	0.70	-251	6.31	0.16	3.092	11.81	6.44
MW-0090	11/25/2013 15:54	2.17	-161	6.28	0.35	6.370	16.40	43.80
MW-0090	11/26/2013 11:39	0.49	-292	6.13	1.17	19.450	16.55	6.90
MW-0090	09/15/2014 13:45	1.75	-356	6.06	0.01	0.219	22.47	79.34
MW-0090	09/15/2014 14:28	2.38	-318	7.40	0.03	0.593	18.27	50.60
MW-0090	12/16/2015 10:29	1.1	-209	6.73	0.03	0.611	15.48	11.4
MW-0090	12/16/2015 12:24	2	-44	6.97	0.06	1.27	16.33	174.9
MW-0090	05/20/2016 09:49	0.34	1600	6.45	0.16	3.129	13.17	14.70
MW-0090	05/20/2016 10:40	10.73	235	4.73	0.15	2.815	13.38	7.50
MW-0090	05/17/2017 09:21	1.73	-129.00	6.42	0.07	1.322	13.08	19.40
MW-0090	05/17/2017 09:24	0.62	-58.00	6.62	0.10	1.924	15.86	8.69
MW-0090	05/17/2017 10:04	5.13	-2.00	7.28	0.10	2.009	13.3	14.30
MW-0090	02/01/2018 09:55	3.99	66.20	6.41	0.04	0.804	9.43	29.80
MW-0090	02/01/2018 10:10	3.96	-59.40	6.40	0.45	0.906	9.44	26.80
MW-0090	02/01/2018 14:05	0.41	-26.40	6.06	0.32	0.660	9.24	38.70
MW-0090	03/05/2019 12:55	0.31	-3.40	6.34	0.18	0.365	8.03	5.50
MW-0090	03/05/2019 14:00	0.36	-107.30	6.61	0.38	0.781	9.51	0.20
MW-0090	03/05/2019 14:10	0.34	-74.80	6.64	0.39	0.793	8.38	0.70
MW-0090	05/17/2019 09:20	0.37	-16.5	6.28	NM	0.464	14.61	2.5
MW-0090	05/17/2019 11:00	0.38	-12.9	6.12	0.22	0.453	14.29	3.3
MW-0090	08/15/2019 10:05	1.67	-144.4	6.91	NM	0.342	22.96	14.5
MW-0090	08/15/2019 10:10	0.89	-148.8	6.51	NM	0.337	24.11	5.4
MW-0090	08/15/2019 10:15	0.91	-160.6	6.45	NM	0.334	24.44	4.3
MW-0090	08/15/2019 10:20	0.92	-163.5	6.44	NM	0.34	24.72	3.3
MW-0090	08/15/2019 10:25	0.98	-162.9	6.41	NM	0.352	25.16	2.8
MW-0090	08/15/2019 10:30	0.93	-170.8	6.41	NM	0.37	24.97	2.5
MW-0090	08/15/2019 10:35	0.95	-171.1	6.41	NM	0.375	25.17	2.3
MW-0090	08/15/2019 10:40	1.08	-171.1	6.41	NM	0.337	24.7	2.4
MW-0090	08/15/2019 10:45	1.11	-173	6.4	NM	0.414	24.34	1.4
MW-0090	08/15/2019 10:50	1.13	-171.5	6.42	NM	0.43	24.67	1.2
MW-0090	08/15/2019 13:14	1.13	-171.5	6.42	NM	0.43	24.67	1.2
MW-0090	08/15/2019 14:25	7.15	-54.3	6.81	0	0.001	31.05	0
MW-0090	08/15/2019 14:35	7.15	-54.3	6.81	0	0.001	31.05	0
MW-0090	11/01/2019 11:55	8.3	-102.6	6.53	NM	0.609	17.29	6.3
MW-0090	11/01/2019 12:00	8.01	-103.7	6.49	NM	0.583	16.81	4.6
MW-0090	11/01/2019 12:05	6.31	-102.4	6.33	NM	0.523	16.41	2.4
MW-0090	11/01/2019 12:10	6.1	-103.7	6.29	NM	0.511	16.37	1.2
MW-0090	11/01/2019 12:15	4.84	-108.7	6.28	NM	0.499	16.26	1.7
MW-0090	11/01/2019 12:20	3.39	-104.3	6.18	NM	0.498	16.13	1.1
MW-0090	11/01/2019 12:25	1.61	-114.3	6.27	NM	0.501	16.37	2.2
MW-0090	11/01/2019 12:30	0.7	-117.3	6.32	NM	0.501	16.49	2.3
MW-0090	11/01/2019 12:35	0.14	-121.9	6.31	NM	0.501	16.5	2.5
MW-0090	11/01/2019 12:40	0.09	-119.5	6.32	NM	0.502	16.42	2.7
MW-0090	11/01/2019 14:15	1.46	-67.3	6.44	0.36	0.735	17.22	2.7
MW-0090	11/01/2019 14:30	1.05	-77	6.69	0.39	0.39	17.25	3.4
MW-0090	02/10/2020 12:10	0.37	-30.1	6.37	NM	0.844	11.54	1
MW-0090	02/10/2020 13:26	3.26	-53.9	6.56	0.48	0.973	10.81	12.5
MW-0090	05/14/2020 13:05	0.57	-43.1	6.27	NM	1.033	14.17	NM
MW-0090	05/14/2020 14:12	3.01	-69.5	6.67	0.53	1.056	14.56	0
MW-0090	08/11/2020 08:35	1.1	75.2	8.02	0.82	1.613	21.37	2.1
MW-0090	08/11/2020 09:45	0.54	-55.7	6.96	0.83	1.636	21.85	0.4
MW-0090	08/11/2020 09:55	0.25	-70.5	6.67	0.83	1.637	21.99	0.5
MW-0090	11/12/2020 14:05	3.36	-63.1	6.78	0.9	1.763	16.68	7.7
MW-0090	11/12/2020 14:20	2.5	-56.8	6.66	0.93	1.82	16.28	3.6
MW-0090	01/25/2021 12:15	3.84	-113.6	6.66	0.62	1.237	12.01	3.3
MW-0090	01/25/2021 12:30	5.74	-106.3	6.72	0.6	1.202	11.85	1.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-0090	05/04/2021 09:30	4.26	-43	6.69	0.55	1.104	14.83	1.8
MW-0090	05/04/2021 09:35	1.43	-55	6.38	0.53	1.049	13.05	0.6
MW-0090	05/04/2021 09:40	0.68	-65.4	6.28	0.52	1.048	12.94	0.4
MW-0090	05/04/2021 09:45	0.64	-69.3	6.28	0.52	1.05	12.84	0.3
MW-0090	05/04/2021 09:50	0.5	-72.5	6.31	0.53	1.054	12.85	0.4
MW-0090	05/04/2021 09:55	0.48	-75.1	6.33	0.53	1.057	12.86	0.3
MW-0090	05/04/2021 10:00	0.47	-76.7	6.34	0.53	1.06	12.85	0.3
MW-0090	08/17/2021 14:05	3.01	-109	6.14	0.55	1.118	25.44	11.9
MW-0090	08/17/2021 14:10	0.57	-124.9	5.87	0.55	1.1	22.44	2.7
MW-0090	08/17/2021 14:15	0.43	-144.3	5.92	0.55	1.101	22.22	2.5
MW-0090	08/17/2021 14:20	0.47	-149.4	5.97	0.55	1.111	21.77	0.8
MW-0090	08/17/2021 14:25	0.35	-156.3	6	0.56	1.122	21.04	0.7
MW-0090	08/17/2021 14:30	0.4	-159.1	6.04	0.56	1.128	20.91	0.1
MW-0090	08/17/2021 14:35	0.38	-159	6.05	0.56	1.135	20.57	0.1
MW-0090	08/17/2021 14:40	0.39	-158	6.09	0.57	1.143	20.32	0
MW-0090	08/17/2021 14:45	0.38	-157.2	6.1	0.57	1.15	20.23	0
MW-0090	08/17/2021 14:50	0.39	-154.4	6.13	0.58	1.158	20.18	0
MW-10	12/18/2012 11:42	2.32	-53.3	7.05	0.26	0.445	15.25	2.70
MW-10	12/18/2012 13:15	2.02	-30.1	7.06	0.26	0.542	16.41	36.20
MW-10	12/19/2012 13:21	1.31	-25.4	7.08	0.27	0.561	16.44	47.10
MW-10	03/28/2013 15:09	6.79	-77	7.09	0.05	1.092	12.05	29.8
MW-10	03/29/2013 15:18	7.06	-140	7.39	0.05	0.934	13.28	646.3
MW-10	01/14/2014 13:07	4.53	95.2	7.19	0.43	0.872	13.31	30.90
MW-10	01/14/2014 13:42	3.26	99	7.26	0.45	0.905	13.39	592.20
MW-10	01/14/2014 13:53	5.30	103.6	7.35	0.45	0.907	10.78	582.00
MW-10	08/20/2014 12:44	0.44	317.8	6.91	0.26	0.538	20.67	60.90
MW-10	08/20/2014 12:50	0.89	228.9	6.99	0.24	0.500	20.01	0.45
MW-10	08/21/2014 14:49	0.48	322.4	6.93	0.28	0.540	20.87	66.70
MW-10	10/21/2014 10:47	16.94	117	7.74	0.30	0.650	18.06	0.0000
MW-10	10/21/2014 12:35	18.10	169	7.46	0.30	14.530	17.89	20.60
MW-10	10/21/2014 12:40	8.00	167	7.52	0.30	0.651	18.43	13.90
MW-10	01/20/2015 09:58	5.57	-16.9	7.48	0.24	0.508	10.97	1.40
MW-10	01/20/2015 11:25	4.97	78.6	7.32	0.25	0.518	12.66	54.20
MW-10	01/20/2015 11:35	5.71	80.5	7.32	0.26	0.540	12.35	85.00
MW-10	12/04/2015 10:10	8.92	444	6.95	0.03	0.636	16.82	17.90
MW-10	12/04/2015 10:11	5.54	-57	7.33	0.05	1.041	17.36	1235.00
MW-10	04/21/2016 10:55	10.49	137	7.27	0.30	0.564	17.58	93.70
MW-10	04/21/2016 11:20	5.74	135	7.39	0.30	0.543	21.07	359.00
MW-10	09/13/2016 11:45	3.05	41.7	7.44	0.54	1.086	24.45	13.80
MW-10	09/13/2016 11:55	3.18	49.8	7.48	0.52	1.041	19.88	146.10
MW-10	06/02/2017 09:45	6.79	251	7.15	0.07	1.308	14.66	17.10
MW-10	06/02/2017 11:09	6.09	134	7.89	0.08	1.662	15.37	47.40
MW-10	02/13/2019 09:45	6.46	161.60	7.81	0.25	0.508	10.59	7.30
MW-10	02/13/2019 11:15	4.55	142	7.64	0.26	0.525	10.87	55.20
MW-10	02/13/2019 11:35	4.58	143.50	7.65	0.26	0.529	10.86	72.70
MW-131	06/05/2012 08:40	1.24	-89	7.09	0.04	0.79264	19.15	26.8
MW-131	06/05/2012 08:43	0.69	-102	7.14	0.04	0.79142	17.41	17.6
MW-131	06/05/2012 08:45	0.38	-110	7.17	0.04	0.80306	17.56	17.7
MW-131	06/05/2012 08:47	0.28	-116	7.18	0.04	0.79886	17.75	82.1
MW-131	06/05/2012 08:50	0.23	-120	7.2	0.04	0.80389	17.85	18
MW-131	06/05/2012 08:52	0.22	-124	7.21	0.04	0.80264	17.72	15.8
MW-131	06/05/2012 08:54	0.22	-126	7.22	0.04	0.80508	17.87	14.4
MW-131	06/05/2012 08:57	0.2	-128	7.22	0.04	0.80212	18.11	14.5
MW-131	06/05/2012 10:18	5.89	-48	6.99	0.02	0.494	17.57	67.20
MW-131	06/06/2012 11:02	2.52	-2	6.51	0.0000	0.467	15.33	10.30
MW-131	11/08/2013 10:30	0.38	-10.3	6.68	0.23	0.600	15.64	152.00

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-131	11/08/2013 11:30	0.47	-104	6.69	0.32	0.655	17.82	25.60
MW-131	11/08/2013 11:40	0.63	-63	6.71	0.32	0.731	16.11	153.00
MW-131	11/09/2013 11:35	0.63	-63	6.71	0.32	0.731	16.11	153.00
MW-131	01/08/2014 10:35	6.08	-52	6.89	0.32	0.664	8.29	25.20
MW-131	01/08/2014 12:35	8.00	-54	6.99	0.38	0.770	7.43	7.70
MW-131	01/08/2014 12:55	10.36	-68.2	7.08	0.36	0.727	6.49	84.80
MW-131	06/09/2014 14:58	1.18	-321	6.80	0.07	1.334	19.20	15.89
MW-131	06/09/2014 15:34	3.12	-155	6.94	0.03	0.608	18.54	57.40
MW-131	06/10/2014 14:50	1.55	-343	6.58	0.06	1.543	15.25	20.60
MW-131	03/17/2015 08:45	0.73	25.7	6.99	0.34	0.700	7.32	27.20
MW-131	03/17/2015 09:40	0.63	-49.8	7.01	0.32	0.659	7.41	19.90
MW-131	03/17/2015 09:55	7.71	-35.7	7.14	0.31	0.629	7.68	26.80
MW-131	07/20/2015 13:15	4.94	-81	6.47	8.20	13.900	22.60	0.0000
MW-131	07/20/2015 13:35	3.78	-69	6.56	7.70	13.500	28.17	34.10
MW-131	02/19/2016 12:13	4.35	-88	6.17	0.67	11.860	9.62	11.10
MW-131	02/19/2016 15:00	4.48	-165	6.80	1.69	27.520	13.62	22.10
MW-131R	06/06/2016 15:05	4.50	68	5.89	14.05	23.250	17.68	24.30
MW-131R	06/06/2016 15:22	5.55	44.9	6.12	8.40	14.550	18.11	165.50
MW-131R	09/06/2016 12:00	2.64	36.4	5.64	14.62	24.220	23.22	35.50
MW-131R	09/06/2016 12:13	3.52	-37.1	6.01	4.48	8.060	23.26	230.90
MW-131R	12/01/2016 11:35	1	-85.3	6.24	2.56	4.745	14.04	20.1
MW-131R	12/01/2016 14:20	3.53	-88.2	6.44	1.11	2.154	12.79	74.8
MW-131R	03/03/2017 12:10	4.08	10.4	6.05	4.96	8.129	10.91	17.20
MW-131R	03/03/2017 12:29	6.91	-82.4	6.43	1.88	3.557	8.80	258.50
MW-131R	06/06/2017 13:00	0.22	-33.10	6.22	1.72	3.336	14.31	12.90
MW-131R	06/06/2017 13:55	0.26	-49.80	6.27	1.71	3.250	14.67	0.50
MW-131R	06/06/2017 14:15	2.30	35.40	6.71	0.78	1.551	16.12	70.10
MW-131R	03/14/2018 08:42	5.93	148	6.89	0.0640	1.2983	6.06	146.5
MW-131R	03/14/2018 08:44	4.51	73	6.93	0.0791	1.5952	5.58	159.1
MW-131R	03/14/2018 08:47	4.03	62	6.97	0.0954	1.9083	5.51	161.9
MW-131R	03/14/2018 08:49	3.81	56	7.01	0.1056	2.1004	5.58	120.2
MW-131R	03/14/2018 08:52	3.67	44	7.04	0.1178	2.3331	5.49	94.4
MW-131R	03/14/2018 08:54	3.57	37	7.08	0.1263	2.4905	5.64	81.7
MW-131R	03/14/2018 08:57	3.49	37	7.12	0.1347	2.6533	5.28	75.9
MW-131R	03/14/2018 08:59	3.46	37	7.15	0.1414	2.7774	5.34	54.1
MW-131R	03/14/2018 09:01	3.45	36	7.18	0.1486	2.9141	5.13	59.3
MW-131R	03/14/2018 09:04	3.37	34	7.21	0.1534	3.0035	5.13	51.2
MW-131R	03/14/2018 09:06	3.3	34	7.22	0.1543	3.0152	5.43	59.8
MW-131R	03/14/2018 09:09	3.23	35	7.24	0.1574	3.0745	5.32	58.2
MW-131R	03/14/2018 09:11	3.15	36	7.26	0.1610	3.1406	5.32	48.5
MW-131R	03/14/2018 09:14	3.07	36	7.27	0.1633	3.1829	5.45	46.3
MW-131R	03/14/2018 09:16	3.03	36	7.28	0.1658	3.2287	5.39	48.9
MW-131R	03/15/2018 09:17	3.03	36.00	7.28	0.17	3.242	5.25	48.92
MW-131R	03/15/2018 09:45	9.28	-103.00	6.95	0.12	2.414	7.42	341.00
MW-131R	03/15/2018 09:47	11.78	198.00	6.95	0.05	0.967	7.54	21.50
MW-131R	12/04/2018 14:10	12.55	71.10	7.63	0.27	0.455	11.74	15.50
MW-131R	12/04/2018 14:50	9.03	8.80	7.23	0.48	0.960	11.93	7.90
MW-131R	12/04/2018 15:00	8.29	-20.20	7.28	0.24	0.503	11.1	8.90
MW-131R	03/12/2019 10:25	1.88	-27.5	7.53	NM	0.502	7.18	NM
MW-131R	03/12/2019 10:59	1.1	-68.4	7.55	0.26	0.535	7.28	0
MW-131R	06/24/2019 10:05	3.53	103.5	7.33	NM	1.024	18.16	21.8
MW-131R	06/24/2019 10:10	2.51	101.1	7.1	NM	0.931	19.57	12
MW-131R	06/24/2019 10:15	2.32	102.3	7.09	NM	0.881	19.66	10.7
MW-131R	06/24/2019 10:20	2.05	104.2	7.08	NM	0.874	19.94	7.3
MW-131R	06/24/2019 10:25	1.88	104.4	7.09	NM	0.865	19.85	5.9
MW-131R	06/24/2019 10:30	1.65	103.2	7.1	NM	0.851	20.22	2.4

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-131R	06/24/2019 10:35	1.46	98.9	7.1	NM	0.837	19.85	1.1
MW-131R	06/24/2019 10:40	1.41	96.7	7.11	NM	0.834	19.98	4.4
MW-131R	06/24/2019 10:45	1.3	88.8	7.12	NM	0.82	20.01	0.2
MW-131R	06/24/2019 10:50	1.23	82.5	7.12	NM	0.815	20.06	1.1
MW-131R	06/24/2019 11:19	0.6	2.9	7.17	0.37	0.755	18.26	5.4
MW-131R	06/24/2019 11:30	0.6	-1.2	7.18	0.37	0.754	18.79	2.6
MW-131R	12/12/2019 09:35	4.3	7.4	6.72	NM	0.425	9.77	456.3
MW-131R	12/12/2019 09:40	2.5	-87.3	6.84	NM	0.371	9.02	426.9
MW-131R	12/12/2019 09:45	4.16	-72.8	6.85	NM	0.313	9.75	454.5
MW-131R	12/12/2019 09:50	7.5	-46	6.88	NM	0.275	9.86	116.7
MW-131R	12/12/2019 09:55	8.3	-31.5	6.91	NM	0.27	9.83	29.2
MW-131R	12/12/2019 10:00	9.15	-28.3	6.9	NM	0.281	10.11	13.2
MW-131R	12/12/2019 10:05	13.42	-32.2	6.88	NM	0.3	9.74	4.3
MW-131R	12/12/2019 10:10	14.53	-37	6.86	NM	0.31	9.99	2.7
MW-131R	12/12/2019 10:15	14.05	-42.6	6.85	NM	0.32	9.87	1.4
MW-131R	12/12/2019 10:20	15.22	-53.9	6.84	NM	0.328	10.01	69.8
MW-131R	12/12/2019 11:15	15.68	-74.4	6.9	0.18	0.367	9.85	1.8
MW-131R	12/12/2019 11:30	34.23	-78.2	7.22	0.13	0.273	8.36	64.5
MW-131R	03/17/2020 13:05	0.41	70.3	7.32	NM	0.483	10.47	43.6
MW-131R	03/17/2020 13:30	0.33	80.4	7.36	0.73	0.449	10.34	31.7
MW-131R	06/26/2020 10:20	6.12	-40	7.23	1.02	1.995	19.15	102.3
MW-131R	06/26/2020 10:50	5.92	-82	7.1	0.83	1.634	17.85	2.2
MW-131R	06/26/2020 11:00	2.45	-85.1	6.76	0.82	1.625	17.77	2.3
MW-131R	12/10/2020 10:40	2.55	-32.8	7.37	0.43	0.874	12.57	1.8
MW-131R	12/10/2020 10:50	1.5	-42.1	7.42	0.41	0.838	12.52	1.3
MW-131R	02/11/2022 08:15	6.61	88	6.47	0.24	0.503	8.69	961
MW-131R	02/11/2022 08:20	4.74	89.7	6.75	0.24	0.483	8.28	592
MW-131R	02/11/2022 08:25	4.23	86.7	5.21	0.23	0.483	7.2	340.2
MW-131R	02/11/2022 08:30	3.24	77.2	5.1	0.24	0.501	6.98	218.4
MW-131R	02/11/2022 08:35	3.19	73.5	5.08	0.25	0.513	7.08	154.3
MW-131R	02/11/2022 08:40	2.84	63.9	5.09	0.26	0.53	7.12	85.7
MW-131R	02/11/2022 08:45	2.91	65.7	5.09	0.26	0.541	7.29	62.2
MW-131R	02/11/2022 08:50	2.33	59.4	5.09	0.27	0.556	7.37	42
MW-131R	02/11/2022 08:55	2.79	57.8	5.1	0.28	0.571	7.42	30.5
MW-131R	02/11/2022 09:00	2.71	57	5.1	0.28	0.583	7.47	25.4
MW-132	04/23/2012 15:46	42.85	-508	6.52	NM	12.30	12.3	55.6
MW-132	04/23/2012 15:49	45.05	-456	6.52	NM	4.49	12.2	17.1
MW-132	04/23/2012 15:52	47.34	-380	6.52	NM	3.22	12.1	1.9
MW-132	04/23/2012 15:55	49.05	-360	6.53	NM	3.09	12.1	1.1
MW-132	04/23/2012 15:57	50.15	-345	6.53	NM	3.07	12.1	0.6
MW-132	04/23/2012 16:00	51.45	-339	6.54	NM	3.06	12.0	1.4
MW-132	04/23/2012 16:03	52.29	-330	6.56	NM	3.13	12.1	-0.2
MW-132	04/23/2012 16:19	5.02	-218	6.51	NM	3.15	11.8	0.2
MW-132	04/23/2012 16:22	10.10	-248	6.55	NM	3.27	11.9	0.00
MW-132	04/23/2012 16:25	13.99	-262	6.56	NM	3.33	11.9	0.00
MW-132	04/23/2012 16:28	17.43	-270	6.56	NM	3.37	11.9	0.00
MW-132	04/23/2012 16:31	20.30	-278	6.58	NM	3.43	11.9	0.00
MW-132	04/23/2012 16:35	0.0000	-177	9.54	0.20	3.770	11.55	181.00
MW-132	04/23/2012 17:30	0.0000	-344	11.94	0.20	3.690	11.53	196.00
MW-132	04/24/2012 17:40	0.0000	-3020	11.89	0.20	3.690	11.54	99.60
MW-132	05/10/2012 08:59	1.77	-175.1	5.71	0.10	2.690	15.59	46.20
MW-132	05/10/2012 11:00	0.0000	-385	6.59	0.20	3.400	14.42	217.00
MW-132	05/11/2012 11:21	5.23	-205	7.15	0.20	3.560	15.27	10.20
MW-132	11/14/2012 13:46	0.47	93.3	5.84	4.3	6.38	15.8	45
MW-132	11/14/2012 14:00	0.57	84.9	5.88	4.3	6.42	16	49.1
MW-132	11/14/2012 14:04	0.26	73.5	5.92	4.3	6.46	16.2	46.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-132	11/14/2012 14:08	0.28	61.9	5.96	4.3	6.5	16.4	44.5
MW-132	11/14/2012 14:12	0.39	55.1	5.97	4.3	6.51	16.6	43.9
MW-132	11/14/2012 14:16	0.51	46.4	5.96	4.3	6.51	16.4	45.1
MW-132	11/14/2012 14:20	1.63	41.9	5.95	4.3	6.49	16.4	46
MW-132	11/14/2012 14:24	0.76	39.1	5.95	4.3	6.51	16.5	47.7
MW-132	11/14/2012 14:28	1.26	38.1	5.97	4.3	6.51	16.5	48
MW-132	11/14/2012 14:32	1.24	38.1	5.94	4.3	6.51	16.5	47
MW-132	11/14/2012 14:36	1.25	37.2	5.96	4.32	6.507	16.4	46.4
MW-132	11/14/2012 16:16	1.31	97.7	6.41	3.01	4.427	14.71	7
MW-132	11/15/2012 16:58	8.4	72.4	6.07	3.16	4.123	9.81	9.3
MW-132	01/29/2013 14:31	4.47	-107.1	6.53	2.2	4.2	10.4	25.5
MW-132	01/29/2013 14:34	2.8	-110.1	6.53	2.2	4.18	10.4	9.3
MW-132	01/29/2013 14:37	2.71	-110.4	6.53	2.2	4.18	10.5	10.1
MW-132	01/29/2013 14:40	2.37	-108.8	6.53	2.2	4.18	10.5	3.1
MW-132	01/29/2013 14:43	2.14	-109	6.53	2.2	4.18	10.5	0
MW-132	01/29/2013 14:46	2.18	-110.2	6.53	2.2	4.17	10.4	0
MW-132	01/29/2013 14:49	2.11	-110.4	6.53	2.2	4.17	10.4	0
MW-132	01/29/2013 14:52	2.06	-109.9	6.53	2.2	4.17	10.4	0
MW-132	01/29/2013 14:55	2.02	-109.8	6.53	2.2	4.17	10.4	0
MW-132	01/29/2013 14:58	1.93	-109	6.53	2.2	4.17	10.4	0
MW-132	01/29/2013 15:01	1.95	-108	6.53	2.2	4.17	10.4	0
MW-132	01/29/2013 15:04	1.95	-101.6	6.53	2.2	4.17	10.4	0
MW-132	05/10/2013 10:35	0	-327.9	13.34	83.2	93.71	16	373.2
MW-132	05/10/2013 10:40	0	-371.7	13.33	76.1	87.4	16.2	352.3
MW-132	05/10/2013 10:45	0	-370.2	13.33	70.7	81.1	15.9	318.1
MW-132	05/10/2013 10:50	0	-404.3	13.28	64.6	74.99	15.6	271.2
MW-132	05/10/2013 10:55	0	-399.7	13.25	55.2	72.01	15.6	238.4
MW-132	05/10/2013 11:00	0	-415.5	13.23	61.1	70.78	15.4	194.4
MW-132	05/10/2013 11:05	0	-421.5	13.22	61.7	70.53	15.4	181.5
MW-132	05/10/2013 11:10	0	-438.5	13.21	61.6	70.68	15.5	173.2
MW-132	05/10/2013 11:15	0	-440.8	13.2	61.82	70.75	15.49	182.5
MW-132	05/10/2013 13:25	0	-520.4	12.82	94.22	90.71	15.79	136.4
MW-132	05/11/2013 14:00	0	-551	12.28	85.2	110.3	15.16	117.2
MW-132	07/03/2013 09:55	0.0000	-521	13.80	60.80	83.700	19.90	18.20
MW-132	07/03/2013 12:05	0.0000	-511	13.20	31.80	46.000	22.00	9.40
MW-132	07/03/2013 13:10	0.0000	-511	13.29	52.22	66.690	18.77	29.20
MW-132	10/18/2013 10:45	3.81	-438	13.49	43.50	64.330	20.91	312.80
MW-132	10/18/2013 11:45	6.46	-254	13.19	37.34	56.130	21.88	1916.00
MW-132	10/18/2013 11:55	8.34	-276	13.18	37.21	53.960	21.85	1916.40
MW-132	12/12/2013 10:05	0.0000	-379.3	12.11	49.58	73.010	7.25	214.20
MW-132	12/12/2013 11:20	0.0000	-427.1	11.20	37.59	56.610	14.61	488.00
MW-132	12/12/2013 12:19	2.60	-443.8	11.37	40.72	61.320	14.39	670.90
MW-132	04/01/2014 09:22	1.28	-122.8	6.78	2.63	4.906	7.07	49.20
MW-132	04/01/2014 12:55	0.38	-507.3	9.78	13.80	22.950	9.79	123.50
MW-132	04/03/2014 12:40	0.35	-529.6	10.24	7.77	28.800	10.28	62.30
MW-132	07/11/2014 12:25	0.04	-324	10.77	37.47	56.450	17.83	54.60
MW-132	07/11/2014 14:00	0.02	-304.6	10.05	31.32	48.860	22.51	6.40
MW-132	07/11/2014 14:55	0.80	-35	9.19	13.02	21.620	20.03	127.80
MW-132	09/11/2014 10:20	0.40	-303.8	9.53	20.47	32.800	21.13	40.80
MW-132	09/11/2014 11:40	0.40	-304.9	9.31	19.99	32.370	20.36	29.60
MW-132	09/11/2014 11:55	0.99	-271.6	9.54	20.22	33.070	21.09	73.20
MW-132	01/15/2015 11:00	0.31	-235.3	7.62	7.75	13.810	7.15	19.80
MW-132	01/15/2015 13:40	-0.04	-312.1	9.67	18.19	29.450	11.76	11.60
MW-132	01/15/2015 14:15	0.12	-359.7	9.76	16.19	27.840	7.59	18.00
MW-132	04/21/2015 10:45	0.04	-232.5	8.97	16.27	26.560	9.03	20.30
MW-132	04/21/2015 12:40	0.03	-340.9	9.13	12.39	20.780	7.33	22.70

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-132	07/22/2015 14:30	0.38	-352	9.19	8.70	15.100	17.35	95.90
MW-132	07/22/2015 16:00	0.36	-341	9.47	10.10	17.100	18.79	27.30
MW-132R	07/26/2016 11:17	0.30	-88.7	6.85	3.82	6.979	18.49	4.20
MW-132R	07/26/2016 11:36	0.36	-84.5	6.82	4.73	8.512	20.10	4.40
MW-132R	08/30/2016 11:31	1.09	-49.5	7.96	5.15	9.202	21.72	2.80
MW-132R	08/30/2016 11:40	0.84	-56.4	7.94	5.12	9.114	21.86	6.40
MW-132R	10/18/2016 10:25	1.11	-122.6	7.08	3.17	5.838	22.90	7.10
MW-132R	10/18/2016 10:35	1.17	-102.8	7.15	1.67	3.191	21.55	59.80
MW-132R	12/06/2016 11:27	0.58	-152.6	7.31	4.13	7.46	12.03	10.5
MW-132R	12/06/2016 11:50	6.43	-48.6	9.51	2.33	4.353	17.57	89.6
MW-132R	01/26/2017 13:15	6.03	-100.6	7.44	4.37	7.864	11.19	5.00
MW-132R	01/26/2017 13:45	6.72	15	8.01	3.27	6.018	7.41	71.50
MW-132R	04/18/2017 08:50	0.84	70.20	6.44	3.60	6.577	11.61	10.70
MW-132R	04/18/2017 09:20	6.81	76.10	5.76	4.70	8.420	13.1	2.00
MW-132R	04/18/2017 09:35	4.42	77.30	7.31	3.21	5.880	14.11	52.40
MW-132R	01/09/2018 09:55	3.82	-161.30	6.86	5.91	9.190	10.97	3.00
MW-132R	01/09/2018 10:25	0.82	-158.30	7.24	6.14	11.820	8.35	4.80
MW-132R	01/09/2018 11:00	1.75	-116.20	7.02	6.32	11.110	8.86	10.10
MW-132R	04/26/2018 08:46	2.92	-77	7.28	0.1729	3.2834	14.66	10.4
MW-132R	04/26/2018 08:48	1.66	-78	7.16	0.2041	3.8569	12.12	12.5
MW-132R	04/26/2018 08:50	0.99	-78	7.17	0.1995	3.7764	11.73	8.9
MW-132R	04/26/2018 08:52	0.79	-82	7.19	0.2046	3.8696	11.48	8
MW-132R	04/26/2018 08:55	0.71	-85	7.2	0.2100	3.9656	11.58	9.9
MW-132R	04/26/2018 08:57	0.72	-88	7.23	0.2175	4.0990	11.53	8.8
MW-132R	04/26/2018 08:59	0.68	-90	7.22	0.2201	4.1441	11.68	10.5
MW-132R	04/26/2018 09:01	0.64	-92	7.23	0.2248	4.2276	11.75	9.1
MW-132R	04/26/2018 09:03	0.67	-94	7.22	0.2269	4.2657	11.67	9.7
MW-132R	04/26/2018 09:05	0.63	-96	7.23	0.2309	4.3356	11.72	11.3
MW-132R	04/26/2018 09:07	0.61	-97	7.22	0.2331	4.3740	11.82	7
MW-132R	04/26/2018 09:10	0.56	-99	7.23	0.2369	4.4402	11.89	6.4
MW-132R	04/26/2018 09:12	0.57	-100	7.23	0.2401	4.4954	11.98	7.4
MW-132R	04/26/2018 09:14	0.6	-101	7.24	0.2426	4.5418	11.88	6.2
MW-132R	04/26/2018 09:16	0.53	-101	7.23	0.2427	4.5454	11.65	6.2
MW-132R	04/26/2018 09:18	0.57	-102	7.24	0.2443	4.5719	11.82	5.5
MW-132R	04/26/2018 09:20	0.57	-103	7.25	0.2488	4.6493	11.91	5.9
MW-132R	04/26/2018 09:23	0.51	-104	7.24	0.2485	4.6455	11.89	7.7
MW-132R	04/26/2018 09:25	0.53	-105	7.25	0.2510	4.6899	11.84	6.4
MW-132R	04/26/2018 09:27	0.53	-105	7.25	0.2611	4.8679	11.8	6.4
MW-132R	04/26/2018 09:29	0.47	-106	7.25	0.2538	4.7392	11.84	6.4
MW-132R	04/26/2018 09:31	0.46	-106	7.26	0.2578	4.8083	11.86	6.6
MW-132R	04/26/2018 09:33	0.45	-106	7.25	0.2566	4.7874	11.89	6.4
MW-132R	04/27/2018 09:20	1.40	173.00	7.10	0.20	3.757	12.02	86.90
MW-132R	04/27/2018 09:33	0.45	-106.00	7.25	26.00	4.802	11.77	6.45
MW-132R	04/27/2018 09:59	2.71	-72.00	7.49	0.21	4.039	10.05	231.10
MW-132R	08/28/2018 13:07	0.35	-98.00	7.03	0.66	11.440	23.91	14.84
MW-132R	08/28/2018 13:19	0.41	-106.00	7.19	0.59	10.330	23.42	24.50
MW-132R	08/28/2018 13:37	0.69	-27.00	7.44	0.52	9.104	23.14	212.40
MW-132R	02/01/2019 14:15	1.15	0.60	6.96	2.81	5.222	7.8	110.10
MW-132R	02/01/2019 14:50	0.39	-35.20	7.00	3.10	5.694	10.18	2.30
MW-132R	02/01/2019 15:00	1.76	-27.90	7.02	3.02	5.371	10.01	89.70
MW-132R	05/09/2019 10:30	2.95	-77.5	7.12	NM	7.896	12.36	64.4
MW-132R	05/09/2019 10:58	1.84	-94.5	7.21	7.37	12.79	11.96	1.1
MW-132R	08/15/2019 10:05	1.15	-100.5	6.81	NM	6.331	22.31	3.4
MW-132R	08/15/2019 10:10	0.76	-99.2	6.8	NM	6.622	23.34	2.7
MW-132R	08/15/2019 10:15	0.7	-98.4	6.8	NM	6.566	23.61	2.6
MW-132R	08/15/2019 10:20	0.69	-99.6	6.81	NM	6.754	23.4	4.1

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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-132R	08/15/2019 10:25	1.24	-95.1	6.8	NM	6.981	23.46	3.1
MW-132R	08/15/2019 10:30	1.21	-100.4	6.83	NM	7.1	23.38	3.1
MW-132R	08/15/2019 10:35	0.54	-103.3	6.84	NM	7.164	23.26	2.8
MW-132R	08/15/2019 10:40	0.52	-106.9	6.85	NM	7.17	23.2	2
MW-132R	08/15/2019 10:45	0.54	-109.4	6.86	NM	3.95	23.24	1.3
MW-132R	08/15/2019 10:50	0.52	-110.8	6.87	NM	7.186	22.96	0.5
MW-132R	08/15/2019 12:50	0.52	-110.8	6.87	NM	7.186	22.96	0.5
MW-132R	08/15/2019 13:30	1.88	-123.7	7.01	4.51	8.123	23.97	6.6
MW-132R	08/15/2019 13:40	5.46	-138.6	7.45	2.37	4.463	24.84	462.3
MW-132R	09/23/2019 11:35	1.07	-121	6.89	NM	3.348	23.6	57.7
MW-132R	09/23/2019 12:20	0.11	-79.4	6.88	2.17	4.084	20.76	9.3
MW-132R	09/23/2019 12:35	0.69	-86.5	6.9	3.14	5.729	20.23	67
MW-132R	02/26/2020 11:40	0.34	-22.8	6.15	NM	3.857	9.45	62.6
MW-132R	02/26/2020 12:10	0.35	-19.9	6.15	4.83	8.411	9.89	24.8
MW-132RR	11/06/2020 08:40	2.15	-53.4	6.49	2.42	4.775	16.39	65.3
MW-132RR	11/06/2020 08:45	1.06	-48.6	6.35	2.6	4.826	16.68	50.1
MW-132RR	11/06/2020 08:50	0.75	-41	6.3	2.61	4.868	16.72	49.3
MW-132RR	11/06/2020 08:55	0.66	-37.1	6.28	2.83	5.211	16.67	62.1
MW-132RR	11/06/2020 09:00	0.47	-34.8	6.27	2.84	5.26	16.52	70.5
MW-132RR	11/06/2020 09:05	0.39	-33.8	6.27	2.74	5.034	16.6	64.5
MW-132RR	11/06/2020 09:10	0.41	-33.2	6.27	2.77	5.135	16.69	60.5
MW-132RR	11/06/2020 09:15	0.57	-33.6	6.28	2.84	5.241	16.72	47.4
MW-132RR	11/06/2020 09:20	0.51	-33.6	6.27	2.86	5.324	16.64	39.8
MW-132RR	11/06/2020 09:25	0.48	-33.6	6.29	2.91	5.372	16.61	35.3
MW-132RR	11/06/2020 09:55	3.52	-20.4	6.44	2.94	5.438	16.95	15.9
MW-132RR	11/06/2020 10:05	1.26	-30.5	6.38	2.95	5.479	17.79	15.2
MW-132RR	02/04/2021 12:50	1.34	-1.6	6.58	3.8	6.918	10.56	2.5
MW-132RR	02/04/2021 12:55	1.04	-1.7	6.45	3.75	6.833	10.73	2.5
MW-132RR	02/04/2021 13:00	1.05	-3.6	6.27	4.37	7.765	9.32	2.4
MW-132RR	02/04/2021 13:05	0.66	-0.2	6.11	4.67	8.385	9.46	2.2
MW-132RR	02/04/2021 13:10	0.67	-2.9	6.08	4.67	8.377	10.52	2
MW-132RR	02/04/2021 13:15	0.71	-3.5	6.07	4.39	7.966	9.86	5.7
MW-132RR	02/04/2021 13:20	0.64	-0.8	6.05	4.5	8.096	8.75	3.5
MW-132RR	02/04/2021 13:25	0.62	-0.3	6.04	4.68	8.412	8.62	1.7
MW-132RR	02/04/2021 13:30	0.6	-0.2	6.04	4.58	8.234	8.7	1.5
MW-132RR	02/04/2021 13:35	0.58	-0.3	6.04	4.51	8.106	8.55	2.6
MW-132RR	02/04/2021 14:20	1.68	-9.7	6.37	8.38	14.41	10.33	7.7
MW-132RR	02/04/2021 14:35	3.66	-30.3	6.36	3.09	5.709	7.3	334.8
MW-132RR	05/17/2021 09:45	5.52	-10.1	6.43	7.5	15.4	17.87	1526.3
MW-132RR	05/17/2021 09:50	1.38	5.1	5.83	13.37	22.33	14.9	235
MW-132RR	05/17/2021 09:55	0.85	5.3	5.78	12.58	21.23	14.64	640
MW-132RR	05/17/2021 10:00	2.09	-3.4	6.04	6.53	11.43	14.27	120.1
MW-132RR	05/17/2021 10:05	1.78	-1.3	6.08	6.35	11.1	14.26	81.5
MW-132RR	05/17/2021 10:10	1.6	1.5	6.09	6.39	11.16	14.34	60.2
MW-132RR	05/17/2021 10:15	1.71	6.8	6.1	6.35	11.24	14.51	33
MW-132RR	05/17/2021 10:20	1.3	11.6	6.11	6.38	11.3	14.48	18.3
MW-132RR	05/17/2021 10:25	1.32	13.7	6.11	6.43	11.25	14.5	14
MW-132RR	05/17/2021 10:30	1.59	16	6.12	6.48	11.33	14.55	9.6
MW-132RR	08/26/2021 08:55	5.24	-81.7	6.12	1.99	3.955	24.91	168.7
MW-132RR	08/26/2021 09:00	4.42	-85.1	6.11	2.28	4.281	23.13	148.9
MW-132RR	08/26/2021 09:05	1.02	-88.3	6.12	2.19	4.125	22.97	80.6
MW-132RR	08/26/2021 09:10	0.9	-89	6.13	2.23	4.193	22.97	44.7
MW-132RR	08/26/2021 09:15	0.85	-89	6.14	2.24	4.214	23.12	25.6
MW-132RR	08/26/2021 09:20	0.76	-88.6	6.14	4.234	4.248	23.19	16.4
MW-132RR	08/26/2021 09:25	0.71	-88.4	6.15	2.28	4.248	23.14	12.6
MW-132RR	08/26/2021 09:30	0.68	-88.1	6.16	2.29	4.309	23.2	9.2

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-132RR	08/26/2021 09:35	0.63	-88.2	6.16	2.3	4.319	23.29	5.9
MW-132RR	08/26/2021 09:40	0.55	-87.8	6.17	2.32	4.376	23.26	5.3
MW-132RR	11/23/2021 13:30	5.42	-70.5	6.52	5.49	9.736	15.71	140.6
MW-132RR	11/23/2021 13:35	5.15	-59.5	6.23	5.69	10.3	16.05	142.8
MW-132RR	11/23/2021 13:40	4.93	-54.2	6.12	5.33	9.421	15.44	137.7
MW-132RR	11/23/2021 13:45	4.93	-47.7	6.03	4.68	8.36	15.36	119.6
MW-132RR	11/23/2021 13:50	2.19	-42.6	5.98	4.53	8.13	15.37	101.4
MW-132RR	11/23/2021 13:55	1.86	-41.3	5.96	4.45	7.982	15.39	87.2
MW-132RR	11/23/2021 14:00	1.69	-40.6	5.94	4.35	7.836	15.28	64.3
MW-132RR	11/23/2021 14:05	1.66	-38.7	5.92	4.26	7.66	15.3	56.8
MW-132RR	11/23/2021 14:10	1.57	-36.9	5.93	4.23	7.602	14.98	47.4
MW-132RR	11/23/2021 14:15	1.55	-35.2	5.92	4.17	7.51	14.94	41.8
MW-132RR	02/03/2022 10:55	1.32	5.3	6.26	23.66	37.9	8.73	178.9
MW-132RR	02/03/2022 11:00	0.67	13.8	6.12	24.28	39.12	8.91	210.3
MW-132RR	02/03/2022 11:05	0.44	17.4	5.98	17.55	27.8	9.18	222.6
MW-132RR	02/03/2022 11:10	0.38	3.8	6.15	12.2	20.42	8.97	214.3
MW-132RR	02/03/2022 11:15	0.34	-4.1	6.28	10.65	18.02	8.86	170.2
MW-132RR	02/03/2022 11:20	0.34	-6.9	6.31	10.33	17.54	8.76	119.7
MW-132RR	02/03/2022 11:25	0.37	-7.4	6.32	10.59	17.95	8.71	118
MW-132RR	02/03/2022 11:30	0.37	-8.4	6.32	10.37	17.64	8.74	90.3
MW-132RR	02/03/2022 11:35	0.39	-9.3	6.32	8.46	14.51	8.49	66.4
MW-132RR	02/03/2022 11:40	0.53	-7.6	6.32	7.63	13.25	8.21	59.5
MW-14	05/01/2012 08:41	1.97	173	6.44	0.03	0.69914	15.71	28
MW-14	05/01/2012 08:43	1.07	170	6.46	0.04	0.74177	14.75	0.9
MW-14	05/01/2012 08:46	0.72	168	6.47	0.04	0.74093	14.59	1
MW-14	05/01/2012 08:48	0.64	166	6.47	0.04	0.74048	14.44	1.8
MW-14	05/01/2012 08:51	0.62	165	6.48	0.04	0.74127	14.43	1.2
MW-14	05/01/2012 08:53	0.57	163	6.48	0.04	0.74134	14.42	1.2
MW-14	05/01/2012 08:56	0.52	163	6.48	0.04	0.74094	14.44	1.9
MW-14	05/01/2012 08:58	0.48	162	6.48	0.04	0.7413	14.44	3.4
MW-14	05/01/2012 09:01	0.44	161	6.49	0.04	0.74113	14.43	2.9
MW-14	05/01/2012 09:03	0.41	161	6.49	0.04	0.74095	14.45	2
MW-14	05/01/2012 09:05	0.38	160	6.49	0.04	0.74109	14.45	4.3
MW-14	05/01/2012 09:08	0.37	160	6.49	0.04	0.74049	14.46	1.7
MW-14	05/01/2012 09:10	0.35	160	6.49	0.04	0.73976	14.48	1.6
MW-14	05/01/2012 09:13	0.34	159	6.5	0.04	0.74006	14.50	1.7
MW-14	05/01/2012 09:53	4.53	49	6.59	0.03	0.657	14.97	22.20
MW-14	05/02/2012 08:55	2.92	170	6.42	0.0000	0.410	14.74	3.30
MW-14	06/24/2013 15:13	1.03	-150	6.31	0.10	1.913	24.15	6.20
MW-14	06/24/2013 15:52	1.22	-96	6.07	0.11	2.079	19.20	15.50
MW-14	06/25/2013 12:28	1.18	-170.00	6.51	0.08	1.648	17.88	10.00
MW-14	09/22/2014 12:32	0.59	161	6.15	0.03	0.702	21.38	7.35
MW-14	09/22/2014 13:05	1.51	162	6.20	0.04	0.713	19.79	955.70
MW-14	09/23/2014 13:23	2.92	107	6.60	0.07	1.324	19.19	2.90
MW-14	07/08/2015 10:18	5.96	122	6.43	0.11	2.104	18.85	2.7
MW-14	07/08/2015 11:36	2.58	142	6.35	0.09	1.837	17.39	297.6
MW-14	01/07/2016 12:25	6.49	304	7.27	0.04	0.76	14.23	20.9
MW-14	01/07/2016 14:02	6.24	-35	7.32	0.04	0.757	13.1	17.5
MW-14	08/05/2016 09:20	2.38	35	6.43	0.06	1.170	18.25	13.10
MW-14	08/05/2016 09:54	2.42	33	6.62	0.05	0.947	21.84	127.00
MW-14	10/26/2016 13:17	1.85	28.00	6.36	0.03	0.620	19.52	6.60
MW-14	10/26/2016 13:54	1.58	-12	6.34	0.06	1.257	20.21	302.60
MW-14	02/17/2017 09:46	6.71	27	6.46	0.04	0.866	10.52	14.60
MW-14	02/17/2017 11:33	10.27	99	6.32	0.04	0.864	8.71	28.00
MW-14	03/27/2018 09:20	7.22	250.00	NM	0.05	1.054	9.58	2.92
MW-14	03/27/2018 10:02	8.98	221.00	NM	0.05	1.104	9.17	11.10

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-14	03/27/2018 12:29	7.12	126.00	6.90	0.03	0.621	9.67	12.40
MW-14	08/14/2018 10:15	1.98	171.00	6.33	0.04	0.898	25.63	2.70
MW-14	08/14/2018 11:58	1.74	152.00	6.38	0.05	0.955	22.82	3.89
MW-14	08/14/2018 12:48	3.62	52.00	7.21	0.05	0.931	21.62	53.10
MW-14	09/17/2019 11:00	2.23	100.9	6.22	0.21	0.47	23.54	8.6
MW-14	09/17/2019 11:17	1.47	88.8	6.24	NM	0.977	23.95	1.6
MW-14	09/17/2019 11:22	0.53	93.2	6.2	NM	0.958	22.33	2.6
MW-14	09/17/2019 11:27	0.37	17.8	6.26	NM	0.954	22.38	3.4
MW-14	09/17/2019 11:30	2.98	131.2	6.3	0.25	0.548	24.2	3.5
MW-14	09/17/2019 11:32	0.33	16.8	6.28	NM	0.95	22.75	0.6
MW-14	09/17/2019 11:37	0.34	86.9	6.28	NM	0.949	23.19	1.1
MW-14	09/17/2019 11:42	0.33	86.5	6.27	NM	0.946	23.65	0.6
MW-14	09/17/2019 11:47	0.35	86.8	6.24	NM	0.935	23.98	2.3
MW-14	09/17/2019 11:52	0.35	87	6.24	NM	0.933	23.73	2
MW-14	09/17/2019 11:57	0.37	86.6	6.22	NM	0.92	24.14	1.1
MW-14	09/17/2019 12:02	0.37	87.8	6.21	NM	0.919	23.86	0.8
MW-14	03/26/2020 09:25	4.13	154	6.68	NM	0.509	11.27	NM
MW-14	03/26/2020 10:50	3.2	150.8	6.7	0.26	0.539	11.09	0
MW-14	09/22/2020 08:35	5.15	75.1	6.89	0.39	0.803	19.1	0
MW-14	09/22/2020 08:40	6.66	71.1	6.5	0.38	0.771	19.41	0
MW-14	09/22/2020 08:45	9.67	73.1	6.44	0.37	0.764	19.9	0
MW-14	09/22/2020 08:50	11.72	76.2	6.44	0.37	0.763	19.98	0
MW-14	09/22/2020 08:55	13.95	79.6	6.42	0.37	0.76	20.06	0
MW-14	09/22/2020 09:00	18.45	86.1	6.42	0.37	0.766	20.29	0
MW-14	09/22/2020 09:05	20.69	89.8	6.41	0.37	0.754	20.46	0
MW-14	09/22/2020 09:10	24.67	93.5	6.41	0.37	0.752	20.52	0
MW-14	09/22/2020 09:15	26.55	96.3	6.45	0.37	0.75	20.54	0
MW-14	09/22/2020 09:20	31.38	98.4	6.42	0.37	0.749	20.59	0
MW-14	09/23/2020 09:10	7.02	48.8	6.29	0.56	1.132	19.78	0
MW-14	09/23/2020 09:20	4.82	-1.2	6.52	0.49	0.983	20.01	NM
MW-14	09/30/2020 09:20	NM	NM	NM	NM	NM	NM	0
MW-14	03/02/2021 09:35	8.24	101.4	7.64	0.22	0.525	8.29	9.6
MW-14	03/02/2021 09:40	7.29	127.7	6.95	0.18	0.365	8.35	7.7
MW-14	03/02/2021 09:45	7.24	148.9	6.92	0.17	0.36	8.39	7
MW-14	03/02/2021 09:50	7.26	151.8	6.8	0.17	0.361	8.08	7.8
MW-14	03/02/2021 09:55	7.27	156.3	6.88	0.17	0.362	8.08	7.7
MW-14	03/02/2021 10:00	7.3	159.9	6.96	0.17	0.362	8.07	7.5
MW-14	03/02/2021 10:05	7.38	162.9	6.94	0.17	0.362	8.09	7.2
MW-14	03/02/2021 11:25	7.28	102.1	6.7	0.21	0.437	9.63	6.8
MW-14	03/02/2021 11:40	8.92	105.8	6.79	0.18	0.376	8.66	44.5
MW-14	02/03/2022 10:05	5.42	215.3	6.17	0.34	0.723	11	5.4
MW-14	02/03/2022 10:10	4.38	216	6.16	0.34	0.701	10.88	5.2
MW-14	02/03/2022 10:15	3.59	212.2	6.14	0.33	0.679	10.57	4
MW-14	02/03/2022 10:20	3.37	208.2	6.14	0.33	0.677	10.55	4.8
MW-14	02/03/2022 10:25	3.17	200.4	6.15	0.33	0.674	10.55	4.3
MW-14	02/03/2022 10:30	3.05	189.2	6.2	0.33	0.672	10.49	4.4
MW-14	02/03/2022 10:35	3.03	182.4	6.24	0.33	0.672	10.44	4.3
MW-14	02/03/2022 10:40	2.98	181.9	6.25	0.33	0.671	10.42	4.2
MW-141	06/04/2012 08:16	2.06	191	6.93	0.03	0.54891	18.63	13
MW-141	06/04/2012 08:17	1.66	189	7	0.03	0.59389	16.89	7.2
MW-141	06/04/2012 08:20	0.78	185	7.04	0.03	0.58171	16.95	6.6
MW-141	06/04/2012 08:23	0.54	179	7.08	0.03	0.58023	16.71	7.5
MW-141	06/04/2012 08:25	0.44	174	7.11	0.03	0.57865	16.6	6.1
MW-141	06/04/2012 08:28	0.42	168	7.12	0.03	0.57914	16.73	6.4
MW-141	06/04/2012 08:31	0.37	160	7.14	0.03	0.58135	16.82	5.7
MW-141	06/04/2012 08:34	0.35	153	7.14	0.03	0.58246	16.85	5.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-141	06/04/2012 08:36	0.32	147	7.15	0.03	0.58131	16.73	6
MW-141	06/04/2012 08:39	0.3	143	7.16	0.03	0.5816	16.63	6.4
MW-141	06/04/2012 08:42	0.28	140	7.17	0.03	0.58122	16.58	6.1
MW-141	06/04/2012 08:44	0.28	137	7.17	0.03	0.58095	16.55	5.9
MW-141	06/04/2012 08:45	0.28	137	7.17	0.03	0.581	16.55	5.88
MW-141	06/04/2012 09:48	4.74	122	7.57	0.03	0.588	14.23	5.90
MW-141	07/01/2013 09:10	0.92	-130	7.14	0.10	1.927	21.92	5.58
MW-141	07/01/2013 10:05	1.36	-123	7.73	0.11	2.196	16.10	11.70
MW-141	07/02/2013 09:46	1.61	-114	7.33	0.08	1.561	15.15	3.70
MW-141	09/16/2014 10:53	1.41	-382	7.40	0.05	0.923	19.29	12.10
MW-141	09/16/2014 11:28	1.94	-330	7.60	0.07	1.296	18.50	11.80
MW-141	09/17/2014 11:33	1.03	152	6.99	0.06	1.244	18.50	11.20
MW-141	12/08/2015 10:40	5.97	468	7.23	0.07	1.301	16.04	9.9
MW-141	12/08/2015 11:03	6.69	407	7.12	0.06	1.201	15.06	34.3
MW-141	09/27/2016 09:21	0.84	4	7.03	0.04	0.819	18.74	50.10
MW-141	09/27/2016 09:52	4.55	105	7.35	0.08	1.528	20.96	21.40
MW-141	03/03/2017 10:11	4.43	154	7.41	0.04	0.777	10.17	16.60
MW-141	03/03/2017 11:32	10.00	214	7.65	0.04	0.786	9.39	36.20
MW-141	02/20/2018 09:35	10	278	6.98	0.0351	0.7183	10.69	23.7
MW-141	02/20/2018 09:37	8.73	280	7.09	0.0440	0.8957	10.15	8.1
MW-141	02/20/2018 09:40	8.56	283	7.14	0.0510	1.0320	10.15	7.1
MW-141	02/20/2018 09:42	8.5	286	7.16	0.0560	1.1304	10	7.2
MW-141	02/20/2018 09:45	8.42	290	7.18	0.0595	1.1969	10.03	7.2
MW-141	02/20/2018 09:47	8.45	294	7.19	0.0623	1.2516	9.99	10.3
MW-141	02/20/2018 09:49	8.39	297	7.2	0.0648	1.2990	10.01	7.6
MW-141	02/20/2018 09:52	8.33	300	7.21	0.0671	1.3432	9.97	8.2
MW-141	02/20/2018 09:54	8.34	303	7.22	0.0686	1.3729	10.08	8
MW-141	02/20/2018 09:57	8.35	305	7.22	0.0668	1.3387	10.08	8.2
MW-141	02/21/2018 09:56	8.35	305	7.22	0.07	1.344	9.94	8.18
MW-141	02/21/2018 10:47	6.63	312	6.87	0.03	0.832	8.98	34.60
MW-141	02/21/2018 10:48	13.80	220	6.96	0.06	1.235	8.41	46.20
MW-141	02/21/2019 09:30	8.54	93.8	7.59	NM	0.344	6.95	4.4
MW-141	02/21/2019 11:00	5.52	89.6	7.66	0.19	0.402	8.86	0.4
MW-141	02/18/2020 10:35	7.71	123.6	7.4	NM	0.162	8.8	12.8
MW-141	02/19/2020 08:35	8.11	190.6	6.77	0.09	0.181	9.86	23.5
MW-141	01/22/2021 08:05	6.53	171.9	7.91	0.17	0.352	8.2	2.2
MW-141	01/22/2021 08:10	6.38	173.3	7.89	0.17	0.353	8.14	1.9
MW-141	01/22/2021 08:15	5.83	196.2	7.9	0.17	0.35	7.81	0.1
MW-141	01/22/2021 08:20	5.79	203.6	7.87	0.17	0.35	7.42	0
MW-141	01/22/2021 08:25	5.7	207.9	7.9	0.17	0.35	7.23	0
MW-141	01/22/2021 08:30	5.65	210	7.89	0.17	0.35	7.22	0
MW-141	01/22/2021 08:35	5.57	212.5	7.89	0.17	0.349	7.47	0
MW-141	01/22/2021 08:40	5.56	213.8	7.91	0.17	0.348	7.58	0
MW-141	01/22/2021 08:45	5.46	216.6	7.91	0.17	0.345	7.55	0
MW-141	01/22/2021 08:50	5.46	216.7	7.56	0.17	0.345	7.56	0
MW-141	01/22/2021 09:55	5.13	200.4	7.43	0.14	0.403	7.89	0
MW-141	01/22/2021 10:05	6.48	243.9	7.85	0.32	0.361	8.09	0
MW-142	06/04/2012 12:17	2.14	148	7.22	0.03	0.5145	16.85	46.7
MW-142	06/04/2012 12:20	1.24	141	7.27	0.03	0.56375	16.36	7.7
MW-142	06/04/2012 12:23	0.76	133	7.3	0.03	0.58809	17.07	6.2
MW-142	06/04/2012 12:25	0.59	125	7.32	0.03	0.58654	17.16	7.5
MW-142	06/04/2012 12:28	0.52	117	7.33	0.03	0.58283	17.25	5.9
MW-142	06/04/2012 12:31	0.46	108	7.34	0.03	0.58663	17.4	6.7
MW-142	06/04/2012 12:33	0.43	101	7.35	0.03	0.58664	17.43	7
MW-142	06/04/2012 12:36	0.41	96	7.35	0.03	0.58611	17.4	8.1
MW-142	06/04/2012 12:39	0.39	92	7.36	0.03	0.58905	17.24	8.8

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-142	06/04/2012 12:41	0.41	88	7.36	0.03	0.58594	17.40	8.8
MW-142	06/04/2012 13:31	1.21	89	7.52	0.03	0.618	15.42	1606.20
MW-142	07/15/2013 12:56	3.34	-132	7.51	0.07	1.446	24.58	162.30
MW-142	07/15/2013 13:45	1.30	-162	7.59	0.14	2.595	19.48	248.00
MW-142	07/16/2013 10:04	1.12	-147.00	7.41	0.17	3.263	17.40	37.50
MW-142	11/13/2014 13:20	3.41	-198	7.18	0.04	1.064	16.68	4.03
MW-142	11/13/2014 14:03	2.40	-78	7.12	0.06	1.180	18.04	277.60
MW-142	11/14/2014 10:20	4.66	-147	7.03	0.05	1.006	18.02	96.60
MW-142	12/08/2015 09:57	5.06	447	7	0.07	1.467	17.81	909.1
MW-142	12/08/2015 13:38	7.6	412	6.77	0.08	1.525	18.27	1378.7
MW-142	02/11/2016 10:19	4.90	17	6.77	0.06	1.207	13.68	37.20
MW-142	02/11/2016 10:25	15.97	80	7.06	3.46	53.810	7.35	907.70
MW-142	03/02/2017 09:28	2.23	339	7.05	0.10	1.914	13.00	39.20
MW-142	03/02/2017 10:49	0.98	241	6.99	0.06	1.221	13.15	51.70
MW-142	02/20/2018 11:04	4.59	248	6.79	0.0564	1.1309	12.74	82.6
MW-142	02/20/2018 11:06	2.04	250	6.82	0.0766	1.5188	12.32	32.2
MW-142	02/20/2018 11:08	1.71	251	6.85	0.0864	1.7036	12.2	33.1
MW-142	02/20/2018 11:10	1.6	252	6.86	0.0911	1.7932	12.16	30.3
MW-142	02/20/2018 11:13	1.53	252	6.87	0.0939	1.8456	12.2	30.1
MW-142	02/20/2018 11:15	1.5	253	6.88	0.0958	1.8809	12.25	48.9
MW-142	02/20/2018 11:17	1.47	254	6.89	0.0972	1.9070	12.3	47.7
MW-142	02/20/2018 11:19	1.44	255	6.89	0.0985	1.9307	12.33	53.1
MW-142	02/21/2018 11:19	1.44	255	6.89	0.10	1.937	12.19	53.14
MW-142	02/21/2018 11:32	5.98	302	6.73	0.06	1.131	12.49	29.50
MW-142	02/21/2018 12:05	1.36	197	6.87	0.10	1.865	12.32	84.80
MW-142	02/21/2019 13:10	4.2	63.6	7.29	NM	1.092	12.35	31.8
MW-142	02/21/2019 15:43	1.9	76.4	7.25	0.54	1.088	12.78	0
MW-142	02/20/2020 10:15	2.06	32	11.4	NM	0.535	10.12	21.2
MW-142	02/20/2020 11:55	1.16	123.1	7.46	0.23	0.468	11.9	35
MW-142	01/28/2021 08:50	0.38	27.8	7.83	0.71	1.407	8.6	39.8
MW-142	01/28/2021 08:55	0.36	29.1	7.73	0.69	1.373	8.59	37.5
MW-142	01/28/2021 09:00	0.33	35.9	7.25	0.58	1.157	8.83	39.7
MW-142	01/28/2021 09:05	0.35	49.9	7.06	0.55	1.097	8.84	43.1
MW-142	01/28/2021 09:10	0.39	47.9	7.03	0.55	1.095	8.88	42.6
MW-142	01/28/2021 09:15	0.45	-27.3	6.93	0.54	1.081	9.29	34
MW-142	01/28/2021 09:20	0.45	-28.4	6.94	0.54	1.082	9.24	32.7
MW-142	01/28/2021 09:25	0.42	-36.7	6.92	0.54	1.078	9.24	32.5
MW-142	01/28/2021 09:30	0.39	-40	6.92	0.54	1.077	9.2	31.3
MW-142	01/28/2021 09:35	0.37	-39.9	6.92	0.54	1.077	9.2	29.8
MW-142	01/28/2021 10:50	0.28	-55.7	6.87	0.55	1.087	9.22	10.6
MW-142	01/28/2021 11:00	3.05	-64.3	6.68	0.58	1.131	8.78	44.2
MW-143	06/04/2012 13:51	7.29	92	7.54	0.01	0.19348	19.92	92.4
MW-143	06/04/2012 13:53	7.77	86	7.6	0.01	0.18834	19.65	81.6
MW-143	06/04/2012 13:55	7.76	78	7.64	0.01	0.18908	19.73	32.4
MW-143	06/04/2012 13:58	7.79	72	7.67	0.01	0.19106	19.67	46.9
MW-143	06/04/2012 14:00	7.68	69	7.68	0.01	0.18981	19.7	81.4
MW-143	06/04/2012 14:02	7.79	68	7.7	0.01	0.18784	19.54	45.1
MW-143	06/04/2012 14:05	7.79	68	7.71	0.01	0.18835	19.52	55.5
MW-143	06/04/2012 14:07	7.85	68	7.72	0.01	0.1894	19.47	34
MW-143	06/04/2012 14:10	7.92	69	7.73	0.01	0.18899	19.32	34.7
MW-143	06/04/2012 14:12	7.82	70	7.75	0.01	0.189	19.11	121.6
MW-143	06/04/2012 14:14	7.97	72	7.75	0.01	0.18794	18.96	202.4
MW-143	06/04/2012 14:17	8.01	73	7.76	0.01	0.18745	19.01	229.1
MW-143	06/04/2012 14:19	8.1	75	7.77	0.01	0.18771	18.95	30.3
MW-143	06/04/2012 14:21	8.16	76	7.79	0.01	0.1877	18.81	38.6
MW-143	06/04/2012 14:24	8.16	78	7.8	0.01	0.1868	18.93	72

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-143	06/04/2012 14:26	8.2	79	7.81	0.01	0.18813	18.8	33.1
MW-143	06/04/2012 14:28	8.24	80	7.82	0.01	0.18811	18.67	28.4
MW-143	06/04/2012 14:31	8.33	82	7.82	0.01	0.18853	18.61	26.7
MW-143	06/04/2012 14:33	8.35	82	7.83	0.01	0.18906	18.58	26.1
MW-143	06/04/2012 14:34	8.35	82	7.83	0.01	0.189	18.58	26.14
MW-143	06/04/2012 15:15	7.17	87	7.72	0.01	0.223	17.11	80.70
MW-143	07/01/2013 13:55	7.12	-10	7.84	0.01	0.205	24.81	62.14
MW-143	07/01/2013 14:43	3.11	-42	7.95	0.02	0.323	17.70	137.00
MW-143	07/02/2013 11:50	5.54	-22.00	7.45	0.02	0.387	23.66	24.50
MW-143	09/16/2014 14:46	3.67	-273	7.08	0.02	0.326	21.09	156.00
MW-143	09/16/2014 15:07	3.56	-324	7.87	0.02	0.319	18.60	1212.80
MW-143	09/17/2014 12:27	4.76	185	6.94	0.02	0.325	20.35	33.00
MW-143	10/02/2015 10:30	8.23	90	7.35	0.03	0.694	22.52	27.50
MW-143	10/02/2015 13:23	3.75	-79	7.54	0.03	0.626	18.92	298.90
MW-143	03/04/2016 10:28	9.32	-70	7.58	0.01	0.185	10.22	97.80
MW-143	03/04/2016 11:51	9.61	-92	7.34	0.02	0.328	12.08	837.70
MW-143	03/02/2017 11:10	6.25	177	8.15	0.01	0.224	10.89	83.60
MW-143	03/02/2017 14:50	9.79	60	8.32	0.01	0.194	11.77	331.60
MW-143	02/20/2018 13:10	11.8	206	7.22	0.0086	0.1821	15.11	90.3
MW-143	02/20/2018 13:13	12.42	196	7.73	0.0040	0.0853	13.05	47.7
MW-143	02/20/2018 13:15	12.08	195	7.99	0.0039	0.0847	13.36	41.9
MW-143	02/20/2018 13:17	11.95	196	8.11	0.0251	0.5178	13.34	44.8
MW-143	02/20/2018 13:20	11.97	199	8.16	0.0262	0.5394	13.23	41
MW-143	02/20/2018 13:22	11.99	202	8.19	0.0272	0.5587	13.05	42.5
MW-143	02/20/2018 13:25	11.86	206	8.2	0.0276	0.5664	13.33	42.8
MW-143	02/20/2018 13:27	11.8	212	8.22	0.0282	0.5790	13.05	44.3
MW-143	02/20/2018 13:29	11.46	221	8.23	0.0293	0.6007	12.72	42.3
MW-143	02/20/2018 13:32	11.69	229	8.24	0.0294	0.6024	13.13	37.9
MW-143	02/20/2018 13:34	11.71	238	8.24	0.0293	0.6011	13.4	37.7
MW-143	02/20/2018 13:37	11.65	249	8.24	0.0296	0.6064	13.44	36.7
MW-143	02/20/2018 13:39	11.7	259	8.25	0.0302	0.6189	13.23	39.1
MW-143	02/20/2018 13:41	11.65	268	8.25	0.0304	0.6233	13.29	42.1
MW-143	02/20/2018 13:44	11.6	277	8.26	0.0307	0.6292	13.33	41.5
MW-143	02/20/2018 13:46	11.58	286	8.26	0.0310	0.6344	13.31	41.1
MW-143	02/20/2018 13:49	11.52	295	8.26	0.0312	0.6379	13.36	40.6
MW-143	02/20/2018 13:51	11.52	304	8.27	0.0313	0.6408	13.43	41.9
MW-143	02/20/2018 13:53	13.12	314	8.27	0.0314	0.6432	13.51	39.4
MW-143	02/20/2018 13:56	11.55	320	8.27	0.0318	0.6512	13.3	41.3
MW-143	02/20/2018 13:58	11.48	328	8.26	0.0319	0.6523	13.48	41.9
MW-143	02/21/2018 12:20	10.74	291	7.38	0.01	0.175	10.18	113.70
MW-143	02/21/2018 13:58	11.48	328	8.26	0.03	0.646	13.34	41.87
MW-143	02/21/2018 14:48	12.18	205	7.18	0.03	0.564	11.71	510.10
MW-143	02/19/2019 10:00	17.22	159.8	7.98	NM	0.132	8.98	74.4
MW-143	02/19/2019 11:30	14.24	135	8.05	0.06	0.131	9.57	29.8
Mw-143	02/17/2020 13:35	11.84	69.8	7.33	NM	0.311	12.44	40.5
Mw-143	02/17/2020 14:50	8.07	94.2	7.42	0.13	2.81	12.87	37.5
MW-143	02/05/2021 08:20	8.51	82.2	7.55	0.16	0.343	10.18	13.1
MW-143	02/05/2021 08:25	8.55	82.6	7.56	0.17	0.343	10.19	12.7
MW-143	02/05/2021 08:30	8.48	83.1	7.55	0.17	0.343	10.23	12.8
MW-143	02/05/2021 08:35	8.08	88.9	7.56	0.16	0.342	10.29	10.6
MW-143	02/05/2021 08:40	8.07	89	7.55	0.16	0.342	10.3	10.3
MW-143	02/05/2021 08:45	8.09	89.4	7.55	0.16	0.342	10.36	10.6
MW-143	02/05/2021 08:50	8.2	88.9	7.26	0.16	0.344	10.25	13.4
MW-143	02/05/2021 08:55	8.04	90.4	7.34	0.17	0.34	10.2	10.4
MW-143	02/05/2021 09:00	8.09	92.1	7.3	0.16	0.339	10.2	10.9
MW-143	02/05/2021 09:05	8.01	94.3	6.95	0.16	0.34	10.2	10.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-143	02/05/2021 10:15	7.53	104.3	7.05	0.16	0.335	10.08	9.4
MW-143	02/05/2021 10:25	8.03	95.8	7.15	0.17	0.364	10.43	12.6
MW-144	06/07/2012 11:07	1.85	-29	6.73	0.36	6.532	17.04	44.40
MW-144	06/08/2012 09:08	0.08	-54	6.48	0.37	6.692	21.32	18.30
MW-144	05/30/2013 11:12	1.13	-135	6.17	0.56	9.800	15.82	26.30
MW-144	05/31/2013 12:06	0.25	-136	6.23	0.57	10.080	15.76	15.00
MW-144	09/23/2014 10:59	1.45	4	6.33	0.64	11.170	20.35	725.10
MW-144	09/24/2014 10:27	0.43	139	6.26	0.86	14.580	22.32	10.00
MW-144	05/27/2016 11:05	NA	628	6.01	0.44	7.933	16.99	8.00
MW-144	05/27/2016 14:06	5.68	528	6.07	0.43	7.658	21.33	0.3274
MW-144	05/27/2016 15:32	22.03	629	6.12	0.44	7.878	16.81	33.70
MW-144	09/14/2016 13:10	0.61	-80.5	5.7	1.87	3.559	26.25	0
MW-144	09/14/2016 13:15	0.51	-76.4	5.67	1.86	3.555	26.87	0
MW-144	09/14/2016 13:20	0.93	-74.4	5.64	1.86	3.56	27.51	0
MW-144	09/14/2016 13:25	0.86	-76.7	5.64	1.85	3.538	26.24	0
MW-144	09/14/2016 13:30	0.88	-76.1	5.63	1.85	3.532	26.63	0
MW-144	09/14/2016 13:35	0.8	-75.3	5.63	1.84	3.52	26.51	0
MW-144	09/14/2016 13:40	0.81	-74.7	5.63	1.84	3.511	26.54	0
MW-144	09/14/2016 13:45	0.78	-73.9	5.62	1.84	3.516	26.53	0
MW-144	09/14/2016 15:30	2.71	-41.8	5.78	2.07	3.949	23.65	0.0000
MW-144	09/14/2016 15:35	1.95	-38.6	5.65	20.60	3.902	23.41	0.0000
MW-144	12/22/2016 09:50	3.82	-91.9	6.25	2.17	4.075	15.7	22.2
MW-144	12/22/2016 09:55	1.56	-96.4	6.28	2.16	4.052	16.09	14.2
MW-144	12/22/2016 10:00	1.25	-97.6	6.28	2.18	4.085	16.26	6.6
MW-144	12/22/2016 10:05	1.09	-99.5	6.28	2.19	4.094	16.5	3.2
MW-144	12/22/2016 10:10	1.04	-101.6	6.28	2.19	4.095	16.51	2.8
MW-144	12/22/2016 10:15	1.01	-100.5	6.28	2.18	4.017	16.5	2
MW-144	12/22/2016 10:20	0.95	-101.6	6.28	2.17	4.079	16.6	3
MW-144	12/22/2016 10:25	0.94	-101.7	6.28	2.17	4.076	16.63	2.6
MW-144	12/22/2016 10:30	0.93	-101.5	6.28	2.18	4.074	16.62	2.5
MW-144	12/22/2016 10:35	0.93	-101.6	6.28	2.18	4.077	16.63	2.4
MW-144	12/27/2016 10:25	2.82	-112.3	6.86	2.13	3.994	16.13	28.4
MW-144	12/27/2016 12:35	2.12	-95.1	6.21	3.4	6.21	17.36	-7.7
MW-144	12/27/2016 13:35	2.12	-95.1	6.21	3.4	6.21	17.36	-7.7
MW-144	12/27/2016 14:10	3.3	-72.2	6.58	3.61	6.576	17.21	25.9
MW-144	05/30/2017 09:27	1.04	-133	6.26	0.4	7.124	17.88	4.762
MW-144	05/30/2017 09:50	1.04	-13	6.34	0.18	3.390	17.09	10.2
MW-144	05/30/2017 09:55	-0.46	-54	6.28	0.18	3.330	16.81	2.1
MW-144	05/30/2017 10:00	-0.54	-70	6.29	0.18	3.327	16.75	1.6
MW-144	05/30/2017 10:05	-0.52	-80	6.3	0.18	3.333	16.76	1.7
MW-144	05/30/2017 10:06	-0.51	-82	6.3	0.18	3.341	16.75	1.9
MW-144	05/30/2017 10:08	-0.5	-85	6.31	0.18	3.346	16.73	1.9
MW-144	05/30/2017 10:09	2.37	-57	6.23	0.46	8.18	14.89	6.9
MW-144	05/30/2017 10:11	-0.5	-87	6.31	0.18	3.350	16.74	1.8
MW-144	05/30/2017 13:35	1.04	-119	6.34	0.42	7.55	20.83	35.7
MW-144	05/31/2017 09:31	1.09	-130	6.16	0.35	6.406	18.11	15.70
MW-144	05/31/2017 10:11	-0.50	-87	6.31	0.18	3.378	16.37	1.75
MW-144	05/31/2017 10:52	0.84	-55	6.56	0.19	3.569	16.06	10.80
MW-144	05/29/2018 08:38	5.04	-103	6.21	0.4000	7.1950	18.58	8.1
MW-144	05/29/2018 08:40	2.42	-117	6.2	0.3997	7.1933	18.17	4.5
MW-144	05/29/2018 08:42	2.44	-119	6.2	0.3991	7.1833	18.16	4.5
MW-144	05/29/2018 08:44	2.01	-121	6.2	0.3989	7.1800	18.13	4.1
MW-144	05/29/2018 08:46	1.61	-123	6.21	0.3991	7.1828	18.24	4
MW-144	05/29/2018 08:48	1.43	-124	6.21	0.3993	7.1861	18.28	3.9
MW-144	05/29/2018 08:51	1.33	-125	6.21	0.3975	7.1574	18.05	5.2
MW-144	05/29/2018 08:53	1.3	-127	6.22	0.3978	7.1624	17.94	3.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-144	05/29/2018 08:55	1.2	-127	6.22	0.3974	7.1557	18.01	4.2
MW-144	05/29/2018 08:57	1.21	-127	6.23	0.3974	7.1556	18.05	6
MW-144	05/29/2018 08:59	1.19	-128	6.23	0.3981	7.1669	18.04	3.9
MW-144	05/29/2018 09:01	1.15	-128	6.23	0.3974	7.1552	18.05	3.4
MW-144	05/29/2018 09:04	1.12	-129	6.23	0.3973	7.1536	18.08	4.2
MW-144	05/29/2018 09:06	1.11	-130	6.24	0.3984	7.1724	17.96	3.6
MW-144	05/29/2018 09:08	1.18	-130	6.24	0.3965	7.1429	17.57	4.4
MW-144	05/29/2018 09:10	1.11	-131	6.24	0.3976	7.1609	17.73	3.6
MW-144	05/29/2018 09:12	1.05	-131	6.25	0.3970	7.1489	17.89	4.3
MW-144	05/29/2018 09:14	1.09	-131	6.25	0.3969	7.1485	17.75	4.4
MW-144	05/29/2018 09:17	1.1	-132	6.25	0.3969	7.1479	17.76	3.5
MW-144	05/29/2018 09:19	1.07	-132	6.25	0.3974	7.1576	17.62	6.6
MW-144	05/29/2018 09:21	1.06	-133	6.25	0.3982	7.1700	17.69	4.2
MW-144	05/29/2018 09:23	1.08	-133	6.25	0.3967	7.1453	17.7	5.7
MW-144	05/29/2018 09:25	1.06	-133	6.25	0.3978	7.1647	17.69	3.6
MW-144	05/29/2018 09:27	1.04	-133	6.26	0.3971	7.1527	17.7	4.8
MW-144	05/30/2018 09:27	1.04	-133	6.26	0.40	7.124	17.88	4.76
MW-144	05/30/2018 10:09	2.37	-57	6.23	0.46	8.180	14.89	6.90
MW-144	05/30/2018 13:35	1.04	-119	6.34	0.42	7.550	20.83	35.70
MW-144	07/16/2019 09:25	0.25	-122.2	6.22	NM	3.144	23.75	1.3
MW-144	07/16/2019 10:05	2.73	-112.6	6.19	NM	3.113	24.13	8.2
MW-144	07/16/2019 10:10	0.9	-115.3	6.22	NM	3.139	23.93	7.2
MW-144	07/16/2019 10:15	0.57	-116.8	6.19	NM	3.141	24	5.7
MW-144	07/16/2019 10:20	0.44	-118.7	6.24	NM	3.143	23.94	3.9
MW-144	07/16/2019 10:25	0.37	-120	6.23	NM	3.143	23.88	2.6
MW-144	07/16/2019 10:30	0.31	-120.8	6.23	NM	3.141	23.95	2.3
MW-144	07/16/2019 10:35	0.29	-121.2	6.23	NM	3.139	23.98	2.2
MW-144	07/16/2019 10:40	0.27	-121.5	6.22	NM	3.145	23.8	2
MW-144	07/16/2019 10:45	0.25	-121.9	6.22	NM	3.14	23.76	1.4
MW-144	07/16/2019 10:50	0.25	-122.2	6.22	NM	3.144	23.75	1.3
MW-144	08/22/2019 12:10	1.1	-106.6	6.42	NM	3.067	28.46	0.6
MW-144	08/22/2019 12:15	1	-105.9	6.37	NM	3.049	28.24	0.6
MW-144	08/22/2019 12:20	0.88	-106.6	6.38	NM	3.032	27.91	0.4
MW-144	08/22/2019 12:25	0.74	-108.7	6.39	NM	3.017	27.84	0.2
MW-144	08/22/2019 12:30	0.68	-110.8	6.41	NM	3.018	27.71	0.4
MW-144	08/22/2019 12:35	0.67	-112.8	6.43	NM	3.018	27.9	0.4
MW-144	08/22/2019 12:40	0.66	-113.5	6.44	NM	3.022	27.93	0.4
MW-144	04/02/2020 12:20	0.14	-131.6	6.55	NM	3.358	14.12	10.1
MW-144	05/27/2020 10:55	0.02	-86.1	6.43	NM	2.428	16.59	NM
MW-144	06/12/2020 09:10	0.25	72.3	6.77	1.3	2.508	19.17	10.1
MW-144	06/12/2020 09:15	0.6	72.3	6.47	1.27	2.455	21.1	8.1
MW-144	06/12/2020 09:20	0.44	77.8	6.35	1.27	2.464	22.24	8.8
MW-144	06/12/2020 09:25	0.39	79.2	6.3	1.26	2.443	23.43	11.1
MW-144	06/12/2020 09:30	0.33	83.4	6.28	1.26	2.452	23.13	8.2
MW-144	06/12/2020 09:35	0.21	84.6	6.29	1.24	2.418	22.58	6.7
MW-144	06/12/2020 09:40	0.15	87	6.29	1.24	2.401	23.07	6.6
MW-144	06/12/2020 09:45	0.06	92.3	6.29	1.23	2.389	22.93	6.5
MW-144	06/12/2020 09:50	0.04	98.4	6.29	1.22	2.372	22.74	6.3
MW-144	06/12/2020 09:55	0.04	100.4	6.29	1.22	2.37	23.15	6.3
MW-144	06/12/2020 11:25	2.52	64.4	6.87	1.63	3.105	22.65	3.7
MW-144	06/12/2020 11:45	2.47	73.6	7.01	1.49	2.865	20.89	31.3
MW-144	12/03/2020 08:40	3.47	-21.3	6.73	0.48	0.961	12.97	8.2
MW-144	12/03/2020 08:45	1.4	-57.4	6.31	0.48	0.972	12.86	8.3
MW-144	12/03/2020 08:50	1.3	-62.5	6.29	0.48	0.972	12.7	8.7
MW-144	12/03/2020 08:55	1.28	-69	6.25	0.48	0.975	12.14	9.7
MW-144	12/03/2020 09:00	1.24	-73	6.25	0.94	1.851	12.86	8.5

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-144	12/03/2020 09:05	1.17	-78.6	6.26	0.96	1.867	14.41	7.9
MW-144	12/03/2020 09:10	1.07	-85.1	6.26	0.95	1.864	15.66	7.4
MW-144	12/03/2020 09:15	1.07	-87.1	6.25	0.95	1.859	16	7.4
MW-144	12/03/2020 09:20	1.04	-89.5	6.23	0.95	1.863	16.23	7.2
MW-144	12/03/2020 09:25	1.03	-90.8	6.22	0.95	1.86	16.23	7.2
MW-144	04/01/2022 10:50	0.99	-103	6.16	1.39	2.664	14.95	4.9
MW-144	04/01/2022 10:55	0.95	-107.2	6.16	1.39	2.665	15.02	4.4
MW-144	04/01/2022 11:00	0.94	-108.7	6.17	1.39	2.663	15.11	3.7
MW-144	04/01/2022 11:05	0.89	3.6	6.18	1.39	2.66	15.29	-115
MW-144	04/01/2022 11:10	0.89	-116.2	6.18	1.39	2.66	15.29	3.1
MW-144	04/01/2022 11:15	0.86	2	6.2	1.38	2.646	16.34	-123.1
MW-144	04/01/2022 11:20	0.85	-124.8	6.21	1.38	2.641	16.04	2.4
MW-144	04/01/2022 11:25	0.85	-125.9	6.21	1.37	2.626	15.93	0
MW-144	04/01/2022 11:30	0.84	-127.9	6.21	1.36	2.613	16.43	0
MW-144	04/01/2022 11:35	0.85	-130	6.21	1.35	2.608	17.15	0.2
MW-145	05/02/2012 08:29	1.97	337	3.35	0.07	1.41819	15.44	0.7
MW-145	05/02/2012 08:31	1.31	348	3.17	0.07	1.44628	13.61	0.5
MW-145	05/02/2012 08:34	0.94	352	3.13	0.07	1.4506	13.46	1
MW-145	05/02/2012 08:36	0.76	356	3.12	0.07	1.44778	13.31	1.3
MW-145	05/02/2012 08:38	0.61	360	3.1	0.07	1.44774	13.32	1.5
MW-145	05/02/2012 08:41	0.51	362	3.09	0.07	1.448	13.22	2
MW-145	05/02/2012 08:43	0.44	364	3.08	0.07	1.44593	13.24	2.1
MW-145	05/02/2012 08:45	0.4	366	3.08	0.07	1.44719	13.17	2.5
MW-145	05/02/2012 08:48	0.36	367	3.08	0.07	1.44658	13.24	4
MW-145	05/02/2012 08:50	0.32	368	3.08	0.07	1.44711	13.24	4.3
MW-145	05/02/2012 08:52	0.29	369	3.08	0.07	1.44636	13.08	4.3
MW-145	05/02/2012 08:55	0.28	369	3.09	0.07	1.44319	13.01	4.2
MW-145	05/02/2012 08:57	0.26	369	3.08	0.07	1.44329	13.01	4.2
MW-145	05/02/2012 09:00	0.25	369	3.09	0.07	1.44312	13	4.7
MW-145	05/02/2012 09:02	0.23	369	3.08	0.07	1.44459	13.06	4.8
MW-145	05/02/2012 09:04	0.22	370	3.09	0.07	1.44275	13.05	4.8
MW-145	05/02/2012 09:07	0.19	370	3.09	0.07	1.44321	13.04	5.4
MW-145	05/02/2012 09:09	0.19	370	3.08	0.07	1.44123	13.05	5.9
MW-145	05/02/2012 09:11	0.18	370	3.09	0.07	1.4433	12.98	6.1
MW-145	05/02/2012 09:14	0.17	370	3.09	0.07	1.44252	12.99	10.3
MW-145	05/02/2012 09:16	0.16	371	3.08	0.07	1.43966	13.03	10.2
MW-145	05/02/2012 09:18	0.15	370	3.09	0.07	1.44134	12.93	11.3
MW-145	05/02/2012 09:56	4.79	242	4.48	0.07	1.353	13.53	10.70
MW-145	05/03/2012 08:31	3.50	336	3.68	0.07	1.403	14.96	2.60
MW-145	06/24/2013 11:16	1.07	104	3.31	0.13	2.465	27.08	3.20
MW-145	06/24/2013 11:54	2.39	-6	5.30	0.17	3.237	16.09	49.20
MW-145	06/25/2013 10:55	1.19	59.00	3.86	0.13	2.407	21.49	3.00
MW-145	09/22/2014 10:28	0.48	226	3.83	0.08	1.491	21.79	9.37
MW-145	09/22/2014 11:10	2.14	136	6.69	0.07	1.475	18.45	223.00
MW-145	09/23/2014 13:03	1.97	146	5.59	0.16	2.970	20.20	9.50
MW-145	01/05/2016 11:01	4.94	319	5.74	0.07	1.365	12.81	11.50
MW-145	01/05/2016 11:59	2.14	18	6.06	0.17	3.228	13.81	21.40
MW-145	03/07/2017 10:33	1.78	164	4.90	0.05	1.020	9.54	14.10
MW-145	03/07/2017 12:16	5.39	9	6.97	0.06	1.128	11.01	3919.10
MW-145	02/14/2018 12:43	8.3	278	6.92	0.0431	0.8749	11.55	8.9
MW-145	02/14/2018 12:46	7.66	288	6.6	0.0418	0.8499	11.17	16.9
MW-145	02/14/2018 12:48	7.43	299	6.34	0.0416	0.8473	10.67	4.1
MW-145	02/14/2018 12:51	7.33	306	6.12	0.0416	0.8472	10.76	5.5
MW-145	02/14/2018 12:54	7.23	311	5.95	0.0416	0.8477	10.8	4.5
MW-145	02/14/2018 12:56	7.17	316	5.79	0.0416	0.8480	10.79	4.5
MW-145	02/14/2018 12:59	7.13	320	5.66	0.0416	0.8479	10.75	6.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-145	02/14/2018 13:01	7.02	322	5.54	0.0417	0.8495	10.91	5.2
MW-145	02/14/2018 13:04	7.01	323	5.45	0.0416	0.8477	10.9	4.9
MW-145	02/14/2018 13:07	6.93	326	5.32	0.0417	0.8493	10.99	5.3
MW-145	02/14/2018 13:09	6.94	326	5.26	0.0418	0.8510	10.8	5.4
MW-145	02/14/2018 13:12	6.83	328	5.17	0.0418	0.8518	10.68	6.5
MW-145	02/14/2018 13:15	6.77	300	5.08	0.0418	0.8523	10.68	9.1
MW-145	02/14/2018 13:17	6.65	282	5.03	0.0421	0.8573	10.63	6.5
MW-145	02/14/2018 13:20	6.64	276	4.97	0.0419	0.8544	10.48	6.4
MW-145	02/14/2018 13:23	6.66	272	4.93	0.0421	0.8566	10.53	7.2
MW-145	02/14/2018 13:25	6.61	271	4.9	0.0421	0.8580	10.43	7.1
MW-145	02/14/2018 13:28	6.58	272	4.87	0.0421	0.8584	10.39	7
MW-145	02/15/2018 11:15	3.00	348.00	6.79	0.06	1.122	8.51	7.20
MW-145	02/15/2018 13:28	6.58	2.72	4.87	0.04	0.861	10.27	7.04
MW-145	02/15/2018 14:01	6.29	219.00	6.39	0.05	1.103	11.34	9.10
MW-145	02/05/2019 13:45	3.51	229.30	4.24	0.66	1.319	10.71	15.30
MW-145	02/05/2019 15:10	1.22	126.50	5.19	0.39	0.796	17.83	22.90
MW-145	02/05/2019 15:30	1.17	153.60	4.92	0.69	1.370	13.67	20.90
MW-145	01/27/2021 11:40	6.91	17.7	7.61	0.33	0.682	7.75	12.9
MW-145	01/27/2021 11:45	6.57	55.7	6.44	0.33	0.683	8.27	7.8
MW-145	01/27/2021 11:50	6.45	83.8	5.93	0.33	0.683	8.65	5.4
MW-145	01/27/2021 11:55	6.33	103.7	5.68	0.38	0.683	8.59	4.5
MW-145	01/27/2021 12:00	6.19	114.1	5.57	0.33	0.683	8.58	5.1
MW-145	01/27/2021 12:05	5.92	122.6	5.51	0.38	0.683	8.53	4
MW-145	01/27/2021 12:10	5.46	122.5	5.51	0.33	0.678	8.4	3.5
MW-145	01/27/2021 12:15	5.35	121.8	5.55	0.33	0.676	8.23	2.8
MW-145	01/27/2021 12:20	5.05	116.9	5.59	0.33	0.672	8.42	2.3
MW-145	01/27/2021 12:25	4.7	107.3	5.69	0.33	0.665	8.41	1.7
MW-145	01/28/2021 08:50	7.55	-8.7	5.85	1.23	2.377	8.28	3.5
MW-145	01/28/2021 09:00	7.87	25.4	5.6	1.13	2.207	7.62	29.4
MW-145	01/28/2021 12:25	4.7	107.3	5.69	0.33	0.665	8.41	1.7
MW-146	04/30/2012 08:44	1.93	-26	6.63	0.02	0.37668	13.29	38.7
MW-146	04/30/2012 08:46	0.92	-52	6.72	0.02	0.42369	12.41	32
MW-146	04/30/2012 08:48	0.62	-67	6.75	0.02	0.42804	12.32	32
MW-146	04/30/2012 08:50	0.5	-77	6.79	0.02	0.42923	12.18	31.7
MW-146	04/30/2012 08:53	0.42	-84	6.81	0.02	0.42983	12.06	31.9
MW-146	04/30/2012 08:55	0.39	-89	6.81	0.02	0.42936	11.98	31.8
MW-146	04/30/2012 08:57	0.34	-93	6.83	0.02	0.4295	11.94	31.8
MW-146	04/30/2012 08:59	0.31	-97	6.84	0.02	0.42811	11.91	31.6
MW-146	04/30/2012 09:01	0.28	-99	6.86	0.02	0.4254	11.84	31.7
MW-146	04/30/2012 09:03	0.25	-100	6.85	0.02	0.423	11.82	31.8
MW-146	04/30/2012 09:05	0.26	-101	6.86	0.02	0.41907	11.78	30.9
MW-146	04/30/2012 09:07	0.23	-102	6.86	0.02	0.4152	11.76	31.9
MW-146	04/30/2012 09:09	0.22	-102	6.86	0.02	0.41178	11.74	31.7
MW-146	04/30/2012 09:11	0.22	-102	6.87	0.02	0.40692	11.75	31.6
MW-146	04/30/2012 09:13	0.22	-102	6.87	0.02	0.407	11.75	31.57
MW-146	04/30/2012 09:30	8.39	-50	7.04	0.02	0.356	11.41	44.70
MW-146	05/01/2012 09:20	1.77	-115	6.73	0.0000	0.493	11.90	26.90
MW-146	06/26/2013 14:21	0.59	-295	6.82	0.07	1.329	20.01	13.37
MW-146	06/26/2013 15:20	0.86	-160	6.80	0.08	1.568	15.46	8.20
MW-146	06/27/2013 11:19	0.15	-304.00	6.75	0.07	1.318	15.24	3.10
MW-146	06/25/2014 14:01	0.70	93	6.81	0.01	0.226	22.00	8.02
MW-146	06/25/2014 14:32	2.99	105	6.87	0.01	0.269	22.56	485.70
MW-146	06/26/2014 12:30	1.97	60	6.74	0.02	0.445	13.66	44.30
MW-146	09/28/2016 10:51	0.63	-148	6.76	0.04	0.786	19.32	77.20
MW-146	09/28/2016 11:17	2.08	-77	7.63	0.06	1.206	20.84	976.90
MW-146	02/28/2017 10:05	10.29	-4.4	7.24	0.01	0.110	6.98	1163.90

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-146	02/28/2017 15:16	3.42	288	7.24	0.12	2.367	13.14	58.00
MW-146	02/14/2018 10:24	11.87	271	8.07	0.0041	0.0886	6.86	36.3
MW-146	02/14/2018 10:26	11.01	263	7.96	0.0020	0.0443	6.38	54.2
MW-146	02/14/2018 10:29	10.91	265	7.82	0.0017	0.0399	6.21	41.5
MW-146	02/14/2018 10:31	10.72	260	7.69	0.0019	0.0422	6.23	123.7
MW-146	02/14/2018 10:34	11.85	252	7.73	0.0021	0.0466	6.15	37.4
MW-146	02/14/2018 10:37	11.15	249	7.72	0.0017	0.0394	5.86	32.5
MW-146	02/14/2018 10:39	10.91	254	7.58	0.0018	0.0409	6.04	32.4
MW-146	02/14/2018 10:42	11.04	255	7.46	0.0017	0.0396	6.11	32.5
MW-146	02/14/2018 10:44	11.11	249	7.51	0.0018	0.0406	6.14	33.1
MW-146	02/14/2018 10:47	11.25	246	7.51	0.0018	0.0405	6.21	29.2
MW-146	02/14/2018 10:49	11.52	244	7.52	0.0018	0.0406	6.19	28.9
MW-146	02/14/2018 10:52	11.72	244	7.49	0.0018	0.0409	6.2	28.8
MW-146	02/15/2018 10:27	11.46	354.00	7.49	0.03	0.573	6.03	72.00
MW-146	02/15/2018 10:52	11.72	244.00	7.49	0.0000	0.041	6.06	28.83
MW-146	02/15/2018 11:46	11.33	256.00	8.02	0.02	0.489	6.43	66.20
MW-146	04/18/2018 08:50	11.51	278	7.74	0.0080	0.1701	8.6	29.3
MW-146	04/18/2018 08:53	10.83	276	7.33	0.0058	0.1240	7.92	44.1
MW-146	04/18/2018 08:55	10.54	272	7.18	0.0058	0.1235	7.77	34.7
MW-146	04/18/2018 08:57	9.75	286	6.64	0.00000000	0.0018	8.23	41.6
MW-146	04/18/2018 09:00	10.41	269	6.77	0.0057	0.1233	7.71	31.6
MW-146	04/18/2018 09:02	10	264	6.75	0.0057	0.1230	7.5	34.6
MW-146	04/18/2018 09:05	9.8	264	6.7	0.0057	0.1223	7.45	39.1
MW-146	04/18/2018 09:07	9.71	267	6.56	0.0057	0.1216	7.63	43
MW-146	04/18/2018 09:09	9.75	268	6.5	0.0057	0.1217	7.68	37.6
MW-146	04/18/2018 09:12	9.71	266	6.52	0.0057	0.1223	7.56	39.8
MW-146	04/18/2018 09:14	9.75	265	6.51	0.0057	0.1219	7.49	35.8
MW-146	04/19/2018 09:14	9.75	265.00	6.51	0.01	0.122	7.37	35.84
MW-146	04/19/2018 09:32	12.52	38.00	7.02	0.06	1.279	8.89	27.90
MW-146	04/19/2018 09:40	10.80	252.00	7.32	0.01	0.131	7.44	39.40
MW-146	01/29/2019 10:55	13.55	170.90	7.23	0.05	0.106	6.15	39.30
MW-146	01/29/2019 11:17	13.59	151.60	7.50	0.05	0.073	7.36	45.80
MW-146	01/29/2019 11:30	13.75	151.10	7.52	0.03	0.071	7.31	41.90
MW-146	11/15/2019 09:00	7	7	6	9	7	7	7
MW-146	11/15/2019 09:05	3.9	-105.6	7.05	0.14	0.289	15.5	37.1
MW-146	11/15/2019 14:15	8.19	-65.9	6.96	NM	0.82	15.44	40.8
MW-146	05/29/2020 10:10	4.66	43.7	6.98	NM	0.299	19.11	10.1
MW-146	05/29/2020 13:55	2.65	-75.4	7.18	0.4	0.813	16.58	38.4
MW-146	11/11/2020 08:45	0.56	-87.6	6.99	0.37	0.749	18.01	14.8
MW-146	11/11/2020 08:50	0.43	-79.5	6.6	0.31	0.637	18	13.9
MW-146	11/11/2020 08:55	0.43	-71.2	6.54	0.28	0.585	17.99	13.2
MW-146	11/11/2020 09:00	0.4	-71.2	6.55	0.28	0.583	17.95	13.2
MW-146	11/11/2020 09:05	0.36	-70.2	6.56	0.29	0.593	17.97	13.1
MW-146	11/11/2020 09:10	0.32	-68.6	6.58	0.3	0.606	18.01	12.6
MW-146	11/11/2020 09:15	0.29	-69.1	6.59	0.31	0.639	18.06	11.1
MW-146	11/11/2020 09:20	0.22	-73.1	6.61	0.35	0.707	18.07	10.5
MW-146	11/11/2020 09:25	0.22	-77.4	6.62	0.37	0.748	18.04	9.5
MW-146	11/11/2020 09:30	0.17	-91.4	6.64	0.39	0.799	18.11	9
MW-146	11/11/2020 13:40	0.94	-97.3	6.96	0.56	1.131	17.91	36.7
MW-146	11/11/2020 13:50	0.93	-91.4	6.79	0.54	1.08	19.12	23.4
MW-146	03/01/2021 11:55	3.26	-161.4	7.54	0.2	0.41	7.64	52
MW-146	03/01/2021 12:00	1.19	-148	7.43	0.2	0.409	7.54	23.3
MW-146	03/01/2021 12:05	0.89	-143.6	7.37	0.19	0.405	7.43	10.5
MW-146	03/01/2021 12:10	0.7	-139.4	7.35	0.19	0.4	7.34	6.5
MW-146	03/01/2021 12:15	0.64	-151.3	7.33	0.19	0.396	7.32	6.8
MW-146	03/01/2021 12:20	0.63	-153.4	7.33	0.19	0.392	7.28	6.7

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-146	03/01/2021 12:25	0.58	-152	7.33	0.19	0.391	7.28	6.8
MW-146	03/01/2021 12:30	0.58	-154.1	7.32	0.19	0.389	7.31	6
MW-146	03/01/2021 12:35	0.72	-153.2	7.33	0.19	0.388	7.32	6.1
MW-146	03/01/2021 12:40	0.54	-154.8	7.33	0.19	0.388	7.34	10.3
MW-146	03/01/2021 14:00	3.9	-128.7	7.29	0.3	0.606	10.21	11.6
MW-146	03/01/2021 14:15	4.05	-132.1	7.23	0.3	0.612	9.6	9.6
MW-146	05/14/2021 08:25	8.19	-13.3	7.18	0.33	0.715	13.49	30.3
MW-146	05/14/2021 08:30	3.76	-35.6	6.78	0.28	0.572	12.92	33.7
MW-146	05/14/2021 08:35	1.02	5.3	6.57	0.22	0.463	11.87	20.1
MW-146	05/14/2021 08:40	0.93	7.3	6.55	0.23	0.477	11.79	20.7
MW-146	05/14/2021 08:45	2.09	-38.8	6.79	0.26	0.532	11.96	17.5
MW-146	05/14/2021 08:50	2.25	-46.2	6.81	0.26	0.531	11.98	14.1
MW-146	05/14/2021 08:55	1.67	-65.6	6.84	0.28	0.566	12	22.6
MW-146	05/14/2021 09:00	0.79	-95.1	6.86	0.31	0.64	12.01	19.4
MW-146	05/14/2021 09:05	0.53	-106.3	6.91	0.34	0.685	11.97	14
MW-146	05/14/2021 09:10	0.46	-112	6.94	0.35	0.717	11.98	11
MW-146	08/20/2021 13:20	3.29	30	6.7	0.11	0.23	22.32	35.2
MW-146	08/20/2021 13:25	2.59	23.2	6.51	0.1	0.221	21.87	26.2
MW-146	08/20/2021 13:30	2.75	54.4	6.07	0.1	0.213	21.57	18.6
MW-146	08/20/2021 13:35	2.86	61.2	6.08	0.1	0.207	21.5	14.8
MW-146	08/20/2021 13:40	3.06	64.4	6.18	0.1	0.202	21.67	9.8
MW-146	08/20/2021 13:45	3.25	58.5	6.35	0.09	0.196	21.88	6
MW-146	08/20/2021 13:50	3.52	46.8	6.48	0.09	0.189	22.03	6.6
MW-146	08/20/2021 13:55	3.98	41.9	6.66	0.08	0.179	22.11	5.9
MW-146	08/20/2021 14:00	4.18	42.9	6.62	0.08	0.173	22.33	4.3
MW-146	08/20/2021 14:05	0.172	4.26	6.64	0.08	0.172	22.47	4.7
MW-146	02/02/2022 12:15	6.57	-24.4	7	0.15	0.313	10.54	12.3
MW-146	02/02/2022 12:20	5.8	7.6	6.54	0.15	0.309	10.34	8.1
MW-146	02/02/2022 12:25	5.77	11.3	6.6	0.15	0.308	10.02	10
MW-146	02/02/2022 12:30	5.62	21.1	6.51	0.15	0.308	9.87	6.9
MW-146	02/02/2022 12:35	5.47	33	6.51	0.15	0.307	9.82	6.5
MW-146	02/02/2022 12:40	5.33	42.5	6.43	0.15	0.307	9.91	4.2
MW-146	02/02/2022 12:45	5.18	48.3	6.37	0.15	0.306	9.88	3.8
MW-148	05/02/2012 15:04	2.4	-21	7.14	0.16	2.96768	13.29	24.6
MW-148	05/02/2012 15:07	0.93	-19	7.15	0.16	2.97567	13.4	1.9
MW-148	05/02/2012 15:10	0.56	-16	7.15	0.16	2.97702	13.5	0.8
MW-148	05/02/2012 15:12	0.49	-14	7.15	0.16	2.97755	13.36	0.5
MW-148	05/02/2012 15:15	0.43	-12	7.14	0.16	2.97566	13.47	0.4
MW-148	05/02/2012 15:18	0.38	-10	7.14	0.16	2.9764	13.49	3.4
MW-148	05/02/2012 15:20	0.34	-9	7.13	0.16	2.97598	13.54	0.5
MW-148	05/02/2012 15:23	0.29	-7	7.13	0.16	2.97371	13.65	0.6
MW-148	05/02/2012 15:26	0.26	-6	7.13	0.16	2.97231	13.61	0.2
MW-148	05/02/2012 15:28	0.28	-5	7.13	0.16	2.97442	13.66	0.5
MW-148	05/02/2012 15:31	0.27	-4	7.14	0.16	2.97138	13.74	4.2
MW-148	05/02/2012 15:34	0.34	-3	7.15	0.16	2.97194	13.78	0.8
MW-148	05/02/2012 15:36	0.38	-2	7.16	0.16	2.97261	13.73	0.5
MW-148	05/02/2012 15:39	0.41	-2	7.17	0.16	2.97408	13.73	0.5
MW-148	05/02/2012 15:42	0.45	-1	7.18	0.16	2.97088	13.82	0.6
MW-148	05/02/2012 15:44	0.44	-1	7.18	0.16	2.97038	13.84	0.3
MW-148	05/02/2012 16:25	6.19	-1	7.32	0.15	2.887	13.82	15.40
MW-148	05/03/2012 11:13	2.06	0	7.01	0.15	2.896	14.33	2.50
MW-148	06/24/2013 13:27	1.03	-157	7.14	0.24	4.368	27.08	5.42
MW-148	06/24/2013 14:11	1.79	-119	6.64	0.26	4.872	17.20	24.30
MW-148	06/25/2013 11:44	0.08	-242.00	7.00	0.24	4.416	16.97	7.70
MW-148	06/25/2014 10:40	0.34	-76	7.03	0.13	2.543	20.14	9.18
MW-148	06/25/2014 11:19	1.33	-69	6.91	0.13	2.543	16.28	19.90

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-148	06/26/2014 13:10	0.68	-74	7.04	0.13	2.526	17.42	17.80
MW-148	01/05/2016 12:30	2.79	208	7.29	0.14	2.64	15.02	19.3
MW-148	01/05/2016 15:39	4.27	-127	7.1	1.3	21.53	15.3	33.4
MW-148	03/07/2017 11:25	2.39	4	7.12	0.08	1.509	11.50	39.80
MW-148	03/07/2017 14:51	5.98	-106	7.34	0.08	1.594	12.90	2592.00
MW-148	02/21/2018 11:09	4.36	145	6.81	0.1348	2.5904	15.76	268.7
MW-148	02/21/2018 11:11	0.97	54	6.81	0.2109	3.9621	14.52	303.4
MW-148	02/21/2018 11:14	0.6	52	6.82	0.2329	4.3505	14.59	236.9
MW-148	02/21/2018 11:16	0.39	56	6.83	0.2328	4.3493	14.31	164.2
MW-148	02/21/2018 11:18	0.34	60	6.83	0.2381	4.4434	14.34	197.4
MW-148	02/21/2018 11:20	0.36	64	6.84	0.2444	4.5541	14.33	371.7
MW-148	02/21/2018 11:23	0.29	69	6.84	0.2469	4.5969	14.51	180.9
MW-148	02/21/2018 11:25	0.29	75	6.85	0.2492	4.6358	14.5	201.4
MW-148	02/21/2018 11:27	0.29	80	6.85	0.2540	4.7213	14.41	139.8
MW-148	02/21/2018 11:29	0.29	82	6.85	0.2529	4.7013	14.46	125
MW-148	02/21/2018 11:32	0.3	89	6.85	0.2486	4.6241	14.71	84.5
MW-148	02/21/2018 11:34	0.35	86	6.86	0.2535	4.7110	14.71	275.7
MW-148	02/21/2018 11:36	0.35	88	6.86	0.2636	4.8899	14.31	306.2
MW-148	02/21/2018 11:38	0.34	93	6.86	0.2697	4.9975	14.22	107.7
MW-148	02/21/2018 11:41	0.35	93	6.86	0.2691	4.9846	14.54	83.1
MW-148	02/21/2018 11:43	0.35	90	6.87	1.0073	17.0608	14.59	145.2
MW-148	02/21/2018 11:45	0.35	93	6.87	0.2721	5.0345	14.74	59
MW-148	02/21/2018 11:47	0.32	93	6.87	0.2679	4.9626	14.55	91.8
MW-148	02/21/2018 11:50	0.3	100	6.87	0.2605	4.8343	14.51	58.2
MW-148	02/21/2018 11:52	0.3	105	6.87	0.2579	4.7857	14.85	47.2
MW-148	02/21/2018 11:54	0.28	107	6.87	0.2599	4.8228	14.74	41
MW-148	02/21/2018 11:56	0.26	101	6.87	0.2611	4.8405	15.09	44.2
MW-148	02/21/2018 11:59	0.23	94	6.88	0.2652	4.9143	14.9	48.6
MW-148	02/22/2018 11:13	4.01	110.00	6.77	0.12	2.406	10.87	18.50
MW-148	02/22/2018 11:58	0.23	94.00	6.88	0.27	4.931	14.76	48.62
MW-148	02/22/2018 12:46	1.10	-119.00	6.90	0.24	4.516	13.74	1860.30
MW-148	02/05/2019 10:00	4.12	-23.00	7.08	1.35	2.596	10.58	39.80
MW-148	02/05/2019 11:40	0.18	2.30	7.50	1.52	2.902	12.71	9.20
MW-148	02/05/2019 12:05	2.37	-41.50	7.35	1.40	2.682	14.8	618.80
MW-148	02/06/2020 14:20	2.94	36.7	7.05	NM	0.345	11.08	55.3
MW-148	02/07/2020 12:20	11.06	168.5	6.84	0.03	0.068	11.78	79.4
MW-148	03/30/2021 09:00	4.5	158.3	6.98	1.86	3.509	10.89	83.6
MW-148	03/30/2021 09:05	2.09	140.3	7.03	1.84	3.489	10.72	63.8
MW-148	03/30/2021 09:10	1.98	128.9	7.06	1.84	3.487	10.71	68.7
MW-148	03/30/2021 09:15	1.94	128.5	7.06	1.84	3.487	10.62	55.3
MW-148	03/30/2021 09:20	1.85	131.1	7.09	1.83	3.47	10.6	60.3
MW-148	03/30/2021 09:25	1.82	134.5	7.11	1.83	3.465	10.62	51.2
MW-148	03/30/2021 09:30	1.77	136.6	7.12	1.83	3.465	10.64	43.4
MW-148	03/30/2021 09:35	1.79	137.7	7.15	1.74	3.303	10.63	55.9
MW-148	03/30/2021 09:40	2.53	139.5	7.24	1.3	2.482	10.32	49
MW-148	03/30/2021 09:45	2.49	145.1	7.22	1.21	2.34	10.17	33.8
MW-148	03/31/2021 08:45	2.19	144.6	6.71	1.12	2.181	12.18	9.9
MW-148	03/31/2021 09:00	4.13	136.9	6.9	1.1	2.132	11.88	21.8
MW-148	03/11/2022 09:10	5.16	-4.2	8.56	0.74	1.446	10.18	81.2
MW-148	03/11/2022 09:15	1.89	27.2	7.43	0.82	1.62	10.62	65.8
MW-148	03/11/2022 09:20	1.72	34.8	7.25	0.9	1.753	10.85	66.2
MW-148	03/11/2022 09:25	1.67	37.5	7.19	0.92	1.801	10.8	71.3
MW-148	03/11/2022 09:30	1.63	42.2	7.14	0.91	1.779	10.58	63.6
MW-148	03/11/2022 09:35	1.59	45	7.12	0.9	1.767	10.61	59.6
MW-148	03/11/2022 09:40	1.59	47.8	7.1	0.9	1.758	10.64	61.2
MW-149	06/13/2012 13:20	1.64	-49	6.70	0.45	8.042	16.76	127.40

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-149	06/14/2012 11:23	0.0000	-51	6.62	0.20	4.120	17.80	48.80
MW-149	05/30/2013 14:33	0.92	-68	6.45	0.77	13.280	15.90	530.90
MW-149	05/31/2013 11:09	0.78	-117.00	6.26	0.33	6.074	16.12	15.20
MW-149	09/23/2014 14:08	0.64	161	6.69	0.83	14.250	19.25	977.40
MW-149	09/24/2014 11:48	0.41	-244	6.33	0.79	13.570	18.71	24.20
MW-149	12/17/2015 09:50	1.61	-26	6.4	0.77	13.23	17.71	996.7
MW-149	12/17/2015 10:38	0.88	-279	6.59	0.34	6.243	16.47	13.6
MW-149	05/27/2016 09:56	NM	627	6.17	0.44	7.944	15.98	13.50
MW-149	05/27/2016 10:40	18.26	421	6.24	0.87	14.820	16.32	1390.50
MW-149	09/21/2016 10:46	2.31	-25.9	6.33	4.08	7.429	20.98	7.22
MW-149	09/21/2016 10:55	0.68	-35.8	6.15	4.06	7.492	23.00	9.00
MW-149	12/20/2016 11:00	3.19	-97.3	6.4	3.14	5.743	13.66	10.5
MW-149	12/20/2016 12:00	2.15	-101.7	6.49	3.38	6.175	13.72	1364.5
MW-149	06/01/2017 09:49	0.80	-83.00	6.27	0.22	4.142	17.14	15.20
MW-149	06/01/2017 09:52	2.16	143.00	6.63	0.35	6.381	15.16	876.30
MW-149	02/22/2018 10:23	3.29	77.00	6.24	0.11	2.168	11.11	13.20
MW-149	02/22/2018 13:55	2.15	-100.00	6.37	1.46	23.900	15.95	1632.10
MW-149	05/30/2018 10:55	1.75	-65.00	6.37	0.81	13.970	15.26	608.40
MW-149	05/30/2018 12:40	1.06	-84.00	6.41	0.26	4.752	17.42	19.80
MW-149	08/28/2018 10:59	0.22	-73.00	6.55	0.40	7.151	21.58	16.40
MW-149	08/28/2018 14:06	1.10	-6.00	7.00	0.79	13.590	20.24	157.50
MW-149	02/04/2019 10:40	5.09	-92.70	6.49	4.25	7.650	12.16	14.30
MW-149	02/04/2019 11:40	8.13	-108.40	6.73	3.70	6.716	16.45	23.10
MW-149	02/04/2019 11:55	6.06	-105.90	6.49	2.37	4.476	15.71	5.70
MW-149	05/03/2019 09:55	2.98	11.6	6.63	0.92	2.046	13.56	8.4
MW-149	08/30/2019 12:35	1.33	-88.3	6.43	NM	7.394	23.2	3.3
MW-149	08/30/2019 14:00	1.87	-75.8	6.42	3.66	6.673	21.27	6.1
MW-149	08/30/2019 14:15	3.09	-75.7	6.49	4.01	7.244	18.26	9.5
MW-149	11/13/2019 11:40	6.49	-2.4	6.18	NM	2.303	15.34	0.8
MW-149	11/13/2019 12:30	2.15	-97	6.22	1.19	2.304	18.74	1.9
MW-149	11/13/2019 12:40	2	-96.2	6.24	1.24	2.36	18.47	11.5
MW-149	11/13/2019 12:45	2	-96.2	6.24	1.24	2.36	18.47	11.5
MW-149	02/19/2020 14:20	4.89	-109.6	6.44	0.65	1.283	13.66	22.7
MW-149	05/26/2020 14:15	2.15	-105.8	6.49	3.35	6.145	21.05	27.7
MW-149	11/18/2020 11:20	6.29	-63.6	6.56	2.39	4.443	13.89	13.2
MW-149	11/18/2020 11:30	1.56	-57.8	6.66	2.43	4.532	12.45	12.3
MW-149	06/21/2021 14:10	4.15	-92.8	6.43	3	5.544	22.1	6
MW-149	06/21/2021 14:15	3.25	-91.6	6.32	3.2	5.973	21.22	4.9
MW-149	06/21/2021 14:20	1.8	-91.6	6.32	3.31	5.893	20.77	4.6
MW-149	06/21/2021 14:25	1.54	-92.6	6.3	3.3	6.056	20.93	4.3
MW-149	06/21/2021 14:30	1.41	-93.4	6.29	3.29	6.043	21.01	3.7
MW-149	06/21/2021 14:35	1.38	-94.1	6.27	3.31	6.031	21.16	3.4
MW-149	06/21/2021 14:40	1.4	-94.5	6.27	3.29	5.926	20.75	3.1
MW-149	06/21/2021 14:45	1.34	-94.5	6.26	3.3	6.053	20.6	3
MW-149	06/21/2021 14:50	1.3	-94.6	6.24	3.29	6.037	20.78	2.9
MW-149	03/31/2022 11:20	2.38	-107.5	6.7	3.91	7.092	14.1	61.7
MW-149	03/31/2022 11:25	1.36	-98.5	6.44	3.8	6.887	13.76	41.9
MW-149	03/31/2022 11:30	1.31	-98.4	6.45	3.8	6.891	13.72	41.7
MW-149	03/31/2022 11:35	1.29	-99.9	6.44	3.72	6.759	13.56	32.8
MW-149	03/31/2022 11:40	1.31	-100.5	6.44	3.71	6.724	13.6	33.3
MW-149	03/31/2022 11:45	1.29	-104	6.44	3.68	6.685	13.75	36.6
MW-149	03/31/2022 11:50	1.32	-104.4	6.44	3.68	6.679	13.74	38.4
MW-149	03/31/2022 11:55	1.31	-106.1	6.45	3.65	6.637	13.74	34.5
MW-149	03/31/2022 12:00	1.3	-107.2	6.45	3.57	6.508	13.73	28.1
MW-149	03/31/2022 12:05	1.27	-107.1	6.45	3.55	6.465	13.76	25.9
MW-151	07/10/2013 11:36	2.43	-129	7.23	0.08	1.539	17.41	36.30

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-151	07/11/2013 10:53	0.30	-223.00	6.74	0.12	2.355	18.03	6.90
MW-151	08/16/2013 11:42	0.72	-100.7	6.77	0.89	1.748	19.41	17.90
MW-151	08/16/2013 12:21	0.33	-113.4	6.91	0.94	1.811	19.97	6.10
MW-151	08/16/2013 12:53	0.50	-121	6.83	0.98	1.914	22.41	9.40
MW-151	08/17/2013 12:53	0.50	-121	6.83	0.98	1.914	22.41	9.40
MW-151	10/30/2013 11:00	0.18	-99.5	6.72	0.98	1.922	17.45	7.10
MW-151	10/30/2013 12:00	0.15	-105	6.60	1.47	2.832	17.34	0.40
MW-151	10/30/2013 12:05	0.15	-105	6.60	1.45	2.785	17.36	0.0000
MW-151	10/31/2013 12:05	0.15	-105	6.60	1.45	2.785	17.36	0.0000
MW-151	01/09/2014 08:50	13.06	186.1	7.76	0.06	0.134	8.89	123.20
MW-151	01/09/2014 10:05	14.10	77.2	7.30	0.16	0.327	8.46	31.60
MW-151	01/09/2014 10:20	12.52	73.4	7.11	1.80	0.373	6.07	317.30
MW-151	08/15/2014 13:30	0.66	-97.4	6.67	0.51	1.031	21.20	21.40
MW-151	08/15/2014 14:50	0.68	-131.4	6.67	0.59	1.081	20.70	1.30
MW-151	08/15/2014 15:10	0.91	-100.6	6.60	0.60	1.065	22.01	7.20
MW-151	11/05/2014 09:32	0.07	-163	6.55	0.25	4.597	17.07	259.40
MW-151	11/06/2014 14:00	0.01	-111	6.71	0.05	1.075	15.95	75.50
MW-151	11/10/2014 09:15	0.38	-65.1	6.78	1.20	2.329	15.27	NM
MW-151	11/10/2014 10:15	0.47	-49.5	6.75	1.24	2.394	15.75	NM
MW-151	11/10/2014 10:30	0.37	-75.8	6.75	1.27	2.448	16.14	NM
MW-151	12/01/2014 13:20	0.64	53.6	6.33	0.10	0.222	14.60	45.70
MW-151	12/01/2014 14:05	1.37	31.7	6.48	0.10	0.201	14.96	20.20
MW-151	12/01/2014 14:15	3.23	33.9	6.58	0.10	0.209	14.94	23.00
MW-151	12/04/2014 09:15	1.46	49.7	6.39	0.11	0.220	12.08	46.30
MW-151	12/04/2014 09:55	0.89	47.4	6.28	0.10	0.211	11.07	29.90
MW-151	12/04/2014 10:05	2.37	32.3	6.41	0.10	0.219	11.45	9.10
MW-151	12/08/2014 09:35	9.52	201.8	7.32	0.05	0.110	8.56	45.40
MW-151	12/08/2014 10:15	8.26	143.5	7.02	0.05	0.112	9.28	37.70
MW-151	12/08/2014 10:25	9.61	126.9	7.05	0.06	0.117	8.67	37.00
MW-151	12/23/2014 10:50	9.24	4.6	7.57	0.07	0.155	10.43	55.40
MW-151	12/23/2014 11:35	10.62	55.4	7.21	0.06	0.138	9.42	44.80
MW-151	12/23/2014 11:55	9.20	63.2	7.20	0.06	0.136	10.04	42.20
MW-151	01/21/2015 06:20	11.06	150.2	7.17	0.08	0.168	6.20	96.50
MW-151	01/21/2015 12:20	9.62	148.4	7.12	0.08	0.166	6.38	91.00
MW-151	01/21/2015 12:45	10.97	101	7.13	0.09	0.196	7.48	102.70
MW-151	03/10/2015 11:45	1.39	101.2	6.27	0.11	0.234	9.68	8.10
MW-151	03/10/2015 12:25	0.77	79.3	6.54	0.11	0.219	9.47	5.20
MW-151	03/10/2015 12:40	0.86	68.5	6.51	0.10	0.216	9.56	10.40
MW-151	09/29/2016 11:30	1.21	-127.6	6.84	2.63	4.885	18.17	21.30
MW-151	09/29/2016 11:40	0.89	-114.7	6.74	1.98	3.899	18.33	20.80
MW-151	02/16/2018 10:16	8.95	151.00	6.91	0.01	0.137	10.13	251.70
MW-151	02/16/2018 11:03	9.17	137.00	7.53	0.02	0.318	9.43	665.70
MW-151	02/16/2018 11:39	4.57	159.00	6.88	0.02	0.432	9.32	157.40
MW-151	03/28/2018 09:55	2.66	55.60	7.07	0.15	0.322	9.57	19.00
MW-151	05/31/2018 08:52	1.20	-76.00	6.62	0.04	0.717	16.51	29.45
MW-151	05/31/2018 09:10	1.91	-44.00	6.82	0.08	1.481	16.55	19.60
MW-151	05/31/2018 09:24	4.07	-78.00	7.07	0.23	4.256	13.97	18.90
MW-151	03/15/2019 10:25	9.71	116.80	7.19	0.05	0.102	13.14	207.10
MW-151	03/15/2019 11:45	8.00	120.80	7.09	0.09	0.194	10.55	46.70
MW-151	03/15/2019 12:20	6.19	127.60	6.99	0.28	0.570	10.1	120.20
MW-151	09/05/2019 09:09	5.52	22.3	8.96	NM	0.563	19.03	7.3
MW-151	09/05/2019 10:26	4.26	-120.3	7.37	1.42	2.722	19.02	0.8
MW-151	09/05/2019 10:32	4.15	-113.6	7.21	1.58	3.014	18.96	18.5
MW-151	03/03/2020 12:50	9.51	134.4	7.25	NM	0.093	11.6	78.1
MW-151	03/03/2020 13:40	8.32	-74.4	7.48	0.04	0.099	11.21	36.8
MW-151	09/04/2020 08:30	1.35	-37.4	6.29	0.16	0.328	19.73	9

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-151	09/04/2020 09:35	2.38	-134.4	6.92	0.87	1.717	17.67	9.9
MW-151	09/04/2020 09:45	0.63	-156.6	7.01	1.13	2.202	18.28	36.7
MW-151	03/11/2021 08:40	13.97	157.8	7.12	0.06	0.137	10.07	118.6
MW-151	03/11/2021 08:45	12.25	153.9	7.71	0.04	0.102	9.87	116.9
MW-151	03/11/2021 08:50	10.64	160.2	7.06	0.03	0.07	9.73	121.8
MW-151	03/11/2021 08:55	9.75	177.8	6.6	0.03	0.066	9.72	110.9
MW-151	03/11/2021 09:00	9.17	198.7	6.09	0.03	0.063	9.56	55.7
MW-151	03/11/2021 09:05	9.01	190.9	6.22	0.03	0.063	9.57	47.1
MW-151	03/11/2021 09:10	8.84	182.7	6.35	0.03	0.063	9.59	42.2
MW-151	03/11/2021 09:15	8.68	178	6.4	0.03	0.064	9.63	39.7
MW-151	03/11/2021 09:20	8.48	172.1	6.48	0.03	0.064	9.81	37.8
MW-151	03/11/2021 09:25	8.3	169.4	6.47	0.03	0.065	9.92	34.7
MW-151	03/11/2021 10:10	10.94	56	6.73	0.14	0.295	12.6	20.3
MW-151	03/11/2021 10:24	7.09	-0.6	6.89	0.23	0.481	12.02	85.2
MW-151	03/23/2022 12:30	9.08	59.3	7.58	0.07	0.153	10.53	38.2
MW-151	03/23/2022 12:35	7.26	43.2	7.35	0.06	0.136	10.99	28.2
MW-151	03/23/2022 12:40	7.2	42.8	7.2	0.06	0.135	11.22	21.7
MW-151	03/23/2022 12:45	7.18	43.7	7.19	0.06	0.134	11.36	23.4
MW-151	03/23/2022 12:50	7.16	45.6	7.08	0.06	0.134	11.55	21.1
MW-151	03/23/2022 12:55	7.12	47.3	7.06	0.06	0.134	11.59	20.3
MW-151	03/23/2022 13:00	7.06	48.3	7	0.06	0.134	11.61	19.8
MW-152	06/27/2012 11:44	0.31	201	5.40	0.01	0.187	20.15	4.37
MW-152	06/27/2012 12:22	4.54	202	5.92	0.01	0.195	17.65	10.10
MW-152	06/28/2012 09:55	2.59	237	4.80	0.0000	0.225	19.70	0.0000
MW-152	07/11/2013 10:07	1.10	-136	6.74	0.49	8.724	24.32	16.47
MW-152	07/11/2013 11:18	0.83	-107	6.68	1.62	26.260	18.23	640.00
MW-152	07/12/2013 09:57	0.82	-120.00	6.43	1.48	24.260	17.04	441.50
MW-152	03/18/2015 10:05	3.77	25.2	6.45	0.60	1.208	4.66	15.80
MW-152	03/18/2015 10:45	1.32	41.4	6.37	0.61	1.218	4.60	4.80
MW-152	03/18/2015 11:05	4.19	51.6	6.51	0.54	1.083	4.51	10.10
MW-152	11/25/2015 11:40	0.12	-61	6.25	0.16	3.019	17.70	44.20
MW-152	11/25/2015 15:14	7.96	-86	6.60	0.18	3.412	17.05	352.90
MW-153	06/05/2012 14:02	4.69	23	7.04	0.04	0.8899	19.95	109.7
MW-153	06/05/2012 14:05	4.8	34	6.95	0.05	0.95574	19.25	52
MW-153	06/05/2012 14:07	4.69	41	6.9	0.05	0.9464	19.13	49.9
MW-153	06/05/2012 14:10	4.66	46	6.87	0.05	0.94878	19.26	50
MW-153	06/05/2012 14:13	4.66	50	6.85	0.05	0.95181	19.29	51.1
MW-153	06/05/2012 14:14	4.66	50	6.85	0.05	0.952	19.29	51.09
MW-153	06/05/2012 15:08	3.51	79	6.78	0.07	1.373	16.07	457.50
MW-153	06/06/2012 12:31	4.21	138	6.44	0.0000	0.880	17.87	11.30
MW-153	09/04/2012 10:16	1.91	105	6.12	0.10	1.920	23.20	20.10
MW-153	09/04/2012 11:15	5.65	154	6.46	0.10	1.850	18.62	219.00
MW-153	09/05/2012 09:50	4.90	143	6.26	0.10	1.990	24.78	8.10
MW-153	07/02/2013 13:40	6.39	-30	6.83	0.08	1.477	24.98	96.06
MW-153	07/02/2013 14:24	1.97	-98	6.18	0.23	4.276	16.78	91.60
MW-153	07/03/2013 10:36	1.58	-62.00	5.83	0.20	3.812	20.54	1.80
MW-153	10/03/2013 09:25	0.68	-424	6.43	0.11	2.097	24.37	41.26
MW-153	10/03/2013 10:09	3.17	-284	5.84	0.25	4.603	18.25	721.80
MW-153	10/04/2013 09:24	1.07	-319	5.64	0.15	2.929	20.38	16.20
MW-153	06/10/2014 09:18	6.27	-59	6.63	0.04	0.717	21.83	126.20
MW-153	06/10/2014 10:55	4.19	-120	6.54	0.07	1.295	18.30	179.60
MW-153	06/11/2014 09:34	2.59	-152	5.86	0.51	8.972	16.14	26.70
MW-153	01/13/2015 15:10	7.03	-82	7.72	0.06	1.137	8.45	136.50
MW-153	01/13/2015 15:36	3.59	-53	7.04	0.05	0.966	15.01	942.90
MW-153	01/14/2015 14:02	3.55	-125	7.33	0.05	1.060	13.64	96.10
MW-153	01/07/2016 11:38	2.45	250	6.94	0.1	1.896	15.75	59.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-153	01/07/2016 14:42	2.84	-36	7.15	0.05	1.024	16.75	2466.3
MW-153	08/05/2016 10:15	3.40	57	6.10	0.32	5.750	21.65	17.60
MW-153	08/05/2016 13:43	1.52	-10	6.65	0.33	6.015	18.53	1430.90
MW-153	02/28/2017 10:15	3.41	289	7.14	0.12	2.360	13.15	58.60
MW-153	02/28/2017 13:23	6.37	126	6.93	0.06	1.107	15.06	90.60
MW-153	03/12/2018 13:18	9.38	NM	NM	NM	NM	NM	NM
MW-153	03/12/2018 13:19	9.38	NM	NM	NM	NM	NM	NM
MW-153	03/12/2018 13:20	8.74	NM	NM	NM	NM	NM	NM
MW-153	03/12/2018 13:21	8.74	NM	NM	NM	NM	NM	NM
MW-153	03/12/2018 13:22	8.67	132	7	0.0346	0.7103	10.04	297.8
MW-153	03/12/2018 13:23	8.67	139	6.99	0.0321	0.6610	9.9	NM
MW-153	03/12/2018 13:25	8.25	117	7.04	0.0405	0.8277	10.01	236.5
MW-153	03/12/2018 13:28	8.03	112	7.04	0.0439	0.8935	9.92	232.7
MW-153	03/12/2018 13:30	8.02	109	7.05	0.0462	0.9398	9.92	226.7
MW-153	03/12/2018 13:33	8.1	108	7.05	0.0483	0.9798	9.83	226.3
MW-153	03/12/2018 13:36	8.1	108	7.06	0.0495	1.0044	9.97	227.2
MW-153	03/12/2018 13:38	8.02	107	7.07	0.0504	1.0202	10.15	225.5
MW-153	03/12/2018 13:41	8.03	107	7.07	0.0513	1.0378	10.26	222.9
MW-153	03/13/2018 12:00	5.89	212.00	6.95	0.19	3.572	10.65	84.00
MW-153	03/13/2018 13:41	8.03	107.00	7.07	0.05	1.042	10.12	222.90
MW-153	03/13/2018 14:30	5.48	195.00	6.90	0.04	0.833	12.52	220.60
MW-153	08/30/2018 10:57	2.19	-7.00	6.78	0.02	0.495	22.52	48.80
MW-153	08/30/2018 13:05	2.45	-1.00	7.07	0.01	0.311	27.72	48.34
MW-153	08/30/2018 13:58	1.57	19.00	7.69	0.02	0.416	19.38	61.80
MW-153	08/28/2019 09:10	2.01	115.9	7.04	NM	0.38	20.94	35.2
MW-153	08/28/2019 09:15	1.41	137.3	6.65	NM	0.329	20.98	32.2
MW-153	08/28/2019 09:20	1.36	145.4	6.57	NM	0.315	21.1	29.8
MW-153	08/28/2019 09:25	1.36	147.9	6.53	NM	0.313	21.16	27.7
MW-153	08/28/2019 09:30	1.32	148.7	6.5	NM	0.317	21.11	25.9
MW-153	08/28/2019 09:35	1.4	147.5	6.48	NM	0.322	21.18	25.3
MW-153	08/28/2019 09:40	1.39	148.1	6.46	NM	0.326	21.06	24.2
MW-153	08/28/2019 09:45	1.29	148	6.43	NM	0.336	20.98	24.4
MW-153	08/28/2019 09:50	1.25	148.4	6.41	NM	0.342	20.9	24.1
MW-153	08/28/2019 09:55	1.29	149.4	6.39	NM	0.345	20.81	24.4
MW-153	08/28/2019 14:45	4.71	53.7	6.39	0.21	0.435	22.23	34.7
MW-153	08/28/2019 14:54	4.03	77.7	6.16	0.18	0.383	20.87	43.7
MW-153	03/11/2020 09:35	8.8	144.2	7	NM	0.247	12.37	428.5
MW-153	03/11/2020 11:10	8.33	181.3	7.04	0.11	0.237	12.54	322.8
MW-153	02/04/2021 08:40	4.58	65.2	6.85	2.3	4.315	8.08	4.1
MW-153	02/04/2021 08:45	4.81	72.9	6.51	2.29	4.296	8.96	3.1
MW-153	02/04/2021 08:50	5.11	84.7	6.36	2.3	4.297	9.64	3.7
MW-153	02/04/2021 08:55	5.1	92.9	6.31	2.29	4.293	9.15	2.7
MW-153	02/04/2021 09:00	5.08	97.3	6.28	2.29	4.281	9.95	2.7
MW-153	02/04/2021 09:05	5.93	106.2	6.27	2.29	4.296	9.18	1.7
MW-153	02/04/2021 09:10	5.94	106.4	6.27	2.3	4.299	9.13	1.6
MW-153	02/04/2021 09:15	6.07	107.2	6.27	2.32	4.35	8.76	1.3
MW-153	02/04/2021 09:20	6.18	107.8	6.27	2.36	4.421	8.59	1.3
MW-153	02/04/2021 09:25	6.21	108.2	6.27	2.38	4.457	8.46	1.1
MW-153	02/04/2021 11:05	3.84	134.4	6.33	2.6	4.529	9.55	0.5
MW-153	02/04/2021 11:15	4.39	110.3	6.3	2.43	4.605	9.43	4.3
MW-155	06/07/2012 08:44	1.24	161	6.51	0.46	8.19018	25.65	103.3
MW-155	06/07/2012 08:46	0.76	151	6.55	0.49	8.61298	22.58	77.7
MW-155	06/07/2012 08:48	0.53	144	6.56	0.48	8.59345	21.78	77.6
MW-155	06/07/2012 08:50	0.43	137	6.56	0.48	8.5946	21.61	73.8
MW-155	06/07/2012 08:52	0.38	130	6.56	0.49	8.60879	21.61	71.1
MW-155	06/07/2012 08:55	0.35	124	6.56	0.49	8.62308	21.51	68

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-155	06/07/2012 08:57	0.33	117	6.57	0.49	8.64103	21.48	67.3
MW-155	06/07/2012 08:59	0.32	109	6.57	0.49	8.63837	21.44	66.1
MW-155	06/07/2012 09:01	0.31	102	6.57	0.49	8.63655	21.45	62.8
MW-155	06/07/2012 09:03	0.25	96	6.57	0.49	8.62466	21.52	61.7
MW-155	06/07/2012 09:05	0.28	90	6.57	0.49	8.66607	21.48	62.4
MW-155	06/07/2012 09:07	0.27	85	6.57	0.49	8.64263	21.48	63.3
MW-155	06/07/2012 09:10	0.41	81	6.57	0.49	8.60984	21.45	61.6
MW-155	06/07/2012 09:12	0.25	77	6.57	0.49	8.64917	21.54	60.6
MW-155	06/07/2012 09:14	0.26	73	6.57	0.49	8.6658	21.38	60.4
MW-155	06/07/2012 09:16	0.25	69	6.57	0.49	8.702	21.48	59.04
MW-155	06/07/2012 10:23	2.59	67	6.56	0.51	8.996	18.75	37.40
MW-155	06/08/2012 10:32	0.06	-7	6.64	0.42	7.476	18.96	20.80
MW-155R	07/26/2016 12:56	1.780	-99.310	6.380	NM	901.200	30.070	27.410
MW-155R	07/26/2016 12:58	1.690	-98.540	6.390	NM	932.960	29.470	28.750
MW-155R	07/26/2016 13:00	1.550	-98.290	6.400	NM	926.680	29.290	23.600
MW-155R	07/26/2016 13:02	1.470	-98.030	6.400	NM	937.270	29.520	23.990
MW-155R	07/26/2016 13:04	1.440	-98.030	6.410	NM	935.340	29.270	22.870
MW-155R	07/27/2016 09:33	1.75	-98	6.43	0.40	7.160	25.89	50.50
MW-155R	07/27/2016 13:36	1.77	-84	6.38	0.45	8.025	22.95	27.80
MW-155R	03/08/2017 10:50	2.28	-64	6.42	0.0723	0.0143	14.55	30.6
MW-155R	03/08/2017 10:52	1.49	-57	6.36	0.0671	0.0133	14.61	36.9
MW-155R	03/08/2017 10:54	2.18	-39	6.41	0.0681	0.0135	13.75	29.8
MW-155R	03/08/2017 10:56	1.87	-30	6.38	0.0671	0.0134	13.63	31.1
MW-155R	03/08/2017 10:59	2.15	-30	6.35	0.0661	0.0131	15.33	31.7
MW-155R	03/08/2017 11:01	2.88	-31	6.37	0.0663	0.0132	16.57	30.3
MW-155R	03/08/2017 11:03	3.6	-34	6.44	0.0664	0.0132	17.02	32.4
MW-155R	03/08/2017 11:05	3.23	-21	6.44	0.0685	0.0136	14.96	29.3
MW-155R	03/08/2017 11:08	2.5	-11	6.38	0.0673	0.0134	14.3	31.1
MW-155R	03/08/2017 11:10	2.24	-9	6.36	0.0669	0.0133	14.03	36.1
MW-155R	03/08/2017 11:12	2.17	-8	6.35	0.0668	0.0133	14.03	38.3
MW-155R	03/08/2017 11:14	2.14	-7	6.35	0.0667	0.0133	14	33.3
MW-155R	03/08/2017 11:17	2.07	-8	6.34	0.0666	0.0132	14.04	35.8
MW-155R	03/08/2017 11:19	1.98	-7	6.34	0.0666	0.0133	14.06	32
MW-155R	03/08/2017 11:21	1.97	-7	6.34	0.0667	0.0133	13.9	30.5
MW-155R	03/08/2017 11:23	2.14	-5	6.33	0.0656	0.0130	15.54	34.6
MW-155R	03/08/2017 11:26	2.87	-11	6.36	0.0655	0.0130	16.85	34.7
MW-155R	03/08/2017 11:28	3.25	-13	6.38	0.0662	0.0131	17.83	34.3
MW-155R	03/08/2017 11:30	3.45	-19	6.46	0.0671	0.0133	17.93	38.9
MW-155R	03/08/2017 11:32	3.47	-9	6.44	0.0682	0.0135	15.62	45.4
MW-155R	03/08/2017 11:35	3.21	-6	6.41	0.0672	0.0133	14.93	48.7
MW-155R	03/08/2017 11:37	2.86	-4	6.37	0.0664	0.0132	15.52	45
MW-155R	03/08/2017 11:39	2.71	-5	6.36	0.0667	0.0133	15.4	44
MW-155R	03/29/2018 11:39	3.32	40.00	6.20	0.07	1.389	7.51	23.94
MW-155R	03/29/2018 11:58	6.78	32.00	6.38	0.07	1.433	8.22	189.40
MW-156	06/07/2012 09:45	1.50	42	6.60	0.54	9.442	20.03	4.70
MW-156	06/08/2012 10:05	0.29	9	6.69	0.52	9.174	19.70	4.30
MW-156R	11/04/2015 08:57	1.88	-127	6.46	1.6254	0.0263	19.34	14.1
MW-156R	11/04/2015 08:59	0.97	-124	6.48	1.6378	0.0265	19.06	15
MW-156R	11/04/2015 09:01	0.7	-121	6.49	1.6588	0.0268	19.11	10.4
MW-156R	11/04/2015 09:03	0.61	-121	6.49	1.6432	0.0266	19.22	11.5
MW-156R	11/04/2015 09:05	0.64	-120	6.5	1.6353	0.0265	19.1	10.8
MW-156R	11/04/2015 09:07	0.54	-121	6.51	1.6307	0.0264	19.15	10.4
MW-156R	11/04/2015 09:09	0.5	-122	6.52	1.6265	0.0263	19.16	9.6
MW-156R	11/04/2015 09:11	0.47	-123	6.52	1.6165	0.0262	19.22	9.1
MW-156R	11/04/2015 09:13	0.46	-124	6.53	1.6166	0.0262	19.21	9.3
MW-156R	11/05/2015 09:21	2.72	276	6.43	0.23	4.349	19.49	15.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-156R	11/05/2015 09:35	6.42	-132	6.53	1.62	26.28	19.19	29.9
MW-156R	03/17/2016 13:05	1.800	-136.000	6.680	0.483	8.620	14.770	3.600
MW-156R	03/17/2016 13:09	0.440	-138.000	6.610	0.549	9.749	12.880	6.400
MW-156R	03/17/2016 13:10	0.410	-138.000	6.610	0.549	9.744	12.880	6.200
MW-156R	03/17/2016 13:11	0.380	-138.000	6.610	0.557	9.877	12.830	7.600
MW-156R	03/17/2016 13:13	0.370	-141.000	6.610	0.573	10.151	12.510	9.000
MW-156R	03/17/2016 13:15	0.350	-140.000	6.610	0.578	10.242	12.350	8.700
MW-156R	03/17/2016 13:17	0.330	-140.000	6.610	0.580	10.270	12.250	10.000
MW-156R	03/17/2016 13:19	0.300	-140.000	6.620	0.587	10.385	12.000	9.200
MW-156R	03/17/2016 13:21	0.280	-139.000	6.610	0.585	10.351	12.000	8.400
MW-156R	03/17/2016 13:23	0.260	-140.000	6.610	0.581	10.294	12.040	10.000
MW-156R	03/17/2016 13:25	0.230	-140.000	6.610	0.580	10.275	12.000	8.100
MW-156R	03/17/2016 13:27	0.220	-141.000	6.610	0.577	10.221	12.070	7.000
MW-156R	03/17/2016 13:29	0.200	-141.000	6.610	0.579	10.256	11.890	6.700
MW-156R	03/17/2016 13:31	0.190	-142.000	6.610	0.577	10.235	11.860	6.500
MW-156R	03/17/2016 13:32	0.190	-142.000	6.620	0.577	10.228	11.830	8.400
MW-156R	03/17/2016 13:34	0.180	-143.000	6.620	0.577	10.225	11.850	9.800
MW-156R	03/17/2016 13:36	0.170	-143.000	6.620	0.578	10.253	11.750	10.300
MW-156R	03/17/2016 13:38	0.170	-143.000	6.620	0.578	10.246	11.740	9.900
MW-156R	03/18/2016 11:20	0.29	-126	6.40	0.07	1.315	10.75	33.30
MW-156R	03/18/2016 14:07	0.17	-145	6.64	0.63	11.050	10.85	47.10
MW-156R	03/08/2017 09:34	3.33	-125	6.95	0.3282	0.0603	12.52	10.5
MW-156R	03/08/2017 09:36	0.27	-158	6.97	0.3170	0.0583	13	6.6
MW-156R	03/08/2017 09:39	-0.03	-167	6.98	0.3074	0.0567	12.3	6.5
MW-156R	03/08/2017 09:41	-0.14	-173	7	0.2953	0.0546	12.09	8.2
MW-156R	03/08/2017 09:43	-0.14	-179	7	0.2786	0.0517	12.55	7.8
MW-156R	03/08/2017 09:46	-0.04	-185	7.02	0.2520	0.0470	12.38	7.7
MW-156R	03/08/2017 09:48	0.07	-185	7.03	0.2264	0.0425	12.06	5.8
MW-156R	03/08/2017 09:51	0.14	-181	7.02	0.2093	0.0395	11.9	3.9
MW-156R	03/08/2017 09:53	0.2	-181	7.01	0.1993	0.0377	11.94	4.1
MW-156R	03/08/2017 09:55	0.25	-179	7.01	0.1940	0.0368	11.91	2.7
MW-156R	03/08/2017 09:58	0.29	-178	7	0.1926	0.0365	11.69	2.9
MW-156R	03/08/2017 10:00	0.32	-178	6.99	0.1930	0.0366	11.43	2.5
MW-156R	03/08/2017 10:02	0.37	-174	6.99	0.1928	0.0366	11.4	2.1
MW-156R	03/08/2017 10:05	0.4	-174	6.99	0.1921	0.0365	11.39	2.3
MW-156R	03/08/2017 10:07	0.4	-176	6.99	0.1919	0.0364	11.37	2.3
MW-156R	03/09/2017 09:49	2.12	-142	7.03	0.20	3.870	10.64	11.80
MW-156R	03/09/2017 10:25	3.10	-138	7.15	0.20	3.769	10.86	37.00
MW-156R	03/29/2018 10:39	0.63	-88.00	8.08	0.17	3.247	9.49	5.10
MW-156R	03/29/2018 12:26	2.47	6.00	6.88	0.18	3.384	9.4	2.68
MW-156R	03/29/2018 13:06	6.48	64.00	7.30	0.17	3.253	9.17	6.60
MW-156R	03/24/2020 09:45	1.01	-213.4	7.12	NM	7.138	10.51	17.4
MW-156R	03/24/2020 10:20	0.98	-200.7	7.18	3.99	7.331	10.56	13.2
MW-156R	05/03/2021 13:05	10.23	-129.5	7.28	3.83	6.925	15.64	16.2
MW-156R	05/03/2021 13:10	5.04	-147.3	7.3	3.81	6.911	14.88	13.7
MW-156R	05/03/2021 13:15	1.62	-186.6	7.29	3.86	6.979	12.66	10.4
MW-156R	05/03/2021 13:20	0.91	-216.5	7.32	3.88	7.094	12.12	3.3
MW-156R	05/03/2021 13:25	1.31	-219.8	7.33	2.74	5.093	12.06	1.5
MW-156R	05/03/2021 13:30	1.56	-220.1	7.32	2.2	4.142	12	1.1
MW-156R	05/03/2021 13:35	1.71	-218.3	7.3	1.81	3.422	11.97	0.7
MW-156R	05/03/2021 13:40	1.88	-219.1	7.3	1.79	3.403	11.91	0.8
MW-156R	05/03/2021 13:45	1.99	-220.3	7.29	1.65	3.136	12.01	0.6
MW-156R	05/03/2021 13:50	2.17	-220.6	7.29	1.61	3.062	12.02	0.5
MW-156R	10/22/2021 09:35	1.48	-256	6.9	6.39	11.2	22.25	-4.5
MW-156R	10/22/2021 09:40	-0.44	-317.2	7.02	6.48	11.4	21.6	-4
MW-156R	10/22/2021 09:45	-0.53	-321.8	7.03	6.36	11.21	21.48	-3.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-156R	10/22/2021 09:50	-0.4	-325.3	7.07	5.65	10.02	21.5	-4
MW-156R	10/22/2021 09:55	-0.29	-324.9	7.13	4.58	8.245	21.53	-4.2
MW-156R	10/22/2021 10:00	-0.15	-323.9	7.17	3.92	7.129	21.52	-4.2
MW-156R	10/22/2021 10:05	-0.23	-323.7	7.19	3.51	6.43	21.48	-4.2
MW-156R	10/22/2021 10:10	-0.13	-322.4	7.28	2.84	5.281	21.19	-3.2
MW-156R	10/22/2021 10:15	1.53	-324.9	7.3	2.59	4.823	21.11	1.9
MW-156R	02/14/2022 09:20	2.3	-5.8	6.75	0.84	1.655	9.77	20.9
MW-156R	02/14/2022 09:25	1.88	-13.6	6.83	0.78	1.547	10.21	6.1
MW-156R	02/14/2022 09:30	1.81	-16.2	6.82	0.78	1.543	10.17	5.9
MW-156R	02/14/2022 09:35	2.33	-21.2	6.57	0.77	1.529	10.2	4.1
MW-156R	02/14/2022 09:40	1.81	-22.6	6.88	0.77	1.527	10.27	4.3
MW-156R	02/14/2022 09:45	1.45	-48.6	6.89	0.75	1.492	10.61	3.1
MW-156R	02/14/2022 09:50	1.48	-50.3	6.92	0.76	1.495	10.61	2.6
MW-156R	02/14/2022 09:55	1.48	-52.4	6.91	0.75	1.491	10.73	2.6
MW-156R	02/14/2022 10:00	2.18	-54.1	6.92	0.76	1.493	10.59	2.3
MW-156R	02/14/2022 10:05	1.44	-57.4	6.88	0.75	1.484	10.63	2.2
MW-157	06/26/2012 11:10	2.6	142	5.88	0.01	0.20537	20.63	14.2
MW-157	06/26/2012 11:12	1.16	164	5.64	0.01	0.18677	20.38	6
MW-157	06/26/2012 11:14	0.69	172	5.62	0.01	0.1868	19.72	3.8
MW-157	06/26/2012 11:17	0.51	175	5.57	0.01	0.1864	19.62	4.4
MW-157	06/26/2012 11:19	0.38	179	5.53	0.01	0.18628	19.66	3.9
MW-157	06/26/2012 11:21	0.27	183	5.5	0.01	0.18651	19.71	4.2
MW-157	06/26/2012 11:23	0.22	185	5.48	0.01	0.1873	19.72	4.9
MW-157	06/26/2012 11:26	0.18	188	5.46	0.01	0.18738	19.77	5.1
MW-157	06/26/2012 11:28	0.17	190	5.46	0.01	0.18776	19.76	5.3
MW-157	06/26/2012 11:30	0.16	192	5.45	0.01	0.18728	19.82	4.6
MW-157	06/26/2012 11:32	0.15	194	5.44	0.01	0.18727	19.9	4.5
MW-157	06/26/2012 11:35	0.27	195	5.42	0.01	0.18654	20.59	7.2
MW-157	06/26/2012 11:37	0.3	197	5.42	0.01	0.18891	20.17	4.8
MW-157	06/26/2012 11:39	0.28	198	5.41	0.01	0.18689	20.16	4.1
MW-157	06/26/2012 11:41	0.29	200	5.4	0.01	0.18654	20.18	4.1
MW-157	06/26/2012 11:44	0.31	201	5.4	0.01	0.18658	20.15	4.4
MW-157	06/26/2012 13:57	0.61	60	7.38	0.05	1.04147	20.76	124.6
MW-157	06/26/2012 14:00	0.49	44	7.38	0.05	1.03415	20.79	111.7
MW-157	06/26/2012 14:02	0.34	28	7.37	0.05	1.03548	21.4	676.3
MW-157	06/26/2012 14:04	0.27	27	7.49	0.05	1.03069	19.23	396.5
MW-157	06/26/2012 14:07	0.22	24	7.52	0.05	1.02809	19.52	215
MW-157	06/26/2012 14:09	0.2	13	7.61	0.05	1.03367	19.44	99
MW-157	06/26/2012 14:12	0.2	8	7.65	0.05	1.03005	19.51	55.5
MW-157	06/26/2012 14:14	0.17	6	7.74	0.05	1.03245	19.46	59.4
MW-157	06/26/2012 14:16	0.16	4	7.93	0.05	1.0364	19.44	37.6
MW-157	06/26/2012 14:19	0.17	3	8.3	0.05	1.0386	19.3	18.8
MW-157	06/26/2012 14:21	0.18	2	8.8	0.05	1.04041	19.2	17.3
MW-157	06/26/2012 14:23	0.18	1	9.03	0.05	1.0375	19.3	12.9
MW-157	06/26/2012 14:26	0.16	0	9.58	0.05	1.04383	19.37	11
MW-157	06/26/2012 14:28	0.16	-1	9.05	0.05	1.04635	19.29	11.8
MW-157	06/26/2012 14:30	0.14	-1	9.77	0.05	1.0377	18.92	13.1
MW-157	06/26/2012 14:33	0.14	-1	9.8	0.05	1.03392	19.04	9.9
MW-157	06/26/2012 14:35	0.14	-1	9.73	0.05	1.03592	19.3	7.1
MW-157	06/26/2012 14:37	0.16	-3	9.45	0.05	1.04312	19.24	7.2
MW-157	06/26/2012 14:40	0.12	-4	10.06	0.05	1.03664	19.26	8.7
MW-157	06/26/2012 14:42	0.13	-6	10.39	0.05	1.03679	19.26	6.3
MW-157	06/26/2012 14:44	0.12	-5	10.41	0.05	1.03716	19.18	6.9
MW-157	07/01/2013 11:06	1.09	202	4.86	0.01	0.288	21.91	5.68
MW-157	07/01/2013 11:51	5.05	80	6.97	0.01	0.293	24.16	8.20
MW-157	07/02/2013 11:01	3.07	113.00	5.28	0.02	0.376	18.79	2.60

Appendix B5 East Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-157	09/16/2014 09:39	1.76	174	5.33	0.10	0.309	18.52	14.52
MW-157	09/16/2014 09:59	2.56	125	6.19	0.02	0.349	20.60	319.00
MW-157	09/17/2014 11:05	-0.05	153	5.32	0.02	0.358	20.87	45.20
MW-157	12/08/2015 11:45	0.61	435	5.84	0.02	0.496	15.75	2756.70
MW-157	12/08/2015 14:36	5.43	485	5.77	0.02	0.421	15.78	719.90
MW-157	09/27/2016 10:00	0.65	191	5.26	0.03	0.537	22.29	316.90
MW-157	09/27/2016 11:01	1.45	129	6.32	0.05	0.966	23.14	850.80
MW-157	03/03/2017 09:04	6.80	207	5.18	0.02	0.430	9.19	13.60
MW-157	03/03/2017 10:06	6.93	257	6.94	0.02	0.357	9.15	120.70
MW-157	03/12/2018 09:07	6.82	266	6.47	0.0188	0.3944	8.38	12.3
MW-157	03/12/2018 09:09	5.27	279	5.69	0.0235	0.4905	7.37	9.4
MW-157	03/12/2018 09:11	4.84	280	5.16	0.0224	0.4686	7.48	10.4
MW-157	03/12/2018 09:14	4.71	284	4.92	0.0245	0.5106	7.42	9.7
MW-157	03/12/2018 09:16	4.64	290	4.83	0.0258	0.5388	7.38	9.6
MW-157	03/12/2018 09:18	4.55	297	4.8	0.0243	0.5076	7.31	9.4
MW-157	03/12/2018 09:20	4.46	302	4.79	0.0244	0.5095	7.48	11
MW-157	03/12/2018 09:22	4.48	305	4.79	0.0251	0.5243	7.38	9.1
MW-157	03/12/2018 09:24	4.4	309	4.79	0.0261	0.5439	7.36	9.8
MW-157	03/12/2018 09:27	4.27	312	4.8	0.0270	0.5629	7.43	9.5
MW-157	03/12/2018 09:29	4.29	314	4.8	0.0279	0.5800	7.35	9.3
MW-157	03/12/2018 09:31	4.17	314	4.81	0.0284	0.5902	7.54	8.4
MW-157	03/12/2018 09:33	4.15	316	4.8	0.0290	0.6017	7.65	8.6
MW-157	03/12/2018 09:35	4.23	320	4.81	0.0301	0.6239	7.47	9.6
MW-157	03/12/2018 09:37	4.16	324	4.81	0.0313	0.6485	7.2	8.9
MW-157	03/12/2018 09:40	4.07	326	4.81	0.0322	0.6677	7.16	9.2
MW-157	03/12/2018 09:42	4.05	328	4.81	0.0333	0.6904	6.87	8.5
MW-157	03/12/2018 09:44	3.98	332	4.81	0.0342	0.7093	6.75	8.5
MW-157	03/12/2018 09:46	3.94	334	4.82	0.0350	0.7250	6.58	8.4
MW-157	03/12/2018 09:48	3.93	335	4.82	0.0356	0.7370	6.56	8.7
MW-157	03/12/2018 09:50	3.95	337	4.82	0.0361	0.7469	6.53	8.9
MW-157	03/13/2018 09:51	3.95	337.00	4.82	0.04	0.750	6.39	8.59
MW-157	03/13/2018 09:57	6.19	299.00	4.91	0.08	1.656	7.43	10.00
MW-157	03/13/2018 10:30	5.55	292.00	6.16	0.02	0.491	8.48	322.50
MW-157	10/16/2018 13:15	4.47	275.00	5.05	0.13	0.277	18.49	10.70
MW-157	10/16/2018 14:15	6.82	293.50	5.09	0.12	0.258	18.13	23.60
MW-157	10/16/2018 14:25	5.26	275.10	5.03	0.12	0.262	18.11	10.60
MW-157	12/06/2018 10:00	7.92	246.40	5.29	0.13	0.282	7.11	6.60
MW-157	12/06/2018 11:10	7.73	266.50	5.38	0.13	0.280	7.4	11.50
MW-157	12/06/2018 11:20	7.33	289.10	5.36	0.13	0.281	5.98	11.90
MW-157	03/21/2019 09:50	2.41	266.9	4.89	NM	0.29	7.29	53.4
MW-157	03/21/2019 11:20	7.1	280.7	5.05	0.13	0.281	7.92	321.1
MW-157	02/24/2020 10:15	5.4	297.4	4.69	NM	0.159	9.18	4.7
MW-157	02/25/2020 08:40	8.91	200	6.01	0.11	0.236	8.44	5.9
MW-157	09/30/2020 09:10	8.73	112.4	6.78	0.23	0.654	19.56	12.06
MW-157	09/30/2020 09:25	9.78	100.6	6.83	0.22	0.451	19.72	418
MW-157	01/22/2021 10:10	9.58	292.4	6.03	0.15	0.313	8.1	11.4
MW-157	01/22/2021 10:15	9.47	298.5	5.94	0.15	0.313	8.13	10.1
MW-157	01/22/2021 10:20	9.22	311.8	5.26	0.15	0.324	7.98	6.6
MW-157	01/22/2021 10:25	9.18	318.7	5.09	0.15	0.324	8.07	5.5
MW-157	01/22/2021 10:30	9.08	326.2	4.94	0.15	0.316	7.97	5.2
MW-157	01/22/2021 10:35	8.96	332.9	4.86	0.15	0.316	8.05	4.2
MW-157	01/22/2021 10:40	8.82	336.4	4.83	0.15	0.316	8.11	3.8
MW-157	01/22/2021 10:45	8.83	340.2	4.78	0.15	0.316	8.18	4.2
MW-157	01/22/2021 10:50	8.76	344.1	4.73	0.15	0.317	8.22	3.4
MW-157	01/22/2021 10:55	8.74	348.3	4.74	0.15	0.319	8.25	2.9
MW-157	01/22/2021 12:00	8.69	327.7	4.85	0.19	0.334	8.4	0.6

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-157	01/22/2021 12:10	8.88	322.2	5.05	0.17	0.35	8.29	3.2
MW-157	03/04/2021 12:15	9.98	177.7	6.57	0.13	0.269	7.51	1.9
MW-157	03/04/2021 13:30	9.12	191.5	6.04	0.13	0.266	7.99	14.2
MW-157	03/04/2021 13:40	9.43	209.9	6.07	0.13	0.264	7.74	88
MW-157	03/03/2022 09:30	9.71	227	5.56	0.11	0.223	8.51	-4.2
MW-157	03/03/2022 09:35	9.41	230	5.42	0.1	0.22	8.52	-6.9
MW-157	03/03/2022 09:40	9.1	231.1	5.28	0.1	0.219	8.87	-1.4
MW-157	03/03/2022 09:45	8.98	236.3	5.3	0.1	0.219	9.52	-1
MW-157	03/03/2022 09:50	8.88	241.4	5.23	0.1	0.219	9.74	-7
MW-157	03/03/2022 09:55	8.81	248.1	5.15	0.1	0.22	9.47	-5.1
MW-157	03/03/2022 10:00	8.85	251.2	5.15	0.1	0.22	9.47	-3.6
MW-172	06/19/2012 10:06	1.01	-64	7.03	0.09	1.73884	21.67	112
MW-172	06/19/2012 10:08	0.72	-77	7.06	0.09	1.77262	20	12.3
MW-172	06/19/2012 10:11	0.49	-84	7.08	0.09	1.7577	19.13	9.7
MW-172	06/19/2012 10:13	0.42	-87	7.08	0.09	1.75246	19.07	10.5
MW-172	06/19/2012 10:16	0.39	-88	7.08	0.09	1.75203	19.22	10.7
MW-172	06/19/2012 10:19	0.36	-89	7.08	0.09	1.7456	19.33	9.7
MW-172	06/19/2012 10:21	0.34	-90	7.07	0.09	1.75202	19.42	24.5
MW-172	06/19/2012 10:24	0.32	-91	7.07	0.09	1.75399	19.75	11
MW-172	06/19/2012 10:26	0.32	-92	7.07	0.09	1.76225	19.7	9.8
MW-172	06/19/2012 10:29	0.31	-93	7.08	0.09	1.75575	19.57	7.4
MW-172	06/19/2012 10:31	0.29	-94	7.08	0.09	1.74975	19.62	9.7
MW-172	06/19/2012 10:34	0.27	-94	7.08	0.09	1.75155	19.64	7.3
MW-172	06/19/2012 10:36	0.27	-94	7.08	0.09	1.75441	19.65	8.3
MW-172	06/19/2012 10:39	0.26	-95	7.08	0.09	1.75633	19.53	7.3
MW-172	06/19/2012 10:42	0.28	-95	7.08	0.09	1.7498	19.37	8.9
MW-172	06/19/2012 10:44	0.28	-95	7.08	0.09	1.7548	19.28	15.3
MW-172	06/19/2012 10:47	0.27	-96	7.08	0.09	1.75025	19.39	7.2
MW-172	06/19/2012 10:49	0.28	-96	7.09	0.09	1.74679	19.64	7.4
MW-172	06/19/2012 10:52	0.28	-97	7.08	0.09	1.75036	19.81	9.5
MW-172	06/19/2012 10:54	0.27	-97	7.08	0.09	1.75607	19.78	8.7
MW-172	06/19/2012 12:01	1.15	-97	10.17	0.09	1.750	16.49	729.10
MW-172	06/20/2012 09:00	0.0000	-169	7.20	0.10	1.950	15.50	68.60
MW-172	09/06/2012 08:45	6.84	-91	6.57	0.10	1.680	22.33	3.10
MW-172	09/06/2012 10:15	5.73	-124	7.16	0.10	1.830	22.76	0.0000
MW-172	09/07/2012 09:07	1.83	-77	6.53	0.10	1.820	22.07	17.00
MW-172	07/10/2013 13:17	2.55	-85	6.85	0.24	4.43476	24.97	153.3
MW-172	07/10/2013 13:19	1.73	-98	6.71	0.24	4.42667	21.92	55.9
MW-172	07/10/2013 13:22	1.27	-104	6.66	0.23	4.22366	21.49	43
MW-172	07/10/2013 13:24	1.15	-109	6.63	0.22	4.11251	21.66	238.4
MW-172	07/10/2013 13:26	1.01	-114	6.61	0.22	4.09898	21.63	318.6
MW-172	07/10/2013 13:29	1.01	-120	6.6	0.22	4.09611	21.56	1744.5
MW-172	07/10/2013 13:31	0.95	-126	6.59	0.22	4.096586	21.5	32.6
MW-172	07/10/2013 13:33	0.88	-132	6.59	0.22	4.05727	21.71	25.7
MW-172	07/10/2013 13:36	0.87	-138	6.59	0.22	4.0965	21.51	65.8
MW-172	07/10/2013 13:38	0.82	-143	6.58	0.22	4.04788	21.72	107.3
MW-172	07/10/2013 13:40	0.83	-146	6.58	0.22	4.07201	21.6	26.7
MW-172	07/10/2013 13:43	0.83	-150	6.58	0.22	4.05867	21.63	22.8
MW-172	07/10/2013 13:45	0.85	-153	6.58	0.22	4.061	21.62	21
MW-172	07/10/2013 13:48	0.86	-154	6.58	0.22	4.046	21.67	20.2
MW-172	07/10/2013 13:50	0.87	-155	6.58	0.22	4.028	21.83	21.5
MW-172	07/10/2013 14:37	2.78	-100	6.83	0.22	4.041	22.50	125.80
MW-172	07/11/2013 11:43	0.20	-153	6.71	0.27	4.993	18.46	37.90
MW-172	06/19/2014 03:10	1.92	-68	6.69	NM	4.28764	18.61	364.4
MW-172	06/19/2014 03:13	0.72	-80	6.7	NM	4.07861	17.77	131.7
MW-172	06/19/2014 03:15	0.56	-82	6.72	NM	4.06029	17.79	126.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-172	06/19/2014 03:17	0.5	-83	6.72	NM	4.05031	17.76	106.6
MW-172	06/19/2014 03:20	0.53	-83	6.73	NM	4.04623	19.94	84.6
MW-172	06/19/2014 03:22	0.5	-82	6.73	NM	4.05129	18.03	84.5
MW-172	06/19/2014 03:24	0.5	-82	6.73	NM	4.05966	18.10	90.1
MW-172	06/19/2014 15:25	0.50	-82	6.73	0.25	4.676	18.10	90.07
MW-172	06/19/2014 16:02	2.45	-73	6.78	0.25	4.570	14.57	2084.20
MW-172	06/20/2014 11:32	0.13	-155	6.83	0.24	4.421	14.64	8.30
MW-172	11/04/2014 10:23	2.55	-0.013	6.89	NM	2.04245	19.10	145.4
MW-172	11/04/2014 10:25	-0.56	-0.013	6.72	NM	2.03108	18.41	23.2
MW-172	11/04/2014 10:27	-0.56	-0.013	6.69	NM	2.02932	18.40	12.6
MW-172	11/04/2014 10:30	-0.56	-0.013	6.68	NM	1.91998	18.41	11.3
MW-172	11/04/2014 10:32	-0.56	-0.013	6.68	NM	1.98607	18.48	11.4
MW-172	11/04/2014 10:35	-0.55	-0.013	6.68	NM	2.00386	18.48	12.1
MW-172	11/04/2014 10:37	-0.55	-0.013	6.68	NM	2.02168	18.56	11.8
MW-172	11/04/2014 10:58	-0.55	-126	6.68	0.12	2.305	18.56	11.84
MW-172	11/04/2014 11:43	-0.54	-149	7.01	0.15	2.856	19.16	2166.10
MW-172	11/05/2014 11:40	0.0000	-114	6.99	0.18	3.484	18.28	56.30
MW-172	07/09/2015 10:37	1.63	35	6.53	0.2116	0.0040	21.51	715.4
MW-172	07/09/2015 10:38	1.5	34	6.55	0.2136	0.0040	20.93	451.6
MW-172	07/09/2015 10:39	0.72	10	6.63	0.2163	0.0040	20.09	302.8
MW-172	07/09/2015 10:41	0.39	-25	6.66	0.2222	0.0041	19.29	60.4
MW-172	07/09/2015 10:42	0.27	-39	6.67	0.2200	0.0041	19.32	47.3
MW-172	07/09/2015 10:44	0.2	-45	6.69	0.2190	0.0041	19.51	23.8
MW-172	07/09/2015 10:45	0.13	-50	6.7	0.2381	0.0044	19.3	25.9
MW-172	07/09/2015 10:47	0.07	-51	6.71	0.2254	0.0042	19.27	27.3
MW-172	07/09/2015 10:48	0.03	-50	6.73	0.2320	0.0043	19.14	27.4
MW-172	07/09/2015 10:50	-0.01	-49	6.74	0.2264	0.0042	19	14.5
MW-172	07/09/2015 10:52	-0.03	-47	6.74	0.2196	0.0041	19.19	48.9
MW-172	07/09/2015 10:53	-0.05	-44	6.74	0.2226	0.0041	19.29	22
MW-172	07/09/2015 10:55	-0.06	-38	6.75	0.2414	0.0045	19.14	26.6
MW-172	07/09/2015 10:56	-0.09	-31	6.75	0.2255	0.0042	19.23	26.6
MW-172	07/09/2015 10:58	-0.09	-25	6.75	0.2196	0.0041	19.42	279
MW-172	07/09/2015 11:00	-0.09	-19	6.75	0.2519	0.0047	19.74	21.2
MW-172	07/09/2015 11:01	-0.13	-13	6.76	0.2291	0.0043	19.54	665.8
MW-172	07/09/2015 11:03	-0.16	-6	6.76	0.2453	0.0045	19.41	289.4
MW-172	07/09/2015 11:04	-0.15	-1	6.76	0.2287	0.0043	19.58	521.3
MW-172	07/09/2015 11:06	-0.17	3	6.76	0.2404	0.0045	19.49	119.1
MW-172	07/09/2015 11:07	-0.17	7	6.76	0.2223	0.0041	19.66	440.4
MW-172	07/09/2015 11:09	-0.16	11	6.76	0.2431	0.0045	19.77	111.1
MW-172	07/09/2015 11:11	-0.16	14	6.76	0.2433	0.0045	19.65	81.8
MW-172	07/09/2015 11:12	-0.17	16	6.76	0.2442	0.0045	19.46	106.9
MW-172	07/09/2015 11:14	-0.18	18	6.76	0.2114	0.0040	19.33	458.7
MW-172	07/09/2015 11:15	-0.2	20	6.76	0.2241	0.0042	19.08	77.4
MW-172	07/09/2015 11:17	-0.22	22	6.76	0.2022	0.0038	19.08	56.1
MW-172	07/09/2015 11:18	-0.21	23	6.76	0.2017	0.0038	19.17	230
MW-172	07/09/2015 11:20	-0.21	24	6.76	0.2036	0.0038	19.26	47.1
MW-172	07/09/2015 11:22	-0.21	25	6.76	0.2003	0.0038	19.6	484.1
MW-172	07/09/2015 11:23	-0.18	26	6.76	0.2384	0.0044	19.76	42.2
MW-172	07/09/2015 11:25	-0.19	26	6.76	0.2366	0.0044	19.82	43.9
MW-172	07/09/2015 11:26	-0.17	26	6.76	0.2339	0.0043	19.93	44
MW-172	07/10/2015 10:19	2.39	-110	6.73	0.6	10.46	17.35	35.6
MW-172	07/10/2015 11:57	0.37	-106	6.69	0.23	4.196	22.62	949.3
MW-172	03/10/2016 13:21	1.840	-152.0	7.160	0.371	6.714	18.470	146.900
MW-172	03/10/2016 13:23	0.700	-156.0	7.120	0.411	7.414	14.980	46.200
MW-172	03/10/2016 13:26	0.370	-156.0	7.060	0.430	7.723	15.030	20.300
MW-172	03/10/2016 13:28	0.300	-155.0	7.050	0.419	7.534	15.330	14.900

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Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-172	03/10/2016 13:30	0.230	-154.0	7.050	0.421	7.572	15.230	14.900
MW-172	03/10/2016 13:33	0.220	-153.0	7.050	0.424	7.628	15.120	16.700
MW-172	03/10/2016 13:35	0.210	-152.0	7.040	0.427	7.687	15.050	17.600
MW-172	03/10/2016 13:37	0.210	-151.0	7.040	0.434	7.792	14.820	13.200
MW-172	03/10/2016 13:40	0.200	-150.0	7.030	0.439	7.886	14.600	11.400
MW-172	03/10/2016 13:42	0.180	-149.0	7.030	0.433	7.787	15.030	10.800
MW-172	03/10/2016 13:45	0.180	-149.0	7.030	0.439	7.884	14.660	16.000
MW-172	03/10/2016 13:47	0.180	-148.0	7.020	0.445	7.983	14.500	11.900
MW-172	03/10/2016 13:49	0.150	-148.0	7.020	0.444	7.973	14.560	8.400
MW-172	03/10/2016 13:52	0.140	-148.0	7.010	0.441	7.910	14.840	544.500
MW-172	03/10/2016 13:54	0.130	-147.0	7.020	0.445	7.978	14.610	10.200
MW-172	03/10/2016 13:56	0.130	-146.0	7.010	0.439	7.882	14.800	8.800
MW-172	03/10/2016 13:59	0.110	-147.0	7.010	0.436	7.831	15.030	8.000
MW-172	03/10/2016 14:01	0.110	-146.0	7.010	0.444	7.978	14.600	14.600
MW-172	03/10/2016 14:03	0.100	-146.0	7.010	0.449	8.057	14.420	12.700
MW-172	03/10/2016 14:06	0.090	-146.0	7.010	0.449	8.059	14.480	7.000
MW-172	03/10/2016 14:08	0.100	-147.0	7.010	0.457	8.197	14.070	7.100
MW-172	03/10/2016 14:10	0.070	-147.0	7.000	0.453	8.129	14.320	6.300
MW-172	03/10/2016 14:11	0.060	-147.0	7.000	0.453	8.118	14.350	5.600
MW-172	03/11/2016 10:48	0.14	-176	6.60	0.07	1.469	10.73	30.00
MW-172	03/11/2016 14:46	1.07	-163	7.08	0.30	5.445	14.67	1575.30
MW-172	09/27/2016 12:31	1.660	-41	7.080	0.097	1.891	23.760	69.200
MW-172	09/27/2016 12:33	0.710	-73	6.960	0.102	1.979	23.250	20.100
MW-172	09/27/2016 12:35	0.560	-88	6.960	0.103	1.991	23.070	11.600
MW-172	09/27/2016 12:38	0.520	-96	6.970	0.103	1.997	23.230	8.400
MW-172	09/27/2016 12:40	0.490	-101	6.980	0.103	1.989	23.300	7.600
MW-172	09/27/2016 12:42	0.460	-105	6.980	0.101	1.963	23.500	8.100
MW-172	09/27/2016 12:45	0.430	-107	6.970	0.101	1.953	23.430	7.200
MW-172	09/27/2016 12:47	0.400	-110	6.970	0.100	1.945	23.370	7.400
MW-172	09/27/2016 12:49	0.370	-112	6.980	0.100	1.937	23.340	8.200
MW-172	09/27/2016 12:52	0.360	-114	6.970	0.099	1.924	23.290	7.200
MW-172	09/27/2016 12:54	0.340	-115	6.980	0.099	1.923	23.350	7.400
MW-172	09/27/2016 12:57	0.330	-117	6.980	0.099	1.917	23.360	7.500
MW-172	09/28/2016 11:43	0.59	-156	6.86	0.08	1.636	19.78	30.60
MW-172	09/28/2016 13:30	0.80	-58	7.05	0.12	2.240	21.55	1106.80
MW-172	03/29/2017 12:47	3.45	-120	6.72	0.0799	0.0158	13.1	160.4
MW-172	03/29/2017 12:49	1.19	-106	6.74	0.0738	0.0147	12.31	280
MW-172	03/29/2017 12:52	0.59	-96	6.78	0.0722	0.0143	12.13	1852.7
MW-172	03/29/2017 12:54	0.38	-91	6.81	0.0715	0.0142	12.22	625.4
MW-172	03/29/2017 12:56	0.25	-88	6.84	0.0713	0.0142	12.2	514.8
MW-172	03/29/2017 12:58	0.18	-86	6.86	0.0711	0.0141	12.32	744.4
MW-172	03/29/2017 13:00	0.16	-85	6.87	0.0708	0.0141	12.21	353.5
MW-172	03/29/2017 13:02	0.13	-81	6.88	0.0707	0.0141	12.23	997.8
MW-172	03/29/2017 13:04	0.13	-78	6.89	0.0705	0.0140	12.25	197
MW-172	03/29/2017 13:07	0.12	-77	6.89	0.0703	0.0140	12.32	401.1
MW-172	03/29/2017 13:09	0.11	-73	6.89	0.0701	0.0139	12.33	198.4
MW-172	03/29/2017 13:11	0.09	-70	6.9	0.0699	0.0139	12.31	87.8
MW-172	03/29/2017 13:13	0.09	-67	6.9	0.0696	0.0139	12.44	470
MW-172	03/29/2017 13:15	0.12	-63	6.9	0.0693	0.0138	12.42	140
MW-172	03/29/2017 13:17	0.13	-59	6.9	0.0692	0.0138	12.56	164.1
MW-172	03/29/2017 13:20	0.12	-57	6.9	0.0691	0.0138	12.47	2429.9
MW-172	03/29/2017 13:22	0.51	-64	6.9	0.0681	0.0135	13.66	131.4
MW-172	03/29/2017 13:24	1.63	-67	6.89	0.0694	0.0138	13.98	266.9
MW-172	03/29/2017 13:26	2.09	-68	6.89	0.0695	0.0138	14.43	111.3
MW-172	03/29/2017 13:28	2.46	-69	6.9	0.0695	0.0138	14.76	94.3
MW-172	03/29/2017 13:30	2.77	-70	6.9	0.0696	0.0138	15.08	141.3

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-172	03/29/2017 13:33	2.5	-68	6.93	0.0712	0.0141	13.13	451.8
MW-172	03/29/2017 13:35	1.17	-63	6.9	0.0705	0.0140	13.04	49.8
MW-172	03/30/2017 10:49	1.84	-111	6.74	0.07	1.372	10.69	50.80
MW-172	03/28/2018 10:40	6.29	-17	6.80	0.09	1.787	10.05	30.70
MW-172	03/28/2018 11:23	2.87	123	6.87	0.10	1.948	9.28	7.17
MW-172	03/28/2018 11:56	2.77	14	7.00	0.09	1.781	10.32	379.60
MW-172	08/28/2018 10:15	0.25	-25	7.03	0.19	3.600	22.63	30.50
MW-172	08/28/2018 10:43	0.43	67	7.06	0.23	4.194	24.1	6.39
MW-172	08/28/2018 11:35	3.45	104	7.37	0.20	3.818	20.25	378.50
MW-172	08/20/2019 08:20	0.98	-34.2	7.22	NM	2.007	21.63	44.3
MW-172	08/20/2019 08:25	0.64	-39.9	7.19	NM	1.998	21.78	8.1
MW-172	08/20/2019 08:30	0.55	-21.7	7.18	NM	2.104	22.01	8.7
MW-172	08/20/2019 08:35	0.59	-70.4	7.17	NM	1.969	21.93	2.8
MW-172	08/20/2019 08:40	0.42	-74.3	7.17	NM	7.962	21.97	4.7
MW-172	08/20/2019 08:45	0.4	-78.3	7.17	NM	1.956	22.05	5.7
MW-172	08/20/2019 08:50	0.38	-83.9	7.17	NM	1.951	22.13	5.2
MW-172	08/20/2019 08:55	0.35	-91.6	7.17	NM	1.94	22.22	4.8
MW-172	08/20/2019 09:00	0.32	-95.5	7.18	NM	1.934	22.26	3.9
MW-172	08/20/2019 09:05	0.31	-100.1	7.18	NM	1.924	22.41	4.1
MW-172	08/20/2019 10:40	1.67	-124.3	7.19	0.87	1.73	23.85	19.9
MW-172	08/20/2019 10:50	2.91	-109.2	7.28	0.91	1.788	19.88	318.8
MW-172	03/04/2021 09:45	9.4	26	8.16	1.04	2.083	9.21	111.5
MW-172	03/04/2021 09:50	3.42	71.5	6.87	0.94	1.839	9.49	47.6
MW-172	03/04/2021 09:55	3.62	90	6.89	0.94	1.835	9.45	35.8
MW-172	03/04/2021 10:00	3.54	80.9	6.91	0.94	1.836	9.22	27.1
MW-172	03/04/2021 10:05	3.43	48.3	6.91	0.93	1.83	9.2	24.2
MW-172	03/04/2021 10:10	3.5	24	6.89	0.93	1.818	9.12	24.8
MW-172	03/04/2021 10:15	3.62	24.2	6.93	0.93	1.817	9.23	21.3
MW-172	03/04/2021 10:20	4.44	17.5	6.95	0.92	1.81	9.05	21
MW-172	03/04/2021 10:25	4.32	2.3	6.95	0.91	1.792	9.21	21.1
MW-172	03/04/2021 10:30	4.29	-21.9	6.96	0.89	1.751	9.14	19.8
MW-172	03/04/2021 14:00	4.52	114.2	6.77	0.68	1.348	10.17	27.5
MW-172	03/04/2021 14:25	4.57	-51.2	6.83	0.65	1.297	11.37	28
MW-172	05/26/2021 10:05	2.14	122.4	5.6	2.08	3.902	15.93	118.6
MW-172	05/26/2021 10:10	0.91	90.2	5.76	2.1	3.931	15.04	92.8
MW-172	05/26/2021 10:15	0.62	89.1	5.71	2.1	3.937	16.02	78.1
MW-172	05/26/2021 10:20	0.6	92	5.64	2.1	3.947	16.05	64.9
MW-172	05/26/2021 10:25	0.63	96	5.57	2.1	3.941	16.29	61.1
MW-172	05/26/2021 10:30	1.11	98.1	5.5	2.09	3.932	16.28	50.3
MW-172	05/26/2021 10:35	0.57	98.9	5.49	2.09	3.932	16.4	51.6
MW-172	05/26/2021 10:40	1.09	100.4	5.46	2.09	3.931	16.23	45.4
MW-172	05/26/2021 10:45	0.56	101.2	5.44	2.09	3.935	16.65	44.8
MW-172	05/26/2021 10:50	0.86	101.4	5.42	2.09	3.937	16.59	46.3
MW-172	09/24/2021 11:20	2.08	161.5	7.51	0	0.012	21.6	13.8
MW-172	09/24/2021 11:25	3.72	146.4	7.22	1.36	2.628	22.23	10.4
MW-172	09/24/2021 11:30	2.97	142.3	7.21	1.37	2.639	22.44	8.1
MW-172	09/24/2021 11:35	3.68	134.5	7.18	1.37	2.645	22.63	6.5
MW-172	09/24/2021 11:40	4.01	132.1	7.18	1.38	2.665	22.77	6.5
MW-172	09/24/2021 11:45	3.54	123.8	7.18	1.4	2.704	22.8	3.4
MW-172	09/24/2021 11:50	3.41	105.7	7.18	1.42	2.737	22.99	1.3
MW-172	09/24/2021 11:55	3.41	78.8	7.18	1.43	2.757	23.16	0.7
MW-172	09/24/2021 12:00	3.1	47.3	7.17	1.43	2.771	23.29	0.4
MW-172	09/24/2021 12:05	3.32	23	7.17	1.43	2.758	23.32	0.4
MW-172	02/03/2022 10:50	2.57	99.4	6.21	1.4	2.697	9.85	206.6
MW-172	02/03/2022 10:55	1.84	18.5	6.59	1.59	3.024	10.69	172.2
MW-172	02/03/2022 11:00	1.66	2.8	6.64	1.62	3.094	10.72	153.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-172	02/03/2022 11:05	1.55	-8.3	6.66	1.65	3.15	10.75	127.3
MW-172	02/03/2022 11:10	1.51	-16.6	6.68	1.68	3.19	10.8	108
MW-172	02/03/2022 11:15	1.44	-23.1	6.7	1.7	3.237	10.74	91.8
MW-172	02/03/2022 11:20	1.4	-27.1	6.71	1.7	3.254	10.69	87.5
MW-172	02/03/2022 11:25	1.37	-28.6	6.71	1.7	3.268	10.67	85.3
MW-172	04/29/2022 12:05	5.5	-124.8	7.74	1.92	3.627	14.27	85.3
MW-172	04/29/2022 12:10	1.14	-97.7	7.12	1.96	3.69	13.39	76.8
MW-172	04/29/2022 12:15	0.65	-98.7	6.95	1.96	3.702	13.14	40.1
MW-172	04/29/2022 12:20	0.55	-103.7	6.88	1.97	3.719	13.17	32.1
MW-172	04/29/2022 12:25	0.48	-108.8	6.84	1.98	3.734	13.12	23.4
MW-172	04/29/2022 12:30	0.41	-113.7	6.8	1.99	3.74	13.09	10.9
MW-172	04/29/2022 12:35	0.4	-114.6	6.8	1.99	3.741	13.1	11.2
MW-172	04/29/2022 12:40	0.39	-116.5	6.79	1.99	3.744	13.13	10.7
MW-173	03/06/2012 13:23	-0.06	-244	7.59	0.89	15.412	7.77	14.74
MW-173	03/06/2012 14:32	-0.02	-142	7.90	0.35	6.425	7.80	2479.90
MW-173	03/07/2012 11:18	0.39	-131	6.98	0.40	7.260	6.30	70.70
MW-173	06/26/2012 15:22	1.17	-75	7.88	0.07	1.43312	23.07	23.4
MW-173	06/26/2012 15:25	0.92	-86	8.1	0.1	2.00887	18.97	14.3
MW-173	06/26/2012 15:27	0.61	-94	7.66	0.1	1.93441	18.41	18.6
MW-173	06/26/2012 15:30	0.45	-100	7.91	0.1	1.87549	18.03	25.6
MW-173	06/26/2012 15:32	0.38	-104	7.99	0.1	1.85626	18.03	12.2
MW-173	06/26/2012 15:35	0.3	-107	7.97	0.09	1.79405	17.92	12.5
MW-173	06/26/2012 15:37	0.25	-109	7.99	0.09	1.76274	17.82	10.8
MW-173	06/26/2012 15:39	0.2	-111	8.04	0.09	1.74429	17.73	11.5
MW-173	06/26/2012 15:42	0.16	-112	8.03	0.09	1.73317	17.66	11.5
MW-173	06/26/2012 15:44	0.15	-113	8.01	0.09	1.73359	17.69	19.1
MW-173	06/26/2012 15:47	0.17	-113	8.01	0.09	1.73647	17.64	11.5
MW-173	06/26/2012 15:49	0.15	-114	7.98	0.09	1.73453	17.57	12.5
MW-173	06/26/2012 15:52	0.14	-114	8	0.09	1.72907	17.71	14.9
MW-173	06/26/2012 15:54	0.11	-114	8.04	0.09	1.72906	17.66	13.5
MW-173	06/26/2012 15:57	0.11	-115	8.02	0.09	1.72397	17.69	12.1
MW-173	06/26/2012 15:59	0.1	-115	7.91	0.09	1.71688	17.52	11.5
MW-173	06/26/2012 16:01	0.09	-115	7.86	0.09	1.71168	17.55	11.2
MW-173	06/26/2012 16:04	0.08	-115	7.83	0.09	1.70723	17.59	11.4
MW-173	06/26/2012 16:06	0.08	-115	7.83	0.09	1.70606	17.56	10.1
MW-173	06/26/2012 16:09	0.07	-115	7.82	0.09	1.70059	17.6	9.9
MW-173	06/26/2012 16:11	0.07	-115	7.82	0.09	1.71103	17.63	10.3
MW-173	06/27/2012 16:12	0.07	-115	7.82	0.09	1.711	17.63	10.27
MW-173	06/27/2012 17:19	4.21	-27	8.01	0.11	2.111	16.73	7.60
MW-173	06/28/2012 11:28	0.0000	-142	7.10	0.20	3.140	15.40	173.00
MW-173	05/09/2013 13:43	0.31	-183	6.77	NM	3.373	13.45	1.38
MW-173	05/09/2013 14:23	0.41	-152	6.53	NM	9.046	11.81	32.6
MW-173	05/10/2013 11:03	0.08	-161	6.71	NM	4.370	11.91	16.70
MW-173	05/22/2013 11:03	0.08	-161	6.71	NM	4.37	11.91	16.7
MW-174	06/05/2012 12:22	1.16	-10	6.93	0.12	2.24459	16.74	36.9
MW-174	06/05/2012 12:24	0.49	-29	6.97	0.12	2.26367	15.87	35.3
MW-174	06/05/2012 12:27	0.31	-39	6.99	0.12	2.25047	15.62	52
MW-174	06/05/2012 12:29	0.29	-45	7	0.12	2.25235	15.69	72.7
MW-174	06/05/2012 12:31	0.26	-49	7.01	0.12	2.25002	15.68	47.9
MW-174	06/05/2012 12:34	0.21	-52	7.02	0.12	2.24038	15.73	30.8
MW-174	06/05/2012 12:36	0.22	-54	7.03	0.12	2.23577	15.81	31.6
MW-174	06/05/2012 12:38	0.2	-56	7.03	0.12	2.24482	15.87	911.5
MW-174	06/05/2012 12:41	0.18	-58	7.04	0.12	2.2416	15.53	155.6
MW-174	06/05/2012 12:43	0.18	-59	7.04	0.12	2.24791	15.52	76.2
MW-174	06/05/2012 12:45	0.16	-61	7.04	0.12	2.24693	15.5	129
MW-174	06/05/2012 12:48	0.15	-62	7.05	0.12	2.24073	15.35	89

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-174	06/05/2012 12:50	0.14	-63	7.05	0.12	2.25304	15.37	228.3
MW-174	06/05/2012 12:52	0.14	-63	7.05	0.12	2.24613	15.48	367.1
MW-174	06/05/2012 12:55	0.13	-64	7.05	0.12	2.2497	15.49	83.2
MW-174	06/05/2012 12:57	0.13	-65	7.05	0.12	2.25919	15.5	493
MW-174	06/05/2012 12:59	0.14	-65	7.05	0.12	2.26112	15.57	186.4
MW-174	06/05/2012 13:02	0.13	-66	7.05	0.12	2.26769	15.54	450.7
MW-174	06/05/2012 13:04	0.13	-66	7.05	0.12	2.27397	15.82	546.9
MW-174	06/05/2012 13:06	0.13	-67	7.05	0.12	2.29421	15.77	100.5
MW-174	06/05/2012 13:09	0.13	-67	7.05	0.12	2.29563	15.72	97.9
MW-174	06/05/2012 13:11	0.11	-68	7.05	0.12	2.29342	15.69	177.7
MW-174	06/05/2012 13:46	4.29	-47	7.22	0.12	2.351	15.26	231.00
MW-174	06/06/2012 11:40	2.65	20	6.82	0.10	2.300	17.83	5.40
MW-174	10/29/2013 09:25	2.82	-375	7.11	0.15	2.789	15.11	25.81
MW-174	10/29/2013 10:09	1.34	-376	6.99	0.15	2.906	16.74	463.30
MW-174	10/30/2013 09:24	1.39	-393	6.97	0.34	6.200	16.47	29.10
MW-178	06/04/2012 11:10	3.44	123	7.59	0.04	0.747	14.80	13.90
MW-178	07/01/2013 09:38	2.97	-56	7.94	0.10	1.861	16.16	6.00
MW-178	07/02/2013 10:15	0.79	-163	7.56	0.08	1.566	18.51	2.00
MW-178	09/16/2014 12:15	2.30	-343	7.90	0.03	0.706	16.93	12.70
MW-178	09/17/2014 11:59	0.22	141	7.20	0.03	0.698	19.98	8.80
MW-178	12/08/2015 10:31	6.26	406	6.93	0.03	0.681	15.57	14.7
MW-178	12/08/2015 11:05	3.26	467	7.61	0.03	0.673	15.36	3.9
MW-178	02/11/2016 11:17	3.31	-6	7.38	0.08	1.504	11.86	7.10
MW-178	02/11/2016 11:19	4.90	17	6.77	0.06	1.207	13.68	37.50
MW-178	03/03/2017 09:45	-0.16	145	7.95	0.03	0.660	11.02	5.80
MW-178	03/03/2017 11:05	6.28	97	7.67	0.03	0.652	11.60	6.60
MW-178	03/13/2018 10:37	1.20	210	7.52	0.18	3.446	9.96	3.80
MW-178	03/13/2018 11:08	4.56	201	7.23	0.18	0.663	9.96	7.80
MW-178	03/06/2019 14:44	6.89	49.6	7.79	0.31	0.644	6.48	3
MW-178	06/26/2020 07:45	6.52	-11.5	8.19	0.49	0.786	14.64	1.6
MW-178	06/26/2020 10:00	4.51	-54.1	7.68	0.36	0.734	16.4	0.1
MW-178	06/26/2020 10:10	2.98	-85.7	7.56	0.36	0.738	17.09	0.2
MW-193	07/10/2013 09:52	5.57	-44	7.57	0.01	0.226	23.59	1306.00
MW-193	07/11/2013 10:05	4.71	-74.00	6.84	0.06	1.169	20.67	454.90
MW-208	07/08/2013 15:18	0.27	-154	6.92	0.09	1.792	19.82	245.10
MW-208	07/09/2013 12:09	0.28	-270	6.82	0.08	1.573	22.31	24.90
MW-208	12/15/2015 11:00	3.58	-51	7.18	0.04	0.835	14.41	1651.5
MW-208	12/15/2015 11:10	0.9	235	7.05	0.04	0.734	13.5	8.7
MW-208	06/13/2017 11:07	0.03	-174	6.60	0.04	0.791	19.76	90.60
MW-208	06/13/2017 12:45	1.32	87	7.84	0.11	2.061	15.6	80.80
MW-209	07/08/2013 09:49	0.36	-131	6.37	0.01	0.184	24.33	160.40
MW-209	07/08/2013 10:52	1.42	-124	7.49	0.01	0.209	18.84	448.40
MW-209	07/09/2013 10:10	0.20	-219	6.43	0.02	0.361	21.59	69.70
MW-209	11/25/2015 10:13	9.97	-42	6.71	0.04	0.869	13.93	282.50
MW-209	11/25/2015 11:13	6.88	87	7.45	0.04	0.729	13.29	185.10
MW-209	06/13/2017 10:31	4.55	-9	7.72	0.04	0.914	21.37	664.20
MW-209	06/13/2017 10:36	4.76	131	6.40	0.01	0.212	19.45	126.40
MW-209	06/13/2017 11:12	5.30	-22	8.48	0.01	0.276	18.05	1063.20
MW-213	01/29/2013 09:47	6.46	-90	6.26	2.1	3.94	10.2	15.5
MW-213	01/29/2013 09:50	4.98	-94	6.26	2.4	4.05	11	34.3
MW-213	01/29/2013 09:53	2.66	-85	6.3	2.1	3.99	10.7	6.8
MW-213	01/29/2013 09:56	2.45	-87.1	6.29	2.1	3.98	10.7	7
MW-213	01/29/2013 09:59	1.9	-87.6	6.28	2.1	3.92	10.5	5.5
MW-213	01/29/2013 10:02	1.74	-90	6.28	2.1	3.91	10.6	2.2
MW-213	01/29/2013 10:05	1.72	-91.3	6.28	2.1	3.91	10.7	4.2
MW-213	01/29/2013 10:08	1.71	-92	6.28	2.1	3.92	10.7	1.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-213	01/29/2013 10:11	1.69	-91	6.29	2.1	3.92	10.7	2.1
MW-213	01/29/2013 10:14	1.66	-90.4	6.29	2.1	3.91	10.7	1.9
MW-213	01/29/2013 10:17	1.68	-90.2	6.29	2.1	3.92	10.5	3
MW-213	01/29/2013 10:20	1.67	-90.5	6.29	2.09	3.923	10.32	2.90
MW-213	01/29/2013 11:00	6.24	-105	6.50	1.98	3.719	12.08	21.50
MW-213	01/30/2013 11:36	5.29	-92.2	6.45	2.68	4.620	11.80	43.60
MW-213	05/09/2013 13:20	1.1	-77.8	6.64	2.94	4.636	17.32	14.3
MW-213	05/10/2013 13:40	2.07	-75.9	6.7	2.2	3.248	13.81	152.9
MW-213	07/10/2013 09:45	4.53	-51	6.18	6.15	9.925	20.67	10.9
MW-213	07/10/2013 10:45	2.08	-77	6.29	3.8	6.311	20.56	33.4
MW-213	07/10/2013 10:55	3.64	-71	6.30	3.90	6.683	21.04	26.90
MW-213	07/11/2013 10:55	3.64	-71	6.3	3.9	6.683	21.04	26.9
MW-213	12/13/2013 09:20	4.27	-68.8	6.23	2.58	4.836	10.39	15.30
MW-213	12/13/2013 10:10	5.31	-81.7	6.40	2.56	4.710	10.53	54.00
MW-213	12/13/2013 10:25	4.41	-75.5	6.43	2.57	4.790	7.50	56.20
MW-213	07/14/2015 12:41	2.61	-328	NM	0.38	6.848	18.41	19.2
MW-213	10/20/2015 09:40	1.42	109	6.19	0.66	11.4	20.93	19.8
MW-213	10/20/2015 10:27	4.88	-43	6.13	1.64	26.5	20.95	335.6
MW-213	03/01/2016 10:30	0.25	-116	6.38	0.11	2.209	9.57	17.60
MW-213	03/01/2016 11:11	3.66	-129	6.66	0.83	14.400	10.64	739.50
MW-213	08/18/2016 10:12	1.67	-116	6.18	3.35	50.450	22.46	10.50
MW-213	08/18/2016 11:51	4.80	-104	6.71	1.64	26.410	21.68	257.20
MW-213	09/01/2016 10:21	1.14	35.9	7.03	3.05	5.625	22.81	6.40
MW-213	09/01/2016 10:30	1.78	36.7	7.00	3.05	5.633	22.88	37.40
MW-213	10/20/2016 14:15	0.47	-81.6	6.34	3.39	6.389	20.14	0.0000
MW-213	10/20/2016 14:25	0.43	-79.7	6.17	3.40	6.512	20.10	0.0000
MW-213	12/07/2016 14:30	3.03	-62.9	6.47	1.56	2.973	15.52	50.3
MW-213	12/07/2016 14:50	3.8	-70.2	6.5	1.47	2.809	15.64	35.1
MW-213	01/16/2017 10:00	2.13	-95.1	6.73	1.02	1.996	9.86	4.5
MW-213	01/16/2017 10:05	1.52	-107.5	6.72	1.02	1.993	10.16	4.1
MW-213	01/16/2017 10:10	1.21	-111.3	6.76	1.02	1.991	10.36	4
MW-213	01/16/2017 10:15	1.11	-115.8	6.77	1.03	2.017	10	4.6
MW-213	01/16/2017 10:20	1.01	-116.8	6.78	1.03	2.009	9.98	4.4
MW-213	01/16/2017 10:25	0.94	-121.9	6.78	1.02	1.998	10.19	4.5
MW-213	01/16/2017 10:30	0.84	-122.9	6.78	1.02	1.996	10.33	4.5
MW-213	01/16/2017 10:35	0.79	-120	6.79	1.02	1.996	10.46	4.5
MW-213	01/16/2017 10:40	0.72	-122.1	6.79	1.02	1.996	10.46	4.4
MW-213	01/16/2017 12:20	2.54	-93.7	6.67	1.26	2.437	15.28	28.40
MW-213	01/16/2017 12:35	1.80	-95	6.64	1.26	2.425	12.70	7.10
MW-213	01/31/2017 11:45	4.74	-135	6.55	0.14	2.657	11.13	119.90
MW-213	01/31/2017 12:31	0.71	-140	6.51	0.13	2.499	10.78	17.70
MW-213	04/24/2017 12:00	0.21	-97.70	6.72	1.18	2.280	12.32	0.0000
MW-213	04/24/2017 13:30	4.93	-84.70	7.10	1.43	2.748	12.17	1.40
MW-213	04/24/2017 13:45	3.09	-65.40	6.84	1.38	2.646	12.72	3.00
MW-213	01/10/2018 08:45	6.76	-65.2	7.53	0.61	1.211	8.35	0.8
MW-213	01/10/2018 08:50	0.93	-61.8	6.31	1.19	2.306	9.76	0
MW-213	01/10/2018 08:55	0.61	-68.3	6.26	1.18	2.279	10.03	0
MW-213	01/10/2018 09:00	0.47	-71.3	6.25	1.17	2.278	10.17	0
MW-213	01/10/2018 09:05	0.38	-74.6	6.27	1.17	2.277	10.35	0
MW-213	01/10/2018 09:10	0.37	-75.5	6.28	1.16	2.277	10.39	0
MW-213	01/10/2018 09:15	0.37	-76.10	6.28	1.15	2.276	10.39	0.0000
MW-213	01/10/2018 10:35	0.39	-71.10	6.36	1.26	2.121	11.31	0.0000
MW-213	01/10/2018 10:50	2.47	-110.10	6.14	1.61	3.261	9.41	26.10
MW-213	02/06/2018 09:16	3.41	14	6.81	0.1557	3.0165	7.9	30.2
MW-213	02/06/2018 09:18	1.89	18	6.58	0.1543	2.9922	7.65	12.8
MW-213	02/06/2018 09:20	1.2	21	6.43	0.1540	2.9833	8.01	11.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-213	02/06/2018 09:22	0.94	21	6.37	0.1540	2.9835	7.95	10.7
MW-213	02/06/2018 09:24	0.81	20	6.31	0.1542	2.9836	8.29	10.4
MW-213	02/06/2018 09:27	0.79	19	6.29	0.1542	2.9834	8.34	11.8
MW-213	02/06/2018 09:29	0.85	17	6.28	0.1542	2.9836	8.37	10.2
MW-213	02/06/2018 09:31	0.95	16	6.28	0.1542	2.9846	8.27	9.6
MW-213	02/06/2018 09:33	1.09	14	6.28	0.1542	2.9859	8.15	9.9
MW-213	02/06/2018 09:35	1.15	13	6.28	0.1543	2.9881	8.06	10
MW-213	02/06/2018 09:37	1.2	12	6.28	0.1543	2.9901	7.97	9.6
MW-213	02/07/2018 09:37	1.20	12.00	6.28	0.15	3.000	7.85	9.58
MW-213	02/07/2018 09:51	0.54	143.00	6.81	0.19	3.684	9.86	19.10
MW-213	02/07/2018 10:15	4.40	-9.00	6.82	0.23	4.298	10.06	62.80
MW-213	05/09/2018 10:28	2.09	-127	6.58	0.2541	4.6957	20.21	6.1
MW-213	05/09/2018 10:30	1.52	-125	6.57	0.2488	4.6112	18.15	6
MW-213	05/09/2018 10:32	1.32	-119	6.58	0.2502	4.6401	17.01	5.8
MW-213	05/09/2018 10:35	1.12	-120	6.59	0.2493	4.6252	16.76	5.8
MW-213	05/09/2018 10:37	1.06	-122	6.59	0.2489	4.6171	17.11	6.2
MW-213	05/09/2018 10:40	1.05	-124	6.6	0.2508	4.6480	17.37	5.7
MW-213	05/09/2018 10:42	1	-126	6.61	0.2512	4.6556	17.37	5.6
MW-213	05/09/2018 10:44	1.02	-127	6.61	0.2506	4.6458	17.26	5
MW-213	05/09/2018 10:47	0.98	-129	6.62	0.2494	4.6250	17.25	5
MW-213	05/09/2018 10:49	0.95	-131	6.63	0.2499	4.6339	17.14	6.8
MW-213	05/09/2018 10:51	0.92	-133	6.63	0.2496	4.6286	17.26	5.7
MW-213	05/09/2018 10:54	0.91	-135	6.64	0.2497	4.6287	17.38	5.4
MW-213	05/09/2018 10:56	0.93	-136	6.65	0.2503	4.6381	17.64	4.7
MW-213	05/09/2018 10:58	0.92	-138	6.65	0.2500	4.6337	17.63	4.8
MW-213	05/09/2018 11:01	0.91	-139	6.66	0.2502	4.6378	17.57	4.9
MW-213	05/10/2018 11:01	0.91	-139.00	6.66	0.25	4.619	17.75	4.93
MW-213	05/10/2018 11:05	2.63	43.00	7.16	0.32	5.824	13.37	12.10
MW-213	05/10/2018 11:40	3.80	-123.00	6.67	0.34	6.195	12.57	16.10
MW-213	07/24/2018 10:03	3.63	-79	6.77	0.3317	6.0210	26.14	10.55
MW-213	07/24/2018 10:05	2.16	-101	6.6	0.3432	6.2160	24.57	6.755
MW-213	07/24/2018 10:07	1.98	-110	6.57	0.3399	6.1610	24.65	6.409
MW-213	07/24/2018 10:10	2.02	-115	6.56	0.3364	6.1010	24.91	6.283
MW-213	07/24/2018 10:12	2.17	-118	6.56	0.3306	6.0020	24.79	6.496
MW-213	07/24/2018 10:14	2.22	-121	6.57	0.3263	5.9290	25.11	6.378
MW-213	07/24/2018 10:16	2.22	-123	6.57	0.3212	5.8430	24.95	5.297
MW-213	07/24/2018 10:19	2.14	-125	6.57	0.3176	5.7810	24.8	6.058
MW-213	07/24/2018 10:21	2.07	-127	6.57	0.3158	5.7500	24.99	5.568
MW-213	07/24/2018 10:23	2.00	-129.00	6.58	0.31	5.709	25.33	6.17
MW-213	08/29/2018 09:30	2.65	-112.40	6.24	3.15	5.809	21.06	14.70
MW-213	08/29/2018 10:55	6.69	-90.60	6.19	2.49	4.667	23.46	3.20
MW-213	08/29/2018 11:13	4.61	-56.10	6.11	2.30	4.346	24.97	6.80
MW-213	11/06/2018 10:15	3.61	-58.4	6.56	1.97	3.939	17.55	3.2
MW-213	11/06/2018 10:20	1.74	-73.5	6.55	1.97	3.733	17.81	7.1
MW-213	11/06/2018 10:25	1.57	-80.4	6.54	1.92	3.619	17.83	7.7
MW-213	11/06/2018 10:30	1.58	-83.9	6.53	1.87	3.561	17.76	7.5
MW-213	11/06/2018 10:35	1.5	-86.7	6.54	1.73	3.294	17.7	11.6
MW-213	11/06/2018 10:40	1.57	-87.5	6.54	1.7	3.15	17.68	9.9
MW-213	11/06/2018 10:45	1.80	-87.60	6.56	1.50	2.851	17.92	9.70
MW-213	11/06/2018 11:25	1.57	-85.80	6.57	1.36	2.626	17.5	7.90
MW-213	11/06/2018 11:35	1.72	-80.40	6.54	1.35	2.714	17.62	8.20
MW-213	05/13/2019 11:00	0.56	-74.4	6.69	NM	1.855	12.23	4.1
MW-213	05/13/2019 12:16	0.16	-116.6	6.92	1.1	2.131	13.1	1.4
MW-213	08/13/2019 10:15	0.52	-84	6.48	NM	10.25	23.5	4.9
MW-213	08/13/2019 10:20	0.42	-94	6.49	NM	10.28	24.04	4
MW-213	08/13/2019 10:25	0.33	-97.3	6.49	NM	10.31	24.29	3.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-213	08/13/2019 10:30	0.31	-95.9	6.49	NM	10.3	24.38	3.6
MW-213	08/13/2019 10:35	0.19	-79.8	6.49	NM	10.23	24.39	3.4
MW-213	08/13/2019 10:40	0.18	-78.4	6.49	NM	10.21	24.45	3.5
MW-213	08/13/2019 10:45	0.16	-86.6	6.49	NM	10.16	24.47	3.5
MW-213	08/13/2019 10:50	0.16	-86.6	6.49	NM	10.11	24.45	3.2
MW-213	08/13/2019 10:55	0.16	-88.5	6.5	NM	10.07	24.48	3.5
MW-213	08/13/2019 11:05	0.16	-88.5	6.5	NM	10.07	24.48	3.5
MW-213	08/13/2019 11:05	0.16	-88.5	6.5	NM	10.07	24.48	3.5
MW-213	08/13/2019 12:40	2.91	-79.3	6.68	3.34	6.137	22.99	6.7
MW-213	08/13/2019 12:50	2.65	80.7	6.63	3.09	5.705	22.64	7.7
MW-213	02/20/2020 13:40	0.48	-95.1	6.82	NM	0.565	9.47	10.5
MW-213	02/20/2020 14:50	1.88	-106.4	6.79	0.41	0.823	10.42	6.9
MW-213	02/16/2021 11:20	3.47	-79	6.81	1.15	2.236	8.91	11
MW-213	02/16/2021 11:25	0.67	-31	6.63	1.14	2.208	8.83	30.1
MW-213	02/16/2021 11:30	0.52	-39.4	6.65	1.14	2.207	9.02	39
MW-213	02/16/2021 11:35	0.41	-49	6.69	1.14	2.214	9.1	38.7
MW-213	02/16/2021 11:40	0.37	-47.9	6.76	1.14	2.217	9.17	37
MW-213	02/16/2021 11:45	0.34	-54.1	6.69	1.14	2.221	8.97	37.4
MW-213	02/16/2021 11:50	0.3	-62.9	6.71	1.14	2.219	9.16	37.4
MW-213	02/16/2021 11:55	0.28	-77.2	6.71	1.15	2.228	9.3	25.1
MW-213	02/16/2021 12:00	0.26	-74	6.72	1.16	2.244	9.26	25.6
MW-213	02/16/2021 12:05	0.26	-80.5	6.73	1.16	2.25	9.38	25.7
MW-213	02/16/2021 14:18	2.04	118.3	6.74	1.7	3.236	11.64	-3.7
MW-213	02/16/2021 14:56	3.4	-91.6	6.78	1.73	3.29	11.4	0.2
MW-213	08/25/2021 12:30	1.01	-196	6.71	2.09	3.903	25.51	3.7
MW-213	08/25/2021 12:35	0.93	-198.4	6.72	1.98	3.739	25.77	3.6
MW-213	08/25/2021 12:40	0.9	-202.3	6.73	1.87	3.559	25.84	3.7
MW-213	02/09/2022 08:55	3.99	23.7	6.65	1.11	2.16	9.43	24.8
MW-213	02/09/2022 09:00	4.17	3.5	6.73	1.09	2.108	8.81	24.2
MW-213	02/09/2022 09:05	7.04	4.7	6.73	1.06	2.073	8.31	24
MW-213	02/09/2022 09:10	7.87	8.9	6.68	1.05	2.054	7.84	23.7
MW-213	02/09/2022 09:15	8.04	18.4	6.56	1.05	2.058	7.71	22.1
MW-213	02/09/2022 09:20	7.61	29.6	6.44	1.6	2.074	7.74	20.5
MW-213	02/09/2022 09:25	6.98	38.6	6.33	1.08	2.102	7.93	19.8
MW-213	02/09/2022 09:30	7.9	43.1	6.26	1.08	2.105	8.09	18
MW-213	02/09/2022 09:35	9.22	50.1	6.19	1.09	2.129	8.24	18.3
MW-213	02/09/2022 09:40	9.9	51.9	6.15	1.1	2.14	8.33	17
MW-214	04/23/2012 11:41	1.42	-56.1	6.30	NM	13.03	12.2	25.0
MW-214	04/23/2012 11:43	1.35	-64.4	6.29	NM	12.87	12.1	12.3
MW-214	04/23/2012 11:46	1.25	-67.1	6.31	NM	12.23	12.0	9.3
MW-214	04/23/2012 11:49	1.18	-68.9	6.32	NM	11.87	12.0	8.6
MW-214	04/23/2012 11:52	1.14	-69.7	6.34	NM	11.25	12.1	9.5
MW-214	04/23/2012 11:55	1.06	-70.5	6.36	NM	10.50	12.2	4.9
MW-214	04/23/2012 11:58	0.98	-70.1	6.38	NM	9.80	12.2	4.1
MW-214	04/23/2012 12:01	0.96	-71.3	6.39	NM	9.50	12.2	4.1
MW-214	04/23/2012 12:04	0.95	-71	6.40	NM	9.20	12.2	3.5
MW-214	04/23/2012 12:10	5.22	-119	8.68	0.40	6.960	11.91	50.70
MW-214	04/23/2012 13:10	0.07	-111	8.82	0.20	4.080	11.73	71.10
MW-214	04/24/2012 13:30	0.13	-105	8.89	0.20	4.050	12.29	70.50
MW-214	06/21/2012 12:13	3.27	-101	6.52	6.5	11.40	23.0	9.5
MW-214	06/21/2012 12:16	1.90	-101	6.44	5.9	10.40	21.3	8.0
MW-214	06/21/2012 12:19	1.40	-18	6.43	5.2	9.41	21.2	3.6
MW-214	06/21/2012 12:22	1.30	-98	6.41	5.0	9.01	21.8	2.3
MW-214	06/21/2012 12:25	1.17	-97	6.39	4.8	8.70	21.8	2.1
MW-214	06/21/2012 12:28	1.08	-97	6.40	4.7	8.46	21.6	2.3
MW-214	06/21/2012 12:31	0.98	-96	6.41	4.6	8.28	21.7	2.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-214	06/21/2012 12:34	0.85	-97	6.42	4.4	7.91	21.5	2.3
MW-214	06/21/2012 12:37	0.81	-97	6.43	4.3	7.85	21.1	2.2
MW-214	06/21/2012 12:40	0.73	-97	6.44	4.2	7.81	21.0	2.4
MW-214	06/21/2012 12:48	1.28	-96	6.50	3.50	6.470	22.16	9.30
MW-214	06/21/2012 14:10	0.64	-100	6.54	2.30	4.320	18.57	9.70
MW-214	06/22/2012 14:23	1.62	-97	6.67	2.40	4.500	19.77	60.60
MW-214	01/28/2013 08:52	1.59	7.1	6.22	3.8	6.9	6.6	101.2
MW-214	01/28/2013 08:55	1.2	12	6.21	3.8	6.86	6.5	93.2
MW-214	01/28/2013 08:58	1.13	11.5	6.23	3.8	6.87	6.6	93.4
MW-214	01/28/2013 09:01	1.04	9.5	6.23	3.8	6.88	6.8	92.3
MW-214	01/28/2013 09:04	0.98	7.8	6.23	3.8	6.88	6.9	88.2
MW-214	01/28/2013 09:07	0.87	6.7	6.23	3.8	6.89	7	84
MW-214	01/28/2013 09:10	0.79	2.4	6.24	3.8	6.89	7	81.6
MW-214	01/28/2013 09:13	0.66	1.1	6.23	3.7	6.83	7	83.8
MW-214	01/28/2013 09:16	0.66	0.6	6.24	3.7	6.8	6.9	82.9
MW-214	01/28/2013 09:19	0.61	0.5	6.25	3.7	6.74	6.9	80
MW-214	01/28/2013 09:22	0.61	0.5	6.25	3.7	6.73	6.9	80
MW-214	05/10/2013 09:00	1.1	-123.4	10.86	11.12	15.81	16.85	14.3
MW-214	05/10/2013 10:25	0.2	-128.1	10.76	11.36	17.78	21.42	13.4
MW-214	05/11/2013 10:30	0.11	-139.4	10.8	11.36	15.81	21.2	25.2
MW-214	07/03/2013 11:30	9.9	-72	9.94	7.79	13.16	23.35	15
MW-214	07/03/2013 13:00	10.2	-110	9.98	7.68	12.83	23.98	14.3
MW-214	07/03/2013 13:30	8.76	-200	9.99	5.68	9.870	24.10	10.70
MW-214	07/04/2013 13:30	8.76	-200	9.99	5.68	9.87	24.1	10.7
MW-214	10/17/2013 09:20	40.98	3.47	6.33	27.63	31.770	21.25	23.00
MW-214	10/17/2013 10:20	28.73	495	3.30	11.07	23.520	21.57	1864.30
MW-214	10/17/2013 10:25	18.03	328	3.18	16.94	23.810	21.04	1840.10
MW-214	12/18/2013 13:30	2.32	76.3	6.13	9.56	16.290	6.72	133.20
MW-214	12/18/2013 14:40	2.61	32.7	6.16	8.65	14.210	13.53	115.70
MW-214	12/18/2013 14:51	2.13	7.68	6.34	21.06	33.520	14.76	265.60
MW-214	03/14/2014 13:30	2.32	76.3	6.13	9.56	16.290	6.72	133.20
MW-214	03/14/2014 14:40	2.61	32.7	6.16	8.65	14.210	13.53	115.70
MW-214	03/14/2014 14:51	2.13	76.8	6.34	21.06	33.520	14.76	265.60
MW-214	03/31/2014 11:10	0.57	-28.3	6.46	5.37	9.558	7.56	88.80
MW-214	03/31/2014 12:45	0.44	-88	6.54	3.19	5.867	8.50	9.50
MW-214	03/31/2014 13:05	0.41	-105.5	6.61	12.01	20.120	10.11	19.20
MW-214	07/11/2014 10:15	1.02	-93	6.71	13.50	22.500	20.58	96.00
MW-214	07/11/2014 12:10	2.61	-125.2	7.40	5.80	10.470	24.50	8.60
MW-214	07/11/2014 13:05	0.31	-104.2	6.84	6.63	12.040	23.30	212.60
MW-214	09/10/2014 10:45	0.34	-76.2	6.74	8.50	14.680	21.52	53.40
MW-214	09/10/2014 11:15	0.34	-97.8	5.77	4.74	8.480	20.68	12.70
MW-214	09/10/2014 11:25	0.95	-99.3	5.76	6.90	9.310	21.33	47.80
MW-214	03/10/2015 12:25	0.82	-13.3	6.89	5.00	9.250	8.00	22.50
MW-214	03/10/2015 14:05	2.99	-92	7.40	2.50	4.760	7.91	29.20
MW-214	03/10/2015 14:20	1.35	-99	7.10	2.50	4.840	7.30	33.30
MW-214	04/21/2015 14:30	0.14	-121.6	7.26	7.01	12.210	12.13	31.90
MW-214	04/22/2015 10:58	0.12	-85.7	7.26	2.66	4.942	9.60	0.0000
MW-214	07/23/2015 12:30	0.0000	-91	6.82	3.50	6.470	18.31	0.0000
MW-214	07/23/2015 13:20	0.45	-86	6.83	3.70	6.840	18.08	31.30
MW-214R	07/25/2016 11:55	2.93	-100	6.88	1.63	3.111	20.70	5.50
MW-214R	07/25/2016 12:10	3.04	-88.3	6.91	1.83	3.530	20.76	9.80
MW-214R	08/29/2016 13:55	0.76	-80.6	7.19	2.10	3.992	24.66	2.60
MW-214R	08/29/2016 14:05	1.04	-94.2	7.14	2.08	4.014	24.61	10.40
MW-214R	10/17/2016 14:50	1.86	-121.3	6.94	1.69	3.221	21.81	3.80
MW-214R	10/17/2016 15:00	2.49	-119.9	6.99	1.30	2.511	20.42	187.80
MW-214R	12/05/2016 11:30	6.17	-126.3	7.2	2.17	4.064	13.95	9.2

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-214R	12/05/2016 12:00	3.8	-70.4	7.01	1.93	3.633	13.46	424.7
MW-214R	01/17/2017 11:15	3.97	-54.2	7.30	1.71	3.257	10.34	6.00
MW-214R	01/17/2017 11:35	3.58	-72.8	7.28	1.65	3.141	10.08	108.00
MW-214R	06/06/2017 10:00	0.66	-32.00	6.85	1.77	3.320	11.24	9.90
MW-214R	06/06/2017 10:40	6.24	-46.10	7.02	2.51	4.664	12.65	2.10
MW-214R	06/06/2017 11:20	5.86	-49.60	7.18	1.90	3.584	13.14	401.20
MW-214R	01/11/2018 10:30	0.53	-155.30	7.03	2.42	3.999	10.94	0.0000
MW-214R	01/11/2018 10:55	0.54	-127.70	7.10	2.91	5.374	10.05	0.0000
MW-214R	01/11/2018 11:15	3.12	-118.20	7.13	2.33	4.362	10.15	266.50
MW-214R	08/27/2018 10:45	6.09	-79.60	7.24	1.11	2.174	20.98	38.00
MW-214R	08/27/2018 11:30	1.89	-84.50	7.16	1.15	2.890	23.74	12.10
MW-214R	08/27/2018 11:45	2.21	-62.50	7.29	0.78	1.555	26.27	119.60
MW-214R	02/07/2019 13:30	0.61	-34.3	7.21	NM	1.64	8.27	32.7
MW-214R	02/07/2019 14:10	0.41	-68.1	7.2	1.26	2.401	8.83	14.3
MW-214R	05/08/2019 13:05	2.94	-116.3	7.07	NM	1.316	16.28	NM
MW-214R	05/08/2019 14:00	2.3	-144.5	7.15	0.84	1.658	15.36	1
MW-214R	08/02/2019 10:05	2.02	-82.1	7.5	NM	3.032	20.67	61.1
MW-214R	08/02/2019 10:10	0.76	-90.7	7.4	NM	3.015	20.23	55
MW-214R	08/02/2019 10:15	0.45	-98.1	7.4	NM	3.208	20.27	21.5
MW-214R	08/02/2019 10:20	0.34	-104.1	7.4	NM	3.435	20.13	11.8
MW-214R	08/02/2019 10:25	0.26	-108.1	7.41	NM	3.568	20.16	6.5
MW-214R	08/02/2019 10:30	0.24	-111.1	7.4	NM	3.684	20.14	5.1
MW-214R	08/02/2019 10:35	0.23	-114.4	7.4	NM	3.84	20.03	2.9
MW-214R	08/02/2019 10:40	0.22	-120	7.4	NM	3.944	20.01	2.6
MW-214R	08/02/2019 10:45	0.21	-120	7.4	NM	4.043	20.02	1.4
MW-214R	08/02/2019 10:50	0.19	-123.4	7.39	NM	4.147	20.03	1.1
MW-214R	08/02/2019 13:50	0.19	-123.4	7.39	NM	4.147	20.03	1.1
MW-214R	08/02/2019 14:15	5.32	-126.2	7.48	1.27	2.467	22.28	10.2
MW-214R	08/02/2019 14:25	1.5	-101	7.55	1.08	2.12	24.63	97.1
MW-214R	02/05/2021 11:50	0.85	-233.8	7.63	11.71	19.5	9.46	19.24
MW-214R	02/05/2021 11:55	0.11	-242.3	7.01	6.9	11.94	9.45	60.1
MW-214R	02/05/2021 12:00	0.11	-246.7	6.97	6.63	11.67	9.18	53.9
MW-214R	02/05/2021 12:05	0.11	-250.5	6.9	6.34	11.2	8.93	28.2
MW-214R	02/05/2021 12:10	0.11	-250.8	6.84	6.21	11.05	8.83	17.9
MW-214R	02/05/2021 12:15	0.11	-250.3	6.79	6.09	10.74	8.82	12.5
MW-214R	02/05/2021 12:20	0.11	-251	6.78	6.04	10.66	8.8	11.9
MW-214R	02/05/2021 12:25	0.11	-252.2	6.75	5.99	10.58	8.86	12.3
MW-214R	02/05/2021 12:30	0.11	-252.2	6.73	5.98	10.55	8.68	11.6
MW-214R	02/05/2021 12:55	0.11	-257.4	6.71	6.17	10.83	8.89	15.1
MW-214R	02/05/2021 13:05	0.57	-243	6.57	2.15	4.063	8.6	34.7
MW-214R	08/25/2021 12:30	0.13	-116.4	6.55	1.59	3.062	22.93	6.2
MW-214R	02/09/2022 10:35	4.21	-198	6.92	7.4	13.19	9.35	238
MW-214R	02/09/2022 10:40	3.73	-186.6	6.75	4.72	8.505	9.22	222.9
MW-214R	02/09/2022 10:45	4.97	-177.6	6.73	3.33	6.11	8.76	56.4
MW-214R	02/09/2022 10:50	4.86	-178.4	6.78	3.31	6.063	8.7	47.6
MW-214R	02/09/2022 10:55	4.8	-180.7	6.73	3.35	6.136	8.67	31.4
MW-214R	02/09/2022 11:00	4.37	-184.1	6.73	3.25	5.97	8.73	16
MW-214R	02/09/2022 11:05	4.32	-184.6	6.36	3.24	5.962	8.73	15.1
MW-214R	02/09/2022 11:10	3.82	-188.9	6.78	3.23	5.93	8.78	7.1
MW-214R	02/09/2022 11:15	3.82	-189.1	6.73	3.24	5.938	8.76	7.2
MW-214R	02/09/2022 11:20	3.83	-189	6.73	3.25	5.957	8.76	7
MW-215	04/23/2012 16:47	6.30	-177	5.19	NM	2.09	11.4	21.4
MW-215	04/23/2012 16:50	6.67	-173	4.45	NM	1.85	11.4	17.4
MW-215	04/23/2012 16:53	9.68	-169	4.28	NM	1.59	11.5	15.6
MW-215	04/23/2012 16:56	11.69	-166	4.19	NM	1.47	11.7	10.7
MW-215	04/23/2012 16:59	13.20	-163	4.08	NM	1.38	11.8	13.0

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-215	04/23/2012 17:02	15.66	-164	4.17	NM	1.35	12.0	14.5
MW-215	04/23/2012 17:05	16.99	-166	4.27	NM	1.37	12.0	12.6
MW-215	04/23/2012 17:08	18.45	-168	4.39	NM	1.40	12.2	11.9
MW-215	04/23/2012 17:11	19.70	-168	4.51	NM	1.44	12.2	13.2
MW-215	04/23/2012 17:16	21.34	-164	4.62	NM	1.220	12.87	17.00
MW-215	04/23/2012 18:00	15.90	-201	5.55	NM	2.860	11.37	23.00
MW-215	04/24/2012 18:05	16.31	-205	5.59	NM	2.060	11.00	17.30
MW-215	06/20/2012 09:24	2.95	-211	5.44	1.1	2.17	23.3	16.2
MW-215	06/20/2012 09:27	2.18	-208	5.44	1.2	2.10	23.1	20.3
MW-215	06/20/2012 09:30	1.87	-205	5.44	1.1	2.11	23.3	19.5
MW-215	06/20/2012 09:33	1.78	-201	5.42	1.0	2.05	23.7	20.1
MW-215	06/20/2012 09:36	1.57	-199	5.42	1.0	2.06	24.0	20.5
MW-215	06/20/2012 09:39	1.51	-198	5.41	1.0	2.03	24.5	19.0
MW-215	06/20/2012 09:42	1.34	-197	5.44	1.1	2.08	24.8	18.8
MW-215	06/20/2012 09:45	1.29	-197	5.44	1.1	2.07	25.0	18.8
MW-215	06/20/2012 09:48	1.22	-198	5.45	1.1	2.07	25.1	19.7
MW-215	06/20/2012 09:51	1.25	-194	5.45	1.0	2.04	25.6	19.8
MW-215	06/20/2012 09:54	1.26	-195	5.45	1.0	2.03	25.4	20.2
MW-215	06/20/2012 10:05	1.00	-120	5.58	1.00	1.890	23.45	60.30
MW-215	06/20/2012 12:00	2.65	-215	6.36	1.80	3.490	19.21	16.30
MW-215	06/21/2012 12:45	9.23	-90	6.98	0.80	2.010	25.26	58.50
MW-215	01/28/2013 14:33	0.56	-185.2	4.6	3	5.46	6.1	100.6
MW-215	01/28/2013 14:36	0.31	-172.6	4.36	2.8	5.17	6.6	154.7
MW-215	01/28/2013 14:39	0.12	-167.8	4.16	2.8	5.14	6.4	132.1
MW-215	01/28/2013 14:42	0.02	-164.4	4.09	2.8	5.13	6.2	118.7
MW-215	01/28/2013 14:45	0.01	-163.6	4.09	2.8	5.12	6.2	116.9
MW-215	01/28/2013 14:48	0	-171.2	4.05	2.8	5.12	6.2	101.2
MW-215	01/28/2013 14:51	0	-171.2	4.05	2.8	5.12	6.2	101.2
MW-215	01/28/2013 14:54	0	-159.4	4.04	2.7	5.12	5.2	106.4
MW-215	01/28/2013 14:57	0	-160.1	4.03	2.7	5.1	5.8	101
MW-215	01/28/2013 15:00	0	-162.1	4.02	2.7	5.1	6.1	100.3
MW-215	01/28/2013 15:03	0	-163.3	4.01	2.7	5.1	6.1	100.7
MW-215	05/13/2013 09:39	2.66	39.4	4	2	2.836	11.97	31.4
MW-215	05/13/2013 11:44	0.27	-477.1	11.44	8.63	11.34	12.74	218.7
MW-215	05/14/2013 11:50	0.24	474.1	11.51	9.02	12.08	13.81	391.9
MW-215	07/01/2013 12:00	1.14	102	5.22	1.8	3.34	22.91	17.3
MW-215	07/01/2013 12:10	0.16	-292	9.99	7.83	11.6	17.6	25.8
MW-215	07/02/2013 12:20	0.17	-306	9.96	8.41	12.56	20.09	51.5
MW-215	10/15/2013 09:10	4.77	176.2	5.87	4.85	8.590	18.58	12.00
MW-215	10/15/2013 10:30	4.85	-260	6.11	10.08	17.080	19.38	9.80
MW-215	10/15/2013 10:40	4.63	-237	6.12	10.36	17.500	19.53	28.40
MW-215	10/16/2013 10:40	4.63	-237	6.12	10.36	17.500	19.53	28.40
MW-215	12/16/2013 11:40	1.18	79	4.31	2.07	3.940	5.30	44.90
MW-215	12/16/2013 13:15	0.54	-95.1	5.77	4.01	7.230	11.78	7.00
MW-215	12/16/2013 13:25	0.70	-117.3	5.86	4.68	8.280	11.48	52.40
MW-215	03/31/2014 11:25	1.83	355.2	4.83	0.68	1.343	6.88	18.90
MW-215	03/31/2014 13:05	3.17	-34.2	6.19	2.27	2.429	9.81	3.90
MW-215	03/31/2014 13:30	0.52	-43.4	6.65	2.34	4.373	9.03	2.90
MW-215	07/16/2014 10:40	0.54	-52.3	6.34	5.53	8.792	18.20	41.20
MW-215	07/16/2014 12:25	0.80	33.6	6.69	0.67	8.071	19.10	157.00
MW-215	07/16/2014 12:55	9.33	-35.7	6.71	0.67	9.362	20.06	139.40
MW-215	09/11/2014 11:15	0.67	191.7	4.36	0.91	1.803	23.16	19.70
MW-215	09/11/2014 13:45	0.67	191.8	4.36	0.91	1.804	23.36	19.40
MW-215	09/11/2014 14:15	0.76	201.3	4.40	0.91	1.824	23.40	30.46
MW-215	01/14/2015 11:55	1.12	10.8	5.82	0.92	1.815	6.45	72.70
MW-215	01/14/2015 13:20	0.32	22.2	6.17	1.82	3.418	10.16	1.00

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-215	01/14/2015 13:35	2.25	38.7	6.20	1.87	3.570	7.65	10.50
MW-215	04/22/2015 10:15	1.79	178.7	5.50	0.83	1.629	9.91	38.50
MW-215	04/22/2015 11:40	3.63	264.7	5.14	0.90	1.764	11.12	19.20
MW-215	07/23/2015 14:45	0.41	-184	6.11	6.80	11.900	17.74	5.60
MW-215	07/23/2015 15:05	0.0000	-219	6.14	7.40	12.900	17.90	247.00
MW-227	05/07/2012 11:32	3.15	-19	6.53	0.07	1.347	14.65	39.80
MW-227	05/08/2012 10:22	0.06	-80	6.79	0.07	1.324	14.44	15.10
MW-227	07/11/2013 14:06	1.43	-132	6.91	0.24	4.553	15.88	263.10
MW-227	07/12/2013 10:24	1.10	-150.00	6.76	0.26	4.791	15.33	22.10
MW-227R	05/19/2016 10:28	6.10	44	6.40	0.09	1.690	12.56	44.00
MW-227R	05/19/2016 11:24	9.61	23	6.96	0.11	2.140	13.78	300.20
MW-227R	06/14/2017 09:19	0.45	-3.00	6.69	0.16	3.139	17.57	11.17
MW-227R	06/14/2017 09:20	1.76	211.00	7.45	0.11	2.111	16.08	263.90
MW-227R	06/14/2017 09:57	1.06	-109.00	6.42	0.06	1.205	15.65	55.30
MW-227R	05/30/2018 09:44	4.63	-67	7.02	0.050	0.9940	17.94	41.6
MW-227R	05/30/2018 09:45	2.57	-67	6.82	0.050	0.9943	17.36	19.4
MW-227R	05/30/2018 09:47	1.9	-69	6.73	0.049	0.9744	17.01	23.4
MW-227R	05/30/2018 09:49	1.68	-70	6.67	0.048	0.9668	17.07	22.1
MW-227R	05/30/2018 09:51	1.49	-71	6.62	0.048	0.9566	17.19	28.5
MW-227R	05/30/2018 09:53	1.43	-71	6.57	0.047	0.9421	17.24	32.6
MW-227R	05/30/2018 09:55	1.35	-72	6.54	0.046	0.9287	17.31	34.1
MW-227R	05/30/2018 09:57	1.34	-73.00	6.52	0.05	0.907	17.52	36.32
MW-227R	11/25/2015 10:52	1.00	-77	6.58	0.11	2.212	15.92	43.40
MW-227R	11/25/2015 11:58	3.39	-4	6.73	0.10	1.886	15.51	1765.20
MW-228	05/07/2012 10:27	7.67	-32	6.54	0.03	0.705	14.04	134.30
MW-228	05/08/2012 09:35	0.10	-70	6.54	0.04	0.726	14.60	18.40
MW-228	07/08/2013 14:26	0.86	-133	6.79	0.07	1.290	19.56	28.90
MW-228	07/09/2013 11:31	0.41	-318.00	6.59	0.07	1.400	21.63	28.00
MW-228	12/18/2014 15:18	1.23	-138	6.75	0.06	1.206	10.83	2742.20
MW-228	12/19/2014 10:46	0.63	-237	6.61	0.06	1.170	11.89	142.80
MW-228	12/15/2015 10:22	9.6	-28	7.13	0.03	0.707	15.42	1256.7
MW-228	12/15/2015 10:23	3.7	250	7.16	0.02	0.889	14.75	451.5
MW-228	05/19/2016 09:45	1.22	48	6.18	0.03	0.525	14.04	45.50
MW-228	05/19/2016 09:46	10.81	61	6.82	0.07	1.398	13.40	1507.20
MW-228	06/13/2017 14:07	1.57	16.00	8.10	0.09	1.693	15.91	192.60
MW-229	07/08/2013 11:42	0.70	-156	7.36	0.04	0.752	17.54	214.20
MW-229	07/09/2013 10:51	0.38	-259.00	6.24	0.02	0.376	24.30	41.30
MW-229R	12/15/2015 08:58	4.39	-6	7.47	0.02	0.491	12.52	382.6
MW-229R	03/07/2017 10:38	9.23	-117	8.15	0.02	0.478	7.39	481.00
MW-229R	03/06/2019 09:24	6.83	34.5	6.91	0.08	0.178	2.66	36.9
MW-235	06/26/2012 14:44	0.12	-5	10.41	0.05	1.037	19.18	6.89
MW-235	06/27/2012 11:00	4.58	100	6.91	0.80	1.190	18.20	649.00
MW-235	09/04/2012 13:04	4.61	165	6.80	0.00	0.67	23.0	178.0
MW-235	09/04/2012 13:06	3.90	160	6.76	0.00	0.66	23.9	186.0
MW-235	09/04/2012 13:08	3.80	154	6.75	0.00	0.67	23.3	49.0
MW-235	09/04/2012 13:10	3.75	134	6.76	0.00	0.67	22.8	39.2
MW-235	09/04/2012 13:12	3.70	106	6.76	0.00	0.67	22.9	56.5
MW-235	09/04/2012 13:14	3.54	86	6.75	0.00	0.67	23.0	30.9
MW-235	09/04/2012 13:16	3.45	69	6.75	0.00	0.67	23.1	21.6
MW-235	09/04/2012 13:18	3.41	55	6.77	0.00	0.67	23.1	18.2
MW-235	09/04/2012 13:20	3.38	52	6.77	0.00	0.67	23.1	18.8
MW-235	09/04/2012 13:22	3.37	52	6.78	0.00	0.67	23.1	17.6
MW-235	10/01/2013 09:29	1.84	-371	6.72	0.17	3.135	20.20	124.00
MW-235	10/01/2013 09:47	3.75	-337	6.86	0.13	2.412	19.81	586.10
MW-235	10/02/2013 10:08	1.86	-357	6.78	0.20	3.816	19.45	65.20
MW-235	08/11/2014 09:23	5.44	-299	6.77	0.11	2.079	22.02	23.66

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-235	08/11/2014 09:56	3.73	-301	7.25	0.10	1.975	19.50	56.60
MW-235	07/15/2015 11:57	1.17	-32	6.93	0.24	4.512	19.56	636.2
MW-235	07/15/2015 14:35	2.3	-343	13.54	0.07	1.465	17.22	91.6
MW-235	02/10/2016 09:42	4.82	24	6.60	0.06	1.238	8.23	4.30
MW-235	02/10/2016 11:11	6.57	69	6.62	0.14	2.711	8.52	89.60
MW-235	08/19/2016 10:33	1.82	-19	6.69	0.04	0.740	19.89	84.70
MW-235	08/19/2016 11:42	20.50	14	6.94	0.23	4.280	21.13	62.90
MW-235	02/28/2017 11:25	10.98	120	6.94	0.06	1.132	8.41	226.00
MW-235	02/28/2017 14:43	3.42	288	7.24	0.12	7.367	13.14	58.00
MW-235	02/14/2018 09:18	8.83	269	7.75	0.049	0.9963	7.48	12
MW-235	02/14/2018 09:20	5.32	268	7.19	0.046	0.9476	6.96	6
MW-235	02/14/2018 09:23	4.33	264	6.95	0.046	0.9427	6.76	5.4
MW-235	02/14/2018 09:26	3.97	258	6.83	0.046	0.9431	6.96	2.8
MW-235	02/14/2018 09:29	3.92	252	6.78	0.046	0.9376	7	2.5
MW-235	02/14/2018 09:31	3.83	245	6.75	0.046	0.9361	7	2.7
MW-235	02/14/2018 09:34	3.77	240	6.73	0.046	0.9359	7.05	1.4
MW-235	02/14/2018 09:37	3.64	235	6.71	0.046	0.9349	7.16	1.5
MW-235	02/14/2018 09:40	3.72	231	6.7	0.046	0.9373	7.12	1.9
MW-235	02/14/2018 09:42	3.6	228	6.68	0.046	0.9350	7.27	2
MW-235	02/14/2018 09:45	3.65	227	6.68	0.046	0.9374	7.27	2.1
MW-235	02/14/2018 09:48	3.61	225	6.67	0.046	0.9392	7.26	2.1
MW-235	02/15/2018 09:33	2.43	333.00	7.04	0.05	0.940	7.69	2.70
MW-235	02/15/2018 09:48	3.61	225.00	6.67	0.05	0.943	7.14	2.09
MW-235	02/15/2018 10:10	4.36	280.00	7.32	0.05	1.018	7.7	65.20
MW-235	08/28/2018 09:31	4.39	165.00	6.92	0.11	2.145	20.59	4.60
MW-235	08/28/2018 09:45	2.49	91.00	6.84	0.11	2.167	23.1	1.57
MW-235	08/28/2018 10:14	2.21	114.00	7.38	0.11	2.192	21.11	9.40
MW-235	01/29/2019 10:40	5.53	128.60	7.08	0.44	0.881	8.09	1.60
MW-235	01/29/2019 13:25	13.39	202.60	7.47	0.42	0.855	7.76	16.10
MW-235	01/29/2019 13:40	9.33	199.10	7.49	0.43	0.875	7.93	108.70
MW-235	08/21/2019 12:10	3.5	-62.9	6.97	NM	1.011	24.42	3.9
MW-235	08/21/2019 12:15	3.46	-33.2	6.84	NM	0.998	25.26	0
MW-235	08/21/2019 12:20	4	1	6.85	NM	0.995	25.31	7.9
MW-235	08/21/2019 12:25	4.34	8.6	6.84	NM	0.995	25.09	3.9
MW-235	08/21/2019 12:30	4.27	17.4	6.83	NM	0.993	24.94	0
MW-235	08/21/2019 12:35	4.1	22.8	6.84	NM	0.997	25.3	0
MW-235	08/21/2019 12:40	4.13	29	6.84	NM	0.992	25.38	0
MW-235	08/21/2019 12:45	3.84	35.2	6.84	NM	0.99	25.14	0
MW-235	08/21/2019 12:50	3.8	38.7	6.83	NM	0.978	25.09	0
MW-235	08/21/2019 13:10	6.23	56.1	7.25	0.49	0.995	26.69	3
MW-235	08/21/2019 13:20	5.91	23.6	7.07	0.48	0.975	22.98	66.1
MW-235	01/28/2021 09:35	3.9	35.6	6.76	1.01	1.991	5.4	14.3
MW-235	01/28/2021 09:40	0.51	40	6.97	1.01	1.982	5.86	0.6
MW-235	01/28/2021 09:45	0.98	45	7	1.01	1.999	6.2	0.5
MW-235	01/28/2021 09:50	1.88	50.5	7.02	1.01	1.979	6.33	0.9
MW-235	01/28/2021 09:55	2.08	53.7	7.04	1.01	1.982	6.43	0.6
MW-235	01/28/2021 10:00	1.85	58.8	7.06	1.01	1.978	6.66	0.2
MW-235	01/28/2021 10:05	0.42	65	7.05	1.01	1.979	6.36	0.4
MW-235	01/28/2021 10:10	0.98	70.4	7.06	1.01	1.976	6.73	0.5
MW-235	01/28/2021 10:15	1.66	74.5	7.06	1.01	1.976	6.68	0.6
MW-235	01/28/2021 10:20	2.25	78.6	7.06	1.01	1.976	6.56	0.5
MW-235	01/28/2021 10:30	3.76	84.9	7.07	1.01	1.977	6.97	0.5
MW-235	01/28/2021 10:45	0.6	89.9	7.09	0.96	1.884	7.03	13
MW-236	05/02/2012 13:31	2.6	-65	6.99	0.13	2.47578	12.62	29.5
MW-236	05/02/2012 13:33	1.38	-87	7.07	0.13	2.51068	12.58	5.5
MW-236	05/02/2012 13:36	0.89	-97	7.1	0.13	2.50722	12.61	4.1

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-236	05/02/2012 13:38	0.67	-103	7.11	0.13	2.49964	12.74	19.1
MW-236	05/02/2012 13:41	0.56	-107	7.13	0.13	2.49919	12.65	24.1
MW-236	05/02/2012 13:44	0.48	-109	7.13	0.13	2.49762	12.55	8
MW-236	05/02/2012 13:46	0.42	-111	7.13	0.13	2.4909	12.76	33.8
MW-236	05/02/2012 13:49	0.41	-112	7.14	0.13	2.49231	12.8	16.7
MW-236	05/02/2012 13:52	0.37	-114	7.14	0.13	2.49142	12.69	14.6
MW-236	05/02/2012 13:54	0.34	-115	7.14	0.13	2.48747	12.85	13.4
MW-236	05/02/2012 13:57	0.32	-116	7.14	0.13	2.48766	12.87	14.2
MW-236	05/02/2012 14:00	0.28	-116	7.15	0.13	2.4903	12.71	24.7
MW-236	05/02/2012 14:02	0.28	-117	7.15	0.13	2.50954	12.7	38.5
MW-236	05/02/2012 14:05	0.26	-117	7.15	0.13	2.53394	12.75	9.3
MW-236	05/02/2012 14:08	0.23	-119	7.16	0.13	2.51646	12.68	12.1
MW-236	05/02/2012 14:10	0.24	-120	7.17	0.13	2.49794	12.68	10.8
MW-236	05/02/2012 14:13	0.24	-120	7.17	0.13	2.49121	12.68	14.6
MW-236	05/02/2012 14:16	0.23	-120	7.16	0.13	2.48595	12.81	11.9
MW-236	05/02/2012 14:18	0.21	-120	7.16	0.13	2.4881	12.66	11.3
MW-236	05/02/2012 14:52	4.05	-81	7.25	0.13	2.482	13.87	10.50
MW-236	05/03/2012 10:31	0.06	-119	7.20	0.13	2.484	13.53	68.00
MW-236	09/04/2012 14:30	1.65	-128	7.09	0.10	2.550	23.10	29.10
MW-236	09/04/2012 14:58	3.50	-60	7.10	0.10	2.570	20.33	14.10
MW-236	09/05/2012 11:45	1.84	-130	6.98	0.10	2.560	20.09	3.00
MW-236	10/03/2013 10:06	0.58	-393	7.03	0.21	3.887	21.56	84.29
MW-236	10/03/2013 10:35	1.42	-398	6.94	0.22	4.148	20.10	25.30
MW-236	10/04/2013 09:51	0.44	-446	7.01	0.16	2.976	20.24	104.90
MW-236	11/06/2013 09:55	0.27	-124	6.89	0.94	1.831	17.72	18.90
MW-236	11/06/2013 10:10	0.19	-125	6.89	0.94	1.856	18.48	19.80
MW-236	11/07/2013 10:15	0.23	-139	6.90	0.94	1.835	18.11	28.00
MW-236	06/25/2014 08:40	0.71	-123	7.00	0.11	2.159	20.05	12.71
MW-236	06/25/2014 09:19	0.92	-87	6.70	0.10	1.873	15.86	7.70
MW-236	06/26/2014 12:52	0.21	-92	6.96	0.11	2.157	16.40	13.10
MW-236	11/04/2014 14:26	-0.50	-158	6.98	0.20	3.820	20.00	7.84
MW-236	11/04/2014 15:01	1.26	-134	6.85	0.20	3.798	18.24	80.30
MW-236	11/05/2014 12:10	0.0000	-172	6.87	0.26	4.721	17.98	256.40
MW-236	03/16/2015 11:55	4.09	-107.5	7.04	0.88	1.732	8.24	112.20
MW-236	03/16/2015 12:35	0.30	-103.6	7.07	1.07	2.067	8.84	49.70
MW-236	03/16/2015 12:50	0.59	-115.5	7.10	1.10	2.135	9.90	122.80
MW-236	07/10/2015 11:54	0.53	-125	6.94	0.9	15.42	15.83	69
MW-236	07/10/2015 15:53	1.18	-82	6.92	1.52	24.84	16.08	669.2
MW-236	01/05/2016 11:43	5.62	212	7.16	0.13	2.453	15.21	77.2
MW-236	01/05/2016 14:04	10.35	-105	7.11	1.42	23.62	11.72	1380.5
MW-236	06/21/2016 11:08	0.75	-165	7.17	0.15	2.921	15.32	52.40
MW-236	06/21/2016 12:03	0.18	-202	7.04	0.98	16.570	15.34	310.80
MW-236	09/07/2016 11:35	0.27	-192	7.08	0.17	3.167	20.10	80.80
MW-236	09/07/2016 12:01	2.25	-102	7.24	0.35	6.411	20.43	563.30
MW-236	02/28/2017 09:26	0.31	226	7.14	0.07	1.317	10.37	22.20
MW-236	02/28/2017 14:29	4.25	-166	7.02	0.07	1.472	11.06	66.60
MW-236	02/14/2018 14:13	4.9	111	6.35	0.065	1.2997	13.31	6.1
MW-236	02/14/2018 14:16	1.61	52	6.48	0.065	1.3014	12.13	3.8
MW-236	02/14/2018 14:18	0.95	21	6.55	0.065	1.2951	12.01	3.4
MW-236	02/14/2018 14:21	0.76	4	6.6	0.065	1.2962	11.91	3.6
MW-236	02/14/2018 14:23	0.66	-7	6.63	0.065	1.3005	11.92	3.8
MW-236	02/14/2018 14:26	0.65	-14	6.66	0.065	1.3007	11.98	3.4
MW-236	02/14/2018 14:28	0.66	-19	6.68	0.065	1.3029	12.04	2.9
MW-236	02/14/2018 14:31	0.7	-22	6.7	0.065	1.3046	11.92	3.1
MW-236	02/14/2018 14:33	0.72	-25	6.72	0.065	1.3047	11.88	2.6
MW-236	02/14/2018 14:36	0.78	-26	6.71	0.068	1.3469	11.84	1.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-236	02/14/2018 14:38	0.87	-27	6.68	0.079	1.5572	11.79	1.7
MW-236	02/14/2018 14:41	0.93	-29	6.66	0.110	2.1383	11.93	1.5
MW-236	02/14/2018 14:44	0.94	-32	6.69	0.141	2.7241	11.95	1.3
MW-236	02/14/2018 14:46	0.87	-35	6.77	0.155	2.9758	12.13	1.3
MW-236	02/14/2018 14:49	0.83	-37	6.83	0.165	3.1552	12.21	1.2
MW-236	02/14/2018 14:51	0.81	-38	6.87	0.174	3.3145	12.22	1.2
MW-236	02/14/2018 14:54	0.82	-39	6.93	0.172	3.2816	11.73	1.4
MW-236	02/14/2018 14:56	0.8	-40	6.95	0.175	3.3371	12	1
MW-236	02/14/2018 14:59	0.8	-41	6.97	0.177	3.3633	12.09	1.4
MW-236	02/14/2018 15:01	0.78	-42	7	0.180	3.4281	12.2	1.5
MW-236	02/15/2018 12:08	0.45	81.00	7.18	0.12	2.253	10.19	26.50
MW-236	02/15/2018 15:01	0.78	-42.00	7.00	0.18	3.439	12.08	1.50
MW-236	02/15/2018 15:23	3.21	19.00	7.04	0.21	3.911	11.36	43.10
MW-236	08/30/2018 10:13	0.14	-150.00	7.47	0.32	5.895	18.81	1.90
MW-236	08/30/2018 11:42	0.46	-155.00	7.45	0.33	5.976	25.85	0.58
MW-236	08/30/2018 12:04	1.40	-71.00	7.42	0.32	5.874	20.08	20.30
MW-236	01/29/2019 14:30	0.45	-122.90	7.29	1.09	2.081	10.33	3.50
MW-236	01/29/2019 14:55	0.35	-133.20	7.38	1.33	2.555	11.22	6.10
MW-236	01/29/2019 15:05	0.98	-147.80	7.41	1.27	2.478	11.21	98.10
MW-236	09/26/2019 08:50	7.12	-136.8	7	NM	2.893	18.67	3.4
MW-236	09/26/2019 08:55	3.6	-153.8	7.17	NM	2.86	18.63	1.5
MW-236	09/26/2019 09:00	3.04	-156.5	7.22	NM	2.841	18.67	1.9
MW-236	09/26/2019 09:05	1.62	-156.7	7.25	NM	2.84	18.75	2
MW-236	09/26/2019 09:10	4.4	-161.3	7.26	NM	2.836	18.84	3.6
MW-236	09/26/2019 09:15	2.49	-159.7	7.27	NM	2.834	18.75	2.4
MW-236	09/26/2019 09:20	1.71	-155.9	7.28	NM	2.835	18.75	1.8
MW-236	09/26/2019 09:25	0.64	-156	7.28	NM	2.83	18.83	1.8
MW-236	09/26/2019 09:30	0.44	-160.4	7.29	NM	2.827	18.85	2
MW-236	09/26/2019 09:35	0.26	-161.4	7.3	NM	2.822	18.92	2.7
MW-236	09/26/2019 09:50	2.1	-159.8	7.3	1.46	2.8	18.52	2.1
MW-236	09/26/2019 10:15	3.52	-126.8	7.24	1.49	2.859	19.71	16.6
MW-236	01/24/2020 12:15	0.79	-51.7	7.38	NM	1.717	12.79	5.3
MW-236	01/24/2020 12:20	0.27	-80.2	7.42	NM	1.729	12.71	5.7
MW-236	01/24/2020 12:25	0.21	-99.3	7.43	NM	1.688	12.75	3
MW-236	01/24/2020 12:30	0.17	-104.9	7.4	NM	1.594	12.62	0.7
MW-236	01/24/2020 12:35	0.16	-110.2	7.38	NM	1.535	12.74	2
MW-236	01/24/2020 12:40	0.16	117.3	7.37	NM	1.529	12.8	1.1
MW-236	01/24/2020 12:45	0.16	-121	7.35	NM	1.514	12.76	0.6
MW-236	01/24/2020 12:50	0.16	-123.2	7.35	NM	1.515	12.89	1.7
MW-236	01/24/2020 12:55	0.16	-125.8	7.34	NM	1.517	12.97	1.3
MW-236	01/24/2020 13:00	0.16	-126.1	7.35	NM	1.511	12.86	0.8
MW-236	01/24/2020 13:10	0.18	-127.9	7.34	0.75	1.48	12.74	0.7
MW-236	01/24/2020 13:30	1.88	-122.1	7.34	0.69	1.376	12.87	21.5
MW-236	01/22/2021 09:20	3.43	-76.7	6.81	1.45	2.776	9.82	159.5
MW-236	01/22/2021 09:25	0.28	-121.5	7.05	1.19	2.29	10.17	26
MW-236	01/22/2021 09:30	0.78	-128.1	7.1	1.11	2.148	10.4	3.1
MW-236	01/22/2021 09:35	1.14	-132.2	7.13	1.12	2.175	10.26	0.9
MW-236	01/22/2021 09:40	1.42	-136.6	7.19	1.15	2.237	10.53	0.7
MW-236	01/22/2021 09:45	1.36	-137.9	7.22	1.16	2.251	10.41	0.7
MW-236	01/22/2021 09:50	1.49	-139.4	7.25	1.19	2.302	10.35	0.6
MW-236	01/22/2021 09:55	1.51	-139.7	7.25	1.2	2.319	10.1	0.5
MW-236	01/22/2021 10:00	1.61	-140.3	7.27	1.19	2.313	10.15	0.5
MW-236	01/22/2021 10:15	1.68	-140.1	7.28	1.17	2.277	10.1	0.8
MW-236	01/22/2021 10:30	3.6	-140.6	7.4	1.4	2.688	10.54	4.8
MW-245	05/02/2012 11:24	1.27	-85	7.07	0.17	3.18812	13.49	3.4
MW-245	05/02/2012 11:27	0.94	-100	7.13	0.17	3.28171	14.34	18.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-245	05/02/2012 11:29	0.69	-111	7.17	0.17	3.27942	14.41	15.2
MW-245	05/02/2012 11:31	0.54	-117	7.2	0.17	3.27161	14.26	15.3
MW-245	05/02/2012 11:33	0.45	-121	7.21	0.17	3.25382	14.47	14.8
MW-245	05/02/2012 11:35	0.41	-124	7.22	0.17	3.24329	14.57	39.1
MW-245	05/02/2012 11:37	0.38	-126	7.23	0.17	3.21854	14.68	77.4
MW-245	05/02/2012 11:39	0.39	-128	7.24	0.17	3.19464	14.74	97.7
MW-245	05/02/2012 11:41	0.39	-130	7.26	0.17	3.1811	14.75	124.2
MW-245	05/02/2012 11:43	0.45	-130	7.27	0.17	3.15836	14.69	128
MW-245	05/02/2012 11:45	0.48	-131	7.28	0.16	3.13479	14.8	117.9
MW-245	05/02/2012 11:47	0.62	-130	7.29	0.16	3.09931	14.81	121.3
MW-245	05/02/2012 11:49	1.05	-128	7.32	0.16	3.03507	14.71	106.6
MW-245	05/02/2012 11:51	2.04	-122	7.35	0.15	2.93519	14.68	73.2
MW-245	05/02/2012 11:53	3.12	-118	7.43	0.15	2.95367	14.22	110.9
MW-245	05/02/2012 11:55	4.47	-114	7.52	0.15	2.92574	14.03	77.8
MW-245	05/02/2012 11:58	5.42	-113	7.56	0.15	2.92996	13.82	56.6
MW-245	05/02/2012 12:00	6	-113	7.58	0.15	2.91424	13.69	42.9
MW-245	05/02/2012 12:02	6.35	-112	7.58	0.15	2.90478	13.63	23.5
MW-245	05/02/2012 12:04	6.6	-112	7.59	0.15	2.89736	13.53	28.9
MW-245	05/02/2012 12:06	6.75	-111	7.58	0.15	2.89384	13.43	26.2
MW-245	05/02/2012 12:08	6.84	-111	7.58	0.15	2.88683	13.35	16.4
MW-245	05/02/2012 12:10	6.92	-109	7.57	0.15	2.87785	13.35	22.3
MW-245	05/02/2012 12:12	6.96	-109	7.56	0.16	2.97587	13.2	89.3
MW-245	05/02/2012 12:14	6.16	-109	7.54	0.16	3.01953	13.01	89.4
MW-245	05/02/2012 12:15	6.16	-109	7.54	0.16	3.020	13.01	89.42
MW-245	08/30/2012 15:22	4.14	-125	7.02	0.20	3.360	28.15	19.20
MW-245	08/30/2012 15:40	6.13	-94	7.27	0.20	3.310	26.55	112.00
MW-245	08/31/2012 11:13	3.40	-87	7.05	0.20	3.210	25.10	65.40
MW-245	10/03/2013 09:05	0.62	-371	7.03	0.18	3.434	22.57	89.80
MW-245	10/04/2013 11:55	0.98	-361	7.04	0.15	2.875	22.46	361.20
MW-245	12/01/2015 11:32	2.65	434	6.96	0.06	1.245	16.81	815.9
MW-245	12/01/2015 14:50	4.84	-145	7.3	0.21	3.925	9.97	762.4
MW-245	02/19/2016 11:24	4.48	-147	6.95	0.06	1.258	9.63	434.30
MW-245	02/19/2016 13:25	7.80	-158	6.70	0.07	1.331	7.39	129.20
MW-245	06/21/2016 10:18	5.27	-66	7.09	0.07	1.368	18.64	351.30
MW-245	06/21/2016 10:22	4.08	-173	6.81	0.12	2.318	19.24	1259.80
MW-245	09/07/2016 10:29	4.83	-54	7.60	0.01	0.132	23.20	111.50
MW-245	09/07/2016 10:37	3.19	-52	7.09	0.05	1.012	23.61	295.20
MW-245	01/27/2017 09:13	0.40	-158	6.99	0.06	1.181	10.93	371.20
MW-245	01/27/2017 10:07	5.24	-134	6.94	0.06	1.133	8.91	119.70
MW-245	02/08/2017 13:24	0.67	-46.00	6.97	0.08	1.541	7.17	7.81
MW-245	02/08/2017 13:47	8.82	-49.00	7.33	0.08	1.549	9.53	116.30
MW-245	02/06/2018 12:53	5.12	-48	7.37	0.080	1.6037	6.69	3.7
MW-245	02/06/2018 12:56	2.68	-59	7.07	0.079	1.5913	6.91	5.7
MW-245	02/06/2018 12:58	1.76	-45	6.94	0.077	1.5479	7.18	5.4
MW-245	02/06/2018 13:00	1.34	-41	6.89	0.077	1.5340	7.67	5.1
MW-245	02/06/2018 13:03	1.1	-39	6.89	0.076	1.5242	7.93	6.1
MW-245	02/06/2018 13:05	0.99	-39	6.89	0.076	1.5249	8.06	5.3
MW-245	02/06/2018 13:07	0.93	-39	6.91	0.076	1.5261	7.94	5.3
MW-245	02/06/2018 13:10	0.88	-40	6.93	0.076	1.5263	7.62	6.5
MW-245	02/06/2018 13:12	0.82	-40	6.93	0.076	1.5274	7.51	6.4
MW-245	02/06/2018 13:14	0.83	-41	6.96	0.076	1.5265	7.19	8.5
MW-245	02/06/2018 13:17	0.74	-43	6.95	0.076	1.5314	7.13	8.4
MW-245	02/06/2018 13:19	0.7	-44	6.95	0.076	1.5336	7.13	7.5
MW-245	02/06/2018 13:21	0.69	-45	6.96	0.077	1.5355	7.22	7.2
MW-245	02/06/2018 13:24	0.67	-46	6.97	0.077	1.5358	7.29	7.8
MW-245	07/24/2018 10:45	2.63	-86	7.35	0.053	1.0650	28.51	6.59

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-245	07/24/2018 10:47	1.36	-114	7.04	0.053	1.0670	27.83	6.43
MW-245	07/24/2018 10:49	1.15	-122	6.95	0.052	1.0470	27.98	7.555
MW-245	07/24/2018 10:52	1.02	-127	6.92	0.050	1.0080	27.66	9.144
MW-245	07/24/2018 10:54	0.92	-130	6.88	0.050	0.9979	27.93	10.98
MW-245	07/24/2018 10:56	0.86	-132	6.86	0.051	1.0290	28.09	9.99
MW-245	07/24/2018 10:59	0.83	-134	6.85	0.053	1.0620	27.93	9.002
MW-245	07/24/2018 11:01	0.79	-137	6.85	0.055	1.0920	28.21	8.157
MW-245	07/24/2018 11:03	0.77	-139	6.86	0.056	1.1200	28.2	7.11
MW-245	07/24/2018 11:05	0.76	-142	6.88	0.056	1.1240	27.98	7.076
MW-245	07/24/2018 11:08	0.74	-144	6.89	0.056	1.1230	27.68	6.628
MW-245	07/25/2018 11:08	0.74	-144.00	6.89	0.06	1.123	27.86	6.63
MW-245	07/25/2018 11:31	4.55	-108.00	7.37	0.05	0.996	25.94	34.60
MW-245	07/25/2018 12:34	0.93	-154.00	7.04	0.05	1.053	24.77	61.80
MW-245	01/30/2019 12:45	1.09	-134.5	7.43	NM	0.826	9.83	NM
MW-245	01/30/2019 13:03	5.1	-111.9	7.49	0.37	0.747	9.72	0
MW-245	07/22/2019 10:05	1.79	-98.3	7.15	NM	1.332	26.62	10.7
MW-245	07/22/2019 10:10	1.53	-103.5	6.8	NM	1.382	27.7	11.6
MW-245	07/22/2019 10:15	1.45	-110.1	6.8	NM	1.456	27.82	10.7
MW-245	07/22/2019 10:20	1.42	-114	6.82	NM	1.464	28	12.2
MW-245	07/22/2019 10:25	1.39	-116.4	6.83	NM	1.445	27.83	11.5
MW-245	07/22/2019 10:30	1.39	-117.4	6.84	NM	1.393	27.83	12.9
MW-245	07/22/2019 10:35	1.42	-120.3	6.87	NM	1.3	27.7	12.4
MW-245	07/22/2019 10:40	1.39	-126.2	6.94	NM	1.09	27.8	9.5
MW-245	07/22/2019 10:45	1.4	-124.3	6.92	NM	1.171	27.58	11.5
MW-245	07/22/2019 10:50	1.66	-89.5	6.87	0.51	1.034	28	19.4
MW-245	07/22/2019 11:15	1.64	-75.7	6.86	0.55	1.118	27.42	39.9
MW-245	02/05/2021 10:40	2.93	62.9	6.93	0.76	1.512	7.46	168.3
MW-245	02/05/2021 10:45	2.03	67.2	6.78	2.08	3.91	8.58	92.3
MW-245	02/05/2021 10:50	2.22	49.4	6.81	2.14	4.04	8.27	112.9
MW-245	02/05/2021 10:55	3.87	8.3	6.92	1.93	1.93	7.76	84.3
MW-245	02/05/2021 11:00	3.92	6.8	6.92	1.92	3.643	7.74	83
MW-245	02/05/2021 11:05	4.55	-20.5	7.07	1.6	3.06	7.42	119.4
MW-245	02/05/2021 11:10	4.56	-21.6	7.07	1.58	3.025	7.41	116.5
MW-245	02/05/2021 11:15	4.69	-28.9	7.12	1.46	2.812	7.35	101.2
MW-245	02/05/2021 11:20	4.81	-37.9	7.16	1.32	2.547	7.33	76.7
MW-245	02/05/2021 11:25	4.79	-40.2	7.18	1.25	2.423	7.37	82.7
MW-245	02/05/2021 11:35	4.8	-50.3	7.22	1.32	2.338	8.22	92.3
MW-245	02/05/2021 11:45	3.28	-48.4	7.3	1.43	2.556	8.32	34.2
MW-246	06/05/2012 09:28	1.4	3	6.26	0.05	1.00077	18.27	78.8
MW-246	06/05/2012 09:32	0.61	-1	6.25	0.05	1.02795	17.1	7.8
MW-246	06/05/2012 09:35	0.4	-5	6.25	0.05	1.01893	16.54	12.4
MW-246	06/05/2012 09:39	0.33	-7	6.24	0.05	1.02276	16.44	8
MW-246	06/05/2012 09:42	0.28	-8	6.24	0.05	1.01681	16.41	7.6
MW-246	06/05/2012 09:46	0.27	-10	6.24	0.05	1.02153	16.47	7.4
MW-246	06/05/2012 09:49	0.25	-11	6.24	0.05	1.02143	16.61	8.4
MW-246	06/05/2012 09:53	0.24	-12	6.24	0.05	1.02109	16.56	9.7
MW-246	06/05/2012 09:56	0.23	-13	6.24	0.05	1.0263	16.68	12.4
MW-246	06/05/2012 10:00	0.22	-14	6.24	0.05	1.02373	16.74	11.7
MW-246	06/05/2012 10:03	0.23	-15	6.24	0.05	1.02058	16.92	14.3
MW-246	06/05/2012 10:07	0.21	-15	6.25	0.05	1.02565	17.1	14.6
MW-246	06/05/2012 10:11	0.2	-16	6.25	0.05	1.0268	17.08	15.8
MW-246	06/05/2012 10:55	2.33	22	6.28	0.05	1.003	18.08	851.60
MW-246	06/06/2012 11:20	2.22	-17	5.83	0.0000	0.621	17.58	57.50
MW-246	08/30/2012 14:20	2.80	3	5.75	0.0000	1.080	22.17	75.20
MW-246	08/30/2012 14:49	7.64	30	6.20	0.0000	0.733	17.47	46.10
MW-246	08/31/2012 10:15	2.24	-5	5.74	0.0000	0.667	22.42	20.50

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-246	11/06/2013 13:35	1.09	-37	5.80	0.47	0.930	17.70	13.80
MW-246	11/06/2013 14:10	1.38	-96.3	5.84	0.56	1.128	16.70	13.00
MW-246	11/06/2013 14:15	1.25	-98	5.82	0.55	1.109	16.93	25.20
MW-246	11/07/2013 14:15	1.25	-98	5.82	0.55	1.109	16.93	25.20
MW-246	01/08/2014 09:15	5.88	128.6	5.69	0.35	0.720	9.39	66.40
MW-246	01/08/2014 09:55	6.06	-32.7	6.08	0.53	1.059	7.42	5.30
MW-246	01/08/2014 10:15	8.60	-32.9	6.25	0.50	1.015	7.75	205.70
MW-246	06/09/2014 13:47	1.39	-302	5.86	0.09	1.661	19.43	7.92
MW-246	06/09/2014 14:13	3.23	-117	6.23	0.06	1.184	16.93	18.20
MW-246	06/10/2014 14:22	1.58	-214	5.91	0.08	1.548	19.59	46.60
MW-246	12/01/2015 11:45	0.33	-19.8	5.75	0.54	1.088	12.77	14.6
MW-246	12/01/2015 12:15	0.16	-26.8	5.94	0.55	1.101	16.62	41.2
MW-246	07/20/2016 14:05	0	-53	6.01	0.4	0.905	18.79	3.5
MW-246	07/20/2016 14:30	0	-58	6.01	0.4	0.861	19.72	16.8
MW-246	06/07/2017 12:45	3.14	-72.80	6.24	1.27	2.456	15.43	0.30
MW-246	06/07/2017 13:45	0.49	-65.60	6.14	1.09	2.113	14.59	0.20
MW-246	06/07/2017 13:55	1.62	-40.00	6.16	1.00	1.959	17.06	50.50
MW-246R	06/06/2016 12:20	2.60	183.9	6.71	0.41	0.829	23.10	4.90
MW-246R	06/06/2016 12:30	6.19	35.4	6.70	0.29	0.590	21.03	15.80
MW-246R	09/06/2016 12:00	0.08	-48.8	5.94	0.43	0.866	18.19	0.40
MW-246R	09/06/2016 12:05	0.06	-50.4	5.98	0.43	0.868	17.76	9.30
MW-246R	11/29/2016 14:40	1.37	-140.5	5.95	0.86	1.69	15.9	11.3
MW-246R	11/29/2016 14:54	1.35	-147.2	5.95	0.86	1.69	16.87	19.3
MW-246R	03/03/2017 10:30	6.46	-136.9	6.62	1.67	3.176	12.27	19.40
MW-246R	03/03/2017 11:05	4.20	-40.6	6.37	1.21	2.965	14.10	22.00
MW-246R	03/14/2018 09:54	5.85	-65	6.44	1.212	20.6387	7.28	73.6
MW-246R	03/14/2018 09:57	0.87	-139	6.65	1.383	23.1877	8.73	34.6
MW-246R	03/14/2018 10:01	0.46	-148	6.72	1.431	23.9202	8.81	69.3
MW-246R	03/14/2018 10:04	0.55	-150	6.73	1.430	23.8906	8.95	114.1
MW-246R	03/14/2018 10:07	0.61	-151	6.73	1.529	25.3995	9.21	150.3
MW-246R	03/14/2018 10:11	0.54	-151	6.74	1.544	25.6506	8.95	145.1
MW-246R	03/14/2018 10:14	0.47	-152	6.75	1.455	24.2840	8.86	202.5
MW-246R	03/14/2018 10:18	0.39	-153	6.75	1.425	23.7890	9.36	211.2
MW-246R	03/14/2018 10:21	0.33	-153	6.76	1.473	24.5558	9	288.1
MW-246R	03/14/2018 10:24	0.26	-153	6.76	1.454	24.2395	9.32	391.8
MW-246R	03/14/2018 10:28	0.22	-153	6.76	1.485	24.7078	9.39	508.8
MW-246R	03/14/2018 10:31	0.15	-152	6.76	1.481	24.6240	9.6	586.3
MW-246R	03/14/2018 10:34	0.11	-152	6.76	1.538	25.4908	9.6	346
MW-246R	03/14/2018 10:38	0.06	-152	6.76	1.530	25.3764	9.57	604.3
MW-246R	03/14/2018 10:41	0.04	-152	6.76	1.556	25.7573	9.86	399.9
MW-246R	03/14/2018 10:45	0.03	-152	6.76	1.530	25.3663	9.8	133.6
MW-246R	03/15/2018 10:26	1.84	25.00	6.23	0.19	3.653	8.59	32.90
MW-246R	03/15/2018 10:45	0.03	-152.00	6.76	1.53	25.460	9.66	133.60
MW-246R	03/15/2018 11:13	3.77	-73.00	6.18	0.18	3.480	11.31	147.30
MW-246R	03/12/2019 13:15	0.23	-155.5	7.09	NM	1.544	12.43	8.5
MW-246R	03/12/2019 14:05	0.22	-141	6.85	0.86	1.696	13.47	4.3
MW-246R	06/25/2019 10:05	3.18	-137.8	7.26	NM	0.851	16.7	8.3
MW-246R	06/25/2019 10:10	0.85	-167.3	7.37	NM	0.852	17.71	1.7
MW-246R	06/25/2019 10:15	0.65	-158.4	7.36	NM	0.908	17.9	2.2
MW-246R	06/25/2019 10:20	0.52	-161.3	7.32	NM	0.93	17.66	1.8
MW-246R	06/25/2019 10:25	0.45	-161	7.34	NM	0.933	17.06	1.3
MW-246R	06/25/2019 10:30	0.43	-162	7.33	NM	0.936	17	1.9
MW-246R	06/25/2019 10:35	0.38	-160.4	7.33	NM	0.938	17.01	0.6
MW-246R	06/25/2019 10:40	0.36	-161.4	7.33	NM	0.946	16.72	7.2
MW-246R	06/25/2019 10:45	0.35	-162.7	7.33	NM	0.947	16.61	9.1
MW-246R	06/25/2019 10:50	0.33	-163.7	7.33	NM	0.952	18.82	14.4

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-246R	06/25/2019 11:23	0.18	-171.6	7.29	0.51	1.027	14.86	1.9
MW-246R	06/25/2019 11:40	0.2	-162.4	7.25	0.52	1.052	15.42	2.2
MW-246R	09/06/2019 08:25	12.3	-73.5	8.76	NM	0.842	17.74	2.3
MW-246R	09/06/2019 08:30	10.77	-38.5	7.93	NM	1.266	16.67	0.5
MW-246R	09/06/2019 08:35	8.86	-35.2	7.44	NM	1.39	16.87	0.2
MW-246R	09/06/2019 08:40	4.68	-37.1	7.68	NM	1.434	16.85	0
MW-246R	09/06/2019 08:45	3.59	-34	7.4	NM	1.43	16.91	0.5
MW-246R	09/06/2019 08:50	2.82	-36.5	7.6	NM	1.429	16.78	0
MW-246R	09/06/2019 08:55	2.41	-30.9	7.01	NM	1.425	16.7	0.1
MW-246R	09/06/2019 09:00	2.04	-35.3	7.51	NM	1.421	16.63	0.1
MW-246R	09/06/2019 09:05	1.8	-33.3	7.29	NM	1.418	16.66	0.4
MW-246R	09/06/2019 09:10	1.62	-32.6	7.29	NM	1.418	16.51	0.2
MW-246R	09/06/2019 09:38	5.72	-57.1	7.58	0.71	1.415	17.1	5
MW-246R	09/06/2019 09:50	6.32	-64.1	8.08	0.46	0.939	18.51	23.6
MW-246R	12/13/2019 12:35	6.82	95.8	6.86	NM	0.274	12.43	91.4
MW-246R	12/13/2019 12:40	3.81	95.8	6.64	NM	0.274	12.77	97.9
MW-246R	12/13/2019 12:45	1.14	-104.3	6.85	NM	0.379	13.67	95.2
MW-246R	12/13/2019 12:50	1.01	-152.8	7.02	NM	0.387	14.14	92.2
MW-246R	12/13/2019 12:55	0.89	-162.6	7.06	NM	0.39	14.27	83.4
MW-246R	12/13/2019 13:00	1.34	-161.3	7.06	NM	0.391	13.81	85.3
MW-246R	12/13/2019 13:05	1.2	-175.3	7.09	NM	0.395	14.35	36.9
MW-246R	12/13/2019 13:10	0.55	-175.9	7.09	NM	0.395	14.38	36.8
MW-246R	12/13/2019 13:15	0.96	-181.4	7.1	NM	0.399	14.06	20.7
MW-246R	12/13/2019 13:20	1.19	-183.4	7.11	NM	0.4	13.9	16.2
MW-246R	12/13/2019 14:40	5.35	-119.6	7.26	0.2	0.413	13.06	9.1
MW-246R	12/13/2019 14:55	5.78	-52.3	6.7	0.13	0.279	12.85	35.8
MW-246R	09/03/2020 11:55	3.24	-127.7	7.27	0.44	0.867	24.87	0.3
MW-246R	09/03/2020 12:00	1.23	-145	7.07	0.35	0.723	22.14	1.6
MW-246R	09/03/2020 12:05	0.6	-146.9	6.94	0.34	0.706	20.83	1.4
MW-246R	09/03/2020 12:10	0.49	-149.4	6.86	0.37	0.755	20.29	1.2
MW-246R	09/03/2020 12:15	0.95	-99.5	6.06	0.62	1.241	20.04	0.9
MW-246R	09/03/2020 12:20	1.12	-96.4	6.02	0.67	1.327	19.63	0.4
MW-246R	09/03/2020 12:25	1.21	-96.4	5.98	0.67	1.328	19.28	0.8
MW-246R	09/03/2020 12:30	1.18	-95.3	5.97	0.67	1.342	19.34	0.9
MW-246R	09/03/2020 13:05	0.96	-92.3	5.82	0.66	1.322	16.08	0.2
MW-246R	09/03/2020 13:20	1.3	-92.8	5.87	0.66	1.323	16.06	0.7
MW-246R	03/18/2022 10:15	3.55	-106.5	6.81	0.49	0.993	13.1	92.6
MW-246R	03/18/2022 10:20	0.71	-136	6.99	0.56	1.12	13.36	47.3
MW-246R	03/18/2022 10:25	0.5	-156.8	7.07	0.58	1.159	13.7	31.6
MW-246R	03/18/2022 10:30	0.47	-159.2	7.09	0.6	1.188	13.61	24.1
MW-246R	03/18/2022 10:35	0.38	-161.7	7.09	0.6	1.191	13.86	21
MW-246R	03/18/2022 10:40	0.34	-162.6	7.1	0.6	1.195	14.09	12.4
MW-246R	03/18/2022 10:45	0.35	-164	7.1	0.6	1.199	14.13	12.2
MW-246R	03/18/2022 10:50	0.34	-167	7.11	0.6	1.196	14.14	11.9
MW-248R	05/24/2012 08:34	7.86	66	7.02	0.01	0.19816	16.85	10.4
MW-248R	05/24/2012 08:36	1.06	-11	7.33	0.01	0.20763	16.36	4.8
MW-248R	05/24/2012 08:38	0.57	-44	7.53	0.01	0.20673	16.63	1.3
MW-248R	05/24/2012 08:40	0.43	-69	7.66	0.01	0.20574	16.62	2.4
MW-248R	05/24/2012 08:42	0.43	-87	7.75	0.01	0.20346	16.65	1.4
MW-248R	05/24/2012 08:44	0.39	-99	7.81	0.01	0.2016	16.77	15.1
MW-248R	05/24/2012 08:46	0.37	-108	7.85	0.01	0.1999	16.8	1.6
MW-248R	05/24/2012 08:48	0.29	-111	7.87	0.01	0.19821	16.85	1.4
MW-248R	05/24/2012 08:50	0.25	-115	7.91	0.01	0.19714	16.8	1.4
MW-248R	05/24/2012 08:52	0.22	-118	7.93	0.01	0.19638	16.71	1.8
MW-248R	05/24/2012 08:54	0.21	-121	7.95	0.01	0.19579	16.81	1.6
MW-248R	05/24/2012 08:55	0.21	-122	7.97	0.01	0.19521	16.89	1.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-248R	05/24/2012 08:57	0.22	-123	7.99	0.01	0.19479	16.93	2.4
MW-248R	05/24/2012 08:59	0.2	-124	8.01	0.01	0.19442	17.02	2.9
MW-248R	05/24/2012 09:01	0.19	-125	8.03	0.01	0.19447	16.99	1.6
MW-248R	05/24/2012 09:03	0.18	-126	8.04	0.01	0.19403	17.02	1.9
MW-248R	05/24/2012 09:05	0.18	-126	8.06	0.01	0.19399	17.02	2
MW-248R	05/24/2012 09:07	0.17	-127	8.07	0.01	0.19433	17	2
MW-248R	05/24/2012 09:10	0.17	-127	8.07	0.01	0.1943	17	1.963
MW-248R	05/24/2012 09:42	6.16	-1	8.18	0.01	0.2385	15.68	13.5
MW-248R	05/25/2012 09:10	3.4	118	7.69	0.01	0.2003	17.12	13.1
MW-248R	09/06/2012 11:50	2.16	-68	7.49	0.0000	0.148	23.08	11.00
MW-248R	09/06/2012 12:25	6.22	10	7.83	0.0000	0.147	21.32	38.00
MW-248R	09/07/2012 11:13	2.31	-29	7.74	0.0000	0.150	22.98	12.90
MW-248R	07/02/2013 09:51	0.96	-206	9.04	0.05	1.083	22.67	5.30
MW-248R	07/02/2013 10:23	1.32	-202	8.15	0.02	0.502	19.93	58.50
MW-248R	07/03/2013 09:39	1.73	-138.00	8.10	0.07	1.345	21.97	24.60
MW-248R	09/29/2014 10:47	0.60	199	7.45	0.01	0.295	23.10	11.80
MW-248R	09/29/2014 11:29	0.58	207	7.71	0.01	0.302	19.36	49.40
MW-248R	09/30/2014 11:14	0.92	18	7.43	0.01	0.297	18.82	56.30
MW-248R	10/02/2015 09:08	2.23	183	7.08	0.03	0.537	20.29	15.00
MW-248R	10/02/2015 11:25	2.79	-102	7.56	0.03	0.668	20.20	93.10
MW-248R	02/11/2016 13:30	2.27	-11	7.03	0.01	0.277	6.25	10.20
MW-248R	02/11/2016 14:43	8.23	-114	6.90	0.07	1.413	6.64	98.00
MW-248R	03/03/2017 11:01	0.37	111	7.51	0.02	0.456	8.27	10.40
MW-248R	03/03/2017 13:55	5.98	-76	7.47	0.02	0.437	8.37	23.60
MW-248R	03/12/2018 11:57	7.07	216	7.25	0.023	0.4827	6.81	53.7
MW-248R	03/12/2018 11:59	1.24	180	7.93	0.025	0.5184	6.81	46.1
MW-248R	03/12/2018 12:01	0.49	169	8.24	0.028	0.5889	6.66	40.4
MW-248R	03/12/2018 12:03	0.23	155	8.36	0.031	0.6478	6.78	38.4
MW-248R	03/12/2018 12:05	0.13	103	8.41	0.033	0.6920	6.75	36.9
MW-248R	03/12/2018 12:07	0.07	40	8.43	0.035	0.7329	6.76	35.4
MW-248R	03/12/2018 12:09	0.03	-51	8.41	0.037	0.7691	6.81	32.4
MW-248R	03/12/2018 12:12	-0.02	-113	8.38	0.039	0.7976	6.9	32.5
MW-248R	03/12/2018 12:14	-0.06	-150	8.36	0.040	0.8210	7	31.3
MW-248R	03/12/2018 12:16	-0.09	-171	8.34	0.041	0.8443	6.98	30.8
MW-248R	03/12/2018 12:18	-0.13	-188	8.35	0.042	0.8584	7.08	30.8
MW-248R	03/12/2018 12:20	-0.16	-197	8.35	0.042	0.8725	7.11	28.7
MW-248R	03/12/2018 12:22	-0.17	-202	8.36	0.043	0.8858	7.15	28.4
MW-248R	03/12/2018 12:25	-0.19	-206	8.34	0.044	0.9001	7.21	29
MW-248R	03/12/2018 12:27	-0.21	-210	8.31	0.045	0.9159	7.14	27.3
MW-248R	03/12/2018 12:29	-0.23	-214	8.29	0.045	0.9267	7.14	26.8
MW-248R	03/12/2018 12:31	-0.24	-217	8.28	0.046	0.9344	7.19	26.9
MW-248R	03/12/2018 12:33	-0.25	-218	8.26	0.046	0.9451	7.14	25.3
MW-248R	03/13/2018 11:20	0.20	91.00	7.48	0.14	2.732	7.09	8.10
MW-248R	03/13/2018 12:33	-0.25	-218.00	8.26	0.05	0.949	7	25.33
MW-248R	03/13/2018 14:07	10.68	-86.00	7.10	0.03	0.571	7.63	17.80
MW-248R	10/15/2018 14:05	4.31	-74.40	7.91	0.44	0.888	19.49	5.50
MW-248R	10/15/2018 14:30	2.04	8.00	7.67	0.23	0.482	19.11	8.40
MW-248R	10/15/2018 14:40	2.39	-154.40	7.63	0.22	0.460	19.79	33.00
MW-248R	12/07/2018 09:10	3.78	-12.30	8.25	0.52	1.038	8.89	0.90
MW-248R	12/07/2018 09:40	5.49	-37.70	8.00	0.19	0.401	9.38	2.40
MW-248R	12/07/2018 09:50	3.48	-43.10	7.62	0.20	0.422	10.19	46.50
MW-248R	03/08/2019 13:35	0.27	-65.40	7.97	0.14	0.287	9.87	1.40
MW-248R	03/08/2019 14:00	0.22	-125.90	7.82	0.14	0.291	7.94	0.70
MW-248R	03/08/2019 14:10	0.53	-115.30	7.75	0.14	0.294	9.24	2.70
MW-248R	09/30/2020 12:45	4.82	-61.8	7.48	0.25	0.514	19.8	5.2
MW-248R	09/30/2020 13:00	4.78	-68.6	7.55	0.25	0.517	19.29	NM

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-248R	10/15/2020 08:50	22.8	24.2	7.01	0.2	0.42	17.9	23.8
MW-248R	10/15/2020 08:55	4.08	-4.6	7.59	0.19	0.392	17.73	14.6
MW-248R	10/15/2020 09:00	1.59	-28.6	7.36	0.19	0.395	17.73	6.3
MW-248R	10/15/2020 09:05	1.57	-61.1	7.39	0.19	0.399	17.85	11.2
MW-248R	10/15/2020 09:10	0.98	-74.8	7.37	0.19	0.397	17.9	8
MW-248R	10/15/2020 09:15	0.44	-81	7.34	0.19	0.398	17.92	2.8
MW-248R	10/15/2020 09:20	0.24	-96.9	7.35	0.19	0.4	17.96	1.5
MW-248R	10/15/2020 09:25	0.25	-105.5	7.36	0.19	0.402	17.97	0.3
MW-248R	10/15/2020 09:30	0.14	-103.1	7.36	0.2	0.405	18	0.5
MW-248R	10/15/2020 09:35	0.12	-89.7	7.36	0.2	0.407	18.02	0.2
MW-248R	10/15/2020 09:57	5.13	-125.2	7.31	0.2	0.414	18.04	11.2
MW-248R	10/15/2020 10:20	8.58	-89.3	7.44	0.2	0.419	18.07	18.2
MW-248R	10/15/2020 13:00	NM	NM	NM	NM	NM	NM	8.2
MW-248R	03/08/2021 09:30	5.79	192.9	6.94	0.21	0.44	5.46	97.8
MW-248R	03/08/2021 10:00	2.81	-60.5	7.52	0.17	0.36	5.63	10.5
MW-248R	03/08/2021 10:08	3.86	-55.9	7.73	0.18	0.375	5.47	25.8
MW-248R	03/31/2021 12:35	7.64	-38.2	7.47	0.15	0.32	10.04	33.6
MW-248R	03/31/2021 12:40	2.17	-82.9	7.31	0.15	0.32	9.05	16.6
MW-248R	03/31/2021 12:45	1.74	-81.2	7.26	0.14	0.295	9.75	11.3
MW-248R	03/31/2021 12:50	2.24	-74.8	7.24	0.14	0.284	9.76	7.3
MW-248R	03/31/2021 12:55	2.45	-85.1	7.21	0.14	0.291	9.66	5.5
MW-248R	03/31/2021 13:00	1.98	-97.5	7.2	0.14	0.302	9.51	4.3
MW-248R	03/31/2021 13:05	1.6	-106.3	7.22	0.15	0.306	9.72	4.1
MW-248R	03/31/2021 13:10	1.69	-111.4	7.23	0.15	0.309	9.51	3.9
MW-248R	03/31/2021 13:15	1.62	-114	7.2	0.15	0.308	9.52	3.4
MW-248R	03/31/2021 13:20	1.44	-118	7.24	0.15	0.308	9.65	3
MW-248R	03/31/2021 13:25	1.59	-118	7.11	0.15	0.302	8.57	3.5
MW-248R	03/31/2021 13:45	1.7	-116.9	7.13	0.15	0.313	8.9	36.4
MW-248R	03/03/2022 12:20	1.9	-88	8.3	0.18	0.384	7.25	17.9
MW-248R	03/03/2022 12:25	1.35	-58.9	7.09	0.16	0.344	7.15	14.7
MW-248R	03/03/2022 12:30	1.34	-17.8	6.59	0.14	0.3	6.87	62.3
MW-248R	03/03/2022 12:35	1.27	9.9	6.23	0.14	0.3	6.65	6.8
MW-248R	03/03/2022 12:40	1.04	17.5	6.08	0.15	0.311	6.62	24.4
MW-248R	03/03/2022 12:45	0.87	19.8	6.08	0.15	0.317	6.62	-10.6
MW-248R	03/03/2022 12:50	0.72	23.4	6.08	0.15	0.323	6.64	28.3
MW-248R	03/03/2022 12:55	0.68	24.8	6.09	0.16	0.324	6.68	-16.1
MW-248R	03/03/2022 13:00	0.64	25.6	6.08	0.16	0.325	6.79	-16.4
MW-248R	03/03/2022 13:05	0.63	25.4	6.08	0.16	0.324	6.85	-17.8
MW-249	05/24/2012 13:49	1.73	60	6.92	0.02	0.45406	21.04	10
MW-249	05/24/2012 13:51	0.55	59	6.9	0.02	0.473	20.29	17.4
MW-249	05/24/2012 13:53	0.37	57	6.91	0.02	0.46197	20.35	5.6
MW-249	05/24/2012 13:55	0.33	55	6.92	0.02	0.44602	20.47	5
MW-249	05/24/2012 13:57	0.35	52	6.94	0.02	0.42841	20.59	15.6
MW-249	05/24/2012 13:59	0.4	47	6.94	0.02	0.40993	20.65	7.3
MW-249	05/24/2012 14:01	0.42	36	6.95	0.02	0.40452	20.73	6.7
MW-249	05/24/2012 14:03	0.44	26	6.96	0.02	0.40154	20.82	4.4
MW-249	05/24/2012 14:05	0.45	18	6.97	0.02	0.40001	20.83	4.2
MW-249	05/24/2012 14:07	0.45	11	6.97	0.02	0.39855	20.81	4.9
MW-249	05/24/2012 14:09	0.47	6	6.98	0.02	0.39775	20.86	5.9
MW-249	05/24/2012 14:11	0.51	3	6.97	0.02	0.39709	20.84	4.6
MW-249	05/24/2012 14:13	0.51	0	6.98	0.02	0.39665	20.82	6.4
MW-249	05/24/2012 14:15	0.51	-2	6.99	0.02	0.3961	20.87	6.5
MW-249	05/24/2012 14:17	0.51	-5	6.99	0.02	0.39585	20.91	4.4
MW-249	05/24/2012 14:19	0.48	-7	6.99	0.02	0.39567	20.9	7.7
MW-249	05/24/2012 14:21	0.47	-8	7	0.02	0.39533	20.93	4.2
MW-249	05/24/2012 14:23	0.47	-10	7	0.02	0.39507	20.94	4.9

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-249	05/24/2012 14:25	0.47	-12	7.01	0.02	0.39484	20.94	6.4
MW-249	05/24/2012 14:27	0.46	-13	7.01	0.02	0.39461	21	9.9
MW-249	05/24/2012 14:29	0.45	-14	7.01	0.02	0.39437	21.05	5.8
MW-249	05/24/2012 14:31	0.45	-15	7.01	0.02	0.39478	20.98	5.8
MW-249	05/24/2012 14:32	0.45	-16	7.01	0.02	0.39476	21.01	6.5
MW-249	05/24/2012 14:34	0.45	-16	7.01	0.02	0.3948	21.01	6.476
MW-249	05/24/2012 15:10	4.58	38	7.2	0.02	0.3952	22.57	8.7
MW-249	05/25/2012 10:12	1.54	70	7.04	0.02	0.3976	21.78	15
MW-249	07/02/2013 11:18	7.19	-34	7.47	0.06	1.146	28.04	56.74
MW-249	07/02/2013 11:57	5.82	-54	8.05	0.01	0.175	27.76	14.90
MW-249	07/03/2013 11:23	3.86	-61.00	7.30	0.05	1.036	28.15	12.10
MW-249	06/10/2014 12:04	1.69	-242	6.75	0.03	0.626	23.13	17.33
MW-249	06/10/2014 12:39	2.25	-134	7.12	0.02	0.409	24.28	8.00
MW-249	06/11/2014 10:14	1.66	-286	6.89	0.03	0.661	23.61	32.30
MW-249	10/02/2015 09:49	3.23	184	5.78	2.97	45.186	24.81	59.00
MW-249	10/02/2015 10:00	4.64	-5	5.84	3.08	46.630	25.35	172.20
MW-249	03/04/2016 09:43	2.18	-88	6.32	1.94	31.720	8.23	45.10
MW-249	03/04/2016 10:24	7.78	-52	6.40	3.72	57.230	8.26	121.90
MW-249	03/02/2017 10:23	1.65	342	7.03	1.86	30.190	10.88	63.60
MW-249	03/02/2017 13:37	2.75	-47	6.18	1.81	29.800	11.60	117.60
MW-249	08/28/2018 11:40	0.51	-54.00	6.18	3.05	46.170	29.49	45.60
MW-249	08/28/2018 14:52	0.48	-44.00	6.21	3.03	45.920	29.93	9.43
MW-249	08/28/2018 15:16	3.84	-18.00	6.34	3.02	45.790	30.09	180.00
MW-249	08/28/2019 09:15	0.21	-75	6.09	NM	115.4	27.13	29.3
MW-249	08/28/2019 09:20	0.47	-49.1	6.1	NM	96.3	27.95	29.6
MW-249	08/28/2019 09:25	0.45	-45.6	6.04	NM	94.31	28.03	20.1
MW-249	08/28/2019 09:30	0.55	-32.6	6.02	NM	81.54	28.43	14.7
MW-249	08/28/2019 09:35	0.77	-18.2	6.02	NM	70.46	28.89	5.2
MW-249	08/28/2019 09:40	0.5	-19.8	6.04	NM	69.09	28.93	5.8
MW-249	08/28/2019 09:45	0.35	-22.2	6.05	NM	67.89	28.72	3.2
MW-249	08/28/2019 09:50	0.27	-23.3	6.04	NM	67.8	28.69	1.9
MW-249	08/28/2019 09:55	0.21	-23.9	6.04	NM	68.43	28.65	5.4
MW-249	08/28/2019 10:00	0.2	-25.6	6.07	NM	62.66	28.74	17
MW-249	08/28/2019 10:15	0.11	-15.9	6.13	45.34	66.79	28.13	13
MW-249	08/28/2019 10:30	1.96	-18.2	6.16	44.58	65.83	28.32	29.1
MW-249	03/31/2021 14:00	3.35	-3.2	6.04	89.22	118.8	12.48	7.4
MW-249	03/31/2021 14:05	1.53	-23.9	6.31	42.4	64.77	12.14	14.7
MW-249	03/31/2021 14:10	1.52	3.4	6.28	29.48	45.71	12.34	14.2
MW-249	03/31/2021 14:15	1.51	10.4	6.24	27.32	42.65	12.37	7.7
MW-249	03/31/2021 14:20	1.53	10.7	6.25	25.53	40.06	12.32	4.2
MW-249	03/31/2021 14:25	1.55	10	6.25	24.91	39.17	12.31	4.4
MW-249	03/31/2021 14:30	1.56	8.6	6.27	24.71	38.91	12.4	3.9
MW-249	03/31/2021 14:35	1.6	8.1	6.27	24.42	38.45	12.46	3.7
MW-249	03/31/2021 14:40	1.59	7.1	6.28	24.11	38.02	12.41	3.9
MW-249	03/31/2021 14:45	1.71	5.7	6.29	24.31	38.28	12.49	6.8
MW-249	03/31/2021 15:00	1.71	5.1	6.27	25.24	41.2	12.19	77.8
MW-250	08/01/2012 09:58	1.26	-96	12.45	0.07	1.28874	24.68	3.6
MW-250	08/01/2012 10:02	0.79	-98	12.52	0.07	1.29198	20.93	1.9
MW-250	08/01/2012 10:07	0.54	-101	12.54	0.06	1.28668	20.7	1.4
MW-250	08/01/2012 10:11	0.46	-103	12.44	0.07	1.28818	20.82	1.2
MW-250	08/01/2012 10:15	0.39	-104	12.3	0.06	1.28754	20.93	1
MW-250	08/01/2012 10:20	0.36	-109	12.14	0.07	1.28875	21.39	0.9
MW-250	08/01/2012 10:24	0.35	-109	12.22	0.07	1.29186	21.36	1
MW-250	08/01/2012 10:28	0.33	-108	12.55	0.06	1.28685	20.92	0.7
MW-250	08/01/2012 10:32	0.33	-110	12.28	0.07	1.29028	21.25	0.9
MW-250	08/01/2012 10:33	0.33	-110	12.28	0.07	1.290	21.25	0.86

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-250	12/19/2012 09:50	3.86	136.3	6.30	0.63	0.995	13.98	33.10
MW-250	12/19/2012 11:01	0.46	-111.4	6.77	0.69	1.093	19.75	0.0000
MW-250	12/20/2012 11:50	3.03	-103.9	6.70	0.60	1.357	14.30	5.90
MW-250	10/06/2014 09:46	0.80	-122	6.70	0.12	2.275	18.38	8.46
MW-250	10/06/2014 10:24	2.85	-135	6.66	0.12	2.332	18.11	31.50
MW-250	10/07/2014 10:41	0.17	244	6.67	0.06	1.251	18.57	13.60
MW-250	12/02/2015 15:18	1.05	-150.5	6.78	0.6	1.207	15.15	0
MW-250	12/02/2015 15:26	0.97	-149.6	6.79	0.6	1.207	15	0
MW-250	05/26/2016 12:32	9.94	563	6.71	0.11	2.055	17.88	17.90
MW-250	05/26/2016 12:57	30.33	533	6.63	0.17	3.296	14.59	18.50
MW-250	05/17/2017 11:33	1.71	-126.00	6.77	0.06	1.219	14.34	14.60
MW-250	05/17/2017 14:36	0.11	-79.00	6.92	0.08	1.670	17.98	10.31
MW-250	05/17/2017 15:01	8.02	-84.00	7.77	0.09	1.795	16.44	19.30
MW-250	07/25/2018 09:35	1.66	-69.40	7.30	0.63	1.261	17.3	0.60
MW-250	07/25/2018 10:25	1.81	-104.00	6.81	0.63	1.256	18.13	0.90
MW-250	07/25/2018 10:50	2.00	-69.60	6.78	0.55	1.112	22.41	11.60
MW-250	08/08/2018 11:23	0.91	-76.80	6.86	0.52	1.044	18.52	0.0000
MW-250	08/08/2018 12:52	0.04	-101.00	6.95	0.57	1.139	17.77	0.0000
MW-250	08/08/2018 13:37	0.05	-108.20	6.93	0.57	1.144	17.74	0.0000
MW-250	02/13/2019 11:00	13.33	149.80	6.44	0.65	1.292	12.42	0.80
MW-250	02/13/2019 12:05	7.15	52.00	6.36	0.91	1.777	16.23	2.90
MW-250	02/13/2019 12:15	9.17	25.40	7.31	0.49	0.978	12.84	15.60
MW-250	05/20/2019 10:10	22.01	135.7	6.53	NM	1.316	17.1	3.5
MW-250	05/20/2019 11:50	10.47	121.8	6.91	0.84	1.653	17.57	7.1
MW-250	08/14/2019 10:05	16.09	154.3	6.38	NM	1.051	18.99	4
MW-250	08/14/2019 10:10	16.54	193.4	6.31	NM	1.048	20.56	1
MW-250	08/14/2019 10:15	16.34	218	6.31	NM	1.065	20.78	0.9
MW-250	08/14/2019 10:20	16.4	237.7	6.3	NM	1.067	20.57	1.3
MW-250	08/14/2019 10:25	15.93	256	6.3	NM	1.069	20.32	1.8
MW-250	08/14/2019 10:30	15.65	263.5	6.29	NM	1.08	20.4	1.3
MW-250	08/14/2019 10:35	15.4	265.8	6.29	NM	1.089	20.56	1.2
MW-250	08/14/2019 10:40	15.24	223.5	6.33	NM	1.148	21.62	1.1
MW-250	08/14/2019 10:45	13.23	194.9	6.35	NM	1.186	21.96	0.9
MW-250	08/14/2019 10:50	11.55	152.7	6.41	NM	1.303	21.67	0.9
MW-250	08/14/2019 13:45	11.55	152.7	6.41	NM	1.303	21.67	0.9
MW-250	08/14/2019 14:45	5.78	-18.4	6.7	1	1.966	20.72	2.1
MW-250	08/14/2019 15:00	13.5	110.3	6.37	0.33	0.677	20.02	2.1
MW-250	10/31/2019 08:20	10.64	140.4	6.41	NM	1.23	17.83	1.6
MW-250	10/31/2019 08:25	10.61	160.9	6.32	NM	1.163	18.08	2.4
MW-250	10/31/2019 08:30	11.3	173.2	6.4	NM	1.172	18.16	0
MW-250	10/31/2019 08:35	11.09	176.4	6.41	NM	1.173	18.15	0
MW-250	10/31/2019 08:40	11.98	179.4	6.42	NM	1.172	18.11	0
MW-250	10/31/2019 08:45	12.02	181.8	6.42	NM	1.171	18.15	0
MW-250	10/31/2019 08:50	12.17	183	6.43	NM	1.17	18.14	0
MW-250	10/31/2019 10:55	5.78	-0.6	6.72	1.2	2.33	17.59	0.3
MW-250	10/31/2019 11:10	9.22	7.14	6.61	0.62	1.247	18.35	3
MW-250	02/10/2020 09:45	9.16	153.6	6.97	NM	1.151	12.56	NM
MW-250	02/10/2020 11:00	7.98	12.9	7.01	1.3	2.498	13.34	3.2
MW-250	08/11/2020 12:35	0.45	22.1	7.07	0.65	1.293	21.36	2.4
MW-250	08/11/2020 13:40	0.33	43.8	7.1	0.67	1.306	21.2	2.1
MW-250	08/11/2020 13:50	2.16	27.5	7.09	0.65	1.288	22.47	0.8
MW-250	11/12/2020 12:00	3.02	-24.5	7.07	2.11	3.967	15.68	3
MW-250	11/12/2020 12:15	4.98	23.7	7.15	0.73	1.449	15.82	63.3
MW-250	01/25/2021 09:10	10.43	224.6	7.06	0.73	1.45	7.97	11.8
MW-250	01/25/2021 10:30	3.87	-101.7	6.98	2.2	4.117	12.32	6.6
MW-250	01/25/2021 10:45	7.23	-22.5	7.27	0.76	1.497	12.25	7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-250	04/26/2021 10:10	2.81	144.3	6.83	0.74	1.465	13.55	0.9
MW-250	04/26/2021 10:15	1.5	103.4	6.85	0.73	1.449	14	1.2
MW-250	04/26/2021 10:20	1.4	73.2	6.85	0.73	1.446	13.91	1.1
MW-250	04/26/2021 10:25	1.32	60.4	6.84	0.73	1.446	14	0.9
MW-250	04/26/2021 10:30	1.13	46.4	6.84	0.73	1.444	14.32	0.9
MW-250	04/26/2021 10:35	1.13	34.5	6.84	0.73	1.445	14.2	0.8
MW-250	04/26/2021 10:40	1.1	17.9	6.83	0.74	1.588	14.41	2.1
MW-250	04/26/2021 10:45	1.63	-21.3	6.8	1.41	2.799	14.28	0.7
MW-250	04/26/2021 10:50	1.71	-33.8	6.79	1.71	3.263	14.38	0.4
MW-250	04/26/2021 10:55	1.7	-38.3	6.79	1.82	3.449	14.55	0.3
MW-250	08/17/2021 13:30	4.07	-4.4	6.74	0	1.415	23.6	5.96
MW-250	08/17/2021 13:35	2.18	-0.2	6.61	0	1.377	19.8	4.44
MW-250	08/17/2021 13:40	1.7	0.9	6.58	0	1.362	18.9	2.8
MW-250	08/17/2021 13:45	1.54	-1.7	6.57	0	1.359	18.7	1.6
MW-250	08/17/2021 13:50	1.43	-2.6	6.56	0	1.357	18.4	1.55
MW-250	08/17/2021 13:55	1.36	-3.9	6.57	0	1.356	18.4	1.54
MW-250	08/17/2021 14:00	1.35	-5.1	6.57	0	1.358	18.5	1.53
MW-251	06/19/2013 14:53	0.52	-184	7.12	0.11	2.059	19.65	12.59
MW-251	06/19/2013 15:27	0.64	-152	6.95	0.14	2.648	16.92	55.80
MW-251	06/20/2013 12:17	-0.13	-195.00	7.31	0.08	1.608	15.93	94.10
MW-251	06/24/2013 08:47	2.16	-36	6.34	0.16	3.05963	23.19	82.1
MW-251	06/24/2013 08:50	2.11	-70	6.47	0.16	2.95774	20.69	18.9
MW-251	06/24/2013 08:52	1.75	-67	6.15	0.15	2.9202	20.09	35.2
MW-251	06/24/2013 08:54	1.56	-102	6.64	0.15	2.91259	20.08	12.6
MW-251	06/24/2013 08:57	1.47	-109	6.67	0.15	2.92289	20.18	10.5
MW-251	06/24/2013 08:59	1.41	-128	6.97	0.15	2.9204	NM	8.7
MW-251	06/24/2013 09:01	1.35	-130	6.96	0.15	2.92668	NM	12.2
MW-251	06/24/2013 09:04	1.33	-124	6.78	0.16	2.97728	NM	14
MW-251	06/24/2013 09:06	1.29	-130	6.83	0.16	3.0034	NM	11.3
MW-251	06/24/2013 09:08	1.28	-136	6.89	0.16	3.04094	NM	11.7
MW-251	06/24/2013 09:11	1.26	-134	6.81	0.16	3.07179	NM	12.1
MW-251	09/15/2014 09:16	1.52	-377	7.09	0.06	1.178	19.47	20.37
MW-251	09/15/2014 10:05	2.41	-330	7.45	0.06	1.224	19.22	157.80
MW-251	09/16/2014 09:58	0.53	249	6.80	0.08	1.608	19.75	103.40
MW-251	07/15/2015 11:45	2.39	-345	NM	0.03	0.682	17.07	89.1
MW-251	07/15/2015 14:02	2.02	-55	7.37	0.09	1.795	17.5	2751.9
MW-251	03/22/2016 09:26	3.83	-70	9.01	0.02	0.505	9.14	150.40
MW-251	03/22/2016 10:39	8.14	118	7.68	0.02	0.420	9.76	406.40
MW-251	07/13/2016 09:39	8.86	-94	7.76	0.03	0.561	16.88	29.70
MW-251	07/13/2016 10:40	9.08	41	7.60	0.08	1.482	18.42	61.50
MW-251	10/19/2016 09:33	0.22	59	7.35	0.03	0.694	18.64	52.80
MW-251	10/19/2016 09:57	4.38	-63	7.14	0.14	2.586	19.52	83.20
MW-251	05/19/2017 09:29	5.83	235.00	7.38	0.01	0.274	12.94	52.20
MW-251	05/19/2017 09:39	0.73	151.00	7.23	0.01	0.207	21.39	9.28
MW-251	05/19/2017 10:16	4.65	190.00	8.27	0.02	0.393	14.07	233.50
MW-252	04/23/2012 12:21	0.37	-343	6.75	NM	44.76	12.6	10.6
MW-252	04/23/2012 12:24	1.68	-356	6.76	NM	44.89	12.5	10.4
MW-252	04/23/2012 12:27	0.33	-363	6.75	NM	44.85	12.5	10.0
MW-252	04/23/2012 12:30	2.39	-365	6.74	NM	44.84	12.5	9.9
MW-252	04/23/2012 12:33	5.33	-369	6.74	NM	44.72	12.6	9.9
MW-252	04/23/2012 12:36	7.78	-369	6.74	NM	44.66	12.7	9.7
MW-252	04/23/2012 12:39	11.10	-347	6.73	NM	44.77	12.7	9.7
MW-252	04/23/2012 12:42	13.77	-356	6.73	NM	44.86	12.6	8.3
MW-252	04/23/2012 12:45	16.86	-357	6.73	NM	45.04	12.5	8.0
MW-252	04/23/2012 12:48	19.04	-363	6.72	NM	45.08	12.4	7.1
MW-252	04/23/2012 12:51	21.27	-359	6.72	NM	45.10	12.3	7.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-252	04/23/2012 12:57	25.24	-371.5	6.73	NM	34.190	12.36	6.60
MW-252	04/23/2012 13:47	43.04	-352	6.57	NM	46.770	14.04	25.10
MW-252	04/24/2012 14:07	48.25	-332	6.60	NM	47.120	14.02	0.70
MW-252	01/28/2013 10:08	0.63	-302.2	6.78	14.1	22.56	6.3	9.6
MW-252	01/28/2013 10:11	0.6	-324.8	6.77	16.7	26.85	6.2	9.3
MW-252	01/28/2013 10:14	0.62	-329.2	6.78	17	27.72	6	10.3
MW-252	01/28/2013 10:17	0.55	-334.9	6.78	17.5	28.28	5.6	9.3
MW-252	01/28/2013 10:20	0.06	-343.6	6.78	20.5	31.76	4.4	11.1
MW-252	01/28/2013 10:23	0	-354	6.76	23.2	23.81	4.3	13.5
MW-252	01/28/2013 10:26	0	-356	6.74	2620	41.47	5.6	14.3
MW-252	01/28/2013 10:29	0	-356	6.75	26.5	41.9	5.3	14.9
MW-252	01/28/2013 10:32	0	-351.2	6.75	26.6	42.16	5.1	14.7
MW-252	01/28/2013 10:35	0	-351.2	6.71	26.7	42.36	5.1	13.9
MW-252	01/28/2013 10:38	0	-351.4	6.62	27	42.55	5.7	12.1
MW-252	05/09/2013 13:52	2.53	-331.8	6.81	28.16	35.6	15.75	2.4
MW-252	05/10/2013 14:15	1.92	-320.5	6.85	28.54	35.75	15.09	4.6
MW-252	07/09/2013 14:00	22.03	-359	6.38	27.9	40.2	21.3	2.1
MW-252	07/09/2013 14:30	39.8	-361	6.49	26.8	41.81	16.32	-3.6
MW-252	07/09/2013 15:15	43.00	-322	6.78	11.16	18.140	23.50	10.50
MW-252	07/10/2013 15:15	43	-322	6.78	11.16	18.14	23.5	10.5
MW-252	10/15/2013 13:35	4.42	-339.9	6.55	26.95	42.110	20.93	2.50
MW-252	10/15/2013 14:15	29.76	-287	6.67	28.21	43.700	15.93	270.00
MW-252	10/15/2013 14:20	28.90	-304	6.66	28.40	43.930	18.75	10.70
MW-252	10/16/2013 14:20	28.90	-304	6.66	28.40	43.930	18.75	10.70
MW-252	12/09/2013 14:50	0.0000	-339.3	6.31	27.75	43.430	7.87	17.50
MW-252	12/09/2013 15:45	3.18	-357.4	6.40	25.58	40.030	12.81	12.90
MW-252	12/09/2013 16:00	0.0000	-393.2	7.62	17.21	28.220	8.21	22.60
MW-252	07/10/2014 12:10	4.67	4	8.87	0.13	0.268	17.37	115.70
MW-252	07/10/2014 13:30	3.89	105.5	8.20	0.14	0.298	26.36	9.00
MW-252	07/10/2014 14:00	3.98	96.6	8.23	0.14	0.277	26.99	93.50
MW-252	01/09/2015 11:15	11.14	-71.1	8.90	0.12	0.252	7.42	86.40
MW-252	01/09/2015 12:10	1.91	-342.1	6.78	15.80	25.790	12.92	-0.70
MW-252	01/09/2015 12:30	2.40	-362.7	6.77	16.14	26.500	11.30	0.80
MW-252R	07/25/2016 12:25	1.45	-351.3	7.73	21.82	34.660	21.65	1.40
MW-252R	07/25/2016 12:35	0.94	-356.6	7.66	21.77	34.600	21.78	1.40
MW-252R	10/19/2016 15:00	3.17	-323.1	6.78	20.78	31.980	20.01	0.0000
MW-252R	10/19/2016 15:10	3.23	-355.7	6.63	20.01	32.230	20.35	0.0000
MW-252R	01/18/2017 13:50	4.46	-359.7	7.50	24.61	38.600	12.84	13.80
MW-252R	01/18/2017 14:05	2.98	-302.7	8.14	15.76	25.780	12.20	20.60
MW-252R	01/10/2018 09:20	0.61	-352.20	6.51	30.29	46.710	12.2	19.60
MW-252R	01/10/2018 10:50	0.33	-344.50	7.09	31.21	48.120	10.9	0.0000
MW-252R	01/10/2018 11:10	0.84	-373.30	6.77	30.12	46.430	13.61	127.40
MW-252R	08/28/2018 10:00	0.19	-366.90	6.80	22.68	35.490	17.87	27.30
MW-252R	08/28/2018 11:25	0.04	-354.80	6.78	28.20	43.920	25.41	2.50
MW-252R	08/28/2018 12:25	0.12	-354.40	6.98	28.98	44.740	26.82	35.70
MW-252R	02/05/2019 12:00	8.98	-90.30	7.96	0.42	0.877	13.62	21.50
MW-252R	02/05/2019 12:55	1.37	-326.60	7.15	26.19	40.830	14.75	2.10
MW-252R	02/05/2019 13:15	1.42	-3267.10	7.28	27.11	41.150	14.75	12.70
MW-252R	05/08/2019 10:00	3.61	-348.5	6.62	28.92	44.69	15.4	9.1
MW-252R	08/02/2019 10:05	0.93	-297.1	6.93	NM	25.69	18.56	5.5
MW-252R	08/02/2019 10:10	2.03	-345.4	6.52	NM	29.6	16.66	2.3
MW-252R	08/02/2019 10:15	2.19	-344	6.54	NM	30.73	16.9	3.7
MW-252R	08/02/2019 10:20	1.76	-350.7	6.57	NM	32.09	16.76	3.2
MW-252R	08/02/2019 10:25	1.16	-354.4	6.58	NM	33.82	17.4	2.4
MW-252R	08/02/2019 10:30	0.9	-340.8	6.58	NM	34.97	17.46	6.7
MW-252R	08/02/2019 10:35	1.18	-339.6	6.58	NM	34.58	17.41	7.7

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-252R	08/02/2019 10:40	1.03	-349.9	6.59	NM	34.18	17.13	8.7
MW-252R	08/02/2019 10:45	1.09	-350.6	6.6	NM	34.22	17.04	8.4
MW-252R	08/02/2019 10:50	1.29	-356.7	6.6	NM	34.13	16.8	8.6
MW-252R	08/02/2019 13:50	1.29	-356.7	6.6	NM	34.13	16.8	8.6
MW-252R	08/02/2019 14:40	8.23	-352	5.61	21.71	34.43	18.62	2.4
MW-252R	08/02/2019 14:55	6.26	-278.4	7.16	1.46	2.815	18.11	12.3
MW-252R	02/05/2021 09:50	0.92	-315.1	6.53	14.43	24.43	9.8	8.2
MW-252R	02/05/2021 09:55	0.87	-363.8	6.57	20.55	33.06	12.38	6.5
MW-252R	02/05/2021 10:00	0.62	-375.1	6.56	21.9	34.93	11.98	8.6
MW-252R	02/05/2021 10:05	0.59	-381.3	6.55	22.4	35.58	12.03	4.7
MW-252R	02/05/2021 10:10	0.23	-385.4	6.53	22.82	38.15	12.03	4.3
MW-252R	02/05/2021 10:15	0.53	-385.5	6.55	23.04	36.53	11.86	3.6
MW-252R	02/05/2021 10:20	0.46	-384	6.6	23.74	37.47	12.3	4.6
MW-252R	02/05/2021 10:25	0.4	-384.4	6.62	23.84	37.63	12.52	3.3
MW-252R	02/05/2021 10:30	0.39	-385	6.82	23.85	37.89	12.78	2.5
MW-252R	02/05/2021 10:35	0.35	-386.2	6.63	23.9	37.65	12.71	2.4
MW-252R	02/05/2021 11:15	0.13	-377.3	6.69	21.47	34.24	14.06	20.9
MW-252R	02/05/2021 11:30	0.2	-358.8	6.72	23.18	0.16	12.89	111.3
MW-252R	02/09/2022 09:10	-0.05	-329.4	6.71	29.25	45.21	12.88	9.6
MW-252R	02/09/2022 09:15	-1.57	-341.2	6.64	29.59	45.69	13.28	17.8
MW-252R	02/09/2022 09:20	-1.3	-342.8	6.67	29.65	45.77	13.29	16.7
MW-252R	02/09/2022 09:25	0.44	-348.3	6.69	29.94	46.16	13.4	6.9
MW-252R	02/09/2022 09:30	1.22	-347.5	6.72	30.34	46.77	12.51	0.1
MW-252R	02/09/2022 09:35	1.34	-347.3	6.72	30.34	46.77	12.5	0
MW-252R	02/09/2022 09:40	1.42	-347.2	6.72	30.34	46.76	12.49	0.1
MW-252R	02/09/2022 09:45	1.9	-345.9	6.73	30.23	46.61	12.51	1.1
MW-252R	02/09/2022 09:50	1.93	-345.9	6.73	30.23	46.61	12.51	1
MW-252R	02/09/2022 09:55	2.23	-345.7	6.73	30.18	46.52	12.61	1.3
MW-253	06/19/2012 14:24	0.85	-2	7.76	0.56	9.80164	27.66	12.8
MW-253	06/19/2012 14:26	0.56	20	7.82	0.63	10.99346	23.84	12.9
MW-253	06/19/2012 14:29	0.41	15	5.95	0.6	10.41252	23.27	14.4
MW-253	06/19/2012 14:31	0.38	5	5.99	0.57	9.91638	23.24	14.8
MW-253	06/19/2012 14:33	0.35	-5	6.05	0.54	9.52596	23.26	15.7
MW-253	06/19/2012 14:35	0.29	-14	6.13	0.52	9.21779	23.37	15.7
MW-253	06/19/2012 14:37	0.26	-24	6.21	0.51	8.98761	23.05	16.4
MW-253	06/19/2012 14:39	0.24	-33	6.26	0.5	8.80441	23.24	16.4
MW-253	06/19/2012 14:42	0.25	-42	6.31	0.49	8.61937	22.96	16.5
MW-253	06/19/2012 14:44	0.25	-49	6.33	0.48	8.45353	23.36	17.6
MW-253	06/19/2012 14:46	0.24	-57	6.37	0.46	8.20681	23.51	17.2
MW-253	06/19/2012 14:48	0.24	-62	6.39	0.46	8.17052	23.17	17.1
MW-253	06/19/2012 14:50	0.23	-68	6.41	0.45	8.0586	23.31	18.6
MW-253	06/19/2012 14:52	0.22	-75	6.47	0.44	7.76133	23.39	18.8
MW-253	06/19/2012 14:55	0.22	-82	6.5	0.42	7.58468	23.37	18.5
MW-253	06/19/2012 14:57	0.21	-87	6.52	0.41	7.41553	23.39	19
MW-253	06/19/2012 14:59	0.2	-89	6.52	0.42	7.46773	23.33	20
MW-253	06/19/2012 15:02	0.20	-89	6.52	0.42	7.468	19.76	23.33
MW-253	06/19/2012 15:31	1.58	-22	6.81	0.41	7.392	22.05	33.90
MW-253	06/20/2012 10:50	0.07	53	5.13	0.0000	15.400	19.00	557.00
MW-253	05/30/2013 09:58	0.43	-126	6.2	0.7	12.08	22.57	8.3
MW-253	05/30/2013 10:30	2.45	-96	6.22	1.59	25.72	20.12	54.1
MW-253	09/23/2014 09:36	0.31	13	6.22	0.78	13.470	23.13	12.63
MW-253	09/23/2014 10:27	2.49	36	6.07	1.09	18.190	22.90	466.80
MW-253	09/24/2014 09:44	0.98	10	5.28	1.31	21.610	21.89	366.10
MW-253	07/10/2015 11:07	-0.19	-40	5.72	NM	34.55	18.97	94.7
MW-253	07/10/2015 13:47	0.18	-102	6.27	NM	25.76	25.56	21.94
MW-253	07/10/2015 14:49	3.56	-75	5.94	NM	47.22	20.68	2902.8

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-253	02/10/2016 12:10	6.3	-175	6.21	1.42	23.885	8.14	59.5
MW-253	02/10/2016 12:12	2.64	-170	6.2	1.49	24.703	10.08	42.2
MW-253	02/10/2016 12:14	1.78	-164	6.22	1.51	25.010	10.58	31.6
MW-253	02/10/2016 12:16	1.2	-160	6.22	1.57	25.989	10.49	29.9
MW-253	02/10/2016 12:18	0.93	-158	6.21	1.60	26.340	10.66	32.1
MW-253	02/10/2016 12:20	0.8	-157	6.22	1.64	26.907	10.65	29.6
MW-253	02/10/2016 12:22	0.71	-156	6.22	1.66	27.294	10.49	29.2
MW-253	02/10/2016 12:24	0.64	-155	6.22	1.67	27.500	10.42	31.8
MW-253	02/10/2016 12:25	0.6	-154	6.23	1.69	27.768	10.2	28
MW-253	02/10/2016 12:27	0.56	-153	6.22	1.67	27.428	10.36	26.5
MW-253	02/10/2016 12:29	0.53	-152	6.23	1.68	27.608	10.43	28.7
MW-253	02/10/2016 12:31	0.52	-151	6.23	1.69	27.674	10.57	27.9
MW-253	02/11/2016 12:09	0.87	0	5.97	0.31	5.657	11.28	45.50
MW-253	02/11/2016 12:31	0.52	-151	6.23	1.69	27.76	10.46	27.91
MW-253	02/11/2016 13:02	1.90	-137	6.26	1.73	28.220	11.28	894.50
MW-253	08/17/2016 08:47	1.16	-68	6.06	NM	21.322	27.22	23.8
MW-253	08/17/2016 08:49	0.76	-88	6.07	NM	22.710	26.32	10.7
MW-253	08/17/2016 08:51	1.81	-102	6.11	NM	22.372	26.58	16.1
MW-253	08/17/2016 08:53	1.48	-109	6.11	NM	22.704	26.69	18.5
MW-253	08/17/2016 08:56	1.5	-118	6.18	NM	21.843	27.14	20.2
MW-253	08/17/2016 08:58	2.48	-123	6.21	NM	20.979	27.27	22.7
MW-253	08/17/2016 09:00	3.83	-127	6.25	NM	20.466	27.24	28.6
MW-253	08/17/2016 09:02	3.94	-130	6.27	NM	20.392	27.15	22.6
MW-253	08/17/2016 09:05	3.31	-132	6.28	NM	20.042	27.33	18.6
MW-253	08/17/2016 09:07	2.83	-134	6.29	NM	19.883	27.5	14.9
MW-253	08/17/2016 09:09	2.49	-133	6.26	NM	20.630	27.31	15.5
MW-253	08/17/2016 09:11	2.21	-136	6.3	NM	19.901	27.5	13.4
MW-253	08/17/2016 09:14	1.99	-139	6.31	NM	19.617	27.82	9.7
MW-253	08/17/2016 09:16	1.73	-140	6.31	NM	19.482	27.82	16.1
MW-253	08/17/2016 09:18	1.45	-142	6.31	NM	19.318	27.84	7
MW-253	08/17/2016 09:20	1.34	-144	6.31	NM	19.181	27.98	7.3
MW-253	08/17/2016 09:23	1.26	-144	6.31	NM	19.136	27.84	5.5
MW-253	08/17/2016 09:25	1.15	-145	6.31	NM	19.085	27.89	4.6
MW-253	08/17/2016 09:27	1.13	-146	6.31	NM	19.126	27.85	4.3
MW-253	08/17/2016 09:29	1.08	-146	6.31	NM	19.227	27.67	5.1
MW-253	08/17/2016 09:32	0.98	-146	6.3	NM	19.382	27.77	4.7
MW-253	08/17/2016 09:34	1	-146	6.3	NM	19.458	27.92	4.6
MW-253	08/17/2016 09:36	1	-145	6.29	NM	19.746	27.6	3.9
MW-253	08/18/2016 09:22	2.50	-72	5.50	1.92	50.480	22.43	600.70
MW-253	08/18/2016 09:36	1	-145	6.29	1.13	18.81	27.6	3.85
MW-253	08/18/2016 10:10	2.46	-78	6.19	1.51	24.520	24.91	95.20
MW-253	09/09/2016 09:15	0.76	-37.5	5.84	3.07	5.747	27.43	0
MW-253	09/09/2016 09:20	0.67	-37.4	5.85	3.03	5.594	27.41	0
MW-253	09/09/2016 09:25	0.58	-40.1	5.9	2.88	5.379	27.15	0
MW-253	09/09/2016 09:30	0.53	-41	5.93	2.86	5.338	27.12	0
MW-253	09/09/2016 09:35	0.39	-44.2	5.97	2.66	4.999	27.34	2.1
MW-253	09/09/2016 09:40	0.32	-50.3	6.03	2.54	4.801	27.42	1
MW-253	09/09/2016 09:45	0.29	-56.8	6.06	2.46	4.642	27.59	0.5
MW-253	09/09/2016 09:50	0.28	-62.5	6.09	2.44	4.59	27.63	0
MW-253	09/09/2016 09:55	0.27	-62.8	6.12	2.42	4.558	27.78	0
MW-253	09/09/2016 11:46	1.39	-29.7	6.07	1.94	5.321	29.75	7.10
MW-253	09/09/2016 11:55	1.56	-14.2	5.26	NM	14.720	23.84	70.80
MW-253	12/27/2016 13:45	1.54	-109.7	6.34	3.25	5.954	12.93	17.9
MW-253	12/27/2016 13:50	0.55	-112.3	6.34	3.25	5.955	12.71	32.5
MW-253	12/27/2016 13:55	0.48	-113.5	6.34	3.25	5.948	12.47	42.1
MW-253	12/27/2016 14:00	0.29	-119.5	6.35	3.23	5.909	12.39	30

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-253	12/27/2016 14:05	0.22	-121.8	6.35	3.21	5.878	12.45	26.7
MW-253	12/27/2016 14:10	0.19	-122.4	6.35	3.2	5.864	12.5	25.8
MW-253	12/27/2016 14:15	0.19	-127.6	6.35	3.2	5.881	12.5	26.1
MW-253	12/27/2016 14:20	0.18	-122.9	6.35	3.21	5.879	12.51	26.3
MW-253	12/27/2016 14:35	4.65	-83.5	6.39	3.31	6.055	12.86	9.5
MW-253	12/27/2016 14:50	7.47	-80.4	6.51	3.48	6.33	13.47	307
MW-253	03/09/2017 12:00	2.13	-62	6.23	0.24	4.562	10.64	34.40
MW-253	03/09/2017 15:00	7.32	-135	6.89	0.30	5.542	11.29	111.30
MW-253	04/26/2018 13:53	4	-64	7.03	0.350	6.3435	18.58	27
MW-253	04/26/2018 13:55	1.64	-56	6.82	0.349	6.3437	16.32	7.6
MW-253	04/26/2018 13:57	1.01	-54	6.76	0.339	6.1899	15.6	13.6
MW-253	04/26/2018 14:00	0.77	-55	6.72	0.336	6.1291	15.52	18.7
MW-253	04/26/2018 14:02	0.68	-57	6.7	0.331	6.0501	15.56	25.7
MW-253	04/26/2018 14:04	0.66	-58	6.69	0.326	5.9681	15.52	35.6
MW-253	04/26/2018 14:06	0.66	-59	6.69	0.318	5.8223	15.54	41.7
MW-253	04/26/2018 14:08	0.58	-60	6.69	0.309	5.6673	15.65	42
MW-253	04/26/2018 14:10	0.61	-60	6.67	0.315	5.7650	15.71	34.5
MW-253	04/26/2018 14:13	0.58	-58	6.65	0.316	5.7933	15.37	31.9
MW-253	04/26/2018 14:15	0.55	-61	6.67	0.310	5.6834	15.45	43.6
MW-253	04/26/2018 14:17	0.59	-62	6.67	0.296	5.4518	15.47	45.9
MW-253	04/26/2018 14:19	0.6	-63	6.68	0.302	5.5404	15.5	52.6
MW-253	04/26/2018 14:21	0.53	-64	6.67	0.295	5.4314	15.66	54.8
MW-253	04/26/2018 14:23	0.57	-64	6.66	0.298	5.4713	15.74	51.9
MW-253	04/26/2018 14:26	0.54	-64	6.66	0.298	5.4750	15.82	47.1
MW-253	04/26/2018 14:28	0.55	-65	6.66	0.301	5.5321	15.74	41.5
MW-253	04/26/2018 14:30	0.55	-66	6.66	0.295	5.4307	15.78	36.5
MW-253	04/26/2018 14:32	0.55	-67	6.67	0.299	5.4924	15.8	33.8
MW-253	04/26/2018 14:34	0.58	-68	6.67	0.300	5.5165	15.69	33.2
MW-253	04/27/2018 11:33	3.12	-67.00	6.07	0.29	5.448	11.47	38.50
MW-253	04/27/2018 14:34	0.58	-68.00	6.67	0.30	5.532	15.57	33.20
MW-253	04/27/2018 15:10	5.08	-67.00	5.61	0.35	6.438	12.83	1517.60
MW-253	10/15/2018 14:40	1.67	-94.1	6.25	3.3	6.007	22.93	3.1
MW-253	10/15/2018 14:45	2.42	-90.7	6.2	3.64	6.604	22.85	2.6
MW-253	10/15/2018 14:50	4.36	69.2	6.05	4.37	7.889	22.58	4.9
MW-253	10/15/2018 14:55	5.02	65.7	6.06	5.72	8.881	22.1	23
MW-253	10/15/2018 15:00	5.03	63.2	6.03	5.73	8.887	22.07	24.1
MW-253	10/15/2018 15:05	5.03	61.1	6.09	5.91	8.889	22.09	24.6
MW-253	10/15/2018 15:15	4.02	-35.30	5.80	6.36	11.230	22.15	4.00
MW-253	10/15/2018 15:20	3.30	-27.30	5.72	6.31	11.080	21.83	5.90
MW-253	10/15/2018 15:30	3.63	-34.20	5.78	5.33	9.623	22.21	9.00
MW-253	04/25/2019 09:00	2.66	-130.7	6.45	2.5	4.631	13.94	5.3
MW-253	04/25/2019 09:05	0.78	-130.8	6.41	2.49	4.63	14.72	6.6
MW-253	04/25/2019 09:10	0.65	-131	6.39	2.46	4.573	14.82	13.3
MW-253	04/25/2019 09:15	0.52	-130.1	6.45	2.36	4.404	15.14	33.2
MW-253	04/25/2019 09:20	0.47	-121.7	6.42	2.28	4.271	15.27	21.5
MW-253	04/25/2019 09:25	0.45	-125.4	6.44	2.24	4.269	15.28	21.3
MW-253	04/25/2019 09:30	0.48	-129.1	6.42	2.22	4.269	15.29	21.2
MW-253	04/25/2019 09:40	0.48	-129.1	6.42	2.22	4.269	12.29	21.2
MW-253	04/25/2019 09:56	0.79	-82.2	6.41	2.47	4.598	13.69	7.4
MW-253	04/25/2019 10:15	0.32	-81.3	6.74	2.51	4.613	14.04	16.3
MW-253	07/15/2019 10:05	10.92	-109.3	6.31	NM	6.109	28.29	22.1
MW-253	07/15/2019 10:10	0.79	-108.4	6.22	NM	5.776	27.07	2.1
MW-253	07/15/2019 10:15	0.56	-113.4	6.27	NM	5.634	27.47	4.6
MW-253	07/15/2019 10:20	0.53	-112.7	6.3	NM	5.451	27.24	2.8
MW-253	07/15/2019 10:25	0.51	-102.7	6.31	NM	5.443	27.45	5.1
MW-253	07/15/2019 10:30	0.49	-101.7	6.31	NM	5.427	27.96	6.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-253	07/15/2019 10:35	0.48	-99.1	6.3	NM	5.096	27.43	2.1
MW-253	07/15/2019 10:40	0.46	-96.2	6.3	NM	4.944	27.61	2.3
MW-253	07/15/2019 10:45	0.45	-97.3	6.3	NM	4.882	27.66	3.4
MW-253	07/15/2019 10:50	0.41	-107.9	6.33	NM	4.97	27.11	0.4
MW-253	07/15/2019 12:25	10.92	-109.3	6.31	3.3	6.109	28.29	22.1
MW-253	07/15/2019 12:30	0.79	-108.4	6.22	3.11	5.776	27.07	2.1
MW-253	07/15/2019 12:35	0.56	-113.4	6.27	3.04	5.634	27.47	4.6
MW-253	07/15/2019 12:40	0.53	-112.7	6.3	2.94	5.451	27.24	2.8
MW-253	07/15/2019 12:45	0.51	-102.7	6.31	2.92	5.443	27.45	5.1
MW-253	07/15/2019 12:50	0.49	-101.7	6.31	2.91	5.427	27.96	6.1
MW-253	07/15/2019 12:55	0.48	-99.1	6.3	2.72	5.096	27.43	2.1
MW-253	07/15/2019 13:00	0.46	-96.2	6.3	2.63	4.944	27.61	2.3
MW-253	07/15/2019 13:05	0.45	-97.3	6.3	2.6	4.882	27.66	3.4
MW-253	07/15/2019 13:10	0.41	-107.9	6.33	2.66	4.97	27.11	0.4
MW-253	08/22/2019 08:15	2.9	-69.1	6.88	NM	7.112	26.4	5.6
MW-253	08/22/2019 08:20	0.84	-83.3	6.26	NM	7.089	26.57	5.3
MW-253	08/22/2019 08:25	0.7	-100.7	6.33	NM	6.707	26.85	6.8
MW-253	08/22/2019 08:30	0.65	-109.7	6.39	NM	6.186	27.38	9.3
MW-253	08/22/2019 08:35	1.04	-102.1	6.41	NM	5.563	27.77	12.4
MW-253	08/22/2019 08:40	0.86	-86.9	6.43	NM	4.574	28.01	15.4
MW-253	08/22/2019 08:45	1.16	-77.8	6.45	NM	4.027	28.41	15.3
MW-253	08/22/2019 08:50	1.04	-79.5	6.47	NM	3.9	28.38	16.9
MW-253	08/22/2019 08:55	0.93	-82.5	6.48	NM	3.995	28.22	22.4
MW-253	08/22/2019 09:00	0.9	-83.2	6.49	NM	4.014	28.24	23.2
MW-253	09/18/2019 08:50	3.8	164.6	6.22	NM	4.175	25.12	18
MW-253	09/18/2019 08:55	2.97	144	6.22	NM	3.886	25.45	7.8
MW-253	09/18/2019 09:00	2.29	111.6	6.27	NM	3.948	24.89	1.8
MW-253	09/18/2019 09:05	1.13	72	6.32	NM	3.8	24.96	1.4
MW-253	09/18/2019 09:10	0.73	50.2	6.32	NM	3.807	24.81	4.6
MW-253	09/18/2019 09:15	0.3	62.6	5.94	NM	6.88	24.18	1.6
MW-253	09/18/2019 09:20	0.22	62.3	5.93	NM	6.623	23.78	1
MW-253	09/18/2019 09:25	0.07	57.4	5.99	NM	6.158	23.93	0.4
MW-253	09/18/2019 09:30	0.08	49.4	6.08	NM	5.451	23.83	0.8
MW-253	09/18/2019 09:35	0.09	38.9	6.16	NM	5.244	23.89	9
MW-253	09/19/2019 09:20	3.38	267.1	5.92	2.74	5.436	22.35	598.8
MW-253	09/19/2019 10:30	1.05	128.9	5.89	3.67	6.708	23.51	5.7
MW-253	09/19/2019 10:31	1.05	128.9	5.89	3.67	6.708	23.51	5.7
MW-253	04/03/2020 10:00	0.56	-58.4	6.44	NM	2.989	11.85	22.1
MW-253	04/27/2020 13:55	0.04	-60.7	6.26	NM	1.571	12.56	36.9
MW-253	04/27/2020 14:05	0.07	50.3	6.23	0.83	1.629	12.86	45.6
MW-253	05/27/2020 10:00	0.09	-51.8	6.42	NM	2.812	16.48	0.7
MW-253	12/01/2020 09:55	3.56	-10	6.42	0.65	1.296	15.2	210.2
MW-253	12/01/2020 10:00	1.91	-25.7	6.4	0.65	1.296	15.27	199.1
MW-253	12/01/2020 10:05	0.47	-59	6.46	0.65	1.302	15.81	80.1
MW-253	12/01/2020 10:10	0.41	-64.5	6.46	0.67	1.323	15.85	60.6
MW-253	12/01/2020 10:15	0.38	-65.5	6.46	0.66	1.302	15.86	45.5
MW-253	12/01/2020 10:20	0.43	-68.2	6.48	0.65	1.3	16.11	25.5
MW-253	12/01/2020 10:25	0.65	-72.7	6.45	0.47	0.944	15.84	14.7
MW-253	12/01/2020 10:30	0.74	-72.9	6.46	0.42	0.859	15.83	14.8
MW-253	12/01/2020 10:35	1.07	-71.6	6.46	0.34	0.702	15.95	18.2
MW-253	12/01/2020 10:40	0.96	-70.6	6.45	0.34	0.685	15.81	22.2
MW-253	03/11/2022 10:30	3.05	-1.9	6.64	0.65	1.278	10.74	72.5
MW-253	03/11/2022 10:35	1.03	-20.2	6.27	0.66	1.313	10.72	60
MW-253	03/11/2022 10:40	0.99	-16.7	6.25	0.62	1.239	10.95	65.9
MW-253	03/11/2022 10:45	1.17	-8.6	6.25	0.51	1.024	11.23	71.3
MW-253	03/11/2022 10:50	1.21	-3.5	6.23	0.45	0.91	11.31	74.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-253	03/11/2022 10:55	1.21	0.9	6.21	0.39	0.798	11.08	67.5
MW-253	03/11/2022 11:00	1.14	9.5	6.16	0.35	0.689	10.84	64.3
MW-253	03/11/2022 11:05	1.1	12.3	6.14	0.35	0.685	10.8	69.4
MW-253	03/11/2022 11:10	1.09	14.7	6.14	0.35	0.681	10.77	65.2
MW-254	05/10/2012 09:23	1.39	-28	6.49	0.06	1.22642	18.85	1.8
MW-254	05/10/2012 09:25	1.39	-41	6.54	0.06	1.22568	16.7	6.6
MW-254	05/10/2012 09:28	0.99	-47	6.56	0.06	1.20653	16.28	2.7
MW-254	05/10/2012 09:30	0.84	-52	6.56	0.06	1.19417	16.34	2.7
MW-254	05/10/2012 09:32	0.7	-55	6.57	0.06	1.18218	16.41	3.4
MW-254	05/10/2012 09:34	0.64	-58	6.57	0.06	1.17613	16.25	1.8
MW-254	05/10/2012 09:37	0.57	-59	6.58	0.06	1.18202	16.01	2.2
MW-254	05/10/2012 09:39	0.53	-60	6.58	0.06	1.18113	15.69	3.8
MW-254	05/10/2012 09:41	0.48	-62	6.59	0.06	1.16266	16.14	2.4
MW-254	05/10/2012 09:43	0.45	-62	6.59	0.06	1.15164	15.88	2
MW-254	05/10/2012 09:46	0.36	-64	6.59	0.06	1.13863	16.45	1.6
MW-254	05/10/2012 09:48	0.33	-64	6.59	0.06	1.14316	16.13	2.3
MW-254	05/10/2012 09:50	0.28	-65	6.6	0.06	1.14203	16.29	2.1
MW-254	05/10/2012 09:52	0.27	-65	6.6	0.06	1.13578	16.15	1.9
MW-254	05/10/2012 09:55	0.25	-66	6.6	0.06	1.12617	16.5	3.4
MW-254	05/10/2012 09:57	0.22	-67	6.6	0.06	1.11448	16.78	2.5
MW-254	05/10/2012 09:59	0.22	-67	6.6	0.06	1.11487	16.1	2.8
MW-254	05/10/2012 10:01	0.21	-68	6.61	0.06	1.10607	16.33	3.9
MW-254	05/10/2012 10:04	0.2	-68	6.62	0.06	1.10424	16.17	3.2
MW-254	05/10/2012 10:06	0.2	-69	6.62	0.06	1.1046	16.16	3.9
MW-254	05/10/2012 10:08	0.15	-69	6.62	0.05	1.0982	16.74	3.8
MW-254	05/10/2012 10:10	0.18	-69	6.62	0.06	1.10282	16.47	4.4
MW-254	05/10/2012 10:12	0.18	-69	6.62	0.06	1.103	16.47	4.37
MW-254	05/30/2013 11:38	0.36	-131	6.53	0.18	3.423	31.21	9.93
MW-254	05/30/2013 12:01	2.76	-85	6.62	0.16	2.954	17.63	8
MW-254	09/24/2014 11:01	0.43	191	6.35	0.06	1.187	20.91	6.00
MW-254	12/17/2015 09:42	0.94	-239	6.83	0.12	2.343	17.44	54.8
MW-254	12/17/2015 11:37	2.23	-92	6.95	0.07	1.455	16.77	9.1
MW-254	05/27/2016 09:26	NM	627	NM	0.18	3.346	15.91	190.40
MW-254	05/27/2016 09:53	2.19	457	NM	0.15	2.904	15.78	257.80
MW-254	09/20/2016 14:16	0.82	-36.3	6.09	0.56	1.131	22.20	4.30
MW-254	09/20/2016 14:25	0.57	-37.5	6.15	0.56	1.136	25.36	22.80
MW-254	12/15/2016 13:55	0.98	-58.8	6.68	0.54	1.073	14.68	0
MW-254	06/01/2017 11:06	0.13	-59.00	6.60	0.11	2.209	17.34	2.10
MW-254	06/01/2017 11:44	1.80	-75.00	7.09	0.16	2.969	16.39	34.70
MW-254	05/29/2018 12:39	1.85	-82	6.87	0.138	2.6313	25.11	35.4
MW-254	05/29/2018 12:40	1.62	-82	6.81	0.139	2.6455	26.03	25.2
MW-254	05/29/2018 12:42	1.55	-84	6.68	0.139	2.6456	25.35	37.2
MW-254	05/29/2018 12:44	1.35	-87	6.63	0.141	2.6860	27.33	19.6
MW-254	05/29/2018 12:46	1.29	-90	6.61	0.142	2.7070	28.63	16.4
MW-254	05/29/2018 12:48	1.21	-92	6.6	0.143	2.7196	29.73	16.7
MW-254	05/29/2018 12:50	1.16	-95	6.6	0.144	2.7484	30.73	17.9
MW-254	05/29/2018 12:53	1.13	-97	6.6	0.145	2.7714	31.64	15.8
MW-254	05/29/2018 12:55	1.09	-99	6.6	0.145	2.7737	32.51	17.2
MW-254	05/29/2018 12:57	1.06	-101	6.6	0.145	2.7740	33.32	17
MW-254	05/30/2018 12:57	1.06	-101.00	6.60	0.14	2.766	33.5	16.96
MW-254	05/30/2018 13:31	224.00	-90.00	6.71	0.12	2.254	18.33	18.20
MW-254	05/20/2019 13:25	0.3	-104.6	6.32	NM	0.911	17.66	13.6
MW-254	05/20/2019 13:37	0.2	-99.5	6.19	0.38	0.764	12.99	39.2
MW-254	03/31/2020 09:35	2.51	-108.2	6.62	NM	0.452	12.04	0.2
MW-254	03/31/2020 09:50	1.94	-113.5	6.62	0.21	0.434	12.38	0.5
MW-254	11/10/2020 12:55	3.41	-49.1	6.7	0.26	0.529	20.9	23.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-254	11/10/2020 13:05	1.7	-48.3	6.61	0.25	0.527	21.32	22.8
MW-254	02/17/2021 14:34	0.44	132.1	6.5	0.47	0.944	11.73	5
MW-254	02/17/2021 14:40	0.21	-138	6.54	0.45	0.901	12.04	-0.4
MW-254	02/17/2021 14:45	0.19	-142.5	6.56	0.44	0.897	12.09	-0.8
MW-254	02/17/2021 14:50	0.39	144.8	6.56	0.44	0.894	12.25	-1.1
MW-254	02/17/2021 14:55	0.33	-146.1	6.56	0.44	0.89	12.4	-0.2
MW-254	02/17/2021 15:00	0.3	-146.7	6.56	0.44	0.89	12.31	-0.4
MW-254	02/17/2021 15:05	0.24	-147.8	6.56	0.44	0.887	12.5	-0.2
MW-254	02/17/2021 15:10	0.18	148.6	6.56	0.44	0.883	12.38	9.5
MW-254	02/17/2021 15:15	0.16	-149.3	6.56	0.44	0.88	12.38	10.8
MW-254	02/17/2021 15:20	0.14	-149.6	6.56	0.43	0.887	12.52	17.6
MW-254	02/17/2021 15:49	4.91	-92.2	6.67	0.53	1.055	12.41	16.27
MW-254	02/17/2021 16:08	5.05	-87.7	6.72	0.44	0.881	10.46	16.31
MW-254	05/11/2021 13:20	0.87	-5.8	6.28	0.01	0.018	18.38	1414
MW-254	05/11/2021 13:25	0.73	16.8	5.8	0.29	0.019	18	100.3
MW-254	05/11/2021 13:30	0.67	31.4	5.64	0.01	0.035	17.44	86.2
MW-254	05/11/2021 13:35	0.66	30.6	5.54	0.01	0.017	15.54	89.2
MW-254	05/11/2021 13:40	3.42	-0.8	5.88	0.67	1.328	15.11	68.6
MW-254	05/11/2021 13:45	1.23	-24.4	6.01	0.66	1.318	14.65	51.2
MW-254	05/11/2021 13:50	1.69	-64.1	6.29	0.66	1.312	14.14	16
MW-254	05/11/2021 13:55	1.26	-75.1	6.39	0.66	1.31	14.18	5.4
MW-254	05/11/2021 14:00	0.91	-81.6	6.43	0.66	1.303	13.93	0.1
MW-254	05/11/2021 14:05	0.75	-84.5	6.45	0.65	1.299	14.13	0.1
MW-254	02/22/2022 11:10	1.69	-121.4	6.62	1.03	2.015	14.87	167.5
MW-254	02/22/2022 11:15	0.91	-123.7	6.59	0.96	1.876	16.26	144.3
MW-254	02/22/2022 11:20	1.8	-121.7	6.59	0.94	1.853	15.23	212.3
MW-254	02/22/2022 11:25	2.2	-129.6	6.48	0.9	1.757	12.95	58.8
MW-254	02/22/2022 11:30	1.95	-134.2	6.46	0.92	1.804	12.96	22.9
MW-254	02/22/2022 11:35	1.64	-140.1	6.49	0.94	1.831	13.05	9
MW-254	02/22/2022 11:40	1.52	-141.8	6.5	0.94	1.842	13.04	6.6
MW-254	02/22/2022 11:45	1.48	-141.2	6.49	0.95	1.85	12.95	4.4
MW-254	02/22/2022 11:50	1.09	-144.7	6.48	0.95	1.861	13.1	2
MW-254	02/22/2022 11:55	1.01	-145	6.48	0.95	1.861	13.07	2
MW-255	06/13/2012 12:57	2.24	-62	7.07	1.47	24.070	16.52	21.70
MW-255	06/14/2012 11:13	0.76	-151	7.50	1.60	26.200	18.90	127.00
MW-255	05/30/2013 14:09	1.37	-175	6.63	2.24	35.37	16.76	45.8
MW-255	05/31/2013 10:41	0.08	-205	6.64	2.23	35.23	17.61	47.5
MW-255	05/31/2013 14:09	1.37	-175	6.63	2.24	35.370	16.76	45.80
MW-255	09/23/2014 11:38	0.96	71	6.27	1.41	23.150	17.12	53.20
MW-255	09/24/2014 11:22	0.54	-278	6.24	1.58	25.620	19.64	50.10
MW-255	12/17/2015 09:17	1.04	-34	6.39	0.97	16.4	16.55	34.5
MW-255	12/17/2015 10:12	0.8	-259	6.52	1.19	19.86	16.91	29.7
MW-255	05/27/2016 10:22	NM	627	6.73	1.91	30.570	16.46	17.90
MW-255	05/27/2016 11:06	54.78	418	6.74	1.86	29.840	17.19	15.20
MW-255	09/19/2016 15:41	1.29	-66.3	7.33	14.53	23.940	17.66	0.80
MW-255	09/19/2016 15:50	0.86	-54.2	7.14	14.38	23.440	18.02	1.11
MW-255	12/15/2016 11:00	7.13	156.3	7.11	6.76	1.307	7.46	12.6
MW-255	12/15/2016 11:25	6.85	53.8	6.95	0.34	1.826	12.38	31.4
MW-255	06/01/2017 09:06	2.47	109.00	7.12	0.34	6.166	15.58	234.50
MW-255	06/01/2017 09:21	1.76	98.00	7.65	0.76	13.030	17.17	38.30
MW-255	05/30/2018 11:23	2.17	-143.00	7.78	0.62	10.820	16.67	130.20
MW-255	05/30/2018 13:05	1.68	-154.00	7.67	0.63	11.090	16.57	47.10
MW-255	05/28/2019 13:52	1.61	-74.3	6.94	12.32	20.49	16.93	5
MW-255	05/13/2020 11:50	0.69	-245.7	7.07	13.04	21.62	16.2	13.8
MW-255	04/26/2022 09:05	6.44	16.9	9.14	0.41	0.827	15.31	75.8
MW-255	04/26/2022 09:10	2.8	-89.7	7.31	1.28	2.403	15.22	95.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-255	04/26/2022 09:15	2	-117.2	6.76	2.56	4.692	15.23	93.4
MW-255	04/26/2022 09:20	1.53	-136	6.67	3.61	6.505	15.22	87.7
MW-255	04/26/2022 09:25	1.08	-154.8	6.63	5.31	9.288	15.24	82.6
MW-255	04/26/2022 09:30	0.66	-177.9	6.65	7.02	12.16	15.28	58.5
MW-255	04/26/2022 09:35	0.49	-191.1	6.71	8.14	13.97	15.27	44.2
MW-255	04/26/2022 09:40	0.33	-202.1	6.75	9.41	15.95	15.35	22.8
MW-255	04/26/2022 09:45	0.19	-218.9	6.78	10.89	18.27	15.45	13.2
MW-255	04/26/2022 09:50	0.17	-225.7	6.8	11.3	18.94	15.48	10
MW-256	05/01/2012 15:42	1.51	-50	6.55	0.05	0.92498	20.83	151.1
MW-256	05/01/2012 15:44	1.07	-60	6.58	0.05	1.00268	16.43	56.2
MW-256	05/01/2012 15:46	0.72	-66	6.59	0.05	1.10042	15.87	27.2
MW-256	05/01/2012 15:49	0.55	-72	6.63	0.06	1.14657	15.82	53
MW-256	05/01/2012 15:51	0.45	-75	6.64	0.06	1.1646	15.64	23.2
MW-256	05/01/2012 15:54	0.36	-78	6.65	0.06	1.17379	15.36	20.5
MW-256	05/01/2012 15:56	0.31	-80	6.66	0.06	1.17839	15.18	14.9
MW-256	05/01/2012 15:58	0.04	-81	6.67	0.06	1.17726	15.24	17.6
MW-256	05/01/2012 16:01	0.25	-82	6.69	0.06	1.18292	15.11	13.3
MW-256	05/01/2012 16:03	0.25	-84	6.7	0.06	1.18075	15.88	12.8
MW-256	05/01/2012 16:05	0.18	-85	6.72	0.06	1.18745	15.84	30.8
MW-256	05/01/2012 16:08	0.22	-86	6.71	0.06	1.19108	16.28	14.1
MW-256	05/01/2012 16:10	0.21	-87	6.73	0.06	1.19498	16.08	16.7
MW-256	05/01/2012 16:12	0.2	-86	6.73	0.06	1.19288	15.91	17.9
MW-256	05/01/2012 16:15	0.18	-88	6.73	0.06	1.2119	16.01	20.2
MW-256	05/01/2012 16:17	0.18	-89	6.73	0.06	1.22394	16.29	21.9
MW-256	05/01/2012 16:19	0.19	-89	6.75	0.06	1.2307	16.15	22.6
MW-256	05/01/2012 16:22	0.16	-90	6.74	0.06	1.24832	16.06	21.3
MW-256	05/01/2012 16:24	0.17	-90	6.75	0.06	1.25532	16.12	21.6
MW-256	05/01/2012 16:26	0.17	-91	6.75	0.06	1.26484	15.96	23
MW-256	05/01/2012 16:27	0.17	-91	6.75	0.06	1.265	15.96	23.04
MW-256	05/01/2012 16:52	3.96	-68	6.89	0.07	1.335	14.85	3.60
MW-256	05/02/2012 11:50	1.97	-93	6.61	0.0000	0.742	13.08	126.00
MW-256	05/29/2013 08:57	1.99	-134	6.44	0.17	3.30373	15.84	11.5
MW-256	05/29/2013 09:00	1.23	-131	6.49	0.17	3.20172	15.35	8.5
MW-256	05/29/2013 09:03	0.96	-132	6.53	0.16	3.12543	15.32	9.7
MW-256	05/29/2013 09:06	0.78	-134	6.57	0.16	3.07113	15.76	9.6
MW-256	05/29/2013 09:08	0.71	-135	6.59	0.17	3.19152	15.88	7.1
MW-256	05/29/2013 09:11	0.67	-134	6.57	0.17	3.14884	15.86	6.8
MW-256	05/29/2013 09:14	0.64	-135	6.58	0.17	3.22145	15.77	7.2
MW-256	05/29/2013 09:17	0.6	-135	6.58	0.17	3.24775	15.72	6.5
MW-256	05/29/2013 09:19	0.58	-135	6.58	0.17	3.27017	15.63	4.9
MW-256	05/29/2013 09:22	0.54	-136	6.59	0.17	3.27305	15.76	10.5
MW-256	05/29/2013 09:25	0.53	-136	6.59	0.17	3.31248	15.6	6.7
MW-256	05/29/2013 09:28	0.5	-136	6.58	0.18	3.3316	15.54	5.8
MW-256	05/29/2013 09:30	0.5	-138	6.6	0.18	3.34994	15.53	9.9
MW-256	05/29/2013 09:33	0.48	-138	6.61	0.18	3.34165	15.58	6.2
MW-256	05/29/2013 09:36	0.46	-138	6.61	0.18	3.35978	15.62	7.8
MW-256	05/29/2013 09:39	0.45	-139	6.62	0.18	3.36872	15.71	6.3
MW-256	05/29/2013 09:41	0.44	-139	6.62	0.18	3.38231	15.82	5.4
MW-256	05/29/2013 09:44	0.42	-139	6.61	0.18	3.38361	15.84	7.1
MW-256	05/29/2013 09:47	0.43	-140	6.62	0.18	3.41241	15.88	5.6
MW-256	08/15/2013 14:01	2.92	-87.4	6.45	0.94	1.860	22.58	284.40
MW-256	08/15/2013 14:41	0.24	-83.4	6.44	0.99	1.936	16.88	36.10
MW-256	08/15/2013 15:03	0.52	-83.1	6.74	1.00	1.974	17.74	17.60
MW-256	08/16/2013 15:03	0.52	-83.1	6.74	1.00	1.974	17.74	17.60
MW-256	06/26/2014 10:21	1.03	-64.00	6.54	NM	1.01	25.58	35.30
MW-256	06/26/2014 10:23	1.10	-82.00	6.57	NM	1.01	23.31	33.50

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-256	06/26/2014 10:26	0.86	-84.00	6.59	NM	1.06	21.78	95.60
MW-256	06/26/2014 10:28	0.68	-85.00	6.58	NM	1.15	21.29	13.50
MW-256	06/26/2014 10:30	0.63	-86.00	6.58	NM	1.23	21.28	87.40
MW-256	06/26/2014 10:33	0.54	-87.00	6.58	NM	1.25	21.23	13.50
MW-256	06/26/2014 10:35	0.48	-88.00	6.58	NM	1.27	21.45	11.80
MW-256	06/26/2014 10:37	0.46	-91.00	6.61	NM	1.28	21.88	20.90
MW-256	06/26/2014 10:40	0.42	-92.00	6.61	NM	1.29	22.03	10.90
MW-256	06/26/2014 10:42	0.40	-92.00	6.60	NM	1.30	21.60	10.50
MW-256	06/26/2014 10:44	0.37	-92.00	6.59	NM	1.28	20.81	9.00
MW-256	06/26/2014 10:47	0.36	-92.00	6.58	NM	1.27	20.66	7.70
MW-256	06/26/2014 10:49	0.33	-93.00	6.59	NM	1.28	21.29	9.70
MW-256	06/26/2014 10:52	0.33	-95.00	6.61	NM	1.30	21.72	19.10
MW-256	06/26/2014 10:54	0.33	-95.00	6.60	NM	1.30	21.80	9.20
MW-256	06/26/2014 10:56	0.31	-96.00	6.61	NM	1.29	21.72	14.00
MW-256	06/26/2014 10:59	0.31	-96.00	6.60	NM	1.30	21.97	14.00
MW-256	06/26/2014 11:01	0.28	-97.00	6.61	NM	1.31	22.10	8.30
MW-256	06/26/2014 11:03	0.28	-96.00	6.61	NM	1.28	21.30	6.80
MW-256	06/26/2014 11:06	0.28	-97.00	6.60	NM	1.29	21.43	9.60
MW-256	06/26/2014 11:08	0.27	-97.00	6.61	NM	1.30	21.73	12.50
MW-256	06/26/2014 11:10	0.26	-98	6.62	0.07	1.383	21.47	7.66
MW-256	06/26/2014 11:53	0.95	-90	6.68	0.03	0.681	18.68	272.20
MW-256	06/27/2014 10:01	0.27	-99	6.60	0.07	1.388	16.56	206.40
MW-256	03/06/2015 13:00	2.25	-65.5	6.76	0.69	1.364	7.86	35.20
MW-256	03/06/2015 13:45	0.29	-90.1	1.90	0.68	1.359	8.15	6.74
MW-256	03/06/2015 13:50	-1.47	-72.1	5.40	0.68	1.362	8.17	6.73
MW-256	07/07/2015 14:38	1.38	-63	6.34	0.0474	0.0010	27.05	44.4
MW-256	07/07/2015 14:40	1.29	-71	6.36	0.0610	0.0012	23.65	23.8
MW-256	07/07/2015 14:41	1.03	-76	6.39	0.0652	0.0013	23.45	22.5
MW-256	07/07/2015 14:43	0.85	-80	6.43	0.0698	0.0014	22.48	17.4
MW-256	07/07/2015 14:44	0.66	-82	6.46	0.0734	0.0014	21.98	14.8
MW-256	07/07/2015 14:46	0.48	-85	6.48	0.0710	0.0014	23.03	65.1
MW-256	07/07/2015 14:47	0.39	-89	6.54	0.0699	0.0014	23.29	18.9
MW-256	07/07/2015 14:48	0.36	-91	6.56	0.0696	0.0014	23.3	13.4
MW-256	07/07/2015 14:50	0.35	-92	6.58	0.0709	0.0014	22.77	21
MW-256	07/07/2015 14:51	0.29	-92	6.57	0.0725	0.0014	22.84	42.6
MW-256	07/07/2015 14:53	0.22	-92	6.57	0.0722	0.0014	23.2	9.7
MW-256	07/07/2015 14:54	0.21	-93	6.59	0.0737	0.0015	22.46	17.9
MW-256	07/07/2015 14:56	0.14	-93	6.57	0.0732	0.0014	23.16	20.2
MW-256	07/07/2015 14:57	0.11	-94	6.58	0.0716	0.0014	23.43	11.3
MW-256	07/07/2015 14:59	0.11	-95	6.59	0.0712	0.0014	23.3	13.1
MW-256	07/07/2015 15:00	0.09	-95	6.58	0.0718	0.0014	23.29	8.5
MW-256	07/07/2015 15:02	0.06	-96	6.59	0.0730	0.0014	22.82	10.7
MW-256	07/07/2015 15:03	0.03	-96	6.59	0.0747	0.0015	22.8	16.5
MW-256	07/07/2015 15:05	0.03	-96	6.59	0.0740	0.0015	23.06	9.4
MW-256	07/07/2015 15:06	-0.03	-97	6.59	0.0735	0.0014	23.2	10.4
MW-256	07/07/2015 15:08	-0.05	-98	6.6	0.0730	0.0014	23.1	8.6
MW-256	07/07/2015 15:09	-0.03	-99	6.6	0.0729	0.0014	23.16	15.2
MW-256	07/07/2015 15:11	-0.02	-99	6.61	0.0740	0.0015	23	7.3
MW-256	07/07/2015 15:12	-0.04	-100	6.61	0.0755	0.0015	22.73	6.9
MW-256	07/07/2015 15:14	-0.05	-100	6.61	0.0767	0.0015	22.52	10.2
MW-256	07/07/2015 15:15	-0.05	-101	6.62	0.0787	0.0015	22.16	6
MW-256	07/07/2015 15:17	-0.07	-101	6.62	0.0799	0.0016	22.13	6.9
MW-256	07/07/2015 15:18	-0.09	-102	6.62	0.0796	0.0016	22.13	5.3
MW-256	07/07/2015 15:20	-0.09	-101	6.6	0.0789	0.0016	22.43	6.1
MW-256	07/07/2015 15:21	-0.11	-102	6.61	0.0804	0.0016	22.28	7.9
MW-256	07/07/2015 15:23	-0.13	-102	6.61	0.0807	0.0016	22.2	6.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-256	07/07/2015 15:24	-0.14	-102	6.61	0.0806	0.0016	22.17	23.9
MW-256	07/07/2015 15:26	-0.14	-103	6.62	0.0798	0.0016	22.24	7.6
MW-256	07/07/2015 15:27	-0.15	-103	6.61	0.0806	0.0016	22.17	5.5
MW-256	07/08/2015 11:59	-0.08	-113	6.58	0.09	1.85	19.81	435.7
MW-256	07/08/2015 15:49	9.2	-57	6.42	0.08	1.53	21.68	526.2
MW-256	02/18/2016 09:05	4.570	-150.000	6.460	0.038	0.791	6.490	40.500
MW-256	02/18/2016 09:07	2.150	-153.000	6.490	0.037	0.774	5.660	32.700
MW-256	02/18/2016 09:09	1.360	-148.000	6.460	0.037	0.773	6.510	21.800
MW-256	02/18/2016 09:12	1.010	-147.000	6.460	0.037	0.768	6.390	30.500
MW-256	02/18/2016 09:14	0.880	-147.000	6.480	0.037	0.767	6.040	18.000
MW-256	02/18/2016 09:16	0.790	-147.000	6.470	0.037	0.768	6.000	17.100
MW-256	02/18/2016 09:18	0.690	-147.000	6.470	0.037	0.769	6.530	23.700
MW-256	02/18/2016 09:20	0.600	-147.000	6.480	0.037	0.768	6.420	17.100
MW-256	02/18/2016 09:22	0.590	-147.000	6.490	0.037	0.767	6.350	20.100
MW-256	02/18/2016 09:24	0.580	-148.000	6.500	0.037	0.768	6.230	21.300
MW-256	02/18/2016 09:27	0.570	-148.000	6.500	0.037	0.767	6.200	16.600
MW-256	02/18/2016 09:29	0.560	-148.000	6.490	0.037	0.766	6.410	17.800
MW-256	02/18/2016 09:31	0.560	-148.000	6.500	0.037	0.769	6.270	13.500
MW-256	02/18/2016 09:33	0.570	-149.000	6.500	0.037	0.766	6.330	14.600
MW-256	02/18/2016 09:35	0.570	-149.000	6.510	0.037	0.769	6.110	12.500
MW-256	02/18/2016 09:37	0.560	-149.000	6.500	0.037	0.768	6.410	17.200
MW-256	02/18/2016 09:40	0.550	-150.000	6.510	0.037	0.769	6.280	11.900
MW-256	02/18/2016 09:42	0.540	-150.000	6.510	0.037	0.772	6.590	25.200
MW-256	02/18/2016 09:44	0.550	-150.000	6.520	0.037	0.764	6.220	12.200
MW-256	02/18/2016 09:46	0.520	-150.000	6.520	0.037	0.767	6.600	12.800
MW-256	02/18/2016 09:48	0.490	-151.000	6.520	0.037	0.770	6.860	15.300
MW-256	02/18/2016 09:50	0.480	-151.000	6.530	0.037	0.767	6.780	10.600
MW-256	02/18/2016 09:53	0.470	-152.000	6.520	0.037	0.771	7.100	10.900
MW-256	02/18/2016 09:55	0.460	-152.000	6.520	0.037	0.769	6.960	62.500
MW-256	02/19/2016 10:22	4.18	-181	6.44	0.04	0.808	7.70	338.30
MW-256	02/19/2016 10:32	0.66	-144	6.38	0.03	0.697	8.04	263.30
MW-256	10/04/2016 10:10	0.74	-100.9	6.83	0.61	1.270	19.03	32.70
MW-256	10/04/2016 10:20	0.89	-83.4	6.86	0.64	1.280	19.45	122.70
MW-256	02/21/2017 13:50	7.98	-141	6.88	0.07	1.36	10.21	248.5
MW-256	02/21/2017 13:52	2.41	-167	6.7	0.07	1.38	10.3	230.9
MW-256	02/21/2017 13:54	2.73	-182	6.65	0.07	1.37	10.56	136.5
MW-256	02/21/2017 13:56	1.02	-183	6.65	0.07	1.36	10.47	47.1
MW-256	02/21/2017 13:58	2.81	-182	6.65	0.07	1.36	10.43	42.4
MW-256	02/21/2017 14:01	2.2	-181	6.64	0.07	1.36	10.37	23.8
MW-256	02/21/2017 14:03	0.7	-180	6.64	0.07	1.35	10.41	22.9
MW-256	02/21/2017 14:05	0.69	-180	6.64	0.07	1.36	10.34	17.6
MW-256	02/21/2017 14:07	0.34	-180	6.64	0.07	1.36	10.42	15.4
MW-256	02/21/2017 14:09	1.61	-180	6.64	0.07	1.37	10.44	17
MW-256	02/21/2017 14:11	0.82	-180	6.65	0.07	1.37	10.32	12.6
MW-256	02/21/2017 14:14	0.57	-179	6.65	0.07	1.36	10.35	11.8
MW-256	02/21/2017 14:16	0.5	-179	6.65	0.07	1.36	10.41	11.7
MW-256	02/21/2017 14:18	0.36	-179	6.65	0.07	1.36	10.34	10
MW-256	02/21/2017 14:20	0.41	-179	6.65	0.07	1.36	10.31	9.6
MW-256	02/21/2017 14:22	0.51	-179	6.65	0.07	1.36	10.23	9.8
MW-256	02/21/2017 14:24	0.55	-180	6.66	0.07	1.37	10.21	9.7
MW-256	02/21/2017 14:27	0.67	-180	6.66	0.07	1.36	10.29	9.2
MW-256	02/21/2017 14:29	0.69	-180	6.66	0.07	1.36	10.21	16.9
MW-256	02/21/2017 14:31	0.79	-180	6.66	0.07	1.37	10.26	9.8
MW-256	02/21/2017 14:33	0.79	-181	6.66	0.07	1.37	10.26	8.7
MW-256	02/21/2017 14:35	0.77	-181	6.67	0.07	1.37	10.22	8.3
MW-256	02/21/2017 14:37	0.86	-181	6.67	0.07	1.37	10.16	9.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-256	02/21/2017 14:40	0.83	-182	6.67	0.07	1.37	10.17	8.8
MW-256	02/22/2017 11:57	0.95	173	7.85	0.14	2.785	9.62	215.90
MW-256	02/22/2017 15:05	6.77	-167	6.75	0.07	1.390	10.51	724.50
MW-256	02/20/2018 12:40	3.25	-2.00	6.59	0.07	1.469	8.83	183.80
MW-256	02/20/2018 13:55	1.39	-1.00	6.70	0.08	1.664	10.22	7.71
MW-256	02/20/2018 14:20	3.81	18.00	6.99	0.05	1.090	9.21	146.00
MW-256	03/29/2018 10:45	0.96	-123.50	7.21	0.77	1.570	9.79	0.0000
MW-256	05/24/2018 09:47	5.32	-79	6.79	0.0569	1.1326	24.17	10.1
MW-256	05/24/2018 09:49	2.48	-97	6.66	0.0656	1.2996	18.7	4.7
MW-256	05/24/2018 09:52	1.67	-107	6.68	0.0697	1.3794	17.74	4.7
MW-256	05/24/2018 09:54	1.38	-108	6.65	0.0593	1.1802	18.25	7.1
MW-256	05/24/2018 09:57	1.15	-115	6.67	0.0702	1.3884	17.65	6.9
MW-256	05/24/2018 10:00	0.96	-119	6.71	0.0717	1.4155	18.1	8.7
MW-256	05/24/2018 10:02	0.92	-123	6.73	0.0716	1.4147	17.84	9.5
MW-256	05/24/2018 10:05	0.83	-125	6.73	0.0719	1.4198	18	11.4
MW-256	05/24/2018 10:07	0.9	-128	6.75	0.0723	1.4280	17.68	10.6
MW-256	05/24/2018 10:10	0.84	-130	6.76	0.0725	1.4313	17.41	13
MW-256	05/24/2018 10:12	0.73	-133	6.76	0.0725	1.4320	17.69	14.8
MW-256	05/24/2018 10:15	0.68	-135	6.77	0.0727	1.4348	18.28	16.7
MW-256	05/24/2018 10:17	0.68	-137	6.77	0.0733	1.4464	18.75	17.6
MW-256	05/24/2018 10:20	0.75	-139	6.78	0.0741	1.4606	18.7	17.7
MW-256	05/25/2018 09:13	0.06	-130.00	6.78	0.06	1.194	14.16	67.10
MW-256	05/25/2018 10:20	0.75	-139.00	6.78	0.07	1.455	18.88	17.72
MW-256	05/25/2018 10:41	5.23	-83.00	6.87	0.05	1.000	18.12	144.10
MW-256	08/21/2018 10:07	0.65	-125.00	6.86	0.07	1.294	21.09	73.60
MW-256	08/21/2018 10:22	0.48	-109.00	6.87	0.08	1.510	21.22	5.79
MW-256	08/21/2018 10:53	0.59	-132.00	6.97	0.05	1.028	21.98	71.10
MW-256	02/14/2019 12:55	1.94	-54.5	7.13	NM	1.456	10.01	3.8
MW-256	02/14/2019 13:05	1.94	-54.50	7.13	0.74	14.560	10.01	3.80
MW-256	02/14/2019 13:25	1.49	-113.30	7.20	0.76	1.495	10.42	39.10
MW-256	02/14/2019 13:45	1.39	-116.80	7.21	0.76	1.502	10.35	0.0000
MW-256	08/28/2019 12:30	4.41	-123.9	6.67	NM	1.404	19.73	5.9
MW-256	08/28/2019 12:35	3.7	-126.3	6.7	NM	1.458	18.93	3.6
MW-256	08/28/2019 12:40	2.42	-128.6	6.75	NM	1.491	18.36	9.8
MW-256	08/28/2019 12:45	3.24	-132.4	6.77	NM	1.498	17.97	16
MW-256	08/28/2019 12:50	2.67	-134.6	6.78	NM	1.493	17.81	6.5
MW-256	08/28/2019 12:55	2.81	-136.7	6.8	NM	1.493	17.74	6.7
MW-256	08/28/2019 13:00	2.8	-130.1	6.77	NM	1.348	18.36	8.1
MW-256	08/28/2019 13:05	2.25	-133.1	6.81	NM	1.487	17.53	11.7
MW-256	08/28/2019 13:10	2.8	-135.4	6.8	NM	1.496	11.29	28.9
MW-256	08/28/2019 13:15	2.42	-137.7	6.82	NM	1.492	17.56	27.9
MW-256	08/28/2019 13:30	3.21	-108.7	6.91	0.77	1.518	21.1	5.6
MW-256	08/28/2019 14:15	5.98	-98.6	6.99	0.76	1.513	17.31	83.7
MW-256	01/29/2021 10:35	1.79	-135.2	7.84	0.52	1.403	6.99	21.6
MW-256	01/29/2021 10:40	0.79	-99.2	7.31	0.51	1.028	6.12	18.6
MW-256	01/29/2021 10:45	0.53	-87.6	6.99	0.52	1.044	6.49	12.1
MW-256	01/29/2021 10:50	0.47	-87.5	7	0.52	1.046	6.57	12.2
MW-256	01/29/2021 10:55	0.32	-87.1	6.96	0.52	1.054	6.55	9.5
MW-256	01/29/2021 11:00	0.31	-87.5	6.93	0.53	1.076	6.58	7.7
MW-256	01/29/2021 11:05	0.29	-89.5	6.9	0.54	1.089	6.7	6.7
MW-256	01/29/2021 11:10	0.27	-90.8	6.89	0.55	1.099	6.9	5.9
MW-256	01/29/2021 11:15	0.26	-92.9	6.89	0.57	1.146	7.76	4.7
MW-256	01/29/2021 11:20	0.26	-93.9	6.89	0.58	1.161	7.78	4.6
MW-256	01/29/2021 11:45	0.2	-88.3	6.27	0.6	1.303	7.43	0.5
MW-256	01/29/2021 11:55	3.02	-110.2	6.4	0.58	1.183	7.58	5.5
MW-256	05/24/2021 13:40	3.11	-70.5	6.64	0.4	0.812	20.24	49.1

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-256	05/24/2021 13:45	1.91	-71.2	6.57	0.39	0.788	19.85	22.9
MW-256	05/24/2021 13:50	0.95	-57.7	6.48	0.4	0.813	18.67	18.6
MW-256	05/24/2021 13:55	0.87	-45.7	6.4	0.43	0.876	18.15	15
MW-256	05/24/2021 14:00	0.76	-33.2	6.32	0.49	0.989	17.41	7.8
MW-256	05/24/2021 14:05	0.74	-30	6.29	0.51	1.029	17.12	6.5
MW-256	05/24/2021 14:10	0.81	-29.1	6.29	0.52	1.049	17.2	5
MW-256	05/24/2021 14:15	0.79	-27.2	6.29	0.54	1.077	17.31	4.7
MW-256	05/24/2021 14:20	0.78	-25.5	6.28	0.55	1.102	16.98	3.6
MW-256	05/24/2021 14:25	0.8	-24.9	6.27	0.55	1.114	16.77	3.3
MW-256	09/17/2021 09:55	0.46	-75.3	6.81	0.44	0.891	20.82	19.6
MW-256	09/17/2021 10:00	1.23	-86.8	6.61	0.48	0.967	20.8	7.6
MW-256	09/17/2021 10:05	2.59	-96.7	6.68	0.48	0.978	20.71	4
MW-256	09/17/2021 10:10	3.54	-101.5	6.71	0.48	0.98	20.54	2.5
MW-256	09/17/2021 10:15	4.51	-105.3	6.72	0.48	0.979	20.49	2.2
MW-256	09/17/2021 10:20	5.58	-106.9	6.72	0.48	0.977	20.42	1.2
MW-256	09/17/2021 10:25	6.4	-107.6	6.7	0.48	0.975	20.22	0.6
MW-256	09/17/2021 10:30	7.59	-109.7	6.71	0.48	0.975	20.3	0.2
MW-256	09/17/2021 10:35	8.78	-110.4	6.7	0.48	0.974	20.22	0
MW-256	09/17/2021 10:40	9.89	-111.8	6.71	0.48	0.974	20.17	0
MW-256	01/10/2022 12:45	1.88	-41.2	6.99	0.67	1.329	8.78	110
MW-256	01/10/2022 12:50	0.68	-70.2	6.94	0.68	1.359	10.69	61.2
MW-256	01/10/2022 12:55	0.42	-86.7	6.93	0.7	1.381	11.34	26.5
MW-256	01/10/2022 13:00	0.35	-97.6	6.93	0.71	1.41	10.96	17.6
MW-256	01/10/2022 13:05	0.32	-103.3	6.93	0.71	1.413	11.47	13.1
MW-256	01/10/2022 13:10	0.3	-106.1	6.93	0.71	1.413	11.64	5.1
MW-256	01/10/2022 13:15	0.29	-109.1	6.93	0.71	1.423	11.6	5
MW-256	01/10/2022 13:20	0.29	-110.8	6.93	0.72	1.418	11.56	5
MW-256	03/22/2022 09:55	2.6	-74.8	6.52	0.57	1.136	9.98	110.6
MW-256	03/22/2022 10:00	0.94	-96.6	6.77	0.59	1.182	10.12	47.1
MW-256	03/22/2022 10:05	1.04	-100.9	6.77	0.64	1.265	10.29	18.4
MW-256	03/22/2022 10:10	0.65	-104.4	6.81	0.66	1.312	10.45	9.7
MW-256	03/22/2022 10:15	0.62	-106.3	6.83	0.67	1.331	10.5	7.9
MW-256	03/22/2022 10:20	0.59	-106.8	6.83	0.68	1.347	10.63	3.9
MW-256	03/22/2022 10:25	0.56	-106.5	6.84	0.69	1.362	10.77	3.7
MW-256	03/22/2022 10:30	0.58	-108	6.84	0.69	1.376	10.8	3.6
MW-257	05/01/2012 14:25	1.46	-86	6.8	0.04	0.87124	20.58	30.6
MW-257	05/01/2012 14:27	1.23	-104	6.88	0.05	0.93622	18.41	28.2
MW-257	05/01/2012 14:29	0.87	-112	6.91	0.05	0.97863	17.39	22.9
MW-257	05/01/2012 14:32	0.71	-118	6.94	0.05	1.00926	17.13	19.4
MW-257	05/01/2012 14:34	0.61	-122	6.96	0.05	1.03281	17.24	16.1
MW-257	05/01/2012 14:36	0.54	-125	6.97	0.05	1.04855	16.92	12.6
MW-257	05/01/2012 14:38	0.47	-128	6.98	0.05	1.05623	16.72	12.9
MW-257	05/01/2012 14:41	0.43	-129	7	0.05	1.06415	16.39	10
MW-257	05/01/2012 14:43	0.4	-130	7	0.05	1.06275	16.71	7.5
MW-257	05/01/2012 14:45	0.37	-132	7.02	0.05	1.07161	16.8	6.2
MW-257	05/01/2012 14:47	0.36	-133	7.02	0.05	1.06725	16.77	5.8
MW-257	05/01/2012 14:50	0.32	-134	7.02	0.05	1.06725	16.68	7.2
MW-257	05/01/2012 14:52	0.4	-135	7.02	0.05	1.07431	16.76	5.8
MW-257	05/01/2012 14:54	0.32	-135	7.03	0.05	1.07729	16.73	5.1
MW-257	05/01/2012 14:56	0.31	-136	7.04	0.05	1.08305	16.35	5.2
MW-257	05/01/2012 14:59	0.32	-136	7.04	0.05	1.07907	16.63	5.1
MW-257	05/01/2012 15:00	0.32	-136	7.04	0.05	1.079	16.63	5.07
MW-257	05/01/2012 15:36	4.12	-89	7.01	0.06	1.111	15.74	9.70
MW-257	05/02/2012 11:05	2.46	-143	6.70	0.0000	0.687	13.20	115.00
MW-257	09/06/2012 10:50	2.01	-127	6.73	0.10	1.160	22.26	9.80
MW-257	09/06/2012 11:22	5.54	-75	6.88	0.10	0.641	21.79	30.00

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-257	09/07/2012 10:13	1.72	-128	6.68	0.10	0.687	21.73	6.01
MW-257	05/29/2013 10:34	1.77	-143	6.61	0.22	4.07126	19.56	27.1
MW-257	05/29/2013 10:37	1.02	-137	6.68	0.23	4.31478	18.53	8.1
MW-257	05/29/2013 10:39	0.74	-136	6.74	0.23	4.26967	18.44	6.5
MW-257	05/29/2013 10:42	0.65	-138	6.79	0.24	4.39438	18.24	6.3
MW-257	05/29/2013 10:44	0.59	-139	6.8	0.23	4.26195	18.42	8.2
MW-257	05/29/2013 10:47	0.55	-141	6.84	0.23	4.34994	18.85	7.1
MW-257	05/29/2013 10:50	0.53	-141	6.83	0.24	4.43667	18.49	4.2
MW-257	05/29/2013 10:52	0.53	-142	6.83	0.24	4.47147	18.62	4.9
MW-257	05/29/2013 10:55	0.48	-143	6.83	0.24	4.40698	18.93	6.2
MW-257	05/29/2013 10:58	0.47	-144	6.84	0.23	4.27331	19.19	6.2
MW-257	05/29/2013 11:00	0.45	-144	6.84	0.23	4.34455	19.29	4.4
MW-257	05/29/2013 11:03	0.44	-145	6.84	0.24	4.45406	19.43	5.9
MW-257	05/29/2013 11:06	0.44	-145	6.82	0.24	4.50877	18.99	10.3
MW-257	05/29/2013 11:08	0.42	-145	6.81	0.23	4.22321	19.14	4.9
MW-257	05/29/2013 11:11	0.42	-147	6.84	0.24	4.49913	19.14	4.6
MW-257	05/29/2013 11:14	0.41	-147	6.83	0.22	4.13549	19.47	5.8
MW-257	05/29/2013 11:16	0.4	-149	6.86	0.24	4.49745	19.58	4.4
MW-257	05/29/2013 11:19	0.39	-146	6.81	0.23	4.28025	19.07	5.4
MW-257	05/29/2013 11:22	0.38	-149	6.85	0.23	4.34226	19.62	5.8
MW-257	08/15/2013 11:24	1.04	-130.1	6.46	1.39	2.638	21.25	212.10
MW-257	08/15/2013 12:13	0.22	-132.1	6.61	1.63	3.102	18.68	17.90
MW-257	08/15/2013 12:35	0.26	-129.9	6.87	1.63	3.118	19.80	17.70
MW-257	10/03/2013 12:28	1.9	-276	6.71	0.17	3.12536	23.85	72.6
MW-257	10/03/2013 12:31	1.3	-306	6.75	0.19	3.54555	22.5	60
MW-257	10/03/2013 12:34	0.92	-320	6.79	0.21	3.83941	22.19	39.7
MW-257	10/03/2013 12:37	0.8	-329	6.84	0.21	3.938696	22.22	34.9
MW-257	10/03/2013 12:39	0.75	-332	6.85	0.22	4.03359	22.25	29
MW-257	10/03/2013 12:42	0.71	-335	6.88	0.22	4.072456	22.44	29.2
MW-257	10/03/2013 12:45	0.72	-338	6.89	0.22	4.00914	22.47	23.2
MW-257	10/03/2013 12:48	0.7	-339	6.86	0.22	4.06872	22.26	19.2
MW-257	10/03/2013 12:50	0.71	-342	6.87	0.22	4.13903	22.32	17.8
MW-257	10/03/2013 12:53	0.71	-345	6.89	0.22	4.1029	22.38	15.1
MW-257	10/03/2013 12:56	0.7	-346	6.88	0.22	4.11252	22.52	15.3
MW-257	10/03/2013 12:58	0.71	-347	6.89	0.22	4.14044	22.64	12.7
MW-257	10/03/2013 13:01	0.69	-349	6.88	0.22	4.12488	22.65	10.8
MW-257	10/03/2013 13:04	0.68	-351	6.89	0.22	4.10938	22.65	10.7
MW-257	10/03/2013 13:07	0.67	-352	6.87	0.22	4.09776	22.59	10.8
MW-257	06/18/2014 09:08	1.02	-145	6.76	NM	1.011	28.77	36.5
MW-257	06/18/2014 09:10	1.26	-128	6.8	NM	1.064	25.03	14.4
MW-257	06/18/2014 09:12	0.93	-123	6.82	NM	1.07	22.17	11.2
MW-257	06/18/2014 09:15	0.73	-124	6.84	NM	1.09	225.00	9.4
MW-257	06/18/2014 09:17	0.6	-126	6.85	NM	1.117	22.89	7.7
MW-257	06/18/2014 09:19	0.53	-18	6.86	NM	1.118	23.02	7.6
MW-257	06/18/2014 09:22	0.51	-130	6.87	0.06	1.127	23.32	7.80
MW-257	06/18/2014 10:05	2.01	-96	6.69	0.03	0.577	20.31	77.80
MW-257	06/19/2014 10:05	0.14	-136	6.81	0.10	1.997	18.24	172.40
MW-257	08/15/2014 08:50	0.60	-123.5	6.62	0.67	1.332	20.01	106.20
MW-257	08/15/2014 10:05	0.65	-135.6	6.78	0.68	1.361	20.71	0.0000
MW-257	08/15/2014 10:35	1.09	-154	6.70	0.70	1.395	20.40	495.10
MW-257	11/05/2014 09:54	0.08	-150	6.74	NM	1.94193	15.78	92.9
MW-257	11/05/2014 09:57	-0.61	-153	6.73	NM	1.95845	15.83	16.6
MW-257	11/05/2014 10:00	-0.61	-150	6.74	NM	1.97104	15.92	13.1
MW-257	11/05/2014 10:02	-0.61	148	6.76	NM	1.99124	15.96	10.4
MW-257	11/05/2014 10:05	-0.61	147	6.77	NM	2.00974	16.00	8.7
MW-257	11/05/2014 10:08	-0.61	-146	6.78	0.13	2.423	16.07	11.64

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-257	11/05/2014 10:42	1.93	-129	6.95	0.05	1.009	16.06	110.40
MW-257	11/06/2014 14:20	0.32	-136	7.04	0.05	1.079	16.63	125.40
MW-257	11/11/2014 09:00	1.41	-93	6.57	0.40	0.816	15.21	51.80
MW-257	11/11/2014 09:40	0.46	-127.5	6.89	0.47	0.914	15.21	11.70
MW-257	11/11/2014 10:00	0.27	-114.7	6.89	0.48	0.963	15.35	11.10
MW-257	12/01/2014 09:40	0.74	-63.2	6.81	0.41	0.801	13.50	120.00
MW-257	12/01/2014 10:20	0.25	-90.7	6.79	0.45	0.893	14.09	43.70
MW-257	12/01/2014 10:30	7.11	-63.1	6.71	0.46	0.920	13.94	28.20
MW-257	12/04/2014 12:15	0.76	-92	6.67	0.31	0.638	12.74	43.20
MW-257	12/04/2014 12:55	0.41	-90.8	6.70	0.39	0.752	12.23	15.90
MW-257	12/04/2014 13:10	4.56	-67.1	6.62	0.40	0.820	12.29	19.80
MW-257	12/08/2014 11:05	0.80	-34.3	6.78	0.26	0.523	6.84	130.20
MW-257	12/08/2014 11:55	0.24	-70.9	6.83	0.31	0.621	8.90	17.20
MW-257	12/08/2014 12:05	11.82	-22.6	6.73	0.32	0.657	8.78	43.70
MW-257	01/22/2015 12:05	0.75	-134.5	7.02	0.52	1.044	8.96	104.40
MW-257	01/22/2015 12:50	0.27	-144.5	7.10	0.59	1.180	8.38	30.30
MW-257	01/22/2015 13:10	2.10	-153.3	7.03	0.62	1.244	9.04	9.50
MW-257	03/04/2015 09:35	1.06	-136.5	6.95	0.64	1.294	7.39	222.20
MW-257	03/04/2015 10:30	0.62	-119.5	7.04	0.66	1.316	7.09	30.00
MW-257	03/04/2015 10:40	0.92	-120.7	7.07	0.65	1.319	7.11	35.40
MW-257	07/07/2015 09:07	1.8	-124	6.31	0.0516	0.0010	23.88	18.7
MW-257	07/07/2015 09:08	1.07	-122	6.36	0.0545	0.0011	22.51	8.9
MW-257	07/07/2015 09:10	0.73	-120	6.43	0.0554	0.0011	21.64	4.7
MW-257	07/07/2015 09:11	0.58	-121	6.49	0.0586	0.0012	21.71	5.4
MW-257	07/07/2015 09:13	0.51	-122	6.54	0.0632	0.0013	21.95	3.7
MW-257	07/07/2015 09:14	0.45	-122	6.57	0.0643	0.0013	21.95	7
MW-257	07/07/2015 09:16	0.4	-122	6.59	0.0654	0.0013	21.82	3.9
MW-257	07/07/2015 09:17	0.36	-122	6.6	0.0659	0.0013	21.92	5.1
MW-257	07/07/2015 09:19	0.33	-122	6.61	0.0669	0.0013	21.91	4.1
MW-257	07/07/2015 09:20	0.3	-122	6.61	0.0673	0.0013	22.02	3.9
MW-257	07/07/2015 09:22	0.28	-123	6.62	0.0681	0.0013	21.91	9.5
MW-257	07/07/2015 09:23	0.28	-123	6.63	0.0690	0.0014	21.95	4.3
MW-257	07/07/2015 09:25	0.26	-123	6.64	0.0698	0.0014	21.8	4.7
MW-257	07/07/2015 09:26	0.25	-123	6.64	0.0708	0.0014	21.81	5
MW-257	07/07/2015 09:28	0.22	-124	6.66	0.0717	0.0014	21.5	6.8
MW-257	07/07/2015 09:29	0.19	-124	6.66	0.0735	0.0014	21.31	4.7
MW-257	07/07/2015 09:31	0.17	-124	6.67	0.0737	0.0015	21.51	3.9
MW-257	07/07/2015 09:32	0.17	-125	6.67	0.0734	0.0014	21.48	3.9
MW-257	07/07/2015 09:34	0.14	-125	6.67	0.0742	0.0015	21.55	3.8
MW-257	07/07/2015 09:35	0.13	-125	6.68	0.0744	0.0015	21.54	4.4
MW-257	07/07/2015 09:36	0.12	-125	6.68	0.0749	0.0015	21.43	2.7
MW-257	07/07/2015 09:38	0.12	-125	6.69	0.0759	0.0015	21.47	4
MW-257	07/07/2015 09:39	0.11	-124	6.69	0.0759	0.0015	21.45	5.4
MW-257	07/07/2015 09:41	0.09	-125	6.7	0.0769	0.0015	21.32	4.6
MW-257	07/07/2015 09:42	0.1	-125	6.7	0.0769	0.0015	21.49	3.6
MW-257	07/07/2015 09:44	0.1	-125	6.7	0.0763	0.0015	21.58	3.1
MW-257	07/07/2015 09:45	0.1	-125	6.7	0.0763	0.0015	21.9	6.5
MW-257	07/07/2015 09:47	0.11	-125	6.7	0.0748	0.0015	22.13	2.9
MW-257	07/07/2015 09:48	0.11	-125	6.7	0.0748	0.0015	22.02	4.2
MW-257	07/07/2015 09:50	0.11	-125	6.7	0.0759	0.0015	21.82	2.7
MW-257	07/07/2015 09:51	0.08	-125	6.71	0.0777	0.0015	21.66	3.3
MW-257	07/07/2015 09:53	0.08	-125	6.71	0.0785	0.0015	21.68	3.4
MW-257	07/07/2015 09:54	0.07	-125	6.7	0.0785	0.0015	21.86	3.4
MW-257	07/08/2015 09:35	0.13	-147	6.63	0.11	2.058	19.44	262.5
MW-257	07/08/2015 10:18	6.81	-84	6.4	0.07	1.336	20.59	819.8
MW-257	02/18/2016 10:39	8.820	-158.000	6.460	0.034	0.702	6.010	615.700

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-257	02/18/2016 10:41	2.590	-147.000	6.460	0.036	0.748	6.390	120.500
MW-257	02/18/2016 10:43	1.520	-139.000	6.480	0.036	0.749	6.650	33.600
MW-257	02/18/2016 10:46	1.100	-137.000	6.500	0.037	0.755	6.890	15.300
MW-257	02/18/2016 10:48	0.920	-135.000	6.510	0.036	0.753	6.970	12.500
MW-257	02/18/2016 10:50	0.820	-134.000	6.510	0.037	0.758	6.660	11.600
MW-257	02/18/2016 10:52	0.720	-134.000	6.520	0.037	0.759	6.720	10.300
MW-257	02/18/2016 10:54	0.660	-133.000	6.520	0.037	0.756	6.860	13.600
MW-257	02/18/2016 10:56	0.610	-133.000	6.520	0.037	0.760	6.820	10.100
MW-257	02/18/2016 10:59	0.570	-133.000	6.530	0.037	0.769	6.580	11.400
MW-257	02/18/2016 11:01	0.560	-133.000	6.540	0.037	0.775	6.300	10.600
MW-257	02/18/2016 11:03	0.540	-134.000	6.540	0.038	0.781	6.290	10.500
MW-257	02/19/2016 09:43	0.65	-168	6.42	0.04	0.831	8.18	150.00
MW-257	02/19/2016 11:30	3.94	-153	6.54	0.04	0.807	7.28	366.60
MW-257	10/04/2016 14:20	2.17	-111.6	6.88	0.90	1.009	20.56	7.30
MW-257	10/04/2016 14:35	2.01	-98.5	6.87	0.48	0.967	20.42	92.10
MW-257	02/21/2017 12:31	4.97	-154	6.8	0.06	1.19	10.35	125.6
MW-257	02/21/2017 12:33	0.99	-180	6.67	0.06	1.20	10.44	42.6
MW-257	02/21/2017 12:36	0.31	-181	6.63	0.06	1.19	10.41	31.2
MW-257	02/21/2017 12:38	0.4	-181	6.61	0.06	1.19	10.64	35.1
MW-257	02/21/2017 12:40	2.39	-180	6.6	0.06	1.19	10.77	27.4
MW-257	02/21/2017 12:42	7.6	-178	6.6	0.06	1.19	10.74	18.6
MW-257	02/21/2017 12:44	4.4	-178	6.6	0.06	1.20	10.58	16.2
MW-257	02/21/2017 12:46	0.85	-177	6.61	0.06	1.20	10.53	13.9
MW-257	02/21/2017 12:49	1.43	-177	6.61	0.06	1.21	10.52	14.5
MW-257	02/21/2017 12:51	5.72	-177	6.62	0.06	1.21	10.27	16.3
MW-257	02/21/2017 12:53	6.71	-178	6.63	0.06	1.21	10.45	10.5
MW-257	02/21/2017 12:55	3.5	-177	6.63	0.06	1.21	10.49	12
MW-257	02/21/2017 12:57	3.75	-177	6.64	0.06	1.21	10.53	9
MW-257	02/21/2017 12:59	0.44	-177	6.65	0.06	1.22	10.51	9.1
MW-257	02/21/2017 13:02	9.22	-178	6.66	0.06	1.22	10.41	9.4
MW-257	02/21/2017 13:04	9.26	-178	6.66	0.06	1.22	10.25	7.5
MW-257	02/21/2017 13:06	2.08	-178	6.67	0.06	1.22	10.36	7.7
MW-257	02/21/2017 13:08	9.04	-179	6.68	0.06	1.23	10.15	7.6
MW-257	02/21/2017 13:10	8.88	-178	6.68	0.06	1.23	10.05	7.1
MW-257	02/21/2017 13:12	8.67	-179	6.69	0.06	1.24	9.95	7.1
MW-257	02/22/2017 11:12	0.34	177	7.77	0.14	2.734	9.86	107.90
MW-257	02/22/2017 13:33	10.32	-189	6.87	0.06	1.291	9.18	390.90
MW-257	02/20/2018 11:50	1.83	50.00	6.35	0.04	0.807	9.09	110.10
MW-257	02/20/2018 12:50	0.99	46.00	6.49	0.04	0.883	9.89	22.46
MW-257	02/20/2018 13:14	2.60	45.00	7.02	0.05	0.954	8.72	109.80
MW-257	03/26/2018 13:25	0.62	-151.60	6.99	0.61	1.217	10.14	0.0000
MW-257	06/06/2018 13:20	0.43	-127.80	6.78	0.47	0.951	18.55	0.0000
MW-257	08/21/2018 09:09	0.25	-119.00	6.86	0.05	1.071	21.1	1.95
MW-257	08/21/2018 09:19	0.39	-118.00	6.72	0.04	0.827	21.99	71.20
MW-257	08/21/2018 09:34	2.88	-75.00	7.04	0.03	0.570	22.02	110.20
MW-257	02/15/2019 10:30	1.7	-145.7	7.13	NM	1.108	9.06	NM
MW-257	02/15/2019 11:00	1.45	-153.2	7.18	0.57	1.139	8.79	0
MW-257	08/28/2019 12:30	1.94	-94.7	7.08	NM	2.471	22.18	12.8
MW-257	08/28/2019 12:35	1.13	-104.9	6.58	NM	1.544	22.08	4.3
MW-257	08/28/2019 12:40	1.53	-120.4	6.63	NM	1.444	22.09	0.4
MW-257	08/28/2019 12:45	1.61	-126.4	6.69	NM	1.432	22.18	0.6
MW-257	08/28/2019 12:50	1.45	-132.9	6.73	NM	1.438	22.16	0.8
MW-257	08/28/2019 12:55	1.95	-139.3	6.77	NM	1.445	22.38	0.3
MW-257	08/28/2019 13:00	1.94	-142.6	6.81	NM	1.451	22.29	0.3
MW-257	08/28/2019 13:05	2.43	-140.9	6.82	NM	1.462	22.17	0.1
MW-257	08/28/2019 13:10	2.48	-142.7	6.82	NM	1.46	22.1	0.4

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-257	08/28/2019 13:15	2.4	-143.7	6.82	NM	1.459	22.26	0.3
MW-257	08/28/2019 13:33	3.57	-93.9	6.77	0.96	1.876	23.81	7
MW-257	08/28/2019 13:50	4.65	-96.1	6.75	0.65	1.306	23.86	177.4
MW-257	10/17/2019 08:10	1.66	-95.5	7.49	NM	1.133	17.14	167.3
MW-257	10/17/2019 08:15	0.87	-99.2	7.01	NM	1.107	16.95	114.6
MW-257	10/17/2019 08:20	0.58	-103.7	6.85	NM	1.072	16.98	95
MW-257	10/17/2019 08:25	0.42	-100.8	6.78	NM	1.071	17.08	36.1
MW-257	10/17/2019 08:30	0.45	-112.8	6.77	NM	1.104	16.96	27.6
MW-257	10/17/2019 08:35	0.29	-105.5	6.77	NM	1.131	17.37	19.7
MW-257	10/17/2019 08:40	0.4	-113.2	6.78	NM	1.153	17.12	13.8
MW-257	10/17/2019 08:45	0.4	-118	6.78	NM	1.174	17.02	10.2
MW-257	10/17/2019 08:50	0.42	-119.9	6.75	NM	1.186	17.1	9.2
MW-257	10/17/2019 08:55	0.38	-120.7	6.77	NM	1.196	17.05	8.6
MW-257	10/17/2019 09:30	3.32	-57.6	6.77	0.67	1.333	17.12	7.5
MW-257	10/17/2019 09:45	6.74	-65.9	6.72	0.55	1.096	18.25	55
MW-257	06/10/2020 10:00	2.16	-129.4	6.89	0.59	1.178	19.79	0
MW-257	06/10/2020 10:05	0.61	-140.3	6.94	0.63	1.251	18.43	0
MW-257	06/10/2020 10:10	0.4	-144.8	6.96	0.65	1.299	18.37	0
MW-257	06/10/2020 10:15	0.35	-147.1	6.96	0.66	1.317	18.52	0
MW-257	06/10/2020 10:20	0.34	-148.5	6.97	0.67	1.326	18.61	0
MW-257	06/10/2020 10:25	0.34	-149.2	6.97	0.67	1.332	18.83	0
MW-257	06/10/2020 10:30	0.32	-148.3	6.97	0.67	1.339	18.96	0
MW-257	06/10/2020 10:35	0.32	-148.4	6.97	0.67	1.34	18.9	0
MW-257	01/27/2021 12:00	7.23	-30	7.14	0.63	1.26	9.16	147.3
MW-257	01/27/2021 12:05	5.23	-57.9	6.92	0.62	1.245	9.59	123.6
MW-257	01/27/2021 12:10	2.16	-80.7	6.91	0.62	1.242	10.12	79.7
MW-257	01/27/2021 12:15	1.35	-89.3	6.9	0.63	1.249	10	67.9
MW-257	01/27/2021 12:20	1.11	-95	6.89	0.63	1.249	9.94	62.6
MW-257	01/27/2021 12:25	0.45	-113.1	6.93	0.62	1.233	9.31	19
MW-257	01/27/2021 12:30	0.44	-113	6.93	0.62	1.232	9.28	17.5
MW-257	01/27/2021 12:35	0.29	-114.7	6.95	0.61	1.227	9.14	20.9
MW-257	01/27/2021 12:40	0.28	-113.7	6.95	0.61	1.226	9.13	19.7
MW-257	01/27/2021 12:45	0.24	-112.5	6.96	0.61	1.224	9.52	12.8
MW-257	01/27/2021 12:55	4.99	-70.7	7.01	0.6	1.21	8.22	16.1
MW-257	01/27/2021 13:23	2.26	-92.7	6.97	0.59	1.179	9.6	167
MW-257	05/25/2021 10:45	3.55	-72.5	6.92	0.56	1.129	21.32	111.8
MW-257	05/25/2021 10:50	1.01	-95.5	6.94	0.63	1.254	19.54	64.6
MW-257	05/25/2021 10:55	0.6	-110.6	6.94	0.67	1.341	18.91	17.5
MW-257	05/25/2021 11:00	0.62	-75.8	6.97	0.68	1.351	19.32	11.1
MW-257	05/25/2021 11:05	0.57	-79.1	7	0.68	1.358	19.03	6.3
MW-257	05/25/2021 11:10	0.57	-79.9	7.01	0.69	1.365	19.25	4.9
MW-257	05/25/2021 11:15	0.54	-84.9	7.02	0.69	1.368	18.89	2.8
MW-257	05/25/2021 11:20	0.57	-77.6	7.02	0.69	1.365	18.91	2.8
MW-257	05/25/2021 11:25	0.55	-81.2	7.02	0.69	1.372	18.96	2.6
MW-257	09/17/2021 08:30	0	-91.8	6.7	0.6	1.197	20.77	44.1
MW-257	09/17/2021 08:35	0	-103.9	6.68	0.61	1.214	20.74	35.8
MW-257	09/17/2021 08:40	0	-120.4	6.75	0.62	1.244	20.76	20
MW-257	09/17/2021 08:45	0.3	-130.2	6.81	0.63	1.26	20.7	14.9
MW-257	09/17/2021 08:50	0.51	-133.8	6.82	0.63	1.264	20.69	12.1
MW-257	09/17/2021 08:55	1.18	-137.7	6.84	0.64	1.27	20.64	8.5
MW-257	09/17/2021 09:00	1.52	-139.7	6.85	0.64	1.27	20.66	6.4
MW-257	09/17/2021 09:05	1.84	-141.2	6.85	0.64	1.272	20.68	7.7
MW-257	09/17/2021 09:10	3.11	-142.5	6.86	0.64	1.272	20.72	3.4
MW-257	09/17/2021 09:15	2.64	-143.8	6.86	0.64	1.272	20.79	3.2
MW-257	10/20/2021 13:25	2.51	-140	6.92	0.61	1.219	22.67	58.9
MW-257	10/20/2021 13:30	1.77	-145.6	6.93	0.6	1.211	23.16	68.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-257	10/20/2021 13:35	1.2	-145.8	6.93	0.61	1.223	23.47	51.2
MW-257	10/20/2021 13:40	1.16	-148.6	6.94	0.63	1.254	23.69	32.4
MW-257	10/20/2021 13:45	0.93	-148.9	6.94	0.64	1.287	23.59	21.1
MW-257	10/20/2021 13:50	0.91	-151	6.94	0.65	1.302	23.54	16.7
MW-257	10/20/2021 13:55	0.96	-152.7	6.93	0.66	1.314	23.59	10.1
MW-257	10/20/2021 14:00	0.89	-152.3	6.93	0.66	1.319	23.5	8.9
MW-257	10/20/2021 14:05	0.93	-153.6	6.93	0.66	1.32	23.54	8.6
MW-257	10/20/2021 14:10	0.89	-153.8	6.93	0.66	1.32	23.65	7.3
MW-257	02/04/2022 11:15	7.16	-201	8.53	0.73	1.556	10.03	201.3
MW-257	02/04/2022 11:20	6.56	-200.7	8.54	0.68	1.353	6.28	162.5
MW-257	02/04/2022 11:25	7.21	-201.2	8.56	0.67	1.329	5.78	130.4
MW-257	02/04/2022 11:30	7.03	-195.8	8.57	0.67	1.331	5.65	90.7
MW-257	02/04/2022 11:35	7.4	-194.8	8.57	0.68	1.341	5.58	65.2
MW-257	02/04/2022 11:40	10.72	-193.2	8.68	0.68	1.351	5.46	55.8
MW-257	02/04/2022 11:45	7.34	-192.2	8.69	0.68	1.358	5.47	39
MW-257	02/04/2022 11:50	7.85	-189.4	8.76	0.69	1.365	5.81	22.7
MW-257	02/04/2022 11:55	7.52	-186.3	8.77	0.69	1.364	6.04	21.5
MW-257	02/04/2022 12:00	7.52	-185.9	8.77	0.69	1.374	6.07	21.4
MW-270	08/07/2012 08:36	1.11	-78	12.9	0.13	2.51771	25.47	9.5
MW-270	08/07/2012 08:39	0.94	-73	13.04	0.14	2.62634	23.19	34.8
MW-270	08/07/2012 08:42	0.66	-90	13.13	0.15	2.7766	21.26	50
MW-270	08/07/2012 08:44	0.52	-108	13.39	0.16	3.09832	20.99	56.3
MW-270	08/07/2012 08:47	0.44	-113	13.41	0.19	3.54359	20.92	21.4
MW-270	08/07/2012 08:49	0.39	-114	13.41	0.21	3.86666	20.84	9.4
MW-270	08/07/2012 08:52	0.36	-113	13.43	0.21	3.99149	20.86	7.6
MW-270	08/07/2012 08:55	0.32	-112	13.43	0.22	4.08385	20.92	6.7
MW-270	08/07/2012 08:57	0.29	-112	13.42	0.22	4.13871	20.96	5.4
MW-270	08/07/2012 09:00	0.28	-111	13.41	0.22	4.17263	20.91	7.6
MW-270	08/07/2012 09:03	0.26	-111	13.41	0.22	4.17976	20.77	8.4
MW-270	08/07/2012 09:05	0.24	-111	13.41	0.22	4.18705	20.68	7.7
MW-270	08/07/2012 09:08	0.22	-112	13.4	0.22	4.1678	20.66	8.9
MW-270	08/07/2012 09:11	0.21	-111	13.41	0.23	4.19849	20.59	8.8
MW-270	08/07/2012 09:13	0.21	-111	13.41	0.22	4.17403	20.82	16.4
MW-270	08/07/2012 09:16	0.21	-111	13.4	0.22	4.18617	20.96	16.7
MW-270	08/07/2012 09:19	0.2	-111	13.39	0.22	4.1807	21.18	17
MW-270	12/20/2012 08:56	8.63	45.3	5.68	2.14	3.182	13.70	12.40
MW-270	12/20/2012 09:39	5.32	-80.1	5.98	2.27	4.244	15.30	0.40
MW-270	12/21/2012 10:52	5.35	-32.9	6.12	2.27	4.242	14.75	536.00
MW-270	03/28/2013 09:41	2.71	-196	6.28	0.37	6.718	12.38	11.43
MW-270	03/28/2013 10:53	3.72	-94	6.48	0.37	6.67	13.94	15.2
MW-270	03/29/2013 11:20	4.56	-73	6.41	0.28	5.252	13.42	300.7
MW-270	01/16/2014 11:42	0.0000	-58.1	6.19	2.04	3.843	13.72	61.00
MW-270	01/16/2014 12:33	0.0000	-73.7	6.18	2.00	3.766	14.62	32.30
MW-270	01/16/2014 13:03	0.0000	-46	6.25	1.99	3.764	13.82	41.40
MW-270	02/24/2014 09:39	2.82	-103	6.28	0.21	3.945	11.58	41.28
MW-270	02/24/2014 10:39	1.30	-107	6.27	0.21	3.962	14.04	22.10
MW-270	02/24/2014 14:15	2.11	-124	6.34	0.20	3.855	13.75	119.30
MW-270	08/21/2014 11:05	0.07	-54.7	6.15	1.59	3.036	16.17	124.10
MW-270	08/21/2014 11:20	0.08	-66.5	6.19	1.46	2.802	16.45	169.20
MW-270	08/21/2014 11:35	0.08	-60.8	6.16	1.45	2.945	16.39	200.30
MW-270	01/29/2015 11:55	0.52	-103.7	6.50	1.73	3.282	12.01	40.90
MW-270	01/29/2015 12:26	0.12	-35.3	6.21	1.75	3.328	14.87	6.90
MW-270	01/29/2015 12:37	0.08	-39.5	6.22	1.74	3.291	14.18	6.50
MW-270	07/08/2015 09:15	0.0000	-36	6.19	1.40	2.810	13.56	33.10
MW-270	07/08/2015 09:25	0.47	-34	6.24	1.50	2.840	14.16	52.30
MW-270	07/22/2015 10:52	1.4	-83	6.27	1.92	30.36	19.64	16.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-270	04/15/2016 13:32	11.31	-83.6	6.34	1.81	3.421	16.53	20.40
MW-270	04/15/2016 13:58	8.59	-81.6	6.44	1.81	3.430	19.11	5.90
MW-270	09/20/2016 11:15	1.62	-72.5	6.44	1.49	2.859	22.19	15.40
MW-270	09/20/2016 12:00	1.73	-83.4	6.37	1.50	2.889	22.02	129.70
MW-270	04/13/2017 09:50	8.03	-20.00	5.99	1.90	3.720	10.83	27.70
MW-270	04/13/2017 10:40	4.34	-44.00	6.36	1.90	3.610	12.11	10.70
MW-270	04/13/2017 10:55	4.60	-37.00	6.44	0.90	1.880	11.26	520.00
MW-270	05/03/2017 14:23	-0.95	-67.00	6.31	0.22	4.158	15.52	5.44
MW-270	05/03/2017 15:33	0.98	-67.00	6.60	0.27	5.080	15.41	43.60
MW-270	01/16/2018 10:10	0.75	-76.90	6.23	1.71	3.211	12.82	50.10
MW-270	01/16/2018 11:10	0.68	-80.60	6.48	1.69	3.229	12.97	30.30
MW-270	01/16/2018 11:30	3.45	-112.10	6.37	1.71	3.341	11.67	112.90
MW-270	02/28/2019 12:25	0.33	-117.40	6.44	0.85	1.678	13.65	6.80
MW-270	02/28/2019 13:20	0.72	-138.10	6.44	0.91	1.784	15.45	2.60
MW-270	02/28/2019 13:35	4.34	-52.40	6.51	0.89	1.750	12.1	175.00
MW-270	05/13/2019 10:10	2.56	49.2	6.39	NM	0.356	10.91	46.1
MW-270	05/13/2019 11:15	4	-56	6.58	0.87	1.713	13.45	13.2
MW-270	08/08/2019 10:05	0.89	-42.8	6.3	NM	1.052	21.6	1360.4
MW-270	08/08/2019 10:10	0.59	-37.7	6.29	NM	0.792	22.96	37.6
MW-270	08/08/2019 10:15	0.66	-30.2	6.3	NM	0.8	24.61	36.7
MW-270	08/08/2019 10:20	0.57	-29.2	6.31	NM	0.828	25.56	28.1
MW-270	08/08/2019 10:25	0.49	-30.2	6.31	NM	0.858	26.19	25.6
MW-270	08/08/2019 10:30	0.45	-40	6.29	NM	0.887	26.59	22.7
MW-270	08/08/2019 10:35	0.38	-46.8	6.28	NM	0.992	27.18	14.7
MW-270	08/08/2019 10:40	0.36	-62.3	6.3	NM	1.165	26.92	13.1
MW-270	08/08/2019 10:45	0.32	-66.3	6.29	NM	1.285	25.87	12.4
MW-270	08/08/2019 10:50	0.28	-68.2	6.28	NM	1.349	25.9	8.6
MW-270	08/08/2019 13:10	0.28	-68.2	6.28	NM	1.349	25.9	8.6
MW-270	08/08/2019 14:00	2.88	-81.4	6.34	1.37	2.639	20.14	19.8
MW-270	08/08/2019 14:15	2.17	-31.7	6.62	0.17	0.356	20.58	95.5
MW-270	11/05/2019 08:20	1.38	-100.5	6.27	NM	2.375	17.69	18.9
MW-270	11/05/2019 08:25	1.01	-99.7	6.29	NM	2.449	17.55	16.9
MW-270	11/05/2019 08:30	0.92	-100.4	6.3	NM	2.444	17.59	10.9
MW-270	11/05/2019 08:35	0.8	-105.2	6.3	NM	2.435	17.58	6.3
MW-270	11/05/2019 08:40	0.78	-107.2	6.31	NM	2.427	17.59	4.7
MW-270	11/05/2019 08:45	0.8	-108.4	6.32	NM	2.423	17.67	4.3
MW-270	11/05/2019 08:50	0.76	-109.2	6.32	NM	2.429	17.65	3.8
MW-270	11/05/2019 08:55	0.75	-109.6	6.32	NM	2.436	17.67	3.4
MW-270	11/05/2019 09:00	0.78	-108.5	6.32	NM	2.439	17.61	2.8
MW-270	11/05/2019 09:05	0.78	-108.8	6.33	NM	2.443	17.67	2.8
MW-270	11/05/2019 10:10	2.83	-139.2	6.36	1.38	2.652	18.93	2.8
MW-270	11/05/2019 10:20	4.39	-64.8	6.7	0.09	0.182	19.75	46.8
MW-270	02/06/2020 12:55	0.31	-151.3	6.24	NM	3.011	14.69	0.3
MW-270	02/06/2020 13:35	2.95	-73.6	6.32	1.63	3.094	13.88	6.7
MW-270	05/12/2020 09:20	0.68	-98.5	5.93	NM	3.457	14.46	4.5
MW-270	05/12/2020 09:53	5.04	-52.1	6.36	2.16	4.053	15.38	27.2
MW-270	08/19/2020 09:05	5.22	-55.4	7.35	0.67	1.34	19.22	163.7
MW-270	08/19/2020 11:10	4.1	-15.9	6.51	0.66	1.32	19.07	75.2
MW-270	08/19/2020 11:20	3.49	-13.2	6.54	0.66	1.317	18.98	72.5
MW-270	11/17/2020 10:35	3.41	-73.5	6.5	1.66	3.158	14.8	18.8
MW-270	11/17/2020 10:50	5.62	-45.6	6.6	0.64	1.268	16.54	105.7
MW-270	02/09/2021 10:12	9.55	-117.6	7.01	1.87	3.559	11.18	65
MW-270	02/09/2021 10:58	11.75	-87.6	6.78	1.91	3.576	13.42	14.2
MW-270	02/09/2021 11:10	7.66	-83.9	6.85	0.6	1.206	12.61	67.5
MW-270	05/03/2021 12:35	0.71	-40.6	6.25	1.79	3.398	18.09	16.8
MW-270	05/03/2021 12:40	0.63	-46.2	6.24	1.86	3.53	17.89	13.5

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-270	05/03/2021 12:45	0.58	-54.4	6.24	1.96	17.27	17.31	9.9
MW-270	05/03/2021 12:50	0.44	-60.4	6.25	2.01	3.783	16.11	6.9
MW-270	05/03/2021 12:55	0.42	-64.6	6.26	2.02	3.8	15.87	5.1
MW-270	05/03/2021 13:00	0.4	-67.1	6.27	2.02	3.802	15.86	5.2
MW-270	05/03/2021 13:05	0.41	-68.4	6.28	2.02	3.803	15.77	5
MW-270	02/23/2022 12:30	2.15	100.4	6.35	1.7	3.228	18.24	120.1
MW-270	02/23/2022 12:35	2.49	-103.3	6.34	1.71	3.25	17.89	111.3
MW-270	02/23/2022 12:40	1.67	-111.6	6.35	1.72	3.271	17.3	94.2
MW-270	02/23/2022 12:45	1	-112.3	6.35	1.72	3.273	17.31	57.3
MW-270	02/23/2022 12:50	0.96	-116	6.35	1.73	3.282	17.36	45.9
MW-270	02/23/2022 12:55	1.09	-121.1	6.35	1.73	3.291	17.33	47.9
MW-270	02/23/2022 13:00	1.66	-121.7	6.35	1.73	3.292	17.32	49.2
MW-270	02/23/2022 13:05	1.42	-122.8	6.35	1.74	3.303	17.3	42.5
MW-270	02/23/2022 13:10	0.78	-124.8	6.35	1.75	3.33	17.67	18.4
MW-270	02/23/2022 13:15	1.53	-125	6.35	1.76	3.335	17.65	30.2
MW-271	08/06/2012 14:09	1.07	-161	10.44	0.15	2.936	31.61	7
MW-271	08/06/2012 14:12	1.23	-150	10.06	0.13	2.451	23.82	3.3
MW-271	08/06/2012 14:15	0.96	-175	10.72	0.13	2.435	22.47	3.9
MW-271	08/06/2012 14:18	0.89	-185	10.63	0.13	2.425	22.51	4.8
MW-271	08/06/2012 14:21	0.92	-189	10.63	0.13	2.424	23.21	5.5
MW-271	08/06/2012 14:24	0.96	-192	10.67	0.13	2.426	22.82	5.7
MW-271	08/06/2012 14:27	0.99	-195	10.67	0.13	2.413	22.49	6.5
MW-271	08/06/2012 14:30	1	-196	10.68	0.13	2.417	22.46	7.3
MW-271	08/06/2012 14:32	0.98	-197	10.67	0.13	2.417	22.95	7.5
MW-271	08/06/2012 14:35	0.94	-198	10.69	0.13	2.42	22.89	8.1
MW-271	08/06/2012 14:36	0.94	-198	10.69	0.13	2.420	22.89	8.07
MW-271	12/20/2012 11:33	4.52	-56.2	6.73	1.23	1.845	12.49	38.50
MW-271	12/20/2012 12:17	1.68	-91.3	6.36	1.22	2.368	13.36	7.90
MW-271	12/21/2012 12:40	4.43	-59.4	6.55	1.13	2.199	16.06	1230.60
MW-271	03/28/2013 13:16	0.71	-182	6.57	0.12	2.281	12.5	10.66
MW-271	03/28/2013 13:58	2.88	-147	6.73	0.16	3.077	13.5	24.7
MW-271	03/29/2013 14:08	1.95	-142	6.77	0.16	3.101	13.59	291.3
MW-271	01/17/2014 08:25	0.0000	217.5	6.11	1.60	3.044	13.50	93.20
MW-271	01/17/2014 13:00	0.0000	-42.2	6.62	0.88	1.731	13.47	487.20
MW-271	01/17/2014 13:40	0.0000	-62.5	6.34	1.60	3.053	15.07	127.70
MW-271	02/24/2014 11:16	1.83	-118	6.49	0.22	4.148	9.91	72.52
MW-271	02/24/2014 11:59	3.43	-112	6.65	0.20	3.757	14.28	29.90
MW-271	02/24/2014 14:49	1.37	-130	6.58	0.15	2.862	14.66	76.80
MW-271	08/20/2014 14:05	1.93	-74.9	6.07	0.51	1.029	21.09	127.30
MW-271	08/20/2014 14:30	0.79	-55.7	6.39	0.54	1.084	21.85	202.30
MW-271	08/21/2014 14:45	0.96	-51.2	6.37	0.54	1.080	22.09	237.10
MW-271	10/21/2014 12:50	2.71	-8	6.80	0.40	0.892	27.12	290.00
MW-271	10/21/2014 13:00	2.12	-17	6.35	0.40	0.877	27.42	259.00
MW-271	10/21/2014 13:20	2.02	-22	6.38	0.50	0.930	27.48	170.00
MW-271	10/28/2014 11:20	4.95	-63	6.63	1.00	1.950	18.88	83.50
MW-271	10/28/2014 11:47	1.58	-55	6.17	1.70	3.290	17.58	11.20
MW-271	10/28/2014 11:58	3.04	-58	6.38	1.70	3.290	18.40	0.0000
MW-271	01/20/2015 11:50	3.30	89.5	6.30	0.28	0.579	21.61	75.80
MW-271	01/20/2015 12:22	1.77	-163	6.19	0.32	0.644	19.38	9.90
MW-271	01/20/2015 12:32	1.63	-148	0.22	0.32	0.647	18.28	8.70
MW-271	04/13/2015 13:30	0.79	-70	6.42	2.50	4.620	22.20	30.00
MW-271	04/13/2015 14:10	1.75	-79	6.49	2.60	4.830	22.88	18.70
MW-271	04/13/2015 14:20	1.29	-80	6.49	2.60	4.920	23.50	15.50
MW-271	07/08/2015 00:00	NM	NM	NM	18.50	NM	NM	NM
MW-271	07/08/2015 11:35	0.07	-65	6.48	1.50	2.840	20.19	33.80
MW-271	04/15/2016 11:00	7.98	-67.2	6.46	1.04	2.029	18.41	22.40

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-271	04/15/2016 11:28	6.93	-67.2	6.52	1.04	2.017	19.10	13.50
MW-271	09/21/2016 10:05	0.25	-81.6	6.67	0.88	1.742	23.35	17.00
MW-271	04/13/2017 08:45	20.82	69.00	5.80	0.30	0.475	12.93	47.70
MW-271	04/13/2017 09:10	5.03	14.00	5.94	0.30	0.615	12.54	162.00
MW-271	04/13/2017 09:25	12.49	-27.00	6.14	0.40	0.837	13.27	488.00
MW-271	05/31/2017 11:26	1.07	-110.00	6.37	0.18	3.356	17.06	68.00
MW-271	05/31/2017 12:04	-0.86	-80.00	6.51	0.10	2.054	17.25	34.09
MW-271	05/31/2017 12:32	0.78	-93.00	7.21	0.13	2.554	17.11	691.10
MW-271	01/25/2018 10:20	0.68	-19.80	6.37	0.51	1.022	9.26	41.80
MW-271	01/25/2018 11:05	3.00	-15.40	6.57	0.34	0.700	5.57	46.90
MW-271	01/25/2018 11:25	48.70	-20.60	6.87	0.62	0.124	7.81	138.40
MW-271	04/05/2018 13:00	6.65	11.70	7.62	0.27	0.554	9.99	352.80
MW-271	04/05/2018 13:40	7.98	-38.30	7.27	0.40	0.812	10.73	564.30
MW-271	04/05/2018 13:45	5.04	-15.90	7.25	0.40	0.784	10.75	582.90
MW-271	02/28/2019 10:00	6.45	159.50	7.08	2.57	4.769	10	16.60
MW-271	02/28/2019 10:55	8.07	234.00	7.60	3.74	6.795	13.61	1247.40
MW-271	02/28/2019 13:15	14.48	108.00	7.22	2.98	5.484	12.61	17.20
MW-271	05/07/2019 13:10	2.4	212.6	6.71	NM	7.639	17.23	64
MW-271	05/07/2019 13:35	4.44	170.8	6.88	2.21	7.689	17.25	40.1
MW-271	08/08/2019 10:05	1.8	67.6	7.07	NM	13.89	21.76	19.5
MW-271	08/08/2019 10:10	0.58	54	6.72	NM	14.49	21.45	17.8
MW-271	08/08/2019 10:15	0.47	73.6	6.61	NM	13.83	21.91	17.4
MW-271	08/08/2019 10:20	0.44	75.2	6.6	NM	13.94	22.29	16.2
MW-271	08/08/2019 10:25	0.51	95.5	6.59	NM	14.51	22.64	17.8
MW-271	08/08/2019 10:30	0.53	89.7	6.61	NM	15.11	22.19	11.5
MW-271	08/08/2019 10:35	0.49	91.6	6.6	NM	14.55	22.53	9.6
MW-271	08/08/2019 10:40	0.59	98.8	6.59	NM	14.25	22.79	8.1
MW-271	08/08/2019 10:45	0.54	101.7	6.59	NM	14.02	23.05	7.2
MW-271	08/08/2019 10:50	0.6	101.8	6.58	NM	13.8	22.78	8.2
MW-271	08/08/2019 12:13	2.61	130.2	7.09	7.9	13.63	20.22	80.5
MW-271	08/08/2019 12:40	8.93	47.3	6.87	7.01	12.22	22.4	114.4
MW-271	11/05/2019 12:20	36.56	113.2	6.94	NM	11.64	19.83	783
MW-271	11/05/2019 12:25	28.58	135.2	6.69	NM	11.53	19.99	115.3
MW-271	11/05/2019 12:30	9.18	36.1	6.63	NM	10.27	20.14	189.5
MW-271	11/05/2019 12:35	8.09	-7.7	6.68	NM	7.729	20.18	181.5
MW-271	11/05/2019 12:40	7.8	-0.5	6.66	NM	8.193	20.22	29.7
MW-271	11/05/2019 12:45	7.91	16.9	6.64	NM	8.931	19.98	82.8
MW-271	11/05/2019 12:50	8.48	44.2	6.67	NM	10.14	19.66	104.7
MW-271	11/05/2019 12:55	9.45	59.7	6.68	NM	10.62	19.6	22.6
MW-271	11/05/2019 13:00	10.06	68.9	6.68	NM	10.87	19.62	21.8
MW-271	11/05/2019 13:05	11	73.9	6.68	NM	11.01	19.55	17.6
MW-271	11/05/2019 14:05	16.17	153.8	6.94	3.87	7.016	18.77	17.4
MW-271	11/05/2019 14:10	23.05	230.8	6.99	4.04	7.302	18.95	1313.2
MW-271	02/12/2020 09:20	1.03	-102.8	6.58	NM	3.854	11.76	7.4
MW-271	02/12/2020 09:50	1.12	-77.9	6.88	1.02	3.101	11.34	18.2
MW-271	05/12/2020 11:55	1.55	82.4	6.25	NM	14.76	15.94	3.4
MW-271	05/12/2020 12:24	2.47	81.9	6.5	7.22	12.53	15.58	30.9
MW-271	02/10/2021 08:48	10.64	56.1	6.56	7.39	12.81	11.71	32.5
MW-271	02/10/2021 09:17	11.49	137	7	8.44	14.43	11.04	1231
MW-271	02/10/2021 09:35	8.71	73.3	6.87	8	13.77	12.34	219.4
MW-271	04/30/2021 11:45	1.79	-61	6.71	3.05	5.648	18.28	54.5
MW-271	04/30/2021 11:50	0.37	-75.2	6.63	2.29	4.271	17.66	15.1
MW-271	04/30/2021 11:55	0.29	-77	6.65	2.03	3.819	17.65	10.7
MW-271	04/30/2021 12:00	0.41	-76.2	6.61	2.26	4.223	17.54	9
MW-271	04/30/2021 12:05	0.36	-71.7	6.57	2.72	5.042	17.85	27.3
MW-271	04/30/2021 12:10	0.5	-68.7	6.53	2.76	5.123	19.63	26.5

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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-271	04/30/2021 12:15	0.63	-65.8	6.47	3.02	5.822	19.06	78.7
MW-271	04/30/2021 12:20	0.38	-57.6	6.35	5.23	9.305	18.09	89.7
MW-271	04/30/2021 12:25	0.39	-60.6	6.38	4.46	7.965	18.57	61.3
MW-271	04/30/2021 12:30	0.35	-62.6	6.41	3.82	6.91	18.63	55.6
MW-271	08/19/2021 13:15	0.26	-70.3	6.6	1.74	3.337	24.33	18.5
MW-271	08/19/2021 13:20	0.3	-75.1	6.5	1.73	3.306	24.48	16.5
MW-271	08/19/2021 13:25	0.76	-91.4	6.48	1.54	2.976	24.9	14.4
MW-271	08/19/2021 13:30	0.89	-99.1	6.48	1.41	2.732	24.71	11.5
MW-271	08/19/2021 13:35	0.98	-102.3	6.48	1.27	2.479	24.92	10.4
MW-271	08/19/2021 13:40	1.03	-106.4	6.48	1.18	2.304	24.96	6.9
MW-271	08/19/2021 13:45	1.1	-110.1	6.49	1.2	2.349	25	3.8
MW-271	08/19/2021 13:50	1.08	-114.5	6.5	1.24	2.424	25.25	6.9
MW-271	08/19/2021 13:55	1.04	-120.5	6.5	1.36	2.632	25.12	4.6
MW-271	08/19/2021 14:00	1.11	-122.8	6.59	1.46	2.817	25.01	4.6
MW-271	02/15/2022 09:15	3.43	27.3	6.55	2.51	4.653	10.52	32
MW-271	02/15/2022 09:20	1.44	-9.8	6.56	2.57	4.771	9.92	33.3
MW-271	02/15/2022 09:25	1.24	-19.8	6.55	2.56	4.787	9.81	33.2
MW-271	02/15/2022 09:30	1.09	-54	6.54	2.14	4.133	9.24	21.5
MW-271	02/15/2022 09:35	1	-79.8	6.58	1.78	3.389	9.31	20.3
MW-271	02/15/2022 09:40	1	-76.6	6.58	1.76	3.339	9.6	11
MW-271	02/15/2022 09:45	0.95	-85.2	6.62	1.71	3.25	9.73	8.8
MW-271	02/15/2022 09:50	0.92	-89.8	6.61	1.74	3.308	9.73	8
MW-271	02/15/2022 09:55	0.85	-94.7	6.57	1.82	3.452	9.63	7.6
MW-271	02/15/2022 10:00	0.75	-97.2	6.54	1.94	3.663	9.2	7.2
MW-275	12/19/2012 13:09	4.32	-36	7.65	0.66	1.305	13.53	5.30
MW-275	12/19/2012 14:28	0.13	-68.3	6.62	0.71	1.409	14.40	0.0000
MW-275	12/20/2012 14:46	2.74	-52.8	6.76	0.71	1.402	14.48	1.60
MW-275	10/06/2014 10:55	2.33	-84	6.73	0.13	2.464	17.88	18.30
MW-275	10/07/2014 11:18	0.77	243	6.91	0.07	1.355	18.43	11.90
MW-275	12/01/2015 14:26	3.30	-63	6.65	0.70	1.430	13.48	0.0000
MW-275	12/01/2015 14:40	3.30	0.66	6.70	0.70	1.380	12.28	5.40
MW-275	05/26/2016 11:02	12.58	582	6.89	0.09	1.849	15.00	15.90
MW-275	05/26/2016 12:30	22.79	521	6.92	0.17	3.161	14.77	4.10
MW-275	05/17/2017 09:50	4.58	3.00	7.04	0.07	1.382	12.93	6.10
MW-275	05/17/2017 10:34	7.23	47.00	7.76	0.09	1.747	15.98	10.90
MW-275	02/01/2018 10:25	8.10	14.80	6.83	0.76	1.505	10.16	25.70
MW-275	02/01/2018 10:45	4.15	30.30	7.14	0.37	0.744	11.09	15.20
MW-275	02/01/2018 14:40	1.47	-51.70	6.89	0.61	1.203	13.09	2.00
MW-275	03/06/2019 12:45	27.48	392.30	6.06	14.61	24.160	9.37	17.50
MW-275	03/06/2019 14:20	2.58	239.60	6.35	7.15	12.410	15.14	13.10
MW-275	03/06/2019 14:30	4.32	275.60	6.48	7.08	12.310	11.34	15.80
MW-275	05/17/2019 13:45	3.18	94.5	6.52	NM	1.277	15.19	11.3
MW-275	05/20/2019 14:25	16.4	125.8	6.74	3.19	5.886	15.56	5.5
MW-275	08/15/2019 10:05	2.77	48	6.44	NM	1.907	19.7	4.3
MW-275	08/15/2019 10:10	0.96	50.9	6.3	NM	1.965	19.88	3.9
MW-275	08/15/2019 10:15	0.65	55.5	6.26	NM	1.966	19.79	3.2
MW-275	08/15/2019 10:20	0.49	54.5	6.23	NM	1.954	19.8	2.5
MW-275	08/15/2019 10:25	0.57	54.1	6.22	NM	1.949	19.43	1.7
MW-275	08/15/2019 10:30	0.38	56.7	6.22	NM	1.945	19.6	1.6
MW-275	08/15/2019 10:35	0.38	59.7	6.21	NM	1.946	19.37	1.5
MW-275	08/15/2019 10:40	0.4	28	6.16	NM	3.233	19.45	1.2
MW-275	08/15/2019 10:45	1.74	33.8	6.16	NM	4.306	19.93	0.9
MW-275	08/15/2019 10:50	2.54	34.7	6.16	NM	4.544	20.26	0.9
MW-275	08/15/2019 13:20	2.54	34.7	6.16	NM	4.544	20.26	0.9
MW-275	08/15/2019 14:40	6.36	19.6	6.51	5.77	10.19	18.65	0.2
MW-275	08/15/2019 14:55	4.52	159.9	6.77	0.92	1.821	18.73	21.8

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-275	10/28/2019 09:35	1.66	233.2	6.56	NM	1.91	16.76	76.3
MW-275	10/28/2019 09:40	1.44	230.8	6.57	NM	1.935	16.8	58.2
MW-275	10/28/2019 09:45	0.73	226.4	6.59	NM	2.086	18.02	10.5
MW-275	10/28/2019 09:50	0.67	221	6.59	NM	2.107	17.98	8.9
MW-275	10/28/2019 09:55	0.53	193.5	6.59	NM	2.165	17.53	5.5
MW-275	10/28/2019 10:00	0.45	182.4	6.59	NM	2.201	17.84	0
MW-275	10/28/2019 10:05	0.41	174.6	6.6	NM	2.251	17.8	2.5
MW-275	10/28/2019 10:10	0.36	124.4	6.58	NM	2.585	17.47	1.9
MW-275	10/28/2019 10:15	0.35	54.4	6.56	NM	2.928	17.49	1.6
MW-275	10/28/2019 10:20	0.34	36	6.55	NM	3.06	17.53	0
MW-275	10/28/2019 11:55	13.45	-1.3	6.79	6	10.55	17.39	4.7
MW-275	10/28/2019 12:10	8.06	-17.5	8.11	0.64	1.277	17.49	77.3
MW-275	02/10/2020 13:05	6.19	123.9	6.81	NM	1.226	11.64	0.9
MW-275	02/10/2020 14:00	6.23	132.2	6.88	0.65	1.289	11.32	0.9
MW-275	05/14/2020 09:30	0.87	15.8	6.62	NM	10.47	15.53	0.8
MW-275	05/14/2020 11:04	2.35	14.9	7.1	5.96	10.48	17.02	0
MW-275	11/11/2020 13:10	3.37	36.3	7.08	4.87	8.665	17.79	3
MW-275	11/11/2020 13:25	1	36.7	7.78	0.5	1.01	17.89	7.5
MW-275	01/26/2021 08:15	11.54	208.1	7.54	0.11	0.225	13.64	16.3
MW-275	01/26/2021 09:45	8.79	26.7	7.18	4.52	8.119	14.16	4.1
MW-275	01/26/2021 10:00	11.29	44.5	8.05	0.32	0.653	11.85	17.3
MW-275	05/03/2021 09:10	10.72	-14	6.55	0.15	0.312	16.19	10.9
MW-275	05/03/2021 09:15	9.2	-5.8	6.91	0.1	0.214	14.77	6.4
MW-275	05/03/2021 09:20	0.1	-7	6.64	0.1	0.207	14.51	4.3
MW-275	05/03/2021 09:25	9.09	-10.9	6.57	0.1	0.206	14.57	3.8
MW-275	05/03/2021 09:30	9.1	-15.5	6.6	0.1	0.206	14.64	3.9
MW-275	05/03/2021 09:35	9.01	-15.6	6.62	0.1	0.208	14.74	3.8
MW-275	05/03/2021 09:40	9	-17.1	6.64	0.1	0.208	14.79	3.7
MW-275	08/17/2021 14:40	7.32	88.7	7.89	0	0.314	23.3	13.38
MW-275	08/17/2021 14:45	6.02	105.6	7.21	0	0.358	18.9	12.03
MW-275	08/17/2021 14:50	5.71	113.5	6.87	0	0.596	18.6	10.73
MW-275	08/17/2021 14:55	3.04	39	7.21	0	5.209	18.4	8.32
MW-275	08/17/2021 15:00	1.92	-7.7	7.25	0	7.245	18.4	6.25
MW-275	08/17/2021 15:05	1.55	-28.9	7.19	0	8.199	18.3	5.45
MW-275	08/17/2021 15:10	1.47	-39.1	7.16	0	8.433	18.3	4.4
MW-275	08/17/2021 15:15	1.37	-45.9	7.15	0	8.512	18.2	4.1
MW-275	08/17/2021 15:20	1.35	-47.4	7.14	0	8.524	18.2	4.28
MW-276	06/19/2013 14:10	0.63	-173	7.48	2.62	40.710	18.90	5.74
MW-276	06/19/2013 15:14	0.86	-152	7.07	3.60	54.490	13.94	21.90
MW-276	06/20/2013 11:51	-0.55	-206.00	7.25	2.34	37.110	12.58	10.30
MW-276	09/15/2014 10:43	1.41	-354	7.19	1.95	31.170	18.53	6.88
MW-276	09/15/2014 11:49	2.08	-317	7.01	1.43	23.400	18.81	188.60
MW-276	05/24/2016 09:58	0.54	628	6.74	2.74	42.750	12.47	13.70
MW-276	05/24/2016 11:05	1.37	628	6.91	1.02	17.270	15.66	18.60
MW-276	05/19/2017 09:55	-0.08	-94.00	6.95	2.35	37.340	11.9	10.60
MW-276	05/19/2017 11:14	0.11	-93.00	7.20	1.86	29.860	21.41	3.76
MW-276	03/12/2019 14:10	0.61	130.2	7.03	NM	30.4	8.99	0.9
MW-276	03/12/2019 15:15	5.59	-40.9	7.43	18.81	30.33	11.64	35.7
MW-276	05/22/2019 13:10	0.26	-64.4	7.62	NM	29.88	14.79	26.2
MW-276	05/22/2019 14:20	1.32	-15.3	7.2	19.57	31.36	16.77	6.6
MW-277	06/19/2013 09:18	4.66	-50	7	0.04	0.82204	20.29	313.7
MW-277	06/19/2013 09:21	3.95	-86	7.62	0.04	0.88937	18.89	303.7
MW-277	06/19/2013 09:23	3.5	-103	7.99	0.05	0.92907	18.24	324.7
MW-277	06/19/2013 09:25	3.21	-116	8.31	0.05	0.96649	18.13	343.6
MW-277	06/19/2013 09:28	3.05	-131	8.66	0.05	1.00716	18.1	322.2
MW-277	06/19/2013 09:30	2.93	-137	8.81	0.05	1.04536	18.1	321.4

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-277	06/19/2013 09:32	2.86	-141	8.92	0.05	1.08108	18.01	311.4
MW-277	06/19/2013 09:35	2.76	-144	8.97	0.06	1.10525	18.09	325.2
MW-277	06/19/2013 09:37	2.68	-146	9	0.06	1.12644	18.07	311.2
MW-277	06/19/2013 09:39	2.63	-149	9.07	0.06	1.14042	18.07	322.4
MW-277	06/19/2013 09:40	2.63	-149	9.07	0.06	1.140	18.02	322.40
MW-277	06/19/2013 10:12	3.73	-139	7.51	0.14	2.655	15.16	586.60
MW-277	06/20/2013 10:33	-0.49	-294.00	7.02	1.90	30.640	14.14	6.90
MW-277	06/19/2014 01:30	2.86	238	7.18	NM	1.40007	22.03	1369.1
MW-277	06/19/2014 01:35	0.89	227	7.56	NM	1.38443	19.62	696.3
MW-277	06/19/2014 01:39	0.66	220	7.7	NM	1.37248	18.6	662
MW-277	06/19/2014 01:43	0.56	214	7.79	NM	1.35882	18.3	634.7
MW-277	06/19/2014 01:48	0.51	208	7.82	NM	1.5461	18.5	682.5
MW-277	06/19/2014 01:52	0.52	-72	7.12	NM	4.57025	18.48	487
MW-277	06/19/2014 01:57	0.42	-95	6.85	NM	8.38789	18.56	354.1
MW-277	06/19/2014 02:01	0.46	-111	6.8	NM	17.10485	18.46	292.4
MW-277	06/19/2014 02:05	0.26	161	6.75	NM	50.28502	18.53	365.2
MW-277	06/19/2014 02:10	0.31	-214	6.73	NM	50.2998	18.19	222
MW-277	06/19/2014 02:14	0.26	-261	6.73	NM	50.3142	18.45	196.4
MW-277	06/19/2014 02:18	0.28	-284	6.74	NM	50.3282	18.76	230.9
MW-277	06/19/2014 14:19	0.28	-284	6.74	3.85	57.140	18.76	230.90
MW-277	06/19/2014 14:55	1.86	-181	7.23	0.25	4.751	14.86	1761.70
MW-277	06/20/2014 10:50	0.13	-300	6.74	4.33	64.360	13.25	7.60
MW-277	03/10/2016 10:56	3.530	-1.000	6.670	2.054	32.587	18.830	1671.800
MW-277	03/10/2016 11:01	2.430	-20.000	6.710	2.176	34.465	16.150	602.900
MW-277	03/10/2016 11:06	2.070	-21.000	6.700	2.142	33.991	15.990	857.200
MW-277	03/10/2016 11:10	1.920	-34.000	6.720	2.097	33.345	15.970	785.300
MW-277	03/10/2016 11:15	1.810	-51.000	6.720	1.960	31.302	17.010	635.600
MW-277	03/10/2016 11:19	1.650	-75.000	6.740	1.956	31.260	16.530	535.200
MW-277	03/10/2016 11:24	1.580	-101.000	6.770	1.951	31.196	16.510	699.400
MW-277	03/10/2016 11:28	1.400	-116.000	6.800	1.925	30.801	16.850	770.900
MW-277	03/10/2016 11:33	1.330	-128.000	6.820	1.948	31.144	16.580	713.900
MW-277	03/10/2016 11:38	1.230	-140.000	6.840	1.963	31.374	16.260	993.400
MW-277	03/10/2016 11:42	1.090	-150.000	6.850	1.954	31.234	16.440	761.600
MW-277	03/10/2016 11:47	0.960	-158.000	6.860	1.950	31.181	16.400	834.100
MW-277	03/11/2016 09:42	2.57	-77	6.90	0.51	9.216	10.64	397.80
MW-277	03/11/2016 12:26	1.15	-200	7.02	2.28	35.960	16.22	754.10
MW-277	03/29/2017 10:22	7.52	134	7.1	0.0586	0.0118	11.58	804
MW-277	03/29/2017 10:27	0.8	-316	6.81	2.0433	0.3279	12.66	93.3
MW-277	03/29/2017 10:31	0.39	-329	6.82	2.0643	0.3313	12.31	106.5
MW-277	03/29/2017 10:36	0.37	-331	6.8	1.9876	0.3199	12.38	86.2
MW-277	03/29/2017 10:41	0.41	-333	6.77	1.9313	0.3113	12.88	132.9
MW-277	03/29/2017 10:45	0.37	-337	6.76	1.8954	0.3057	13.23	399.5
MW-277	03/29/2017 10:50	0.38	-340	6.76	1.8470	0.2984	13.49	574.4
MW-277	03/29/2017 10:54	0.4	-344	6.76	1.7931	0.2905	13.45	322.1
MW-277	03/29/2017 10:59	0.42	-345	6.76	1.7606	0.2857	13.39	339.1
MW-277	03/29/2017 11:03	0.44	-347	6.76	1.7473	0.2837	13.42	176.2
MW-277	03/29/2017 11:08	0.45	-349	6.77	1.7433	0.2831	13.53	160.5
MW-277	03/29/2017 11:13	0.46	-350	6.77	1.7415	0.2827	13.65	147.2
MW-277	03/30/2017 09:57	4.15	66	7.01	0.13	2.571	12.19	302.10
MW-277	03/30/2017 11:50	6.74	-138	7.52	0.15	2.838	13.98	778.50
MW-277	03/14/2018 12:20	9.08	167	6.94	0.0708	1.4202	8.55	343.9
MW-277	03/14/2018 12:24	7.04	112	7.19	0.0882	1.7470	9.56	78
MW-277	03/14/2018 12:29	6.92	88	5.85	0.0956	1.8844	10.21	70.9
MW-277	03/14/2018 12:33	7.93	81	5.85	0.1034	2.0313	10.15	73.9
MW-277	03/14/2018 12:38	7.04	77	7.25	0.1061	2.0808	10.47	63.1
MW-277	03/14/2018 12:43	6.95	75	7.44	0.1083	2.1177	11.17	56.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-277	03/14/2018 12:47	7.03	75	7.54	0.1157	2.2594	10.44	56.3
MW-277	03/14/2018 12:52	6.9	75	7.58	0.1173	2.2861	10.95	57.4
MW-277	03/14/2018 12:56	6.85	75	7.61	0.1181	2.2994	11.33	58.8
MW-277	03/15/2018 11:19	8.14	-218.00	6.86	3.21	49.410	12.31	3.30
MW-277	03/15/2018 12:56	6.85	75.00	7.61	0.12	2.308	11.19	58.81
MW-277	03/15/2018 13:32	7.31	-161.00	6.72	2.92	45.120	15.17	0.0000
MW-277	02/26/2019 10:35	1.28	-308.80	6.71	19.15	30.770	10.5	102.40
MW-277	02/26/2019 12:10	0.57	-315.30	6.59	22.42	35.480	14.48	15.80
MW-277	02/26/2019 12:20	0.43	-322.40	6.57	23.87	37.580	14.22	3.70
MW-277	05/16/2019 09:50	13.29	-325.7	6.79	NM	29.64	14.81	1.2
MW-277	05/16/2019 11:00	4.08	-329.8	6.78	15.11	26.32	14.23	1.9
MW-277	03/06/2020 09:30	6.25	134.2	7	NM	0.152	12.95	23.4
MW-277	03/06/2020 10:45	6.01	130.3	7.04	0.07	0.157	12.44	12.4
MW-277	03/05/2021 11:45	11.09	11.7	7.92	0.16	0.336	11.73	109.8
MW-277	03/05/2021 11:50	9.62	12.6	7.81	0.16	0.311	12.39	108.8
MW-277	03/05/2021 11:55	8.92	26.5	7.74	0.15	0.307	12.13	126.7
MW-277	03/05/2021 12:00	9	30.4	7.66	0.15	0.305	11.67	112.9
MW-277	03/05/2021 12:05	9	34.4	7.63	0.15	0.304	11.3	116.4
MW-277	03/05/2021 12:10	11.7	15.6	7.51	0.22	0.477	8.53	174.7
MW-277	03/05/2021 12:15	10.02	31.4	7.48	0.16	0.325	11.66	178.6
MW-277	03/05/2021 12:20	9.96	50.4	7.44	0.15	0.307	12.14	137.4
MW-277	03/05/2021 12:25	9.85	53.1	7.46	0.15	0.304	11.96	110.5
MW-277	03/05/2021 12:30	9.69	63.2	7.38	0.15	0.306	11.3	70.3
MW-277	03/05/2021 12:35	9.69	63.2	7.38	0.15	0.306	11.3	70.3
MW-277	03/05/2021 13:35	5.41	-226.8	6.95	17.01	27.57	14.73	7.9
MW-277	03/05/2021 13:55	5.98	-241.4	7.37	11.46	19.22	12.67	171.1
MW-277	02/04/2022 13:10	-0.44	-343	7.02	10.05	16.91	12.35	116.2
MW-277	02/04/2022 13:15	-0.48	-346.8	6.98	10.98	18.31	12.38	108.3
MW-277	02/04/2022 13:20	-1.35	-347	6.82	22.79	36.06	12.42	28.1
MW-277	02/04/2022 13:25	-1.7	-349	6.82	23.35	36.89	11.58	33.8
MW-277	02/04/2022 13:30	-0.05	-344.7	6.83	23.4	37.03	10.67	35
MW-277	02/04/2022 13:35	-1.07	-349.9	6.83	24.92	39.15	9.2	33.8
MW-277	02/04/2022 13:40	-1.06	-351.5	6.82	26.44	41.52	8.87	43
MW-277	02/04/2022 13:45	-2.28	-357.7	6.82	26.43	41.53	8.44	50.8
MW-277	02/04/2022 13:50	-1.45	-358.4	6.82	26.42	41.55	8.39	52
MW-277	02/04/2022 13:55	-2.59	-357.7	6.83	26.38	41.5	8.4	50.4
MW-282	12/18/2012 14:31	0.90	16.4	5.30	0.38	0.608	13.99	80.70
MW-282	12/18/2012 15:19	0.08	-30	6.01	0.47	0.743	13.89	21.50
MW-282	12/19/2012 17:00	1.07	-9.2	6.11	0.50	1.019	13.49	522.30
MW-282	01/13/2014 13:25	0.94	157.3	5.46	0.19	0.395	8.68	13.40
MW-282	01/13/2014 14:12	0.0000	175	5.44	0.19	0.394	9.14	3.80
MW-282	01/13/2014 14:21	1.06	159.6	4.93	0.18	0.380	8.76	78.30
MW-282	08/20/2014 14:42	7.23	135.7	5.35	0.12	0.263	21.17	0.0000
MW-282	08/20/2014 14:47	1.27	187.3	5.65	0.13	0.331	21.68	26.20
MW-282	08/20/2014 15:49	6.70	134.2	5.39	0.12	0.258	24.13	14.50
MW-282	09/19/2014 09:26	0.46	247	6.77	0.02	0.411	19.38	1298.70
MW-282	09/19/2014 10:00	0.68	78	5.86	0.02	0.390	19.31	375.10
MW-282	10/28/2014 09:35	9.25	-5	7.33	0.20	0.458	17.25	56.90
MW-282	10/28/2014 10:27	5.94	-33	6.66	0.30	0.547	17.80	2.80
MW-282	10/28/2014 10:36	1.34	-54	6.63	0.30	0.555	17.85	6.40
MW-282	01/22/2015 12:35	4.35	-16.9	8.65	0.13	0.290	8.09	263.40
MW-282	01/22/2015 13:32	1.03	34.6	6.14	0.13	0.282	9.18	30.30
MW-282	01/22/2015 13:42	1.09	38.4	6.20	0.13	0.285	9.03	37.40
MW-282	07/09/2015 10:30	0.0000	227	5.19	0.10	0.272	15.50	0.0000
MW-282	07/09/2015 10:45	0.24	179	5.35	0.10	0.290	15.91	0.0000
MW-282	12/16/2015 11:26	1.18	-235	6.68	0.02	0.418	15.39	7.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-282	12/16/2015 14:44	2.25	-52	7.02	0.07	1.324	16.51	1045.2
MW-282	04/19/2016 12:23	0.0000	-21	6.41	0.10	0.227	13.55	0.0000
MW-282	04/19/2016 12:42	0.0000	-25	6.37	0.10	0.226	16.86	4.90
MW-282	09/12/2016 11:45	1.10	-76.3	6.45	0.38	0.736	22.97	17.80
MW-282	09/12/2016 13:45	0.96	-74.7	6.45	0.37	0.733	23.56	16.70
MW-282	04/11/2017 09:30	4.79	350.00	4.43	0.20	0.484	11.53	3.40
MW-282	04/11/2017 11:00	2.75	227.00	6.26	0.20	0.477	11.13	3.50
MW-282	04/11/2017 11:15	2.70	63.00	6.00	0.20	0.506	11.44	15.20
MW-282	04/06/2018 09:00	17.15	7.40	6.83	0.29	0.592	4.96	77.20
MW-282	04/06/2018 10:45	22.49	57.70	6.44	0.24	0.500	5.55	2.20
MW-282	04/06/2018 10:50	22.72	65.50	6.25	0.20	0.419	5.25	109.70
MW-282	03/01/2019 10:15	2.89	127.40	6.56	0.11	0.235	7.6	206.50
MW-282	03/01/2019 11:50	1.59	15.40	6.16	0.24	0.509	9.09	31.90
MW-282	03/01/2019 12:20	0.29	10.30	6.13	0.33	0.665	7.04	412.10
MW-282	05/17/2019 09:35	3.24	163.7	6.88	NM	0.153	16.18	16
MW-282	05/17/2019 11:05	2.74	187.8	6.95	0.09	0.196	16.37	14.6
MW-282	08/14/2019 10:05	3.81	151.2	6.59	NM	0.167	21.7	31.4
MW-282	08/14/2019 10:10	2.6	237.2	6.53	NM	0.166	22.97	22.3
MW-282	08/14/2019 10:15	3.17	193	6.56	NM	0.168	22.87	19.2
MW-282	08/14/2019 10:20	3.21	200.3	6.54	NM	0.169	23.12	19.6
MW-282	08/14/2019 10:25	3.11	208.9	6.53	NM	0.166	22.94	21.2
MW-282	08/14/2019 10:30	3.08	215.9	6.53	NM	0.166	23.19	21.1
MW-282	08/14/2019 10:35	3.07	220.9	6.54	NM	0.166	23.11	24.9
MW-282	08/14/2019 10:40	3.05	228.9	6.53	NM	0.165	22.8	22
MW-282	08/14/2019 10:45	2.79	232.7	6.53	NM	0.165	22.86	22.2
MW-282	08/14/2019 10:50	2.6	237.2	6.53	NM	0.166	22.97	22.3
MW-282	08/14/2019 11:50	4.81	60.7	6.27	0.27	0.567	22.86	2.1
MW-282	08/14/2019 12:05	5.95	45.6	6.31	0.29	0.601	23.18	183.6
MW-282	10/30/2019 12:25	1.65	73.5	6.29	NM	0.298	19.16	18.1
MW-282	10/30/2019 12:30	1.72	83.4	6.23	NM	0.293	18.99	15.1
MW-282	10/30/2019 12:35	1.74	89	6.21	NM	0.29	18.95	11.5
MW-282	10/30/2019 12:40	1.58	92.9	6.2	NM	0.288	18.9	12.9
MW-282	10/30/2019 12:45	1.64	97.2	6.18	NM	0.288	18.86	13.7
MW-282	10/30/2019 12:50	1.51	100.6	6.15	NM	0.287	18.76	13.1
MW-282	10/30/2019 12:55	1.59	102.2	6.13	NM	0.285	18.68	14.2
MW-282	10/30/2019 14:40	1.87	74.6	6.2	0.15	0.322	19.24	1.3
MW-282	10/30/2019 14:55	4.04	60.8	6.28	0.15	0.323	19.24	11.7
MW-282	02/10/2020 10:00	1.81	18.5	6	NM	0.582	9.67	180.6
MW-282	02/10/2020 11:06	2.78	60.8	6.24	0.24	0.485	10.43	16.2
MW-282	05/11/2020 11:20	0.72	116.5	6.06	NM	0.206	13.54	5.6
MW-282	05/11/2020 13:13	0.93	-9.2	6.39	0.17	0.36	13.62	15.1
MW-282	11/18/2020 15:00	2.04	-35.7	7.18	2.2	4.127	15	10.6
MW-282	11/18/2020 15:20	1.56	6.2	6.53	0.18	0.365	11.94	7.7
MW-282	01/27/2021 10:30	2.92	156.9	6.61	0.16	0.335	9.55	31.6
MW-282	01/27/2021 12:10	0.34	113.1	7.04	0.15	0.308	10.38	4.5
MW-282	01/27/2021 12:25	0.34	64.6	6.8	0.15	0.303	9.76	28.7
MW-282	04/28/2021 08:50	2.45	194.4	6.23	0.3	0.597	13.1	48
MW-282	04/28/2021 08:55	1.54	188.8	6.21	0.27	0.562	12.59	43.2
MW-282	04/28/2021 09:00	1.12	180.6	6.24	0.27	0.557	12.44	49.9
MW-282	04/28/2021 09:05	1.11	171.3	6.23	0.27	0.551	12.43	42.3
MW-282	04/28/2021 09:10	1.2	164.9	6.24	0.27	0.548	12.41	35.5
MW-282	04/28/2021 09:15	1.22	160.3	6.23	0.27	0.545	12.37	28.1
MW-282	04/28/2021 09:20	1.18	158.8	6.22	0.26	0.542	12.38	23.6
MW-282	04/28/2021 09:25	1.11	157.3	6.22	0.26	0.535	12.36	17.6
MW-282	04/28/2021 09:30	1.08	156.2	6.22	0.26	0.531	12.38	13.8
MW-282	04/28/2021 09:35	1.08	155.3	6.2	0.26	0.525	12.35	12.1

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-282	03/17/2022 09:40	8.84	175.9	5.77	0.13	0.271	10.32	251.4
MW-282	03/17/2022 09:45	8.71	176.3	5.75	0.13	0.27	10.29	240.7
MW-282	03/17/2022 09:50	8.88	157.7	5.83	0.13	0.266	10.05	64
MW-282	03/17/2022 09:55	8.05	140.9	6.03	0.13	0.264	10.02	44.9
MW-282	03/17/2022 10:00	9.46	135.4	6.02	0.13	0.264	9.99	41.4
MW-282	03/17/2022 10:05	9	133.9	6.03	0.13	0.264	10	32.4
MW-282	03/17/2022 10:10	7.83	133.6	6.08	0.13	0.264	10	23.8
MW-282	03/17/2022 10:15	6.3	132.7	6.12	0.13	0.266	9.99	20
MW-282	03/17/2022 10:20	6.46	132.8	6.05	0.13	0.266	10.02	16.1
MW-282	03/17/2022 10:25	6.88	131.5	6.09	0.13	0.265	9.98	18.3
MW-283	12/20/2012 13:55	6.92	-50.2	7.46	0.91	1.014	13.24	0.0000
MW-283	12/20/2012 14:54	1.10	-87.2	6.25	0.89	1.730	13.70	5.20
MW-283	12/21/2012 15:02	2.20	-86.1	6.74	0.85	1.667	13.74	11.80
MW-283	04/01/2013 11:15	6.57	96	6.99	0.15	2.832	13.14	66.1
MW-283	04/02/2013 11:48	0.81	-233	7.1	0.15	2.919	11.94	43.5
MW-283	01/18/2014 14:25	0.12	140.8	6.35	0.84	1.653	13.92	22.90
MW-283	01/18/2014 15:27	0.05	-103.3	6.86	0.95	1.866	14.99	3.70
MW-283	01/18/2014 15:38	1.30	-101.9	6.88	0.95	1.849	13.28	13.80
MW-283	08/21/2014 11:22	1.47	-112	6.86	0.63	1.265	15.83	-13.30
MW-283	08/21/2014 12:10	0.28	-96.5	6.86	0.82	1.608	15.38	-15.70
MW-283	08/21/2014 12:27	0.28	-100.3	6.89	0.82	1.656	18.11	-14.70
MW-283	10/06/2014 11:30	2.60	-145	6.56	0.17	3.174	19.12	18.90
MW-283	10/07/2014 11:45	0.80	22.3	6.75	0.08	1.659	19.74	16.50
MW-283	10/28/2014 09:25	4.41	-26	6.69	0.80	1.560	15.48	13.70
MW-283	10/28/2014 10:22	5.22	-83	6.69	0.80	1.620	16.05	0.0000
MW-283	10/28/2014 10:35	1.86	-85	6.67	0.80	1.590	16.45	0.0000
MW-283	01/22/2015 12:30	4.68	52.7	7.09	0.52	1.044	9.31	157.00
MW-283	01/22/2015 13:15	0.34	-160.3	6.66	0.68	1.204	14.71	-1.80
MW-283	01/22/2015 13:20	1.36	-125	6.69	0.59	1.181	13.58	20.00
MW-283	07/09/2015 10:25	1.97	-68	6.81	0.60	1.310	12.43	0.0000
MW-283	07/09/2015 10:30	0.0000	-66	6.80	0.60	1.300	12.79	0.0000
MW-283	10/15/2015 13:50	43.10	-90.7	6.83	0.88	1.724	19.46	33.70
MW-283	10/15/2015 14:25	216.92	-98.7	6.99	0.78	1.520	20.77	49.20
MW-283	04/19/2016 10:27	0.0000	-112	6.93	0.50	0.955	16.85	0.0000
MW-283	04/19/2016 10:42	0.0000	-109	6.92	0.50	0.952	20.31	16.50
MW-283	09/12/2016 12:00	0.61	-97.7	6.87	1.59	3.099	25.65	15.90
MW-283	09/12/2016 14:00	0.67	-101.3	6.94	1.58	3.101	26.17	14.70
MW-283	04/11/2017 12:10	9.42	-63.00	7.16	0.40	0.817	16.51	0.0000
MW-283	04/11/2017 13:30	2.62	-146.00	7.24	0.50	0.925	19.3	0.0000
MW-283	04/11/2017 13:45	9.03	-80.00	7.38	0.40	0.839	16.69	25.40
MW-283	07/25/2018 11:10	2.51	-85.00	6.75	0.57	1.152	19.16	6.50
MW-283	07/25/2018 11:55	2.76	-70.50	6.91	0.54	1.084	18.6	2.50
MW-283	07/25/2018 12:10	3.07	-87.10	6.87	0.56	1.122	20.09	12.60
MW-283	08/08/2018 13:48	0.0000	-99.80	7.01	0.50	1.004	19.36	0.0000
MW-283	08/08/2018 15:25	0.07	-108.60	6.97	0.49	0.988	19.67	1.90
MW-283	08/08/2018 16:01	0.0000	-105.80	6.97	0.49	0.986	18.91	0.0000
MW-283	02/13/2019 13:25	24.00	341.30	5.12	10.37	17.530	13.06	155.40
MW-283	02/13/2019 14:40	21.98	291.00	6.01	12.17	20.300	16.9	29.60
MW-283	02/13/2019 14:55	22.01	287.60	6.09	11.11	18.980	15.97	128.40
MW-283	05/20/2019 10:35	1.36	-98.3	7.58	NM	12.72	21.7	1.3
MW-283	05/20/2019 11:55	9.12	105.2	7.37	7.34	12.74	20.21	14.4
MW-283	08/14/2019 10:05	0.55	-82.4	6.51	NM	10.76	19.72	6
MW-283	08/14/2019 10:10	8.53	94.5	7.38	NM	0.155	20.01	18.1
MW-283	08/14/2019 10:15	3.48	-44.1	6.73	NM	5.747	20.04	16.9
MW-283	08/14/2019 10:20	0.95	-14.1	6.81	NM	8.892	19.97	22.4
MW-283	08/14/2019 10:25	0.83	-131.3	6.87	NM	9.276	19.88	16.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-283	08/14/2019 10:30	0.74	-133	6.87	NM	9.677	19.74	16.2
MW-283	08/14/2019 10:35	0.7	-121.1	6.78	NM	10.2	19.81	12.9
MW-283	08/14/2019 10:40	0.65	-106.2	6.67	NM	10.58	19.84	9.3
MW-283	08/14/2019 10:45	0.6	-91.2	6.59	NM	10.68	19.74	7.2
MW-283	08/14/2019 10:50	0.55	-82.4	6.51	NM	10.76	19.72	6
MW-283	08/14/2019 11:46	11.23	-37.3	6.78	8.01	13.8	19.51	13.6
MW-283	08/14/2019 11:50	11.23	-37.3	6.78	8.01	13.8	19.51	13.6
MW-283	08/14/2019 12:00	7.03	-25.8	7.17	0.6	1.212	22.18	52.3
MW-283	10/30/2019 08:35	6.5	128.1	7.29	NM	0.13	17.98	48.5
MW-283	10/30/2019 08:40	5.92	130	7.18	NM	0.123	17.84	29.5
MW-283	10/30/2019 08:45	5.85	134.4	7.1	NM	0.122	17.84	20
MW-283	10/30/2019 08:50	5.86	138	7.09	NM	0.123	17.81	19.1
MW-283	10/30/2019 08:55	5.75	141	7.04	NM	0.121	17.76	19.4
MW-283	10/30/2019 09:00	5.62	143.3	7.02	NM	0.121	17.8	19.3
MW-283	10/30/2019 09:05	5.5	145.3	7	NM	0.124	17.85	19.3
MW-283	10/30/2019 11:10	6.05	-38.9	6.79	6.65	11.62	17.92	31.6
MW-283	10/30/2019 11:25	6.21	-27	7.38	0.31	0.627	18.66	23.8
MW-283	02/11/2020 09:35	0.07	-268.8	8.53	NM	10.81	14.15	15.1
MW-283	02/11/2020 10:47	6.88	58.5	7.68	6.92	12.03	14.24	29.4
MW-283	05/11/2020 14:20	0.02	-469.1	9.06	NM	9.635	16.18	61.7
MW-283	05/11/2020 15:01	1.74	5.7	8.41	6.15	10.8	17.4	45.7
MW-283	11/18/2020 13:30	4.16	-65.5	7.3	4.88	8.686	14.98	18.3
MW-283	11/18/2020 13:45	9.4	-20.2	8.13	0.3	0.623	14.49	73.5
MW-283	01/25/2021 13:15	10.6	-0.4	8.03	0.12	0.256	13.83	28.2
MW-283	01/25/2021 14:35	5.91	-88.6	7.14	4.02	7.192	15.11	7.7
MW-283	01/25/2021 14:45	10.58	-18.8	7.95	0.3	0.619	13.2	69.4
MW-283	04/26/2021 11:25	8.12	59.8	8.03	0.23	0.481	14.26	16.7
MW-283	04/26/2021 11:30	7.34	67.4	8.1	0.21	0.434	14.65	12.2
MW-283	04/26/2021 11:35	7.26	70.6	8.09	0.21	0.437	14.85	12.5
MW-283	04/26/2021 11:40	7.22	73.9	8.07	0.21	0.443	14.84	14.3
MW-283	04/26/2021 11:45	4.93	80.8	7.78	0.7	1.516	14.94	7.8
MW-283	04/26/2021 11:50	2.33	-5.9	7.5	2.38	4.52	15.05	5.7
MW-283	04/26/2021 11:55	1.72	-83.1	7.37	3.42	6.269	15.1	5.8
MW-283	04/26/2021 12:00	1.62	-100.8	7.22	3.9	7.067	15.06	6.6
MW-283	04/26/2021 12:05	1.59	-102.7	7.15	4.1	7.391	15.12	6.6
MW-283	04/26/2021 12:10	1.35	-104	7.12	4.17	7.515	15.18	6.7
MW-283	02/15/2022 10:40	10.87	-28.9	8.22	0.19	0.406	10.85	56.6
MW-283	02/15/2022 10:45	10.77	-14.9	8.18	0.18	0.369	10.56	74
MW-283	02/15/2022 10:50	0.72	-7	8.1	0.17	0.356	10.78	70.2
MW-283	02/15/2022 10:55	10.75	-1.6	8.08	0.17	0.353	10.66	70.9
MW-283	02/15/2022 11:00	10.71	5.9	8.05	0.17	0.35	11.17	78.2
MW-283	02/15/2022 11:05	11.88	9.6	8.09	0.17	0.35	11.77	83
MW-283	02/15/2022 11:10	10.73	17.7	8.04	0.17	0.349	11.49	88.2
MW-283	02/15/2022 11:15	10.62	23.6	8	0.18	0.381	11.42	82.1
MW-283	02/15/2022 11:20	9.2	33.9	7.81	0.33	0.67	11.29	75.9
MW-283	02/15/2022 11:25	8.05	37.9	7.69	0.5	1.005	11.75	69.2
MW-284	12/14/2012 10:33	0.13	-81.7	6.41	2.23	3.242	13.36	15.40
MW-284	12/14/2012 11:55	0.04	-77.2	6.17	2.45	3.605	13.97	4.30
MW-284	12/15/2012 13:25	3.16	-50	6.43	2.38	3.464	13.63	520.40
MW-284	05/28/2013 11:24	0.32	-138	6.47	0.31	5.771	12.82	108.5
MW-284	05/29/2013 10:28	0.13	-177	6.53	0.19	3.66	13.86	69.7
MW-284	09/19/2014 10:07	1.13	87	6.22	0.20	3.665	18.01	121.00
MW-284	09/19/2014 10:39	0.27	18	6.10	0.20	3.763	17.95	80.40
MW-284	12/16/2015 10:56	1.08	-219	6.53	0.15	2.884	14.92	56.3
MW-284	12/16/2015 14:13	1.47	-48	6.41	0.83	14.21	16.01	69.2
MW-284	05/20/2016 10:15	4.22	61	6.86	1.14	19.150	12.42	17.40

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-284	05/20/2016 11:29	3.68	71	6.09	0.23	4.399	12.54	6.30
MW-284	05/18/2017 09:03	1.63	114.00	6.55	0.16	3.143	12.77	31.20
MW-284	05/18/2017 09:50	6.11	-118.00	6.30	0.16	3.050	12.49	10.70
MW-284	01/29/2018 10:30	14.41	-61.40	6.31	0.57	1.142	9.13	13.10
MW-284	01/29/2018 11:25	7.59	-49.70	6.54	0.84	1.648	9.14	33.40
MW-284	01/29/2018 11:35	7.58	-62.30	6.58	0.0000	1.650	9.38	49.70
MW-285	12/14/2012 12:50	2.52	-96.5	7.45	2.07	3.102	14.25	4.70
MW-285	12/14/2012 14:10	0.21	-49.4	6.86	2.08	3.093	13.99	0.90
MW-285	12/15/2012 14:18	0.76	-49.3	6.92	2.08	2.972	12.67	2.40
MW-285	05/28/2013 11:09	0.99	-178	6.97	0.22	4.146	13.99	23.70
MW-285	05/28/2013 11:47	0.77	-88	6.89	0.33	6.106	14.42	41.8
MW-285	05/29/2013 11:09	0.99	-178	6.97	0.22	4.146	13.99	23.7
MW-285	09/19/2014 10:43	1.86	18	6.37	0.19	3.647	16.43	15.20
MW-285	09/19/2014 11:17	1.43	6	6.80	0.19	3.639	16.53	10.40
MW-285	05/20/2016 10:42	0.63	300	7.01	0.23	4.236	13.01	10.50
MW-285	05/20/2016 11:18	4.40	238	5.09	0.21	4.008	16.22	20.40
MW-285	05/18/2017 09:23	1.97	-12.00	6.81	0.21	3.979	14.22	8.10
MW-285	05/18/2017 09:35	0.45	26.00	6.67	0.34	6.177	14.67	14.90
MW-285	01/29/2018 10:25	1.90	99.50	6.76	1.72	3.281	13.31	0.70
MW-285	01/29/2018 11:35	1.54	109.60	7.09	1.84	3.479	13.54	1.90
MW-285	01/29/2018 11:55	5.18	70.20	7.00	1.75	3.327	13.36	6.10
MW-285	03/06/2019 10:25	1.83	24.10	6.95	1.66	3.163	8.17	2.00
MW-285	03/06/2019 11:20	0.36	-23.00	6.87	1.73	3.277	13.42	2.30
MW-285	03/06/2019 11:30	6.23	23.20	7.22	1.68	3.196	10.47	95.60
MW-285	05/09/2019 12:50	0.29	-12.9	6.86	NM	3.256	13.9	NM
MW-285	05/09/2019 14:25	2.44	-0.7	7.18	1.75	3.317	14.54	1.7
MW-286	12/13/2012 11:30	1.62	-41	6.18	1.71	2.542	13.68	14.60
MW-286	12/13/2012 12:55	0.03	-74.1	6.19	1.42	2.190	14.73	2.00
MW-286	12/14/2012 15:50	6.30	-29.4	6.20	1.34	1.988	13.21	9.20
MW-286	05/28/2013 14:37	0.51	-109	6.34	0.35	6.370	12.70	565.70
MW-286	05/29/2013 12:30	0.05	-205.00	6.45	0.17	3.147	13.62	13.60
MW-286	09/19/2014 11:24	1.15	64	6.57	0.49	8.665	18.87	32.10
MW-286	09/19/2014 11:56	0.51	10	6.36	0.46	8.120	18.83	585.90
MW-286	12/20/2016 09:11	0.01	-132	6.45	0.08	1.52	14.62	40.1
MW-286	12/20/2016 09:23	4.42	-9	6.39	0.09	1.86	13.72	447.8
MW-286	05/19/2017 10:32	-0.15	-60.00	6.53	0.27	4.942	13.15	20.00
MW-286	05/19/2017 12:18	8.00	19.50	7.45	0.21	3.960	13.29	538.50
MW-286	02/02/2018 09:30	0.85	-83.70	6.31	1.27	2.454	8.13	3.10
MW-286	02/02/2018 10:30	1.01	-81.10	6.40	1.25	2.412	6.55	10.20
MW-286	02/02/2018 10:50	6.43	-45.70	6.62	1.21	2.352	6.43	60.00
MW-287	12/17/2012 12:10	4.61	21	7.35	2.45	4.556	14.54	16.60
MW-287	12/17/2012 12:16	0.76	-31.4	6.55	3.21	5.879	14.01	0.20
MW-287	12/18/2012 12:25	2.76	-31.5	6.68	2.91	5.356	13.99	0.90
MW-287	05/28/2013 14:01	1.76	-70	6.76	0.44	7.851	14.93	43.80
MW-287	05/29/2013 11:52	1.54	-145.00	6.85	0.29	5.334	15.35	19.40
MW-287	10/07/2014 11:42	2.88	15	6.61	0.24	4.399	19.79	21.80
MW-287	10/08/2014 00:00	0.84	226	6.62	0.24	4.365	20.59	10.10
MW-287	05/24/2016 10:42	5.01	628	6.72	0.81	13.920	13.91	9.60
MW-287	05/24/2016 11:40	5.81	628	6.88	0.22	4.083	16.15	16.10
MW-287	05/18/2017 10:38	3.56	46.00	6.89	0.23	4.314	14.96	9.90
MW-287	05/18/2017 12:23	3.67	86.00	7.16	0.20	3.755	16.88	11.00
MW-287	02/02/2018 09:25	3.29	210.80	6.82	1.73	3.270	10.45	3.90
MW-287	02/02/2018 10:50	4.54	219.40	7.02	1.16	4.115	9.75	4.60
MW-287	02/02/2018 11:15	6.13	247.00	7.30	0.81	4.481	7.89	2.30
MW-287	03/11/2019 11:10	0.7	-19.5	6.91	NM	3.553	11.87	7.2
MW-287	03/11/2019 12:20	1.63	-35.4	6.88	2.15	4.029	14.29	7.2

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-287	05/10/2019 12:30	8.99	128.8	6.81	NM	3.141	16.99	NM
MW-287	05/10/2019 13:45	9.7	131.1	6.85	1.69	3.211	19.08	2.3
MW-287	08/15/2019 09:40	0.38	126.1	6.68	NM	2.802	20.64	NM
MW-287	08/15/2019 10:05	1.15	214.5	6.65	NM	2.602	16.73	0.1
MW-287	08/15/2019 10:10	0.71	222.1	6.67	NM	2.677	17.93	0
MW-287	08/15/2019 10:15	0.76	226.7	6.7	NM	2.745	20.04	0.1
MW-287	08/15/2019 10:20	0.7	232.3	6.69	NM	2.782	20.79	0.2
MW-287	08/15/2019 10:25	0.53	212.5	6.68	NM	2.798	20.48	0.1
MW-287	08/15/2019 10:30	0.47	148.6	6.68	NM	2.792	20.29	0
MW-287	08/15/2019 10:35	0.41	119.3	6.68	NM	2.794	20.38	0
MW-287	08/15/2019 10:40	0.42	120.5	6.68	NM	2.795	20.51	0
MW-287	08/15/2019 10:45	0.38	126.1	6.68	NM	2.802	20.64	0
MW-287	08/15/2019 10:50	1.83	-2.7	6.59	2.24	4.203	20.66	0.1
MW-287	08/15/2019 10:55	1.83	-2.7	6.59	2.24	4.203	20.66	0.1
MW-287	08/15/2019 11:05	2.92	106.5	6.64	1.6	3.054	18.35	2.8
MW-287	11/01/2019 08:05	2.15	-5.8	6.84	NM	3.053	15.35	0
MW-287	11/01/2019 08:10	1.81	-16.8	6.81	NM	3.083	15.41	0
MW-287	11/01/2019 08:15	1.84	-9.3	6.82	NM	3.09	15.39	0
MW-287	11/01/2019 08:20	2.24	-15.1	6.79	NM	3.097	15.57	0
MW-287	11/01/2019 08:25	3.83	-12.1	6.91	NM	3.087	15.97	0
MW-287	11/01/2019 08:30	4.19	-11.6	6.92	NM	3.093	16.43	0
MW-287	11/01/2019 08:35	4.68	-12.3	6.93	NM	3.102	16.87	0
MW-287	11/01/2019 08:40	5.37	-13	6.94	NM	3.11	17.38	0
MW-287	11/01/2019 08:45	5.34	-12.9	6.95	NM	3.107	17.63	0
MW-287	11/01/2019 08:50	5.5	-13	6.96	NM	3.111	18.03	0
MW-287	11/01/2019 11:00	7.55	-22.9	6.9	2.25	4.209	17.02	0.3
MW-287	11/01/2019 11:15	9.32	-24	7.25	1.58	3.012	17.79	6.8
MW-287	02/11/2020 09:30	6.14	182.9	7.21	NM	3.133	11.53	NM
MW-287	02/11/2020 11:00	6.33	212.7	6.81	1.62	3.133	11.51	0
MW-288	08/01/2012 08:37	0.9	-110	6.8	0.05	0.96422	22.11	1.1
MW-288	08/01/2012 08:39	0.77	-111	6.81	0.05	0.96751	21.76	1.5
MW-288	08/01/2012 08:41	0.67	-113	6.82	0.05	0.96985	21.88	1.4
MW-288	08/01/2012 08:44	0.61	-114	6.84	0.05	0.97894	21.81	1
MW-288	08/01/2012 08:46	0.55	-116	6.85	0.05	0.98205	22.05	0.9
MW-288	08/01/2012 08:48	0.52	-116	6.86	0.05	0.98889	22.02	0.8
MW-288	08/01/2012 08:51	0.5	-116	6.87	0.05	0.99078	22.16	1.2
MW-288	08/01/2012 08:53	0.49	-117	6.87	0.05	0.9963	22.26	0.7
MW-288	08/01/2012 08:55	0.46	-117	6.88	0.05	0.99909	22.52	0.7
MW-288	08/01/2012 08:58	0.47	-117	6.88	0.05	1.004	22.53	1.08
MW-288	12/17/2012 10:15	4.37	149.3	6.28	0.47	0.937	11.58	3.50
MW-288	12/17/2012 11:12	1.22	-37	6.62	0.56	1.124	14.10	1.10
MW-288	12/18/2012 12:25	2.83	-36.8	6.73	0.62	1.228	14.21	1.90
MW-288	10/07/2014 13:24	0.80	-8	6.28	0.01	0.306	18.97	10.76
MW-288	10/07/2014 14:13	1.83	-75	6.19	0.05	0.967	17.47	14.10
MW-288	10/08/2014 12:03	0.84	229	6.55	0.03	0.619	18.25	9.40
MW-288	12/16/2015 09:46	2.1	-182	7.08	0.03	0.615	15.19	11.9
MW-288	12/16/2015 10:49	3.34	-35	7.08	0.06	1.139	15.25	23.1
MW-288	05/26/2016 10:24	1.46	579	6.43	0.07	1.357	13.78	16.20
MW-288	05/26/2016 12:00	12.93	531	6.20	0.06	1.217	13.83	3.80
MW-288	05/17/2017 10:39	1.58	-31.00	6.48	0.04	0.894	13.06	12.30
MW-288	05/17/2017 11:42	0.22	-30.00	6.68	0.08	1.552	16.65	1.05
MW-288	05/17/2017 12:16	0.62	-28.00	7.28	0.13	2.544	12.61	5.90
MW-288	01/31/2018 09:50	3.27	187.40	6.38	0.14	0.300	9.21	1.80
MW-288	01/31/2018 10:40	5.92	99.20	6.52	0.19	0.388	8.55	2.00
MW-288	01/31/2018 11:10	7.93	23.70	6.61	0.19	0.039	7.45	30.90
MW-289	08/01/2012 10:59	1.57	-72	12.45	0.04	0.78666	24.28	4.5

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-289	08/01/2012 11:01	1.07	-90	12.19	0.04	0.77836	23.89	3.9
MW-289	08/01/2012 11:03	0.8	-97	12.39	0.04	0.77333	23.85	4.1
MW-289	08/01/2012 11:05	0.61	-101	12.4	0.04	0.76716	23.66	3.5
MW-289	08/01/2012 11:07	0.5	-106	12.37	0.04	0.76169	23.85	3.8
MW-289	08/01/2012 11:09	0.45	-108	12.32	0.04	0.75746	23.87	3.9
MW-289	08/01/2012 11:11	0.41	-111	11.94	0.04	0.7532	23.85	4.1
MW-289	08/01/2012 11:13	0.37	-112	12.38	0.04	0.74719	23.72	3.7
MW-289	08/01/2012 11:15	0.35	-113	12.17	0.04	0.75729	23.66	4
MW-289	08/01/2012 11:17	0.34	-114	12.37	0.04	0.75473	23.53	4.1
MW-289	08/01/2012 11:19	0.31	-116	12.36	0.04	0.7387	23.57	4.5
MW-289	12/13/2012 09:33	0.22	-82.6	6.34	NA	1.352	12.58	8.90
MW-289	12/13/2012 11:10	5.41	-68.6	6.10	0.76	0.962	12.84	1.30
MW-289	12/14/2012 15:45	0.37	-9.9	6.84	0.63	0.937	10.19	74.10
MW-289	10/07/2014 10:12	0.93	-149	5.92	0.30	0.645	19.89	29.19
MW-289	10/07/2014 11:06	1.88	-197	6.05	0.27	4.913	19.19	131.30
MW-289	10/08/2014 10:35	-0.15	212	6.49	0.04	0.870	20.07	10.50
MW-289	05/18/2017 10:55	-0.03	-68.00	6.96	0.08	1.495	16.48	13.88
MW-289	01/26/2018 09:05	6.65	113.40	6.92	0.32	0.660	7.96	25.80
MW-289	01/26/2018 09:15	3.68	24.90	7.03	0.33	0.683	7.99	25.40
MW-289	01/26/2018 14:00	0.70	-55.60	6.92	0.29	0.589	6.76	9.60
MW-289	03/07/2019 10:30	0.32	-27.00	7.02	0.16	0.329	4.94	30.50
MW-289	03/07/2019 12:00	1.47	-87.90	6.70	0.50	1.012	6.59	14.00
MW-289	03/07/2019 12:10	0.88	-72.10	6.70	0.55	1.110	5	19.80
MW-289	05/22/2019 10:20	0.24	-184.3	7.11	NM	0.546	15.95	7.5
MW-289	05/22/2019 11:35	4.59	-40.9	7.44	0.87	1.707	15.85	10.4
MW-289	08/16/2019 10:05	5.53	4.3	6.52	NM	0.664	22.97	0.7
MW-289	08/16/2019 10:10	0.82	-54.6	6.25	NM	0.642	22.96	0.6
MW-289	08/16/2019 10:15	0.76	-61	6.24	NM	0.633	23.25	0.7
MW-289	08/16/2019 10:20	0.94	-63.5	6.25	NM	0.629	23.1	0.2
MW-289	08/16/2019 10:25	0.96	-65.8	6.24	NM	0.626	23.34	0.2
MW-289	08/16/2019 10:30	0.91	-66.4	6.24	NM	0.625	23.51	0.3
MW-289	08/16/2019 10:35	0.92	-67.9	6.24	NM	0.623	23.46	0.3
MW-289	08/16/2019 10:40	1.28	-61.4	6.27	1.14	2.233	22.07	NM
MW-289	08/16/2019 10:45	1.48	14.9	6.6	0.88	1.967	NM	4.8
MW-289	08/16/2019 10:50	NM	NM	NM	NM	NM	23	25.6
MW-289	10/29/2019 08:10	2.2	-142.2	6.57	NM	0.739	17.19	38.4
MW-289	10/29/2019 08:15	0.72	-153.2	6.57	NM	0.728	16.66	11.6
MW-289	10/29/2019 08:20	0.42	-161.2	6.53	NM	0.723	16.5	6.2
MW-289	10/29/2019 08:25	0.25	-167.7	6.51	NM	0.721	16.47	5.6
MW-289	10/29/2019 08:30	0.18	-172.9	6.5	NM	0.721	16.47	6.4
MW-289	10/29/2019 08:35	0.12	-178.4	6.49	NM	0.725	16.43	5.7
MW-289	10/29/2019 08:40	0.11	-182.1	6.5	NM	0.725	16.51	4.8
MW-289	10/29/2019 08:45	0.11	-187.2	6.5	NM	0.725	16.51	4.5
MW-289	10/29/2019 08:50	0.09	-192.2	6.5	NM	0.724	16.53	4
MW-289	10/29/2019 08:55	0.09	-196.1	6.49	NM	0.728	16.68	3.9
MW-289	10/29/2019 11:00	9.16	-54.6	6.76	0.54	1.087	17.31	3.3
MW-289	10/29/2019 11:15	5.61	-76.1	6.81	0.58	1.239	17.06	6.9
MW-289	02/11/2020 12:55	0.36	-8.9	6.59	NM	1.319	9.72	24.6
MW-289	02/11/2020 13:46	3.62	64.7	6.69	0.94	1.834	9.65	29.2
MW-289	01/26/2021 10:20	8.05	-116.3	7.25	0.28	0.578	9.34	20.4
MW-289	01/26/2021 11:50	8.51	-111.3	7.14	0.6	1.2	9.7	5.2
MW-289	01/26/2021 12:10	9.93	-101.8	7.2	0.55	1.106	6.96	6
MW-289	05/03/2021 10:30	4.98	-41.1	6.7	0.33	0.68	15.55	122
MW-289	05/03/2021 10:35	1.53	-54.1	6.63	0.35	0.708	12.74	102.5
MW-289	05/03/2021 10:40	1.45	-65.8	6.65	0.35	0.35	11.93	122.8
MW-289	05/03/2021 10:45	1.39	-70.2	6.77	0.34	0.703	11.91	133

Appendix B5 East Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-289	05/03/2021 10:50	1.2	-73.9	6.75	0.35	0.704	11.79	117.2
MW-289	05/03/2021 10:55	1.12	-76.4	6.76	0.35	0.709	11.72	113.6
MW-289	05/03/2021 11:00	1.1	-78.3	6.77	0.35	0.713	11.75	108.9
MW-289	08/17/2021 12:30	1.22	-76.7	6.46	NM	0.699	22.9	14.31
MW-289	08/17/2021 12:35	1.19	-77.2	6.45	NM	0.7	22.8	13.58
MW-289	08/17/2021 12:40	1.13	-78.9	6.44	NM	0.702	22.6	14.1
MW-289	03/01/2022 12:00	0.68	-142.3	7.51	0.21	0.432	8.18	64
MW-289	03/01/2022 12:05	0.62	-141.9	7.34	0.2	0.421	8.08	61.7
MW-289	03/01/2022 12:10	4.05	-128.5	7.06	0.2	0.418	8.1	72.3
MW-289	03/01/2022 12:15	6.88	-114.9	6.92	0.2	0.417	8.1	64.5
MW-289	03/01/2022 12:20	9.34	-108.7	6.83	0.2	0.417	8.08	67.1
MW-289	03/01/2022 12:25	9	-102.4	6.75	0.2	0.416	8.21	73.3
MW-289	03/01/2022 12:30	1.63	-94.8	6.57	0.23	0.415	8.43	52.3
MW-289	03/01/2022 12:35	1.13	-76.9	6.57	0.2	0.415	8.86	48.7
MW-289	03/01/2022 12:40	7.91	-94.4	6.69	0.2	0.419	8.36	64.2
MW-289	03/01/2022 12:45	8.83	-94.8	6.66	0.2	0.419	8.38	65.4
MW-289	04/18/2022 11:35	1.92	-77.1	6.69	0.21	0.432	9.71	11.8
MW-289	04/18/2022 11:40	1.56	-78.1	6.64	0.21	0.433	9.72	9.6
MW-289	04/18/2022 11:45	1.41	-80.6	6.63	0.21	0.433	9.71	10
MW-289	04/18/2022 11:50	1.13	-96.3	6.68	0.21	0.438	9.77	11.6
MW-289	04/18/2022 11:55	1.06	-102.9	6.73	0.21	0.438	9.68	10.1
MW-289	04/18/2022 12:00	1.1	-106	6.72	0.21	0.44	9.58	8.9
MW-289	04/18/2022 12:05	1.15	-106.4	6.72	0.21	0.44	9.64	8.7
MW-289	04/18/2022 12:10	1.15	-107.1	6.72	0.21	0.44	9.65	8.5
MW-290	12/13/2012 14:05	17.50	-46.6	7.00	0.73	1.123	13.12	0.70
MW-290	12/13/2012 15:23	0.57	25.1	7.07	0.73	1.131	13.52	15.60
MW-290	12/14/2012 15:35	6.30	25.2	7.14	0.74	1.030	9.53	79.00
MW-290	01/14/2014 08:05	1.10	179.2	7.24	1.09	2.091	11.80	10.10
MW-290	01/14/2014 09:07	0.25	153.9	7.30	1.08	2.096	12.10	343.30
MW-290	01/14/2014 09:17	0.10	154.2	7.31	1.06	2.077	12.29	1386.10
MW-290	08/20/2014 12:15	5.65	217.4	7.12	0.59	1.501	23.24	0.0000
MW-290	08/20/2014 13:15	1.09	249.7	7.06	0.55	1.487	24.27	0.0000
MW-290	08/21/2014 13:30	0.77	437.7	7.05	0.71	1.112	28.00	0.0000
MW-290	10/21/2014 09:35	11.78	199	6.65	0.70	1.380	16.56	63.10
MW-290	10/21/2014 10:50	5.76	166	7.13	0.70	1.360	19.24	240.00
MW-290	10/21/2014 11:00	2.42	158	7.19	0.70	1.330	19.21	500.00
MW-290	01/22/2015 09:50	10.17	1.3	7.57	0.53	1.063	10.68	3.10
MW-290	01/22/2015 11:30	8.63	103	7.18	0.53	1.056	8.87	12.60
MW-290	01/22/2015 11:35	8.58	105.2	7.16	0.53	1.060	8.45	25.50
MW-290	07/07/2015 10:25	5.31	190	7.21	0.50	1.040	15.90	120.00
MW-290	07/09/2015 10:18	6.48	194	7.23	0.50	1.060	14.79	105.00
MW-290	12/04/2015 11:20	5.90	4.79	7.12	0.07	1.427	17.93	18.10
MW-290	12/04/2015 13:45	5.23	-43	7.40	0.09	1.784	17.64	786.90
MW-290	04/18/2016 11:42	5.45	171	8.05	0.50	0.924	13.74	6.22
MW-290	04/18/2016 12:10	3.49	185	7.02	0.40	0.827	17.63	18.70
MW-290	09/14/2016 12:25	6.43	69.7	7.31	1.17	2.413	25.12	0.0000
MW-290	06/02/2017 09:05	5.43	219.00	7.00	0.15	2.947	14.59	9.80
MW-290	06/02/2017 10:11	7.10	138.00	7.68	0.16	3.036	14.79	743.20
MW-290	01/25/2018 09:15	1.46	75.80	6.97	0.70	1.562	6.82	10.80
MW-290	01/25/2018 09:30	2.08	78.60	7.26	0.69	1.437	7.14	16.40
MW-290	01/25/2018 13:20	0.31	80.10	7.61	0.74	1.461	10.06	0.90
MW-290	02/13/2019 12:00	8.75	158.00	7.39	0.63	1.256	10.89	17.20
MW-290	02/13/2019 13:00	8.10	150.50	7.55	0.64	1.276	10.27	25.20
MW-290	02/13/2019 13:25	8.33	150.70	7.56	0.64	1.282	10.27	32.40
MW-290	08/13/2019 08:39	5.8	89.4	7.62	1	1.933	19.2	1275.5
MW-290	08/13/2019 08:55	9.15	103.9	7.5	0.75	1.503	18.62	1271.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-290	08/13/2019 10:55	5.24	64.2	7.18	NM	1.48	21.25	4.3
MW-290	02/07/2020 11:21	6.39	34.8	7.55	0.75	1.475	12.2	1.3
MW-290	08/21/2020 10:50	7.11	120.5	6.72	0.64	1.287	23.69	0
MW-290	08/21/2020 12:00	6.14	125.6	6.88	0.65	1.334	21.45	0
MW-290	08/21/2020 12:10	7.01	90.5	6.56	0.6	1.283	22.02	0
MW-290	01/28/2021 09:05	10.07	228.3	7	0.76	1.508	9.37	1.2
MW-290	01/28/2021 10:30	9.93	139.9	7.46	0.65	1.286	8.64	9.1
MW-290	01/28/2021 10:50	7.61	180.3	7.57	0.68	1.344	11.54	1318.3
MW-291	12/14/2012 09:10	10.40	-91.5	7.10	1.71	2.619	14.89	2.20
MW-291	12/14/2012 10:18	10.40	-63.1	7.03	1.71	2.627	14.67	1.00
MW-291	12/15/2012 12:00	4.32	-107.2	6.83	1.76	2.503	11.98	104.60
MW-291	01/14/2014 09:25	NM	NM	NM	NM	NM	14.57	NM
MW-291	01/14/2014 09:32	-0.80	-18.6	7.07	2.42	4.504	NM	34.90
MW-291	01/14/2014 10:37	0.0000	-49.1	7.03	2.48	4.617	14.86	7.10
MW-291	01/14/2014 10:47	-0.52	-42.3	7.06	2.47	4.598	11.42	7.60
MW-291	08/20/2014 12:45	0.43	-37.9	6.97	1.63	3.112	16.28	-0.20
MW-291	08/20/2014 13:35	0.13	-15.5	6.89	1.61	3.071	15.91	-0.90
MW-291	08/20/2014 13:55	0.15	-15.3	6.87	1.61	3.069	15.86	-0.90
MW-291	10/21/2014 11:20	2.84	125	6.83	1.40	2.780	18.77	10.00
MW-291	10/21/2014 12:10	3.60	-14	7.07	1.50	2.920	16.23	10.20
MW-291	10/21/2014 12:20	1.81	-16	7.07	1.50	2.920	16.19	10.40
MW-291	01/22/2015 09:50	2.00	113.2	6.45	1.26	2.426	11.44	5.50
MW-291	01/22/2015 10:58	0.99	-100.3	7.15	1.32	2.596	13.99	2.80
MW-291	01/22/2015 11:10	1.54	-99.4	7.17	1.36	2.576	13.03	2.40
MW-291	07/09/2015 10:27	0.0000	-3	6.97	1.40	2.680	15.53	0.0000
MW-291	07/09/2015 10:35	0.0000	-3	6.98	1.40	2.680	16.33	0.0000
MW-291	12/04/2015 11:46	5.50	508	7.13	0.16	3.038	16.37	9.70
MW-291	12/04/2015 14:22	9.05	-34	7.20	0.17	3.211	15.87	48.40
MW-291	04/18/2016 11:10	0.0000	-43	8.16	1.40	2.770	17.24	0.0000
MW-291	04/18/2016 11:30	0.0000	-42	8.18	1.40	2.690	19.96	0.0000
MW-291	09/13/2016 14:50	2.18	-3.8	7.07	2.72	5.053	23.34	4.50
MW-291	09/13/2016 15:10	2.50	9.6	7.16	2.68	4.992	22.67	5.90
MW-291	04/06/2017 09:10	8.24	210.00	6.69	1.40	2.690	6.61	2.50
MW-291	04/06/2017 11:15	1.71	2.84	7.08	1.40	2.840	6.09	0.70
MW-291	04/06/2017 11:45	10.40	4.00	7.24	1.40	2.800	9.35	19.80
MW-291	02/14/2019 12:40	6.62	216.60	7.10	1.48	2.837	10.38	2.70
MW-291	02/14/2019 13:40	5.14	167.60	7.46	1.32	2.887	10.04	70.80
MW-291	02/14/2019 14:05	5.17	172.30	7.48	1.32	2.872	10.08	92.90
MW-291	08/20/2019 09:40	5.08	-50.4	7.03	NM	1.758	20.11	46.9
MW-291	08/20/2019 11:10	1.71	-30.5	7.04	0.88	1.743	21.61	3.1
MW-291	08/20/2019 11:25	3.11	38.1	7.15	0.88	1.746	23.78	1.4
MW-291	02/14/2020 10:35	3.15	33.8	7.63	0.52	3.399	9.81	16.1
MW-291	01/22/2021 11:50	1.44	-44.2	7.29	0.71	1.389	11.27	7.8
MW-291	01/22/2021 14:00	4.54	-50.2	7.59	1.19	2.305	14.87	28.4
MW-291	01/22/2021 14:25	6.12	53.3	7.68	1.21	2.347	14.57	10.7
MW-292R	01/15/2013 13:36	1.46	43.4	6.4	0.1	0.29	8.9	232.9
MW-292R	01/15/2013 13:40	0.39	42.4	6.39	0.1	0.29	9.2	89.9
MW-292R	01/15/2013 13:45	0.33	40.6	6.46	0.1	0.29	9.3	82.7
MW-292R	01/15/2013 13:50	0.26	30.9	6.34	0.1	0.29	9.4	68.3
MW-292R	01/15/2013 13:55	0.23	25.3	6.26	0.1	0.29	9.3	56.3
MW-292R	01/15/2013 14:00	0.2	19.1	6.3	0.1	0.29	9.4	53.9
MW-292R	01/15/2013 14:05	0.2	17.2	6.34	0.1	0.29	9.5	47
MW-292R	01/15/2013 14:10	0.2	17.4	6.33	0.1	0.29	9.4	45.7
MW-292R	01/15/2013 14:15	0.2	17.3	6.31	0.1	0.29	9.5	45.6
MW-292R	01/15/2013 14:25	0.20	17.3	6.31	0.14	0.294	9.46	45.60
MW-292R	01/15/2013 15:53	0.14	-59.9	6.43	0.14	0.463	11.08	18.90

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-292R	01/16/2013 15:53	0.14	-59.9	6.43	0.14	0.463	11.08	18.90
MW-292R	01/18/2013 15:53	0.14	-59.9	6.43	0.14	0.463	11.08	18.9
MW-292R	05/16/2013 13:10	0.83	-89.1	6.39	0.5	0.81	14.6	35.2
MW-292R	05/16/2013 13:15	0.92	-69.5	6.37	0.5	0.81	14.2	54.6
MW-292R	05/16/2013 13:20	0.9	-50.2	6.38	0.5	0.81	14.4	54.4
MW-292R	05/16/2013 13:25	0.88	-48.1	6.37	0.5	0.8	14.2	54.3
MW-292R	05/16/2013 13:30	0.86	-68.1	6.38	0.5	0.8	14	50.4
MW-292R	05/16/2013 13:35	0.86	-73.2	6.39	0.5	0.79	13.9	38.9
MW-292R	05/16/2013 13:40	0.87	-72.7	6.39	0.5	0.78	13.8	39.7
MW-292R	05/16/2013 13:45	0.87	-73.7	6.4	0.5	0.78	13.8	36.5
MW-292R	05/16/2013 13:50	0.09	-74.4	6.39	0.49	0.777	13.78	33.6
MW-292R	05/16/2013 14:15	4.49	-68.8	6.51	0.42	0.72	16.13	15.8
MW-292R	05/17/2013 14:25	6.48	-94.1	6.47	0.4	0.596	11.92	493.2
MW-292R	01/15/2014 13:15	4.34	-67.5	6.59	0.39	0.791	12.18	40.80
MW-292R	01/15/2014 13:37	5.30	-112.8	6.53	0.38	0.771	12.82	9.70
MW-292R	01/15/2014 13:53	5.25	-119.5	6.79	0.36	0.769	12.75	10.60
MW-292R	08/22/2014 09:43	205.30	99.1	6.39	0.10	0.218	16.91	387.60
MW-292R	08/22/2014 10:28	2.52	-6.2	6.60	0.11	0.244	36.82	89.80
MW-292R	08/22/2014 10:45	2.20	18.5	6.60	0.11	0.248	36.00	325.00
MW-292R	09/16/2014 11:20	2.02	91	7.15	0.11	0.232	14.09	46.50
MW-292R	09/16/2014 12:00	0.55	4.6	6.86	0.08	0.173	18.99	57.20
MW-292R	09/16/2014 12:10	0.62	21	6.85	0.08	0.174	16.80	53.60
MW-292R	09/29/2014 09:45	2.50	18.6	6.37	0.09	0.189	9.24	69.50
MW-292R	09/29/2014 10:30	0.31	12.8	6.45	0.09	0.183	21.30	57.90
MW-292R	09/29/2014 10:35	0.40	19.6	6.44	0.09	0.193	18.30	64.40
MW-292R	10/24/2014 11:30	2.11	-61	6.47	0.10	0.289	15.89	0.0000
MW-292R	10/24/2014 12:00	0.34	-53	6.29	0.20	0.360	29.72	0.0000
MW-292R	10/24/2014 13:14	0.49	-36	6.11	0.20	0.369	30.72	33.00
MW-292R	01/21/2015 10:25	3.05	-171.5	6.91	0.23	0.454	13.88	10.10
MW-292R	01/21/2015 11:15	0.95	-205.6	6.85	0.23	0.475	15.61	1.70
MW-292R	01/21/2015 11:30	0.84	-206.6	6.90	0.23	0.478	15.75	1.50
MW-292R	04/13/2015 12:42	1.05	-72	6.79	0.20	0.388	23.86	11.10
MW-292R	04/13/2015 13:05	0.58	-102	6.93	0.20	0.379	23.54	1.70
MW-292R	04/13/2015 13:15	0.79	-98	6.92	0.20	0.383	23.55	9.50
MW-292R	07/08/2015 11:57	0.0000	-97	6.61	0.20	0.322	25.05	0.0000
MW-292R	07/08/2015 12:05	0.0000	-105	6.61	0.20	0.318	26.73	0.0000
MW-292R	10/16/2015 11:15	0.38	-187.1	7.10	0.24	0.502	24.93	2.20
MW-292R	10/16/2015 11:30	0.65	-156.6	7.10	0.24	0.497	23.86	21.30
MW-292R	04/20/2016 13:03	1.61	-102	6.87	0.20	0.345	14.34	19.10
MW-292R	04/20/2016 13:23	3.15	-111	6.83	0.20	0.352	15.92	36.90
MW-292R	09/15/2016 10:55	1.42	-20.6	6.78	0.13	0.280	19.89	32.40
MW-292R	09/15/2016 11:15	1.50	-27	6.88	0.12	0.253	20.99	174.00
MW-292R	04/10/2017 08:30	9.63	73.00	5.86	0.20	0.376	9.76	63.80
MW-292R	04/10/2017 09:10	1.60	-45.00	6.37	0.20	0.341	8.27	10.50
MW-292R	04/10/2017 09:25	8.31	-46.00	6.50	0.20	0.337	7.81	87.10
MW-292R	01/23/2018 09:50	0.29	-126.30	6.85	0.31	0.642	12.16	7.50
MW-292R	01/23/2018 10:35	0.41	-92.10	6.82	0.31	0.632	12.1	6.70
MW-292R	01/23/2018 10:50	4.14	-76.70	7.00	0.32	0.647	12.047	40.70
MW-292R	04/03/2018 13:00	10.16	5.30	7.42	0.16	0.326	7.67	6.20
MW-292R	04/03/2018 13:45	9.58	-15.90	7.39	0.20	0.417	7.98	2.10
MW-292R	04/03/2018 13:50	10.21	-13.30	7.43	0.20	0.420	8.23	22.10
MW-292R	02/20/2019 08:40	4.54	14.90	7.96	0.53	1.066	9.04	336.90
MW-292R	02/20/2019 09:00	4.31	-31.00	7.72	0.51	1.024	8.03	9.60
MW-292R	02/20/2019 09:20	4.41	-64.30	7.68	0.49	0.982	6.52	106.00
MW-292R	08/13/2019 08:35	3.97	-82.9	6.5	NM	0.821	20.22	4.5
MW-292R	08/13/2019 09:15	4.27	-73.6	6.89	0.34	0.704	20.63	3.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-292R	08/13/2019 09:35	3.51	-75.9	6.69	0.27	0.558	22.27	29.6
MW-292R	02/12/2020 14:22	5.62	60.3	6.91	0.39	0.793	10.22	1.2
MW-292R	02/08/2021 11:30	2.99	200.7	7.28	0.37	0.752	9.49	76.9
MW-292R	02/08/2021 12:30	2.62	4.8	7.21	0.29	0.593	10.67	2.9
MW-292R	02/08/2021 12:55	3.9	-159.9	7.5	0.3	0.606	9.3	32.3
MW-293	05/03/2012 09:15	0.81	0.3	0.40	-139.00	16.570	6.96	4.28
MW-293	05/03/2012 10:30	0.82	0.8	0.38	-142.00	14.330	6.98	4.41
MW-293	05/04/2012 10:40	0.80	0.6	0.43	-155.00	14.550	6.99	4.39
MW-293	05/07/2015 15:20	0.84	-108	6.50	0.30	0.618	28.83	10.90
MW-293R	01/21/2013 09:10	21.86	27.3	10.83	0.13	0.276	11.50	53.60
MW-293R	01/21/2013 10:17	29.20	143	6.67	0.17	0.359	13.88	8.60
MW-293R	01/22/2013 10:35	43.00	116	6.90	0.17	0.359	7.20	7.40
MW-293R	04/29/2013 10:25	4.38	-124	7.12	0.06	1.114	12.09	31.2
MW-293R	04/30/2013 12:05	1.16	-218	7.29	0.05	0.958	11.72	23.3
MW-293R	05/14/2013 10:00	4.17	149.6	8.47	0.21	0.382	12.4	57.1
MW-293R	05/14/2013 11:00	3.74	46.2	6.98	0.32	0.51	14.03	3.1
MW-293R	05/15/2013 11:15	2.13	61.9	6.99	0.32	0.522	14.81	2.3
MW-293R	01/15/2014 13:18	0.0000	37.8	10.06	0.22	0.542	14.87	742.50
MW-293R	01/15/2014 13:47	0.0000	72.4	7.09	0.37	0.753	15.23	35.00
MW-293R	01/15/2014 13:59	0.0000	52.7	7.01	0.37	0.756	15.16	145.80
MW-293R	08/22/2014 09:15	9.11	239	7.17	0.49	1.019	15.86	15.80
MW-293R	08/22/2014 10:30	7.80	45.1	7.25	0.51	1.030	27.18	0.90
MW-293R	08/22/2014 10:40	7.70	46.3	7.26	0.51	1.060	27.00	1.40
MW-293R	09/16/2014 09:45	3.14	206.3	6.79	0.30	0.617	8.19	0.0000
MW-293R	09/16/2014 10:45	0.57	91	6.96	0.31	0.636	14.46	0.0000
MW-293R	09/16/2014 11:05	2.07	96.1	7.02	0.31	0.639	14.35	0.0000
MW-293R	10/24/2014 13:05	7.86	-46	6.80	0.30	0.661	26.36	1.20
MW-293R	10/24/2014 13:50	4.47	37	6.89	0.30	0.707	26.53	0.0000
MW-293R	01/21/2015 11:50	3.96	-78.1	6.90	0.30	0.483	11.39	4.30
MW-293R	01/21/2015 12:40	4.42	26.9	6.61	0.35	0.720	18.23	1.60
MW-293R	01/21/2015 12:55	4.38	27.1	6.60	0.35	0.719	19.16	1.50
MW-293R	07/08/2015 11:05	0.0000	-33	6.34	0.20	0.452	27.71	0.0000
MW-293R	07/08/2015 11:15	0.0000	-32	6.34	0.20	0.452	27.79	0.0000
MW-293R	04/13/2016 14:47	0.0000	-120	7.15	0.20	0.320	20.11	0.0000
MW-293R	04/13/2016 15:09	0.0000	-120	7.19	0.20	0.318	18.42	0.0000
MW-293R	09/16/2016 10:15	2.88	-41.6	6.78	0.29	0.603	20.59	0.0000
MW-293R	09/16/2016 10:30	2.65	-55.2	6.70	0.21	0.436	21.12	4.40
MW-293R	04/07/2017 08:40	9.21	64.00	5.68	0.20	0.339	10.84	0.0000
MW-293R	04/07/2017 10:15	10.47	-41.00	6.47	0.20	0.436	11.41	0.0000
MW-293R	04/07/2017 10:30	11.95	-50.00	6.69	0.10	0.282	8.86	7.80
MW-293R	04/03/2018 09:00	11.23	48.60	7.91	0.28	0.201	8.92	53.00
MW-293R	04/03/2018 10:00	9.25	24.60	6.83	0.29	0.590	11.07	13.90
MW-293R	04/03/2018 10:05	9.31	21.00	6.84	0.29	0.481	11.09	12.40
MW-293R	02/20/2019 08:40	4.21	47.40	7.88	0.84	1.648	10.89	106.10
MW-293R	02/20/2019 09:40	7.03	-67.20	7.65	0.46	0.924	11.53	8.20
MW-293R	02/20/2019 10:00	3.68	-62.40	7.40	0.57	1.708	11.55	33.20
MW-293R	08/12/2019 13:30	2.57	-122.8	6.55	NM	1.554	21.54	10.3
MW-293R	08/12/2019 15:05	3.16	-99	6.51	0.59	1.191	20.74	1.7
MW-293R	08/12/2019 15:20	3.9	-149.8	7.2	0.5	1.005	23.15	60.4
MW-293R	02/13/2020 09:43	3.19	130.4	7.09	0.42	0.851	11.87	5
MW-293R	08/10/2020 12:25	2.02	-143.1	7.52	0.22	0.465	26.06	4.4
MW-293R	08/10/2020 13:45	0.99	-113.1	7.04	0.34	0.709	24.98	1.7
MW-293R	08/10/2020 13:55	2.14	-120.5	7.09	0.35	0.832	24.89	5.8
MW-293R	02/10/2021 09:40	4.6	198.7	7.04	0.2	0.405	9.37	20.6
MW-293R	02/10/2021 11:10	4.49	-76.5	7.23	0.15	0.32	13.05	4.8
MW-293R	02/10/2021 11:25	3.14	-68.9	7.41	0.16	0.322	11.3	21

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-294	04/30/2012 13:24	2.93	-36	6.35	0.27	4.91273	17.34	25.6
MW-294	04/30/2012 13:26	1.13	-54	6.4	0.27	4.93205	14.77	38.5
MW-294	04/30/2012 13:28	0.68	-61	6.37	0.26	4.88443	15.45	20.1
MW-294	04/30/2012 13:31	0.51	-65	6.36	0.26	4.88415	15.73	25.6
MW-294	04/30/2012 13:33	0.44	-68	6.34	0.26	4.90481	15.48	37.6
MW-294	04/30/2012 13:35	0.41	-70	6.34	0.26	4.89949	15.41	38.1
MW-294	04/30/2012 13:37	0.39	-70	6.34	0.26	4.88269	15.63	37.6
MW-294	04/30/2012 13:39	0.38	-71	6.34	0.26	4.88576	15.79	31.4
MW-294	04/30/2012 13:41	0.35	-72	6.34	0.26	4.85851	15.97	28.9
MW-294	04/30/2012 13:44	0.34	-73	6.34	0.26	4.90004	15.65	22.8
MW-294	04/30/2012 13:46	0.32	-74	6.35	0.26	4.88263	15.84	24.1
MW-294	04/30/2012 13:48	0.31	-74	6.35	0.26	4.87415	15.74	28.2
MW-294	04/30/2012 13:50	0.3	-75	6.36	0.26	4.85493	15.82	27.1
MW-294	04/30/2012 13:52	0.29	-75	6.36	0.26	4.83062	15.89	29.6
MW-294	04/30/2012 14:21	7.11	-89	7.25	0.09	1.761	14.91	389.70
MW-294	05/01/2012 11:00	1.43	-107	6.43	0.30	4.870	13.44	85.30
MW-294	08/27/2012 13:16	0.54	-47	6.44	0.25	4.61962	24.42	33
MW-294	08/27/2012 13:19	0.15	-60	6.47	0.25	4.62208	24.61	34.7
MW-294	08/27/2012 13:21	0.08	-66	6.48	0.25	4.606	24.85	35.4
MW-294	08/27/2012 13:24	0.07	-71	6.49	0.25	4.60067	25.21	36.5
MW-294	08/27/2012 13:26	0.05	-74	6.5	0.25	4.6186	24.86	31.3
MW-294	08/27/2012 13:29	0.03	-76	6.51	0.25	4.58969	24.14	32.6
MW-294	08/27/2012 13:31	0.03	-78	6.52	0.25	4.55399	24.07	32.2
MW-294	08/27/2012 13:34	0.02	-80	6.54	0.24	4.46675	24.08	29
MW-294	08/27/2012 13:37	0.02	-81	6.55	0.24	4.44921	24.11	23.7
MW-294	08/27/2012 13:39	0.01	-82	6.58	0.23	4.33998	24.09	23.6
MW-294	08/27/2012 13:42	0	-83	6.58	0.22	4.15211	24.21	23.3
MW-294	08/27/2012 13:44	-0.01	-84	6.61	0.21	3.97981	24.07	17.7
MW-294	08/27/2012 13:47	-0.02	-85	6.61	0.2	3.72445	24.51	15.7
MW-294	08/27/2012 13:49	-0.02	-85	6.62	0.2	3.68629	24.61	13.8
MW-294	08/27/2012 13:52	-0.03	-84	6.6	0.21	3.97187	24.58	21.3
MW-294	08/27/2012 13:54	-0.06	-85	6.6	0.23	4.29296	24.45	20.6
MW-294	08/27/2012 13:57	-0.07	-87	6.62	0.21	3.904	24.76	16.8
MW-294	08/27/2012 13:59	-0.06	-88	6.62	0.19	3.63957	25.35	13.5
MW-294	08/27/2012 14:02	-0.06	-89	6.64	0.18	3.40943	25.24	14.5
MW-294	08/27/2012 14:05	-0.04	-89	6.64	0.18	3.372	25.36	12.42
MW-294	08/27/2012 14:38	2.79	-40	7.09	0.08	1.632	25.15	87.20
MW-294	08/28/2012 10:25	1.09	-68	6.65	0.17	3.181	22.93	208.20
MW-294	06/16/2014 11:02	0.46	-263	6.45	0.72	12.440	21.81	35.69
MW-294	06/16/2014 11:43	0.78	-171	6.93	0.10	1.923	18.49	131.80
MW-294	06/17/2014 10:33	0.23	-136	6.49	0.22	4.187	15.61	64.20
MW-294	02/10/2016 10:38	0.67	-46	6.34	0.18	3.535	6.64	118.00
MW-294	02/10/2016 12:40	12.54	-144	6.85	0.20	3.927	6.71	314.90
MW-294	02/21/2017 11:24	0.97	166	8.53	0.26	4.992	6.93	242.70
MW-294	02/21/2017 12:38	8.14	-130	7.15	0.08	1.550	8.38	1194.00
MW-294	02/12/2018 08:53	3.84	26	6.64	0.333	6.1617	8.82	82.8
MW-294	02/12/2018 08:56	1.87	7	6.46	0.332	6.1713	7.4	44.4
MW-294	02/12/2018 08:58	1.25	3	6.39	0.332	6.1779	7.18	87.7
MW-294	02/12/2018 09:00	1.04	1	6.37	0.332	6.1709	7.18	73.8
MW-294	02/12/2018 09:03	1.08	-1	6.35	0.331	6.1702	7.13	59.8
MW-294	02/12/2018 09:05	1.1	-2	6.33	0.331	6.1618	7.05	47.8
MW-294	02/12/2018 09:08	1.18	-3	6.3	0.330	6.1522	7	47.1
MW-294	02/12/2018 09:10	1.3	-3	6.29	0.330	6.1494	6.98	50.1
MW-294	02/12/2018 09:12	1.44	-4	6.28	0.330	6.1498	7	62.4
MW-294	02/12/2018 09:15	1.79	-4	6.28	0.330	6.1491	6.97	32.3
MW-294	02/12/2018 09:17	2.3	-4	6.27	0.330	6.1475	6.96	26.9

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-294	02/12/2018 09:19	3	-5	6.27	0.329	6.1395	6.81	14.3
MW-294	02/12/2018 09:22	3.36	-5	6.27	0.331	6.1682	6.78	11.1
MW-294	02/12/2018 09:24	3.49	-6	6.27	0.330	6.1437	6.79	11.3
MW-294	02/12/2018 09:26	3.46	-6	6.27	0.328	6.1115	6.88	17
MW-294	02/12/2018 09:29	3.42	-6	6.27	0.326	6.0903	6.76	8.5
MW-294	02/12/2018 09:31	3.28	-7	6.27	0.322	6.0111	6.8	16.7
MW-294	02/12/2018 09:33	3.09	-7	6.27	0.318	5.9370	6.73	30.9
MW-294	02/12/2018 09:36	2.9	-7	6.27	0.311	5.8195	6.76	27
MW-294	02/12/2018 09:38	2.77	-7	6.28	0.304	5.7034	6.76	28
MW-294	02/12/2018 09:40	2.66	-7	6.28	0.297	5.5802	6.68	34
MW-294	02/12/2018 09:43	2.58	-8	6.29	0.290	5.4476	6.7	35.6
MW-294	02/13/2018 09:42	2.58	-8.00	6.29	0.29	5.467	6.58	35.65
MW-294	02/13/2018 10:01	4.65	119.00	7.34	0.09	1.761	5.71	172.60
MW-294	02/13/2018 10:07	8.98	26.00	7.32	0.10	1.943	5.91	515.00
MW-294	02/22/2019 09:35	23.24	-69.6	6.69	NM	5.095	7.7	35.1
MW-294	02/22/2019 10:05	7.54	-70.4	6.94	0.89	1.747	7.26	0
MW-294	02/07/2020 08:45	3.32	-121.6	6.57	NM	0.482	8.09	6.4
MW-294	02/07/2020 09:00	2.75	-122	6.65	0.22	0.464	8.17	6.7
MW-294	01/21/2021 12:20	6.34	71.5	6.2	2.86	5.286	8.54	48.8
MW-294	01/21/2021 12:25	1.24	-31.8	6.41	2.89	5.338	8.84	34.2
MW-294	01/21/2021 12:30	0.82	-45.1	6.46	2.7	5.018	8.66	52.9
MW-294	01/21/2021 12:35	0.55	-53.6	6.56	2.33	4.38	8.56	46.6
MW-294	01/21/2021 12:40	0.44	-58.2	6.59	1.96	3.702	8.48	31.5
MW-294	01/21/2021 12:45	0.4	-60.4	6.65	1.77	3.363	8.56	14.7
MW-294	01/21/2021 12:50	0.38	-62	6.71	1.64	3.14	8.63	7.3
MW-294	01/21/2021 12:55	0.37	-62.3	6.71	1.52	2.91	8.72	9.1
MW-294	01/21/2021 13:00	0.37	-61.6	6.69	1.47	2.822	8.67	12.3
MW-294	01/21/2021 13:05	0.36	-60.4	6.68	1.42	2.735	8.55	11
MW-294	01/21/2021 13:30	0.29	-65.9	6.84	1.4	2.887	8.64	6.2
MW-294	01/21/2021 13:40	0.44	-50.2	6.77	1.43	2.414	8.6	13.2
MW-295	04/30/2012 09:45	2.46	-11	5.92	0.04	0.89157	14.55	278
MW-295	04/30/2012 09:47	1.2	-8	5.9	0.04	0.89538	15.01	71.8
MW-295	04/30/2012 09:49	0.9	-4	5.88	0.04	0.8967	14.43	27.9
MW-295	04/30/2012 09:51	0.75	-2	5.86	0.04	0.88405	15.09	36.3
MW-295	04/30/2012 09:53	0.6	0	5.85	0.04	0.88382	15.25	210.6
MW-295	04/30/2012 09:56	0.56	2	5.84	0.04	0.88628	15.07	181.2
MW-295	04/30/2012 09:58	0.47	3	5.81	0.04	0.88024	15.37	76.4
MW-295	04/30/2012 10:00	0.45	5	5.82	0.04	0.88166	15.47	76.6
MW-295	04/30/2012 10:02	0.39	5	5.81	0.04	0.88099	15.49	72.4
MW-295	04/30/2012 10:04	0.34	6	5.8	0.04	0.87933	15.44	145.4
MW-295	04/30/2012 10:06	0.35	6	5.81	0.04	0.87674	15.95	96.2
MW-295	04/30/2012 10:09	0.34	6	5.8	0.04	0.88178	15.5	63.6
MW-295	04/30/2012 10:11	0.33	6	5.81	0.04	0.88119	15.74	27
MW-295	04/30/2012 10:13	0.31	6	5.8	0.04	0.8826	15.68	43.6
MW-295	04/30/2012 10:15	0.31	6	5.82	0.04	0.88402	15.55	59.6
MW-295	04/30/2012 10:17	0.29	6	5.82	0.04	0.8761	16.09	22
MW-295	04/30/2012 10:19	0.27	7	5.81	0.04	0.87614	15.92	26.8
MW-295	04/30/2012 10:22	0.28	6	5.82	0.04	0.88353	15.38	32
MW-295	04/30/2012 10:24	0.26	6	5.83	0.04	0.87471	15.96	16.3
MW-295	04/30/2012 10:26	0.26	6	5.82	0.04	0.87872	15.98	20.6
MW-295	04/30/2012 10:28	0.26	6	5.83	0.04	0.88158	15.53	61.8
MW-295	04/30/2012 10:30	0.25	6	5.82	0.04	0.88287	15.54	24.2
MW-295	04/30/2012 10:32	0.23	6	5.82	0.04	0.88274	15.45	55.7
MW-295	04/30/2012 10:59	2.71	0	5.92	0.05	0.941	14.48	54.70
MW-295	05/01/2012 10:15	1.52	10	5.54	0.0000	0.624	13.59	13.90
MW-295	08/27/2012 08:25	1.07	3	5.98	0.04	0.8892	24.68	4.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-295	08/27/2012 08:28	0.36	4	5.97	0.04	0.88436	23.78	4.2
MW-295	08/27/2012 08:30	0.22	5	5.97	0.04	0.8781	23.63	4
MW-295	08/27/2012 08:32	0.19	5	5.96	0.04	0.88131	23.81	9.3
MW-295	08/27/2012 08:35	0.18	5	5.96	0.04	0.88021	23.75	5.8
MW-295	08/27/2012 08:37	0.16	5	5.96	0.04	0.88194	23.62	5.1
MW-295	08/27/2012 08:39	0.14	4	5.97	0.04	0.88262	23.39	4.5
MW-295	08/27/2012 08:42	0.14	4	5.97	0.04	0.88042	23.42	6.8
MW-295	08/27/2012 08:44	0.15	3	5.97	0.04	0.88021	23.82	5.5
MW-295	08/27/2012 08:46	0.15	2	5.97	0.04	0.8839	23.91	5.2
MW-295	08/27/2012 08:49	0.15	2	5.97	0.04	0.88415	23.9	5.8
MW-295	08/27/2012 08:51	0.13	1	5.97	0.04	0.88043	23.95	5.7
MW-295	08/27/2012 08:53	0.15	1	5.97	0.04	0.88314	24.08	7.1
MW-295	08/27/2012 08:56	0.17	1	5.98	0.04	0.88136	23.9	7.4
MW-295	08/27/2012 08:58	0.18	1	5.97	0.04	0.87765	23.92	7.8
MW-295	08/27/2012 09:00	0.16	0	5.97	0.04	0.88468	24	7.3
MW-295	08/27/2012 09:01	0.16	0	5.97	0.04	0.885	24.00	7.27
MW-295	08/27/2012 09:32	1.65	-1	6.33	0.05	0.934	19.05	2541.70
MW-295	08/28/2012 09:00	1.78	41	6.04	0.04	0.884	20.54	21.60
MW-295	06/16/2014 14:15	0.30	-281	5.81	0.05	1.050	30.20	12.19
MW-295	06/16/2014 14:51	0.67	-110	6.84	0.08	1.538	14.56	2739.00
MW-295	06/17/2014 11:20	0.23	-19	5.88	0.04	0.871	14.22	1.30
MW-295	11/23/2015 11:00	0.81	26	5.77	0.40	0.863	14.18	3.70
MW-295	11/23/2015 12:05	1.88	27	5.76	0.40	0.862	13.24	101.00
MW-295	02/10/2016 11:25	0.49	58	5.58	0.04	0.799	11.36	38.20
MW-295	02/10/2016 16:15	6.87	-110	5.89	0.12	2.262	11.56	94.80
MW-295	02/21/2017 09:54	2.88	204	7.28	0.10	1.903	11.09	24.30
MW-295	02/21/2017 10:06	6.34	-80	6.16	0.04	0.851	11.70	84.50
MW-295	02/12/2018 10:22	7.85	30	7.36	0.039	0.7968	7.86	31.3
MW-295	02/12/2018 10:25	3.67	44	6.84	0.038	0.7892	7.31	16.8
MW-295	02/12/2018 10:27	2.41	51	6.5	0.038	0.7888	8.2	13.1
MW-295	02/12/2018 10:29	2.05	54	6.32	0.038	0.7891	8.17	18.2
MW-295	02/12/2018 10:32	1.89	57	6.16	0.038	0.7883	8.3	18.4
MW-295	02/12/2018 10:34	1.88	59	6.05	0.038	0.7890	8.28	13.4
MW-295	02/12/2018 10:36	1.83	61	5.95	0.038	0.7882	8.53	12.5
MW-295	02/12/2018 10:39	1.82	62	5.88	0.038	0.7885	8.53	15
MW-295	02/12/2018 10:41	1.89	64	5.81	0.038	0.7880	8.56	19.1
MW-295	02/12/2018 10:43	1.88	65	5.77	0.038	0.7890	8.44	11.9
MW-295	02/12/2018 10:46	1.9	67	5.72	0.038	0.7894	8.31	13.7
MW-295	02/12/2018 10:48	1.9	68	5.67	0.038	0.7886	8.35	10.2
MW-295	02/12/2018 10:50	1.96	69	5.64	0.038	0.7879	8.3	9.3
MW-295	02/12/2018 10:53	1.97	70	5.61	0.038	0.7893	8.24	10.4
MW-295	02/12/2018 10:55	1.96	71	5.58	0.038	0.7885	8.22	8.8
MW-295	02/12/2018 10:58	1.93	72	5.55	0.038	0.7885	8.25	7.8
MW-295	02/12/2018 11:00	1.97	72	5.53	0.038	0.7871	8.33	7.8
MW-295	02/12/2018 11:02	1.98	73	5.51	0.038	0.7874	8.48	7.4
MW-295	02/13/2018 10:52	2.34	220.00	7.55	0.03	0.578	10.52	27.00
MW-295	02/13/2018 11:02	1.98	73.00	5.51	0.04	0.790	8.36	7.38
MW-295	02/13/2018 12:38	6.57	52.00	6.58	0.04	0.821	10.42	596.50
MW-295	04/18/2018 12:04	4.09	41	6.91	0.042	0.8556	13.24	59.4
MW-295	04/18/2018 12:07	2.72	67	6.41	0.042	0.8458	11.97	8.6
MW-295	04/18/2018 12:10	2.13	81	6.13	0.042	0.8524	12.31	5.9
MW-295	04/18/2018 12:13	2.04	87	5.99	0.043	0.8730	12.51	4.2
MW-295	04/18/2018 12:15	1.82	91	5.88	0.043	0.8641	12.24	2.7
MW-295	04/18/2018 12:18	1.63	92	5.78	0.042	0.8553	12.37	2.5
MW-295	04/18/2018 12:21	1.4	92	5.7	0.043	0.8642	12.46	2.5
MW-295	04/18/2018 12:24	1.29	95	5.61	0.043	0.8727	12.79	2.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-295	04/18/2018 12:27	1.32	96	5.56	0.042	0.8602	12.49	320.2
MW-295	04/18/2018 12:30	1.17	99	5.5	0.042	0.8465	12.63	552.8
MW-295	04/18/2018 12:32	1.3	100	5.46	0.043	0.8641	12.81	37.5
MW-295	04/18/2018 12:35	2.41	101	5.36	0.042	0.8433	12.98	1032.7
MW-295	04/18/2018 12:38	7.47	94	5.38	0.043	0.8717	12.88	59
MW-295	04/18/2018 12:41	3.28	102	5.37	0.042	0.8514	12.19	5.9
MW-295	04/18/2018 12:44	1.97	106	5.33	0.042	0.8533	12.3	2.6
MW-295	04/18/2018 12:47	1.68	107	5.3	0.042	0.8515	12.39	2.5
MW-295	04/18/2018 12:49	1.56	108	5.27	0.042	0.8603	12.75	1.7
MW-295	04/18/2018 12:52	1.56	107	5.28	0.043	0.8680	12.48	1.7
MW-295	04/19/2018 11:19	1.17	-99.00	5.86	0.04	0.896	11.41	92.30
MW-295	04/19/2018 12:52	1.56	107.00	5.28	0.04	0.871	12.36	1.68
MW-295	04/19/2018 13:25	4.05	6.00	7.02	0.05	0.984	11.89	398.20
MW-295R	11/13/2019 09:40	3.51	-152.1	6.49	NM	0.609	8.6	10.3
MW-295R	11/13/2019 10:32	3.06	-152.3	6.52	0.3	0.608	8.68	10.7
MW-295R	11/13/2019 10:37	3.5	-154.6	6.52	0.3	0.608	8.69	10.6
MW-295R	12/06/2019 09:40	6.48	-83.4	7.67	NM	1.191	8.88	21.6
MW-295R	12/06/2019 09:45	0.78	-75.8	6.77	NM	1.292	8.55	17.3
MW-295R	12/06/2019 09:50	1.66	-72.8	6.72	NM	1.321	8.53	16.6
MW-295R	12/06/2019 09:55	0.71	-72.6	6.73	NM	1.404	8.39	15.2
MW-295R	12/06/2019 10:00	0.41	-71.5	6.76	NM	1.472	8.18	12.7
MW-295R	12/06/2019 10:05	0.39	-70.8	6.79	NM	1.494	8.13	11.3
MW-295R	12/06/2019 10:10	0.31	-70	6.81	NM	1.49	8.09	11.6
MW-295R	12/06/2019 10:15	0.29	-69.4	6.83	NM	1.491	8.02	11.8
MW-295R	12/06/2019 10:20	0.27	-69.7	6.85	NM	1.48	8.04	7.9
MW-295R	12/06/2019 10:25	0.27	-69.6	6.86	NM	1.463	8.14	5.7
MW-295R	12/06/2019 10:35	5.83	-31.8	6.98	0.75	1.486	7.16	16.7
MW-295R	12/06/2019 10:45	2.64	-44.7	7.02	0.71	1.407	7.52	67.3
MW-295R	05/29/2020 12:30	0.32	-94.5	6.53	NM	1.105	22.17	3.5
MW-295R	05/29/2020 13:05	0.29	-76.2	6.6	0.56	1.132	21.14	3.9
MW-295R	08/26/2020 14:00	4.57	-71	6.59	0.68	1.374	26.78	39.5
MW-295R	11/09/2020 09:25	0.45	-87.4	6.8	0.97	1.909	16.65	40
MW-295R	11/09/2020 09:30	0.35	-86	6.45	0.91	1.785	16.85	36.6
MW-295R	11/09/2020 09:35	0.32	80.2	6.4	0.89	1.745	16.96	24.2
MW-295R	11/09/2020 09:40	0.23	-74.1	6.38	0.88	1.727	17	20
MW-295R	11/09/2020 09:45	0.2	-76.5	6.36	0.86	1.698	17.05	15.1
MW-295R	11/09/2020 09:50	0.39	-77.9	6.35	0.85	1.68	17.11	13
MW-295R	11/09/2020 09:55	0.29	-79.6	6.33	0.83	1.644	17.04	10.9
MW-295R	11/09/2020 10:00	0.37	-79.6	6.32	0.82	1.619	17.1	9.3
MW-295R	11/09/2020 10:05	0.39	79.1	6.31	0.8	1.576	17.13	9
MW-295R	11/09/2020 10:10	0.35	-79.6	6.3	0.78	1.537	17.09	8.5
MW-295R	11/09/2020 10:30	1.23	-75.4	6.45	0.75	1.491	17.08	4
MW-295R	11/09/2020 10:50	1.73	-63.4	6.34	0.51	1.019	17.32	14.9
MW-295R	03/03/2021 08:40	3.1	1.9	5.68	0.42	0.856	6.82	86
MW-295R	03/03/2021 08:45	1.69	-35.9	6.09	0.39	0.803	6.4	26.7
MW-295R	03/03/2021 08:50	1.44	-41.8	6.75	0.38	0.77	5.98	12.4
MW-295R	03/03/2021 08:55	0.82	-44.3	6.68	0.37	0.749	5.77	5.1
MW-295R	03/03/2021 09:00	0.63	-44	6.77	0.36	0.738	5.6	2.8
MW-295R	03/03/2021 09:05	0.48	-40.2	6.89	0.36	0.727	5.47	2
MW-295R	03/03/2021 09:10	0.43	-38.9	6.96	0.35	0.721	5.5	0.4
MW-295R	03/03/2021 09:15	0.42	-35.9	6.93	0.35	0.714	5.46	0
MW-295R	03/03/2021 09:20	0.4	-30.9	7.07	0.34	0.706	5.46	0
MW-295R	03/03/2021 09:25	0.39	-28.4	6.99	0.34	0.699	5.65	0
MW-295R	03/03/2021 10:05	4.73	-36.1	7.4	0.37	0.749	6.74	8.8
MW-295R	03/03/2021 10:20	3.82	-8.8	7.28	0.32	0.663	6.06	109.9
MW-295R	03/29/2021 14:35	2.46	-132	6.58	0.56	1.103	11.3	22.4
MW-295R	03/29/2021 14:40	0.78	-147.6	6.5	0.51	1.018	11.05	26.7

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-295R	03/29/2021 14:45	0.37	-160.4	6.43	0.52	1.035	10.92	10
MW-295R	03/29/2021 14:50	0.25	-164.3	6.41	0.51	1.028	11.1	9.6
MW-295R	03/29/2021 14:55	0.15	-165	6.36	0.51	1.015	11.06	9.5
MW-295R	03/29/2021 15:00	0.15	-164.3	6.33	0.5	1.007	11.01	9
MW-295R	03/29/2021 15:05	0.15	-163.8	6.3	0.5	1	11.01	8.9
MW-295R	03/29/2021 15:15	0.08	-150.7	6.24	0.48	0.987	1.096	5.4
MW-295R	03/29/2021 15:25	0.22	-141.8	6.2	0.48	0.955	10.76	14.7
MW-295R	05/13/2021 09:10	7.45	-138.9	7.15	0.55	1.111	17.86	54.8
MW-295R	05/13/2021 09:15	3.25	-115.8	6.47	0.54	1.075	17.01	45.9
MW-295R	05/13/2021 09:20	1.38	-109	6.43	0.52	1.048	15.98	31
MW-295R	05/13/2021 09:25	0.59	-92.3	6.41	0.51	1.024	15.37	15.1
MW-295R	05/13/2021 09:30	0.48	-89.4	6.31	0.52	1.055	15.32	5.9
MW-295R	05/13/2021 09:35	0.46	-88.8	6.31	0.52	1.053	15.32	6
MW-295R	05/13/2021 09:40	0.44	-86.1	6.29	0.53	1.067	15.31	6.7
MW-295R	05/13/2021 09:45	0.43	-85.6	6.28	0.53	1.064	15.35	7.4
MW-295R	05/13/2021 09:50	0.43	-85.4	6.28	0.52	1.044	15.47	8.4
MW-295R	05/13/2021 09:55	0.43	-85	6.28	0.52	1.047	15.42	8.5
MW-295R	02/01/2022 11:15	3.52	24.6	6.57	0.46	0.924	7.77	161.1
MW-295R	02/01/2022 11:20	3.49	23.6	6.49	0.4	0.825	7.48	81.9
MW-295R	02/01/2022 11:25	3.74	23.9	6.37	0.38	0.776	7.07	17.5
MW-295R	02/01/2022 11:30	5	24	6.35	0.38	0.772	6.57	13.5
MW-295R	02/01/2022 11:35	5.65	24.8	6.31	0.38	0.767	6.55	13.9
MW-295R	02/01/2022 11:40	5.55	23.7	6.31	0.38	0.768	6.54	13.6
MW-295R	02/01/2022 11:45	5.46	22.7	6.31	0.38	0.771	6.52	13.4
MW-295R	02/02/2022 09:20	5.78	-113.4	6.37	0.45	0.92	7.56	67.9
MW-295R	02/02/2022 09:25	2	-90.7	6.43	0.43	0.864	8.06	62.3
MW-295R	02/02/2022 09:30	1.7	-84.2	6.47	0.44	0.883	7.61	29.8
MW-295R	02/02/2022 09:35	14.1	-78.3	6.5	0.45	0.906	7.19	14.2
MW-295R	02/02/2022 09:40	1.36	-71.3	6.48	0.45	0.911	7.2	10.2
MW-295R	02/02/2022 09:45	1.26	-71.8	6.52	0.45	0.917	7.22	3.7
MW-295R	02/02/2022 09:50	1.21	-71.7	6.49	0.45	0.917	7.44	0.7
MW-295R	02/02/2022 09:55	1.23	-71.3	6.52	0.45	0.917	7.56	0.5
MW-295R	02/02/2022 10:00	1.23	-70.8	6.52	0.45	0.913	7.71	0.8
MW-295R	02/02/2022 10:05	1.26	-69.4	6.51	0.45	0.907	7.79	0.9
MW-296	04/30/2012 12:06	2.26	-37	6.26	0.07	1.55169	18.59	19.4
MW-296	04/30/2012 12:09	1.17	-50	6.3	0.07	1.5677	15.16	17
MW-296	04/30/2012 12:12	0.85	-55	6.31	0.07	1.56599	15.34	16.8
MW-296	04/30/2012 12:14	0.62	-59	6.31	0.07	1.5641	14.95	16.8
MW-296	04/30/2012 12:17	0.57	-61	6.3	0.07	1.56989	15.1	13.4
MW-296	04/30/2012 12:20	0.52	-62	6.31	0.07	1.53742	15.04	16.1
MW-296	04/30/2012 12:23	0.47	-65	6.32	0.07	1.51876	14.85	13.2
MW-296	04/30/2012 12:26	0.43	-66	6.33	0.07	1.5084	14.88	10.9
MW-296	04/30/2012 12:29	0.38	-67	6.3	0.07	1.49551	15	9.3
MW-296	04/30/2012 12:32	0.36	-69	6.32	0.07	1.48086	14.94	6.7
MW-296	04/30/2012 12:34	0.33	-70	6.33	0.07	1.46997	15.13	10.5
MW-296	04/30/2012 12:37	0.23	-73	6.33	0.07	1.45576	14.83	9.5
MW-296	04/30/2012 12:40	0.22	-73	6.34	0.07	1.44807	14.81	4.6
MW-296	04/30/2012 12:43	0.19	-74	6.35	0.07	1.4399	14.84	5.1
MW-296	04/30/2012 12:46	0.17	-76	6.36	0.07	1.42717	14.66	4.5
MW-296	04/30/2012 12:49	0.17	-77	6.36	0.07	1.42294	14.7	4.2
MW-296	04/30/2012 12:51	0.16	-77	6.37	0.07	1.41381	14.87	4
MW-296	04/30/2012 12:54	0.15	-79	6.37	0.07	1.4119	14.82	4.2
MW-296	04/30/2012 12:56	0.15	-79	6.37	0.07	1.412	14.82	4.15
MW-296	04/30/2012 13:14	7.43	-37	6.63	0.07	1.389	15.30	11.90
MW-296	08/27/2012 09:46	1.12	-67	6.56	0.08	1.5843	23.42	4.9
MW-296	08/27/2012 09:49	0.32	-86	6.64	0.08	1.57815	22.69	14.8
MW-296	08/27/2012 09:52	0.08	-91	6.65	0.08	1.57742	22.54	6.5
MW-296	08/27/2012 09:55	0.01	-95	6.66	0.08	1.55289	22.67	7.4
MW-296	08/27/2012 09:58	0.01	-98	6.66	0.08	1.54101	22.85	8.9

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-296	08/27/2012 10:00	0.01	-101	6.66	0.08	1.5422	22.82	19.2
MW-296	08/27/2012 10:03	0	-103	6.67	0.08	1.53064	22.94	10.7
MW-296	08/27/2012 10:06	0	-104	6.68	0.08	1.48972	22.95	10.8
MW-296	08/27/2012 10:09	-0.01	-105	6.68	0.08	1.48118	22.92	10.9
MW-296	08/27/2012 10:12	-0.02	-106	6.7	0.07	1.45463	23.14	9.2
MW-296	08/27/2012 10:15	-0.01	-107	6.7	0.07	1.44534	23.26	10
MW-296	08/27/2012 10:17	-0.01	-107	6.72	0.07	1.42803	22.68	10.9
MW-296	08/27/2012 10:20	-0.03	-107	6.72	0.07	1.41513	22.94	9.8
MW-296	08/27/2012 10:23	-0.05	-107	6.73	0.07	1.4046	22.96	10.7
MW-296	08/27/2012 10:26	-0.09	-108	6.73	0.07	1.40364	23.15	11
MW-296	08/27/2012 10:29	-0.1	-108	6.72	0.07	1.38743	23.51	11.1
MW-296	08/27/2012 10:32	-0.11	-108	6.73	0.07	1.38508	23.43	11.8
MW-296	08/27/2012 10:34	0.09	-108	6.74	0.07	1.388	22.96	12.21
MW-296	08/27/2012 11:06	0.24	-52	6.80	0.06	1.250	19.82	49.40
MW-296	06/16/2014 11:25	0.26	-42.9	6.36	0.91	1.799	16.63	2.22
MW-296	06/16/2014 11:40	0.25	-44.8	6.36	0.89	1.753	15.55	1.90
MW-296	06/16/2014 11:55	0.81	-41.7	6.39	0.88	1.730	17.27	8.30
MW-296	06/16/2014 16:09	1.40	-160	6.46	0.42	20.570	-5.78	10.74
MW-296	06/16/2014 16:37	0.59	-167	6.92	0.10	1.988	14.76	12.70
MW-296	06/17/2014 12:06	0.11	-120	6.47	0.09	1.796	13.45	460.70
MW-296	08/07/2015 11:32	1.82	-99	6.49	0.22	4.193	16.79	36.8
MW-296	08/07/2015 14:10	1.62	-76	7.35	0.17	3.235	17.95	12.7
MW-296	02/10/2016 11:55	0.18	-30	6.24	0.07	1.433	12.17	79.00
MW-296	02/10/2016 16:07	3.58	-147	6.33	0.17	3.226	10.79	112.00
MW-296	08/19/2016 11:26	1.34	-133	6.50	0.04	0.856	17.45	35.90
MW-296	08/19/2016 14:13	4.09	-115	7.21	0.23	4.218	20.81	80.20
MW-296	02/21/2017 10:38	0.72	154	7.58	0.17	3.314	12.09	46.70
MW-296	02/21/2017 11:20	5.29	-141	6.69	0.07	1.410	12.28	28.90
MW-296	02/12/2018 11:32	10.96	39	7.21	0.076	1.5321	7.62	13.4
MW-296	02/12/2018 11:34	4.42	28	6.72	0.075	1.4985	9.35	5.9
MW-296	02/12/2018 11:37	2.55	19	6.52	0.074	1.4734	9.98	7.8
MW-296	02/12/2018 11:40	2.07	15	6.41	0.074	1.4742	9.97	6.5
MW-296	02/12/2018 11:42	1.87	12	6.34	0.073	1.4552	10.1	10.8
MW-296	02/12/2018 11:45	1.79	11	6.29	0.072	1.4444	10.01	5
MW-296	02/12/2018 11:48	1.81	10	6.25	0.072	1.4468	10.03	6.3
MW-296	02/12/2018 11:50	1.76	9	6.22	0.070	1.4017	9.98	3.8
MW-296	02/12/2018 11:53	1.84	9	6.2	0.069	1.3760	9.82	4.4
MW-296	02/12/2018 11:56	1.82	9	6.19	0.067	1.3520	9.87	3.2
MW-296	02/12/2018 11:58	1.83	9	6.17	0.067	1.3443	9.84	2.2
MW-296	02/12/2018 12:01	1.81	9	6.17	0.067	1.3379	9.73	3
MW-296	02/12/2018 12:04	1.8	9	6.16	0.066	1.3300	9.85	2.7
MW-296	02/12/2018 12:06	1.85	9	6.15	0.066	1.3280	9.85	2.6
MW-296	02/12/2018 12:09	1.82	9	6.15	0.066	1.3251	9.83	2.5
MW-296	02/13/2018 11:43	0.97	111.00	6.55	0.05	0.986	11.55	66.40
MW-296	02/13/2018 12:09	1.82	9.00	6.15	0.07	1.329	9.71	2.53
MW-296	02/13/2018 12:34	8.29	38.00	6.74	0.06	1.277	11.14	74.80
MW-296	04/18/2018 13:39	5.4	-37	7.39	0.082	1.6114	13.23	9.9
MW-296	04/18/2018 13:42	2.01	-17	6.82	0.077	1.5257	12.78	5.5
MW-296	04/18/2018 13:45	1.61	-9	6.6	0.077	1.5200	12.84	5.5
MW-296	04/18/2018 13:48	1.48	-5	6.45	0.075	1.4888	12.91	4.4
MW-296	04/18/2018 13:51	1.5	-3	6.38	0.076	1.5001	12.79	3.3
MW-296	04/18/2018 13:54	1.36	-1	6.29	0.075	1.4904	12.91	3.5
MW-296	04/18/2018 13:57	1.33	0	6.25	0.073	1.4514	12.74	3.2
MW-296	04/18/2018 14:00	1.31	1	6.22	0.072	1.4385	12.39	3.3
MW-296	04/18/2018 14:04	1.23	2	6.18	0.073	1.4548	12.83	3.3
MW-296	04/19/2018 12:02	1.67	-148.00	6.53	0.07	1.398	11.19	48.20
MW-296	04/19/2018 14:03	1.23	2.00	6.18	0.07	1.459	12.71	3.26
MW-296	04/19/2018 14:35	1.80	-27.00	6.62	0.07	1.370	12.19	49.90
MW-296	08/30/2018 09:58	0.44	-88.00	6.49	0.06	1.157	23.2	2.34

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-296	08/30/2018 10:28	1.89	-1.00	7.22	0.05	1.023	20.87	65.30
MW-296	02/04/2019 13:55	2.04	-96.90	6.79	0.63	1.257	13.09	10.20
MW-296	02/04/2019 14:10	4.34	-94.70	6.95	0.32	0.662	14.6	36.60
MW-296	02/04/2019 14:25	6.03	-76.10	6.86	0.62	1.238	14.17	33.10
MW-296	04/23/2019 10:35	0.78	-96.8	6.74	NM	1.173	14.93	0.3
MW-296	04/23/2019 10:55	0.53	-88.6	6.77	0.55	1.092	11.97	1.3
MW-296	09/17/2019 08:50	3.43	169.5	6.26	NM	1.145	21.07	4.5
MW-296	09/17/2019 08:55	0.41	165.9	6.08	NM	0.998	21.24	1.2
MW-296	09/17/2019 09:00	0.31	159.8	6.09	NM	0.935	21.29	4.4
MW-296	09/17/2019 09:05	0.24	147.4	6.15	NM	0.839	21.29	0.5
MW-296	09/17/2019 09:10	0.14	132.3	6.18	NM	0.758	21.33	0.8
MW-296	09/17/2019 09:15	0.13	118.8	6.21	NM	0.718	21.67	2.5
MW-296	09/17/2019 09:20	0.11	93.8	6.25	NM	0.7	21.98	1.3
MW-296	09/17/2019 09:25	0.12	74.7	6.23	NM	0.679	22.02	0.6
MW-296	09/17/2019 09:30	0.11	51.5	6.23	NM	0.665	22.07	5.5
MW-296	09/17/2019 09:35	0.11	29.2	6.25	NM	0.64	22.16	2.1
MW-296	09/17/2019 10:04	0.23	41.8	6.24	0.29	0.596	22.56	1
MW-296	09/17/2019 10:22	0.28	8.9	6.29	0.27	0.552	22.72	7.4
MW-296	11/13/2019 14:00	3.09	-88.2	6.67	NM	0.386	13.31	12.8
MW-296	11/13/2019 14:54	2.84	-138.5	6.8	0.15	0.323	14.83	6.3
MW-296	11/13/2019 15:00	4.13	-124.4	6.84	0.17	0.348	13	17.2
MW-296	05/28/2020 13:35	0.9	-177.5	6.62	NM	0.673	20.26	3.2
MW-296	05/28/2020 13:55	1.72	-150	6.7	0.31	0.639	18.5	1.4
MW-296	11/06/2020 10:15	2.3	-90.3	7.06	0.25	0.516	16.76	23.8
MW-296	11/06/2020 10:20	1.1	-94.4	6.82	0.2	0.416	17.12	20.5
MW-296	11/06/2020 10:25	1.05	-99.9	6.78	0.19	0.395	17.2	19.3
MW-296	11/06/2020 10:30	0.59	-113	6.76	0.18	0.369	17.3	17.6
MW-296	11/06/2020 10:35	0.61	-126	6.77	0.17	0.364	17.44	16.6
MW-296	11/06/2020 10:40	0.47	-139	6.78	0.17	0.363	17.7	15.6
MW-296	11/06/2020 10:45	0.44	-149.2	6.78	0.17	0.36	17.66	15.4
MW-296	11/06/2020 10:50	0.48	-169.4	6.78	0.16	0.342	17.65	14.5
MW-296	11/06/2020 10:55	0.45	-170.4	6.79	0.16	0.34	17.82	14.5
MW-296	11/06/2020 11:00	0.43	-178.3	6.8	0.16	0.336	17.87	14.6
MW-296	11/06/2020 11:10	5.41	-130.4	7.02	0.17	0.362	17.88	14.8
MW-296	11/06/2020 11:20	2.41	-115.1	6.74	0.18	0.371	19.85	13.2
MW-296	03/02/2021 12:20	1.87	-73.5	6.84	0.58	1.166	5.72	9.1
MW-296	03/02/2021 12:25	1.17	-80.8	6.81	0.57	1.146	5.98	6.4
MW-296	03/02/2021 12:30	0.66	-94	6.75	0.54	1.1	5.3	0.9
MW-296	03/02/2021 12:35	0.29	-96.8	6.72	0.52	1.06	5.54	0
MW-296	03/02/2021 12:40	0.24	-94.1	6.74	0.51	1.03	5.5	0
MW-296	03/02/2021 12:45	0.22	-102.7	6.76	0.49	1	6.17	0
MW-296	03/02/2021 12:50	0.14	-105	6.76	0.46	0.943	5.26	0
MW-296	03/02/2021 12:55	0.12	-103.7	6.77	0.44	0.886	5.04	0
MW-296	03/02/2021 13:00	0.1	-111.4	6.75	0.42	0.861	4.97	0
MW-296	03/02/2021 13:05	0.09	-115.6	6.77	0.41	0.838	5.01	0
MW-296	03/02/2021 13:30	2.89	-67	6.89	0.38	0.771	5.44	7.9
MW-296	03/02/2021 13:45	2.71	-70.4	7.06	0.35	0.716	5.66	4.5
MW-296	05/12/2021 11:00	11.17	-184.8	8.38	0.04	0.078	15.55	47.7
MW-296	05/12/2021 11:05	5.19	-142.1	7.5	0.94	1.846	15.66	44.3
MW-296	05/12/2021 11:10	1.29	-120.4	6.65	0.55	1.14	13.32	23.9
MW-296	05/12/2021 11:15	1.25	-120.6	6.66	0.55	1.107	13.18	24.6
MW-296	05/12/2021 11:20	1.22	-121.9	6.66	0.55	1.097	13.19	21.6
MW-296	05/12/2021 11:25	1.34	-151.5	6.68	0.46	0.93	12.99	9.3
MW-296	05/12/2021 11:30	1.46	-155.3	6.69	0.45	0.923	13	7.9
MW-296	05/12/2021 11:35	1.61	-200.9	6.74	0.39	0.8	13.58	2.4
MW-296	05/12/2021 11:40	1.72	-217.6	6.77	0.37	0.764	13.28	4.3
MW-296	05/12/2021 11:45	1.91	-237.7	6.76	0.35	0.723	13.22	4.5
MW-296	02/02/2022 10:50	2.94	-46.9	6.56	0.47	0.946	0.947	103.1
MW-296	02/02/2022 10:55	1.46	-54.7	6.62	0.47	0.953	10.24	116.4

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-296	02/02/2022 11:00	0.97	-60.9	6.64	0.47	0.949	10.09	49.8
MW-296	02/02/2022 11:05	0.82	-67	6.68	0.47	0.945	10.42	11.5
MW-296	02/02/2022 11:10	0.94	-77.6	6.7	0.47	0.941	10.2	0.6
MW-296	02/02/2022 11:15	0.94	-98.7	6.76	0.47	0.947	10.28	0.8
MW-296	02/02/2022 11:20	0.79	-118.6	6.81	0.47	0.956	10.25	0.6
MW-296	02/02/2022 11:25	0.76	-142.4	6.85	0.48	0.964	10.13	0.4
MW-296	02/02/2022 11:30	0.96	-161.8	6.87	0.48	0.967	10.1	0.4
MW-296	02/02/2022 11:35	0.96	-176.9	6.84	0.48	0.97	9.91	0.7
MW-297	05/02/2012 10:11	2.84	145	6.5	0.01	0.25789	13.37	28.1
MW-297	05/02/2012 10:13	1.96	142	6.52	0.01	0.25658	14.01	46.3
MW-297	05/02/2012 10:15	1.66	139	6.57	0.01	0.25661	14.21	60.8
MW-297	05/02/2012 10:17	1.58	139	6.58	0.01	0.25518	14.35	47.6
MW-297	05/02/2012 10:19	1.62	139	6.59	0.01	0.2556	14.44	36.6
MW-297	05/02/2012 10:22	2.38	139	6.6	0.01	0.27005	14.55	22.7
MW-297	05/02/2012 10:24	2.86	140	6.62	0.01	0.27783	14.52	16.9
MW-297	05/02/2012 10:26	3.3	140	6.64	0.01	0.28029	14.49	12.3
MW-297	05/02/2012 10:28	3.45	140	6.65	0.01	0.2793	14.54	10.6
MW-297	05/02/2012 10:30	3.54	140	6.65	0.01	0.27607	14.61	12.7
MW-297	05/02/2012 10:32	3.46	139	6.65	0.01	0.27554	14.68	17.3
MW-297	05/02/2012 10:34	3.35	138	6.64	0.01	0.26956	14.65	16.8
MW-297	05/02/2012 10:37	3.14	137	6.62	0.01	0.26726	14.58	18.8
MW-297	05/02/2012 11:05	4.73	36	6.86	0.01	0.267	14.09	21.90
MW-297	05/03/2012 09:07	5.27	43	6.69	0.01	0.307	15.53	68.00
MW-297	08/30/2012 12:43	2.08	-6	6.16	0.0000	0.274	27.42	8.70
MW-297	08/30/2012 13:22	6.47	-52	6.65	0.0000	0.338	25.65	39.00
MW-297	08/31/2012 09:18	1.61	-26	6.01	0.0000	0.379	22.64	97.50
MW-297	09/22/2014 09:20	0.30	75	6.25	0.03	0.566	22.63	7.63
MW-297	09/22/2014 10:00	1.52	142	6.92	0.03	0.637	22.42	114.40
MW-297	09/23/2014 12:48	0.22	108	6.64	0.06	1.124	20.83	307.40
MW-297	02/23/2015 09:37	4.54	311	6.30	0.05	1.115	8.08	184.10
MW-297	02/23/2015 14:28	5.49	1407	6.88	0.12	2.331	2.62	6.12
MW-297	02/23/2015 15:03	8.31	1115	7.33	0.07	1.344	5.81	31.00
MW-297	01/05/2016 09:50	7.83	-29	7.33	0.07	1.487	12.4	3163.2
MW-297	01/05/2016 10:34	9.14	374	7.05	0.02	0.433	14.38	41.7
MW-297	02/21/2017 12:10	5.31	246	8.08	0.09	1.703	8.80	96.70
MW-297	02/21/2017 15:07	10.49	78	6.63	0.01	0.233	11.02	1374.80
MW-297	02/12/2018 13:42	11.58	25	7.73	0.020	0.4178	8.62	18.3
MW-297	02/12/2018 13:44	10.81	48	7.39	0.025	0.5249	8.8	16.8
MW-297	02/12/2018 13:47	10.63	60	7.21	0.022	0.4499	8.85	16.3
MW-297	02/12/2018 13:50	10.58	67	7.1	0.021	0.4316	8.78	16.8
MW-297	02/12/2018 13:53	10.43	73	7	0.019	0.4021	8.8	21.4
MW-297	02/12/2018 13:55	10.14	77	6.94	0.020	0.4123	9.27	65.2
MW-297	02/12/2018 13:58	10.84	80	6.86	0.020	0.4079	9.45	35.7
MW-297	02/12/2018 14:01	10.42	83	6.84	0.020	0.4086	9.42	20.7
MW-297	02/12/2018 14:04	10.35	85	6.83	0.019	0.4019	9.27	25.2
MW-297	02/12/2018 14:06	10.17	88	6.79	0.019	0.3985	9.31	21.9
MW-297	02/12/2018 14:09	10.13	92	6.76	0.019	0.3954	9.11	22.8
MW-297	02/12/2018 14:12	10.1	94	6.73	0.019	0.3988	9.16	22.9
MW-297	02/13/2018 13:24	9.63	296.00	7.82	0.02	0.365	9.05	45.30
MW-297	02/13/2018 14:12	10.10	94.00	6.73	0.02	0.400	9.04	22.93
MW-297	02/13/2018 14:50	9.72	49.00	7.48	0.02	0.449	9.02	33.10
MW-297	04/19/2018 10:18	9.91	-9.00	6.34	0.05	0.981	10.64	70.90
MW-297	04/19/2018 10:27	4.64	255.00	6.02	0.01	0.210	10.79	14.65
MW-297	04/19/2018 11:02	8.04	87.00	6.81	0.02	0.392	10.8	1414.20
MW-297	02/04/2019 10:30	1.79	-18.30	7.21	0.12	0.247	8.36	19.40
MW-297	02/04/2019 11:05	4.04	-22.90	7.20	0.22	0.458	9.7	22.70
MW-297	02/04/2019 11:25	5.13	-14.30	7.23	0.13	0.273	9.92	610.90
MW-297	04/24/2019 09:30	1.77	91.1	6.52	NM	0.28	16.5	17.7
MW-297	04/24/2019 09:56	8.43	44.6	6.92	0.14	0.293	17.18	13.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-297	11/13/2019 11:50	3.34	13.9	6.89	NM	0.172	13.17	58.4
MW-297	11/13/2019 12:40	4.43	-39.3	6.72	0.08	0.177	13.89	21.6
MW-297	11/13/2019 12:45	5.09	-43.3	6.85	0.08	0.165	16.03	31.9
MW-297	05/28/2020 10:15	0.74	136.6	6.59	NM	0.204	21.45	12.6
MW-297	05/28/2020 11:00	3.27	-11.4	6.86	0.15	0.312	19.4	22.1
MW-297	05/29/2020 08:35	6.63	56.9	6.58	0.19	0.384	16.5	54.7
MW-297	11/09/2020 13:15	0.64	-151	7.47	0.13	0.288	19.62	19
MW-297	11/09/2020 13:20	1.16	-136.1	6.88	0.12	0.246	20.11	12.5
MW-297	11/09/2020 13:25	1.35	-119.9	6.65	0.12	0.243	19.77	8.5
MW-297	11/09/2020 13:30	1.51	-105.3	6.6	0.11	0.242	19.53	10.2
MW-297	11/09/2020 13:35	1.2	-94.8	6.57	0.11	0.235	19.82	17.9
MW-297	11/09/2020 13:40	0.93	-90.9	6.55	0.11	0.23	19.68	18.9
MW-297	11/09/2020 13:45	0.81	83.9	6.5	0.11	0.225	19.64	19.5
MW-297	11/09/2020 13:50	0.66	-74	6.44	0.11	0.227	19.67	15.3
MW-297	11/09/2020 13:55	0.58	-67.6	6.42	0.11	0.23	19.35	13.5
MW-297	11/09/2020 14:00	0.54	-62.1	6.39	0.11	0.234	19.24	11.6
MW-297	11/09/2020 14:20	1.37	-42.9	6.5	0.15	0.306	20.14	8
MW-297	11/09/2020 14:35	1.38	-24.8	6.5	0.12	0.252	20.58	59.2
MW-297	03/02/2021 12:00	6.61	-34.5	7.47	0.08	0.168	7.36	4.9
MW-297	03/02/2021 12:05	5.73	-21.3	7.16	0.08	0.159	7.51	4.1
MW-297	03/02/2021 12:10	5.78	-15.9	7	0.07	0.155	6.74	0.6
MW-297	03/02/2021 12:15	5.83	-13.7	6.91	0.07	0.154	7.06	0.7
MW-297	03/02/2021 12:20	5.48	-12.2	6.86	0.07	0.148	6.22	13.4
MW-297	03/02/2021 12:25	5.25	-13.7	6.84	0.07	0.145	6.2	14.6
MW-297	03/02/2021 12:30	6	-21.5	6.95	0.07	0.143	6.22	17.7
MW-297	03/02/2021 12:35	4.92	-21.1	6.82	0.07	0.141	6.19	15.4
MW-297	03/02/2021 12:40	4.01	-22.6	6.77	0.07	0.141	6.17	17
MW-297	03/02/2021 12:45	3.42	-27.2	6.74	0.07	0.143	6.25	11.9
MW-297	03/02/2021 13:00	1.46	-36.2	6.77	0.08	0.159	7.12	58.4
MW-297	03/02/2021 13:10	1.67	-35.8	6.66	0.08	0.172	7.77	72.4
MW-297	05/14/2021 11:20	6.33	40.1	7.17	0.16	0.341	19.77	78.3
MW-297	05/14/2021 11:25	3.72	49.2	6.71	0.16	0.333	17.48	93.7
MW-297	05/14/2021 11:30	2.69	43.4	6.52	0.15	0.306	16.93	45.3
MW-297	05/14/2021 11:35	2.66	64	6.44	0.13	0.276	18.12	23.1
MW-297	05/14/2021 11:40	2.36	65.7	6.39	0.13	0.274	17.91	26.7
MW-297	05/14/2021 11:45	1.98	71.1	6.27	0.13	0.26	19.37	30.1
MW-297	05/14/2021 11:50	1.58	77.4	6.2	0.12	0.261	19.9	27.6
MW-297	05/14/2021 11:55	1.27	82.4	6.16	0.12	0.268	19.84	23.2
MW-297	05/14/2021 12:00	1.08	85.9	6.15	0.13	0.259	20.2	19.9
MW-297	05/14/2021 12:05	0.99	89.1	6.15	0.13	0.27	19.94	17.3
MW-305	10/27/2014 09:36	5.46	-120	6.65	0.80	1.400	10.36	0.0000
MW-305	10/27/2014 10:26	1.19	-133	6.35	0.90	1.830	12.45	0.0000
MW-305	10/27/2014 11:08	5.04	-138	6.36	0.90	1.750	12.05	0.0000
MW-305R	01/21/2013 13:23	5.64	-3.6	6.46	0.1	0.24	7.4	32.2
MW-305R	01/21/2013 13:29	3.8	-14.6	6.64	0.1	0.24	8.1	27.6
MW-305R	01/21/2013 13:32	3.52	-17.8	6.73	0.1	0.24	8.1	26.6
MW-305R	01/21/2013 13:35	3.32	-17.8	6.78	0.1	0.24	8.4	23.8
MW-305R	01/21/2013 13:38	3.19	-16.9	6.83	0.1	0.23	7.9	22.9
MW-305R	01/21/2013 13:41	3.08	-15.6	6.86	0.1	0.23	8	19.8
MW-305R	01/21/2013 13:44	3.93	-11.9	6.87	0.1	0.22	6.8	18.6
MW-305R	01/21/2013 13:48	2.89	-9.8	6.89	0.1	0.23	6.2	18.9
MW-305R	01/21/2013 13:52	2.89	-8.5	6.89	0.1	0.23	7.1	18.7
MW-305R	01/21/2013 13:56	2.88	-7.6	6.89	0.11	0.227	7.22	18.10
MW-305R	01/21/2013 14:27	3.07	-1.6	6.86	0.12	0.256	9.62	11.70
MW-305R	01/22/2013 14:50	4.50	1.5	6.88	0.12	0.259	3.03	11.20
MW-305R	05/16/2013 09:15	12.65	7.1	1.07	-68.5	3.9	0.7	0.6
MW-305R	05/16/2013 09:20	0.5	-62.8	6.44	0.7	1.08	12.5	2
MW-305R	05/16/2013 09:25	0.4	-67.5	6.49	0.7	1.08	12.5	2.5
MW-305R	05/16/2013 09:30	0.37	-68	6.52	0.7	1.06	12.4	1.6

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Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-305R	05/16/2013 09:35	0.32	-72	6.53	0.7	1.07	12.1	1.4
MW-305R	05/16/2013 09:40	0.3	-71.9	6.54	0.7	1.06	12.1	1.8
MW-305R	05/16/2013 09:50	0.3	-71.9	6.54	0.71	1.064	12.09	1.8
MW-305R	05/16/2013 10:05	0.99	-41.9	6.36	0.76	1.137	12.35	1.1
MW-305R	05/17/2013 10:30	11.96	-55.9	6.78	0.68	1.055	13.49	80.6
MW-305R	01/15/2014 14:26	0.23	48.2	6.92	0.90	1.768	13.01	201.20
MW-305R	01/15/2014 14:52	0.0000	-50.4	6.85	0.91	1.784	12.51	45.10
MW-305R	01/15/2014 15:03	0.0000	-55	6.84	0.82	1.605	10.71	29.90
MW-305R	08/22/2014 11:41	5.75	97.2	6.46	0.60	1.243	23.63	163.30
MW-305R	08/22/2014 12:26	1.85	139.7	5.85	0.84	1.686	35.17	85.20
MW-305R	08/22/2014 12:47	1.81	183.3	5.93	0.84	1.717	34.24	18.50
MW-305R	09/16/2014 10:05	7.43	207.3	4.60	0.47	0.944	8.48	39.30
MW-305R	09/16/2014 10:53	0.75	215.1	4.77	0.20	0.413	14.39	62.90
MW-305R	09/16/2014 11:20	0.70	225.4	4.74	0.24	0.439	14.24	63.90
MW-305R	09/29/2014 11:05	1.68	119	6.70	0.55	1.095	14.70	23.90
MW-305R	09/29/2014 11:35	0.64	104.3	6.47	0.58	1.167	17.91	17.20
MW-305R	09/29/2014 11:40	0.75	110.4	6.37	0.58	1.173	23.00	36.70
MW-305R	01/29/2015 09:45	7.64	79.4	8.90	0.59	1.038	7.87	26.80
MW-305R	01/29/2015 10:30	6.67	-14.8	6.79	0.59	1.198	11.76	2.00
MW-305R	01/29/2015 10:45	6.60	-23	6.74	0.59	1.205	12.40	1.70
MW-305R	07/08/2015 13:55	0	-110	6.76	0.7	1.35	25.06	0.6
MW-305R	07/08/2015 14:20	0	-109	6.89	0.7	1.36	26.45	0
MW-305R	04/13/2016 13:47	0.0000	-101	7.98	0.20	0.494	16.78	15.00
MW-305R	04/13/2016 15:10	1.14	-75	7.84	0.30	0.567	17.69	1000.00
MW-305R	09/20/2016 14:55	3.08	70.1	7.16	0.27	0.552	25.18	2.30
MW-305R	09/20/2016 15:10	2.78	96.3	7.27	0.25	0.514	24.04	103.30
MW-305R	04/10/2017 09:40	9.04	-108.00	7.31	0.20	0.460	8.96	26.20
MW-305R	04/10/2017 10:30	17.80	121.00	7.64	0.20	0.497	10.13	9.70
MW-305R	04/10/2017 10:50	9.39	136.00	7.65	0.30	0.540	10.27	70.60
MW-305R	01/15/2018 13:35	8.60	11.30	8.00	0.54	1.142	12.27	2.10
MW-305R	01/15/2018 13:40	4.01	152.40	7.28	0.27	0.546	13.49	0.0000
MW-305R	01/15/2018 14:20	8.31	48.00	7.75	0.50	1.040	13.43	182.30
MW-305R	04/02/2018 13:15	14.24	91.60	8.03	0.22	0.469	5.9	54.30
MW-305R	04/02/2018 14:00	12.56	-17.80	7.04	0.18	0.379	6.34	49.90
MW-305R	04/02/2018 14:05	13.53	-11.70	6.93	0.18	0.374	7.58	385.20
MW-305R	02/22/2019 10:00	8.88	144.00	7.44	3.25	5.942	11.12	271.10
MW-305R	02/22/2019 11:00	6.83	130.80	7.29	4.05	7.321	9.59	0.60
MW-305R	02/22/2019 11:55	8.60	122.20	7.48	4.56	8.167	12.33	24.60
MW-305R	05/21/2019 13:45	0.78	155.2	6.82	NM	8.198	16.58	2.1
MW-305R	05/21/2019 14:15	2.88	178.5	7.48	4.79	8.576	18.7	6.5
MW-305R	08/12/2019 10:05	2.55	110.6	6.88	NM	6.289	23.89	0
MW-305R	08/12/2019 10:10	1.24	108.7	6.77	NM	6.292	23.4	1.6
MW-305R	08/12/2019 10:15	1.44	108.3	6.78	NM	6.252	23.97	2.9
MW-305R	08/12/2019 10:20	1.98	108.9	6.79	NM	6.14	24.8	0.4
MW-305R	08/12/2019 10:25	3.19	109.1	6.79	NM	6.024	25.04	4.2
MW-305R	08/12/2019 10:30	5.43	109.1	6.79	NM	5.777	25.09	0
MW-305R	08/12/2019 10:35	10.94	108.3	6.76	NM	5.096	24.84	2.4
MW-305R	08/12/2019 10:40	14.51	107.6	6.73	NM	4.505	24.64	25
MW-305R	08/12/2019 10:45	16.69	106.6	6.72	NM	4.076	24.8	27.2
MW-305R	08/12/2019 10:50	17.75	105.7	6.72	NM	3.801	24.96	7.5
MW-305R	08/12/2019 14:00	17.75	105.7	6.72	NM	3.801	24.96	7.5
MW-305R	08/12/2019 14:37	6.09	54.8	7.06	3.24	5.978	26.05	22.1
MW-305R	08/12/2019 14:55	11.09	96.6	6.87	3.63	6.612	20.45	500.6
MW-305R	11/04/2019 09:00	1.38	-10.9	6.81	NM	5.94	15.2	10.2
MW-305R	11/04/2019 09:05	1.77	-3	6.8	NM	5.799	15.26	8.1
MW-305R	11/04/2019 09:10	2.32	10.1	6.79	NM	5.478	15.38	4.8
MW-305R	11/04/2019 09:15	2.27	16.3	6.79	NM	5.263	15.61	5.3
MW-305R	11/04/2019 09:20	2.01	18.2	6.79	NM	5.073	15.59	6.1
MW-305R	11/04/2019 09:25	1.67	19.2	6.78	NM	4.9	4.899	7.4

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-305R	11/04/2019 09:30	1.45	20.5	6.77	NM	4.772	15.67	5
MW-305R	11/04/2019 09:35	1.38	22.2	6.77	NM	4.659	15.93	8.3
MW-305R	11/04/2019 09:40	1.39	4.618	6.76	NM	4.618	16.03	9
MW-305R	11/04/2019 09:45	1.38	27.2	6.76	NM	4.961	15.92	11.3
MW-305R	11/04/2019 10:20	4.63	19.6	7	2.57	4.771	17.03	13.9
MW-305R	11/04/2019 10:35	5.92	-8.9	7.04	2.92	5.367	16.97	1255.1
MW-305R	02/06/2020 09:45	7.11	141.8	7.18	NM	4.42	11.11	21
MW-305R	02/06/2020 10:36	7.53	175.9	7.25	2.52	4.709	8.57	29.8
MW-305R	02/12/2020 09:07	13.95	185.7	7.39	2.11	3.955	11.73	8
MW-305R	05/12/2020 14:00	2.75	183.3	6.48	NM	4.789	14.26	1.2
MW-305R	05/13/2020 09:23	3.61	140.3	6.88	2.43	4.522	15.08	9
MW-305R	11/13/2020 10:05	6.66	75.6	7.29	2.23	4.169	15.93	11.3
MW-305R	11/13/2020 10:20	6.92	92.8	7.23	2.41	4.493	15.24	219
MW-305R	02/10/2021 13:15	9.76	43.2	7.69	0.83	1.639	10.37	17.5
MW-305R	02/10/2021 13:35	9.48	60.8	7.62	0.93	1.827	10.83	27.9
MW-305R	04/28/2021 10:15	10.86	152.1	7.52	2.14	4.02	14.88	20
MW-305R	04/28/2021 10:20	10.34	145.7	7.61	2.16	4.04	13.99	27.9
MW-305R	04/28/2021 10:25	10.03	142.2	7.59	2.16	4.042	13.74	48.3
MW-305R	04/28/2021 10:30	9.97	141.4	7.58	2.16	4.043	13.91	50
MW-305R	04/28/2021 10:35	10.01	140.7	7.54	2.16	4.059	14.23	48
MW-305R	04/28/2021 10:40	9.91	140.1	7.54	2.17	4.063	14.32	41.5
MW-305R	04/28/2021 10:45	10.5	139.6	7.54	2.17	4.07	14.69	38
MW-305R	04/28/2021 10:50	9.57	138.3	7.53	2.17	4.073	14.85	34.6
MW-305R	04/28/2021 10:55	32.8	136.2	7.53	2.18	4.087	14.92	29.4
MW-305R	04/28/2021 11:00	9.97	135.7	7.53	2.18	4.094	14.99	31.3
MW-305R	08/18/2021 13:40	8.19	94.3	6.97	2.57	4.754	24	90.4
MW-305R	08/18/2021 13:45	8.31	89.3	7.04	2.55	4.694	22.5	89
MW-305R	08/18/2021 13:50	8.29	90.3	7.05	2.55	4.697	22.6	89.4
MW-305R	08/18/2021 13:55	8.4	73.8	7.04	2.55	4.704	22.7	50.7
MW-305R	08/18/2021 14:00	8.24	85.1	7.02	2.56	4.735	22.8	45.98
MW-305R	08/18/2021 14:05	7.78	91.9	7.02	2.59	4.78	23	36.75
MW-305R	08/18/2021 14:10	7.72	71.7	7.01	2.6	4.812	23.3	41.69
MW-305R	08/18/2021 14:15	7.91	60.9	6.96	2.6	4.86	24.6	44.5
MW-305R	08/18/2021 14:20	7.85	53	6.87	2.62	4.872	24.3	37.6
MW-305R	08/18/2021 14:25	7.71	46.4	6.86	2.62	4.87	24	23.5
MW-306	09/04/2012 11:10	1.66	-110	6.68	0.50	1.000	23.56	0.0000
MW-306	09/04/2012 12:20	1.32	-130	6.70	0.50	0.984	22.05	0.0000
MW-306	09/05/2012 12:30	6.84	-49	6.27	0.0000	0.908	23.80	104.00
MW-306	12/18/2014 12:27	2.17	-133	6.55	0.09	1.727	13.82	5.60
MW-306	03/04/2016 14:52	2.12	-115	6.51	0.38	6.936	11.00	49.60
MW-306	03/31/2020 12:50	0.08	-100.5	6.59	0.31	0.635	12.78	0.5
MW-306	05/27/2020 10:25	2.7	-101.8	6.83	0.48	0.973	16.8	1.3
MW-306	01/27/2021 13:30	0.11	-82.3	6.91	0.43	0.858	11.8	73.2
MW-306	01/27/2021 14:40	0.11	-84	6.91	0.46	0.916	13.39	6.1
MW-306	01/27/2021 15:00	0.11	-73.1	6.86	0.45	0.911	13.17	3.3
MW-306	04/28/2021 13:30	2.73	-109.5	6.5	0.7	1.354	21.03	6.4
MW-306	04/28/2021 13:35	1.77	-98.7	6.6	0.62	1.226	16.7	2.4
MW-306	04/28/2021 13:40	1.35	-98.2	6.6	0.6	1.187	15.27	0.8
MW-306	04/28/2021 13:45	1.07	-98.1	6.59	0.59	1.181	15.32	0.7
MW-306	04/28/2021 13:50	1.21	-98.7	6.58	0.59	1.173	14.98	0.6
MW-306	04/28/2021 13:55	1.21	-98.1	6.58	0.59	1.174	14.97	0.7
MW-306	04/28/2021 14:00	1.18	-97.7	6.58	0.59	1.174	14.93	0.8
MW-306	02/22/2022 13:15	2.83	-76.4	6.53	1.14	2.211	12.94	4.6
MW-306	02/22/2022 13:20	1.87	-71.5	6.41	1.14	2.209	12.78	3.9
MW-306	02/22/2022 13:25	1.43	-70	6.38	1.14	2.203	12.63	3.7
MW-306	02/22/2022 13:30	1.98	-56.6	6.23	1.13	2.195	12.05	3
MW-306	02/22/2022 13:35	0.92	-54.8	6.21	1.13	2.19	12.07	3
MW-306	02/22/2022 13:40	0.89	-51.3	6.16	1.12	2.181	11.98	2.5
MW-306	02/22/2022 13:45	1.91	-46.2	6.11	1.12	2.169	12.02	2.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-306	02/22/2022 13:50	2.07	-30.8	5.95	1.1	2.135	11.78	2.2
MW-306	02/22/2022 13:55	1.27	-29.5	5.94	1.1	2.133	11.72	2.3
MW-306	02/22/2022 14:00	1.01	-26.6	5.92	1.1	2.132	11.64	2.3
MW-316	05/03/2012 11:15	0.64	0.9	5.79	-141.00	16.570	6.54	0.37
MW-316	05/03/2012 12:10	0.65	1.1	6.96	-159.00	14.330	6.91	0.71
MW-316	05/04/2012 12:16	0.68	1	6.87	-129.00	14.550	6.72	0.03
MW-316	01/21/2015 09:10	0.56	-72.7	6.85	0.38	0.818	7.89	19.80
MW-316	01/21/2015 09:58	3.05	-148.6	6.61	0.27	0.574	6.19	-1.10
MW-316	01/21/2015 10:11	2.37	-145.3	6.57	0.28	0.574	6.33	0.0000
MW-316R	01/15/2013 09:54	1.67	-45.3	6.45	0.4	0.79	8.3	806.4
MW-316R	01/15/2013 09:59	1.49	-60.6	6.42	0.4	0.75	9.4	808.3
MW-316R	01/15/2013 10:05	1.32	-65.6	6.39	0.4	0.79	9.5	689
MW-316R	01/15/2013 10:10	1.93	-62	6.4	0.4	0.78	9.5	613.2
MW-316R	01/15/2013 10:15	2.2	-63	6.6	0.4	0.78	9.6	542.1
MW-316R	01/15/2013 10:20	3.43	-61.3	6.46	0.4	0.78	9.6	455.8
MW-316R	01/15/2013 10:25	5.59	-62.5	6.43	0.4	0.78	9.7	360.8
MW-316R	01/15/2013 10:30	6.52	-60.2	6.42	0.4	0.78	9.7	312
MW-316R	01/15/2013 10:35	7.78	-62.7	6.4	0.4	0.79	9.7	263.8
MW-316R	01/15/2013 10:40	8.43	-64.9	6.47	0.4	0.79	9.7	244.6
MW-316R	01/15/2013 10:45	8.36	-64.6	6.48	0.4	0.78	9.7	245.9
MW-316R	01/15/2013 10:50	8.46	-63.7	6.44	0.39	0.784	9.66	230.70
MW-316R	01/15/2013 12:09	0.50	-49.9	6.40	0.38	0.775	9.88	815.70
MW-316R	01/16/2013 12:09	0.50	-49.9	6.40	0.38	0.775	9.88	815.70
MW-316R	05/14/2013 12:35	2.58	-83.3	6.67	0.3	0.59	14	1210.2
MW-316R	05/14/2013 12:40	0.78	-85.3	6.53	0.3	0.58	13.9	1154.2
MW-316R	05/14/2013 12:45	0.71	-88.5	6.46	0.3	0.58	13.8	1085
MW-316R	05/14/2013 12:50	0.52	-91.5	6.45	0.3	0.58	13.7	1128.7
MW-316R	05/14/2013 12:55	0.39	-94.4	6.4	0.3	0.57	13.3	937.4
MW-316R	05/14/2013 13:00	0.32	-96	6.43	0.3	0.57	13.5	811.8
MW-316R	05/14/2013 13:05	0.21	-98.6	6.42	0.3	0.56	13.3	550.7
MW-316R	05/14/2013 13:10	0.12	-100.3	6.44	0.3	0.56	12.9	439
MW-316R	05/14/2013 13:15	0.15	-100.4	6.43	0.3	0.56	12.8	382.5
MW-316R	05/14/2013 13:20	0.14	-101.4	6.41	0.3	0.56	12.7	289.9
MW-316R	05/14/2013 13:25	0.14	-101.5	6.41	0.3	0.57	12.6	286.6
MW-316R	05/14/2013 13:30	0.13	-101.7	6.41	0.28	0.566	12.56	260.7
MW-316R	05/14/2013 13:47	0.16	-101.8	6.45	0.28	0.567	11.81	258
MW-316R	05/15/2013 14:26	0.06	-95.3	6.47	0.28	0.571	14.24	207.9
MW-316R	01/15/2014 10:15	2.88	-45	6.70	0.14	0.429	10.30	72.60
MW-316R	01/15/2014 10:45	3.71	-58.4	6.63	0.13	0.268	11.57	38.40
MW-316R	01/15/2014 10:55	4.51	-59.1	6.66	0.13	0.269	11.59	50.70
MW-316R	09/16/2014 11:20	9.19	90.9	5.81	0.17	0.350	15.56	5.40
MW-316R	09/16/2014 12:00	11.46	77.5	5.63	0.17	0.353	17.02	18.10
MW-316R	09/16/2014 12:15	3.55	68.2	5.63	0.17	0.366	22.46	15.20
MW-316R	09/29/2014 09:35	3.93	80.3	5.39	0.13	0.277	15.72	10.80
MW-316R	09/29/2014 10:20	2.96	45.4	5.52	0.14	0.304	26.43	8.10
MW-316R	09/29/2014 10:30	3.23	42	5.52	0.14	0.291	29.25	10.00
MW-316R	10/23/2014 09:30	3.47	-7	5.70	0.30	0.665	12.04	0.0000
MW-316R	10/23/2014 10:15	1.83	-21	5.74	0.30	0.647	15.02	0.0000
MW-316R	04/13/2015 10:30	1.04	-32	6.33	0.20	0.514	20.69	0.0000
MW-316R	04/13/2015 10:46	0.51	-108	6.54	0.20	0.446	20.11	39.30
MW-316R	04/13/2015 10:55	0.61	-170	6.70	0.20	0.450	19.53	33.20
MW-316R	07/08/2015 11:50	0.0000	-59	6.37	0.10	0.266	20.75	6.30
MW-316R	07/08/2015 12:05	4.31	-59	6.36	0.10	0.263	21.14	4.70
MW-316R	04/20/2016 11:07	0.0000	-64	6.95	0.10	0.216	13.92	56.00
MW-316R	04/20/2016 11:34	0.0000	-67	7.02	0.10	0.209	14.35	54.10
MW-316R	09/15/2016 10:45	2.36	-47	6.47	0.21	0.435	21.58	19.60
MW-316R	09/15/2016 11:00	1.20	-58	6.45	0.16	0.332	22.36	183.20
MW-316R	04/07/2017 09:49	3.27	203.00	6.15	0.10	0.170	8.83	105.00
MW-316R	04/07/2017 10:25	2.12	61.00	5.98	0.10	0.200	8.6	44.60

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-316R	04/07/2017 10:45	11.89	54.00	6.01	0.10	0.205	8.9	54.00
MW-316R	01/23/2018 13:25	0.90	48.20	6.13	0.21	0.417	11.72	270.60
MW-316R	01/23/2018 13:55	2.48	-25.00	6.27	0.28	0.578	13.51	104.50
MW-316R	01/23/2018 14:10	5.09	-22.50	6.41	0.29	0.596	12.42	316.30
MW-316R	02/11/2019 10:30	7.40	163.00	7.01	0.92	0.127	11.24	433.90
MW-316R	02/11/2019 11:15	5.61	84.90	7.30	0.72	0.177	10.86	45.00
MW-316R	02/11/2019 11:30	5.69	92.50	7.30	0.72	0.178	10.86	124.20
MW-316R	08/13/2019 10:05	6.28	-95.3	6.84	NM	0.597	21.38	196.9
MW-316R	08/13/2019 10:52	5.16	-83.5	6.58	0.29	0.591	21.92	18.4
MW-316R	08/13/2019 11:07	5.46	-71.9	6.68	0.24	0.492	23.7	151.3
MW-316R	02/12/2020 13:36	7.49	166.9	6.87	0.07	0.149	11.46	11.4
MW-316R	08/21/2020 08:50	4.54	-11	7.38	0.26	0.542	21.02	24.5
MW-316R	08/21/2020 09:30	6.36	95.6	6.75	0.22	0.476	21.88	13.2
MW-316R	08/21/2020 09:40	4.27	99.6	6.74	0.22	0.464	22.03	58.6
MW-316R	02/08/2021 11:35	7.56	158.1	6.7	0.17	0.345	10.06	154.1
MW-316R	02/08/2021 12:05	1.82	2.5	6.75	0.12	0.244	11.98	14
MW-316R	02/08/2021 12:20	1.42	-32.2	6.71	0.12	0.243	12.36	206.4
MW-317R	01/22/2013 09:10	0.4	-53	6.46	0.6	1.16	5.4	191
MW-317R	01/22/2013 09:13	0.41	-52.5	6.63	0.6	1.15	5.5	182.2
MW-317R	01/22/2013 09:16	0.4	-53.5	6.55	0.6	1.16	5.7	188.5
MW-317R	01/22/2013 09:19	0.31	-53.3	6.57	0.6	1.18	4.9	149
MW-317R	01/22/2013 09:22	0.27	-58.7	6.52	0.6	1.18	4.8	130.6
MW-317R	01/22/2013 09:25	0.28	-59.5	6.52	0.6	1.19	5.1	120
MW-317R	01/22/2013 09:28	0.24	-60.3	6.5	0.6	1.19	5.1	104.1
MW-317R	01/22/2013 09:31	0.23	-61	6.49	0.6	1.2	4.8	93.2
MW-317R	01/22/2013 09:34	0.23	-60.9	6.53	0.59	1.190	4.94	95.20
MW-317R	01/22/2013 10:05	0.18	-71	6.54	0.60	1.202	8.13	32.50
MW-317R	01/23/2013 10:50	2.07	-70.6	6.55	0.53	1.065	9.42	1202.60
MW-317R	03/28/2013 09:34	8.38	-72.8	6.3	0.7	1.47	8.3	646.5
MW-317R	03/28/2013 09:38	2.76	-99.8	6.39	0.8	1.51	8.3	621.6
MW-317R	03/28/2013 09:42	1.38	-104.8	6.45	0.8	1.52	8.5	501.6
MW-317R	03/28/2013 09:46	1.27	-105.5	6.47	0.8	1.52	8.5	482.4
MW-317R	03/28/2013 09:50	1.34	-106.1	6.49	0.8	1.52	8.5	438.3
MW-317R	03/28/2013 09:54	1.32	98.1	6.5	0.8	1.52	8	423.1
MW-317R	03/28/2013 09:58	1.21	-96.7	6.51	0.8	1.52	8.2	354.7
MW-317R	03/28/2013 10:02	1.13	-95.8	6.52	0.8	1.52	8.3	234
MW-317R	03/28/2013 10:06	1.1	-95.2	6.52	0.8	1.52	8.4	201
MW-317R	03/28/2013 10:10	1.11	-94	6.53	0.8	1.52	8.3	176.1
MW-317R	03/28/2013 10:14	1.11	-94.6	6.53	0.8	1.52	8.5	147.1
MW-317R	03/28/2013 10:18	1.11	-94.4	6.53	0.8	1.51	8.5	125.5
MW-317R	03/28/2013 10:30	1.11	-94.4	6.53	0.77	1.513	8.52	125.5
MW-317R	03/28/2013 10:52	4.63	-60.9	6.45	0.72	1.436	9.49	131.8
MW-317R	03/29/2013 11:46	2	-117.1	6.58	0.71	1.416	8.93	383.5
MW-317R	01/16/2014 08:00	0.0000	59.6	6.33	0.48	0.960	10.13	740.90
MW-317R	01/16/2014 08:23	0.0000	-80.5	6.47	0.46	0.927	10.42	79.80
MW-317R	01/16/2014 08:33	0.0000	-74.6	6.36	0.42	0.936	10.34	84.60
MW-317R	08/22/2014 13:45	1.92	-6.2	6.60	0.19	0.398	22.14	30.20
MW-317R	08/22/2014 14:25	0.0000	-69.7	6.34	0.19	0.427	54.91	27.90
MW-317R	08/22/2014 14:32	0.0000	-67.3	6.33	0.19	0.428	52.87	45.40
MW-317R	09/16/2014 11:27	0.09	101.8	6.08	0.12	0.243	14.07	17.30
MW-317R	09/16/2014 11:30	0.19	163.4	5.89	0.11	0.238	15.24	17.80
MW-317R	09/17/2014 11:30	0.07	100.4	6.10	0.12	0.253	13.94	17.50
MW-317R	09/29/2014 10:36	1.17	-81.8	6.55	0.14	0.285	18.83	6.88
MW-317R	09/29/2014 10:52	4.36	51.3	6.50	0.13	0.270	11.82	12.10
MW-317R	09/29/2014 11:45	0.65	-78.1	6.54	0.14	0.285	19.73	8.00
MW-317R	10/27/2014 09:40	7.57	-8	5.89	0.20	0.526	8.39	9.90
MW-317R	10/27/2014 10:30	4.36	-41	5.90	0.20	0.495	13.73	0.0000
MW-317R	10/27/2014 11:40	4.94	-29	5.76	0.30	0.617	13.60	0.0000
MW-317R	01/29/2015 11:25	2.82	-12.8	6.80	0.01	0.023	10.67	1.70

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-317R	01/29/2015 12:10	1.15	-62.9	6.01	0.34	0.672	9.76	0.60
MW-317R	01/29/2015 12:35	1.24	-63.7	6.61	0.33	0.686	13.56	0.60
MW-317R	07/08/2015 11:50	0	-159	6.96	0.4	0.759	22.26	1.2
MW-317R	07/08/2015 12:05	0	-165	6.79	0.4	0.766	24.45	33.3
MW-317R	04/18/2016 14:12	0.0000	-125	7.62	0.20	0.318	16.38	181.00
MW-317R	04/18/2016 14:43	0.72	-143	7.92	0.20	0.320	22.94	183.00
MW-317R	09/20/2016 12:15	2.04	-104.9	6.82	0.23	0.488	23.17	26.20
MW-317R	09/20/2016 12:30	1.44	-102.9	6.79	0.21	0.443	22.70	880.90
MW-317R	04/10/2017 12:15	2.60	155.00	7.62	0.10	0.257	11.53	173.00
MW-317R	04/10/2017 13:00	3.64	-61.00	7.43	0.10	0.257	13.65	11.20
MW-317R	04/10/2017 13:15	2.13	-17.00	7.32	0.10	0.265	12.57	363.00
MW-317R	01/16/2018 13:35	4.76	108.10	7.82	0.32	0.645	9.3	51.90
MW-317R	01/16/2018 13:40	0.26	-109.20	6.78	0.33	0.658	12.31	0.0000
MW-317R	01/16/2018 14:00	3.82	87.90	7.77	0.32	0.647	9.2	44.00
MW-317R	02/19/2019 13:35	0.86	76.20	7.28	2.54	4.772	13.84	459.80
MW-317R	02/19/2019 14:15	1.38	108.80	7.38	3.77	5.821	11.35	384.50
MW-317R	02/19/2019 14:35	1.42	115.20	7.42	3.71	5.966	11.37	627.10
MW-317R	05/21/2019 13:35	1.49	121.3	7.39	NM	2.609	14.02	189.6
MW-317R	05/21/2019 14:05	3.75	103.4	7.8	1.46	2.808	13.86	273.2
MW-317R	08/07/2019 10:05	0.18	86	7.46	NM	2.089	21.84	610.9
MW-317R	08/07/2019 10:10	0.24	104.1	7.46	NM	2.101	22.9	524.7
MW-317R	08/07/2019 10:15	0.24	113.9	7.46	NM	2.11	23.47	497.8
MW-317R	08/07/2019 10:20	0.23	121.5	7.46	NM	2.117	24.14	441.2
MW-317R	08/07/2019 10:25	0.21	131.3	7.46	NM	2.123	24.66	377.1
MW-317R	08/07/2019 10:30	0.2	135.9	7.45	NM	2.121	24.79	352.2
MW-317R	08/07/2019 10:35	0.15	-138.8	7.45	NM	2.121	24.77	335.7
MW-317R	08/07/2019 10:40	0.15	140.5	7.44	NM	2.12	24.56	234.4
MW-317R	08/07/2019 10:45	0.15	141	7.43	NM	2.12	24.64	223.6
MW-317R	08/07/2019 10:50	0.14	142.9	7.42	NM	2.12	25.05	105.8
MW-317R	08/07/2019 13:30	0.14	142.9	7.42	NM	2.12	25.05	105.8
MW-317R	08/07/2019 14:15	1.25	142.9	228.9	1.07	2.108	26.56	232.2
MW-317R	08/07/2019 14:25	2.25	0.2	7.38	1.03	2.017	22.39	1317.9
MW-317R	11/04/2019 12:25	0.75	-143.9	7.42	NM	3.716	15.49	1220.8
MW-317R	11/04/2019 12:30	0.52	-89.2	7.37	NM	3.344	14.85	481.3
MW-317R	11/04/2019 12:35	0.44	-67.5	7.35	NM	3.178	14.74	331
MW-317R	11/04/2019 12:40	0.33	-57.2	7.35	NM	3.164	14.68	298.3
MW-317R	11/04/2019 12:45	0.25	-52.9	7.34	NM	3.081	15.11	233.4
MW-317R	11/04/2019 12:50	0.19	-47.6	7.34	NM	3.06	16.01	92.3
MW-317R	11/04/2019 12:55	0.17	-45.9	7.34	NM	3.032	16.55	69.6
MW-317R	11/04/2019 13:00	0.16	-46.6	7.34	NM	3.034	16.84	52.5
MW-317R	11/04/2019 13:05	0.21	-45.6	7.34	NM	3.03	17.02	39.9
MW-317R	11/04/2019 13:10	0.32	-44.9	7.33	NM	3.012	17.31	31.9
MW-317R	11/04/2019 13:55	2.28	-130.1	7.45	1.54	2.953	18.36	1183.9
MW-317R	11/04/2019 14:10	3.64	-62.4	7.4	1.51	2.895	18.39	265.9
MW-317R	05/13/2020 10:45	0.63	-13.4	7.34	NM	0.783	11.73	99
MW-317R	05/13/2020 11:11	3.98	85.4	7.51	0.4	0.803	12.12	142.4
MW-317R	08/13/2020 10:35	2.54	51.9	7.68	0.45	0.917	22.36	17.6
MW-317R	08/13/2020 10:40	2.63	43.2	7.57	0.45	0.917	22.1	18.3
MW-317R	08/13/2020 10:45	2.6	45.8	7.49	0.45	0.919	22.47	18.9
MW-317R	08/13/2020 10:50	1.24	51.6	7.36	0.46	0.929	21.11	73.3
MW-317R	08/13/2020 10:55	1.21	52.6	7.36	0.46	0.929	21.05	75.7
MW-317R	08/13/2020 11:00	1.18	54.4	7.31	0.46	0.927	21.06	80.5
MW-317R	08/13/2020 11:05	1.21	35.5	7.3	0.44	0.894	21.04	62.6
MW-317R	08/13/2020 11:10	1.21	31.3	7.3	0.44	0.894	21.04	61.3
MW-317R	08/13/2020 11:15	1.22	27	7.3	0.44	0.894	21.06	60.9
MW-317R	08/13/2020 11:20	1.21	21.7	7.3	0.44	0.894	21.07	59.8
MW-317R	08/13/2020 11:21	1.21	21.7	7.3	0.44	0.894	21.07	59.8
MW-317R	08/13/2020 12:00	1.03	18.5	7.04	0.44	0.994	20.8	40.7
MW-317R	08/13/2020 12:10	2.75	57.8	7.15	0.43	0.909	21.16	44.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-317R	11/20/2020 09:20	11.39	87.2	7.29	0.52	1.041	15.01	137.7
MW-317R	11/20/2020 09:25	10.42	87.2	7.41	0.53	1.064	14.8	140.5
MW-317R	11/20/2020 09:30	9.66	83.9	7.49	0.54	1.09	14.78	131.4
MW-317R	11/20/2020 09:35	9	52.3	7.5	0.54	1.077	14.76	126.3
MW-317R	11/20/2020 09:40	8.37	46.1	7.48	0.47	0.946	14.7	125.6
MW-317R	11/20/2020 09:45	8.01	46	7.48	0.47	0.943	14.7	106.7
MW-317R	11/20/2020 09:50	7.2	41.2	7.47	0.47	0.953	14.81	89.8
MW-317R	11/20/2020 09:55	6.48	33.3	7.48	0.48	0.959	14.83	74.6
MW-317R	11/20/2020 10:00	5.36	24.7	7.48	0.48	0.963	14.97	56.6
MW-317R	11/20/2020 10:05	4.96	21.4	7.47	0.48	0.961	14.93	50.8
MW-317R	11/20/2020 10:45	16.62	8.7	7.67	0.41	0.827	15.14	161.4
MW-317R	11/20/2020 11:05	9.7	27.3	7.6	0.37	0.756	14.36	723
MW-317R	02/11/2021 10:45	4.11	190.1	7.38	0.47	0.962	9.54	224.2
MW-317R	02/11/2021 10:50	1.54	359.3	7.18	0.44	0.894	8.89	321.7
MW-317R	02/11/2021 10:55	0.82	184.5	7.27	0.43	0.87	9.02	508.3
MW-317R	02/11/2021 11:00	0.97	170.1	7.33	0.43	0.864	8.85	514.8
MW-317R	02/11/2021 11:05	1.16	163.9	7.39	0.43	0.868	8.37	488.9
MW-317R	02/11/2021 11:10	1.35	157.4	7.41	0.43	0.871	8.36	375.3
MW-317R	02/11/2021 11:15	1.26	150.2	7.45	0.44	0.894	8.51	290.2
MW-317R	02/11/2021 11:20	1.43	146.8	7.46	0.46	0.926	8.19	247.4
MW-317R	02/11/2021 11:25	1.4	147.9	7.45	0.47	0.947	8.31	238.8
MW-317R	02/11/2021 11:30	1.37	146	7.47	0.47	0.954	8.57	221.5
MW-317R	02/11/2021 12:05	2.06	-9.4	7.33	0.65	1.298	10.98	923.8
MW-317R	02/11/2021 12:25	6.03	32	7.51	0.57	1.143	9.33	1189.5
MW-317R	04/29/2021 14:10	2.2	109.2	7.39	0.66	1.302	16.62	564.1
MW-317R	04/29/2021 14:15	1.29	92	7.31	0.66	1.295	15.02	701.8
MW-317R	04/29/2021 14:20	1.36	76.8	7.32	0.65	1.286	14.04	906.9
MW-317R	04/29/2021 14:25	1.46	73.9	7.33	0.65	1.285	13.85	903.8
MW-317R	04/29/2021 14:30	1.69	61.1	7.33	0.65	1.287	13.62	895.5
MW-317R	04/29/2021 14:35	1.24	59	7.33	0.66	1.308	13.58	1449.4
MW-317R	04/29/2021 14:40	1.33	61.8	7.33	0.67	1.33	13.9	1480.4
MW-317R	04/29/2021 14:45	1.67	61.5	7.32	0.68	1.355	13.86	1374.2
MW-317R	04/29/2021 14:50	1.31	56.6	7.31	0.7	1.379	13.51	1180.4
MW-317R	04/29/2021 14:55	1.37	42.5	7.28	0.72	1.419	13.21	949.2
MW-317R	08/19/2021 12:30	3.48	205.3	7.09	0.95	1.747	21.38	260.2
MW-317R	08/19/2021 12:35	3.01	205.5	7.07	1.01	1.97	21.29	231.5
MW-317R	08/19/2021 12:40	2.53	204.8	7.03	1.08	2.113	21.11	187
MW-317R	08/19/2021 12:45	2.26	199.8	7.01	1.11	1.995	21.02	176.4
MW-317R	08/19/2021 12:50	2.08	193.2	6.98	1.13	2.199	20.97	160.1
MW-317R	02/14/2022 14:20	12.6	17.8	7.84	0.37	0.764	5.54	809.6
MW-317R	02/14/2022 14:25	12.14	17	7.76	0.36	0.744	5.51	839.4
MW-317R	02/14/2022 14:30	11.85	15.3	7.62	0.35	0.723	5.49	834.5
MW-317R	02/14/2022 14:35	11.63	16.3	7.57	0.35	0.713	5.82	811.3
MW-317R	02/14/2022 14:40	11.73	15.9	7.57	0.35	0.708	5.93	778.4
MW-317R	02/14/2022 14:45	11.69	16.2	7.62	0.35	0.708	6.03	713.5
MW-317R	02/14/2022 14:50	11.54	18.6	7.59	0.34	0.705	6.41	687.8
MW-317R	02/14/2022 14:55	11.54	19.9	7.6	0.35	0.706	6.36	649.6
MW-317R	02/14/2022 15:00	11.82	23.1	7.62	0.34	0.7	6.51	393.8
MW-317R	02/14/2022 15:05	11.7	28.1	7.57	0.34	0.7	6.05	343.2
MW-318R	01/07/2013 13:00	3.09	26.8	6.83	0.4	0.81	9.6	462.7
MW-318R	01/07/2013 13:05	2.52	-12.2	6.75	0.4	0.83	10.3	785.1
MW-318R	01/07/2013 13:10	1.83	-15.5	6.73	0.4	0.89	10.4	859.4
MW-318R	01/07/2013 13:15	1.06	-25.7	6.68	0.5	0.94	10.2	460.2
MW-318R	01/07/2013 13:20	0.91	-17.5	6.7	0.4	0.85	10.1	179.1
MW-318R	01/07/2013 13:25	0.74	-21.4	6.68	0.4	0.85	10.2	142.2
MW-318R	01/07/2013 13:30	0.68	-22.5	6.71	0.4	0.86	10.3	140
MW-318R	01/07/2013 13:35	0.64	-24.1	6.72	0.4	0.86	10.2	138.8
MW-318R	01/07/2013 13:40	0.61	-24.9	6.72	0.4	0.87	10.3	137.5
MW-318R	01/07/2013 13:45	0.60	-26	6.69	0.44	0.877	10.46	142.10

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-318R	01/08/2013 14:20	1.11	-19.3	6.76	0.46	0.926	8.21	899.10
MW-318R	05/06/2013 13:10	4.94	-94.4	6.55	1.1	2.2	17.9	251.8
MW-318R	05/06/2013 13:15	4.99	-93.1	5	1.1	2.19	17.5	189.6
MW-318R	05/06/2013 13:20	4.73	-96.3	6.54	1.1	2.19	18.5	173.5
MW-318R	05/06/2013 13:25	4.69	-97.1	6.55	1.1	2.16	20.1	184.9
MW-318R	05/06/2013 13:30	4.71	-93.1	6.55	1.1	2.19	18.7	154.5
MW-318R	05/06/2013 13:35	4.61	-91.3	6.55	1.1	2.16	17.7	133.1
MW-318R	05/06/2013 13:40	4.54	-91.3	6.54	1.1	2.15	17.5	126.5
MW-318R	05/06/2013 13:45	447	-90.7	6.54	1.1	2.13	17.4	118.6
MW-318R	05/16/2013 13:45	4.47	-90.7	6.54	1.09	2.133	17.38	118.6
MW-318R	05/16/2013 14:02	4.03	-83.5	6.5	1.01	1.965	12.47	43.6
MW-318R	05/17/2013 14:31	4.77	-94.5	6.6	0.97	1.903	12.96	993.4
MW-318R	07/08/2015 10:42	8.18	-114	12.48	4.1	7.41	21.24	800
MW-318RR	04/19/2016 14:30	2.21	-124	6.64	0.90	1.840	14.39	4.40
MW-318RR	04/19/2016 14:57	4.18	-135	6.75	0.90	1.820	17.19	58.60
MW-318RR	09/20/2016 10:15	0.64	104.1	6.85	0.78	1.557	24.66	14.90
MW-318RR	09/20/2016 10:30	1.01	-69.8	6.84	0.69	1.383	22.21	601.30
MW-318RR	04/12/2017 12:20	6.73	-93.00	7.46	0.10	0.228	13.42	62.20
MW-318RR	04/12/2017 13:00	0.62	-21.00	6.52	0.10	0.230	11.28	11.70
MW-318RR	04/12/2017 13:10	0.34	-7.00	6.46	0.10	0.253	10.27	577.00
MW-318RR	01/18/2018 10:05	6.62	44.90	6.59	0.45	0.912	8.12	26.40
MW-318RR	01/18/2018 11:00	4.35	41.10	6.53	0.51	1.121	9.02	20.80
MW-318RR	01/18/2018 11:20	5.15	50.30	6.62	0.51	1.136	8.94	112.40
MW-318RR	04/02/2018 10:00	13.42	98.60	7.94	0.33	0.673	4.7	23.70
MW-318RR	04/02/2018 11:00	9.36	81.80	9.64	0.31	1.418	6.57	976.10
MW-318RR	04/02/2018 11:10	9.20	82.40	9.60	0.31	1.397	6.55	992.80
MW-318RR	02/19/2019 13:35	0.53	12.10	7.51	1.44	2.772	9.26	26.40
MW-318RR	02/19/2019 14:00	0.59	-19.90	7.55	1.42	2.742	7.78	41.40
MW-318RR	02/19/2019 14:15	3.17	-29.70	7.74	1.26	2.452	6.46	1243.90
MW-318RR	05/21/2019 10:00	1.21	120.7	6.43	NM	1.692	13.98	55.1
MW-318RR	05/21/2019 10:35	1.97	153.4	6.85	0.7	1.384	14.88	31.4
MW-318RR	08/07/2019 10:05	0.75	-100.6	6.94	NM	2.108	21.91	220.1
MW-318RR	08/07/2019 10:10	0.54	-35.5	6.6	NM	2.058	22.06	174.4
MW-318RR	08/07/2019 10:15	0.48	-97.2	6.54	NM	2.063	22.32	97
MW-318RR	08/07/2019 10:20	0.47	-98	6.53	NM	2.085	22.28	71.3
MW-318RR	08/07/2019 10:25	0.44	-98.7	6.52	NM	2.115	22.41	48.3
MW-318RR	08/07/2019 10:30	0.4	-98.1	6.52	NM	2.153	22.13	34.2
MW-318RR	08/07/2019 10:35	0.4	-96.3	6.51	NM	2.201	21.75	23.3
MW-318RR	08/07/2019 10:40	0.38	-95.2	6.51	NM	2.234	21.79	18.5
MW-318RR	08/07/2019 10:45	0.37	-93.2	6.5	NM	2.285	21.97	15.6
MW-318RR	08/07/2019 10:50	0.36	-93	6.5	NM	2.331	22.05	12.7
MW-318RR	08/07/2019 13:25	0.36	-93	6.5	NM	2.331	22.05	12.7
MW-318RR	08/07/2019 13:52	1.54	-63	6.56	2.38	4.456	22.96	40.4
MW-318RR	08/07/2019 14:18	1.22	-59	6.52	1.68	3.205	21.39	1317
MW-318RR	11/04/2019 12:30	4.9	67.2	7.52	NM	1.892	16.91	500.6
MW-318RR	11/04/2019 12:35	4.18	73.3	7.4	NM	1.93	17.05	344.5
MW-318RR	11/04/2019 12:40	3.89	77.2	7.36	NM	1.905	17.01	244.2
MW-318RR	11/04/2019 12:45	3.32	78.4	7.3	NM	1.778	16.87	185.4
MW-318RR	11/04/2019 12:50	2.48	78.8	7.21	NM	1.575	16.99	163.1
MW-318RR	11/04/2019 12:55	1.62	78.3	7.1	NM	1.344	17.07	145.6
MW-318RR	11/04/2019 13:00	0.96	78	7.01	NM	1.193	16.97	114
MW-318RR	11/04/2019 13:05	0.78	77.9	6.95	NM	1.166	17	88.1
MW-318RR	11/04/2019 13:10	0.7	76.7	6.92	NM	1.135	17.1	70.8
MW-318RR	11/04/2019 13:15	0.65	74.4	6.87	NM	1.141	17.01	56.3
MW-318RR	11/04/2019 13:55	3.18	112.3	6.83	0.66	1.31	15.94	78.3
MW-318RR	11/04/2019 14:10	2.55	103.4	6.78	0.56	1.124	16.81	139.1
MW-318RR	05/13/2020 13:05	1.12	42.9	6.65	NM	1.501	12.93	10.4
MW-318RR	05/13/2020 13:28	3.18	-0.7	6.89	0.6	1.196	14.6	48.3
MW-318RR	11/20/2020 12:45	1.41	65.1	6.77	0.59	1.185	15.68	14.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-318RR	11/20/2020 13:15	5.79	80.5	6.92	0.58	1.157	14.99	336
MW-318RR	02/11/2021 13:50	7.69	152.7	7.52	0.8	1.591	6.58	95.1
MW-318RR	02/11/2021 14:30	6.13	-45.5	7.31	0.75	1.484	8.96	437.8
MW-318RR	02/11/2021 14:45	6.63	-40.1	7.43	0.78	1.54	9.08	257.2
MW-318RR	04/29/2021 11:55	2.13	115.5	6.98	0.57	1.144	14.43	1522.4
MW-318RR	04/29/2021 12:00	1.75	115.5	6.97	0.57	1.137	14.57	1522.6
MW-318RR	04/29/2021 12:05	1.45	115.2	6.94	0.57	1.137	15.1	1530.5
MW-318RR	04/29/2021 12:10	1.63	115.3	6.93	0.57	1.139	15.43	1534.7
MW-318RR	04/29/2021 12:15	1.68	116	6.91	0.57	1.135	15.94	1539
MW-318RR	04/29/2021 12:20	1.62	116.2	6.91	0.57	1.133	16	1542.1
MW-318RR	04/29/2021 12:25	1.56	116.8	6.88	0.56	1.125	15.94	1539.9
MW-318RR	03/01/2022 09:30	10.88	141.2	7.26	0.29	0.593	5.95	1088.5
MW-318RR	03/01/2022 09:35	10.36	141	7.21	0.29	0.595	5.91	1127
MW-318RR	03/01/2022 09:40	10.28	134.1	7.24	0.29	0.594	5.74	1183.4
MW-318RR	03/01/2022 09:45	10.2	132.7	7.22	0.29	0.593	5.33	1201.9
MW-318RR	03/01/2022 09:50	9.93	131.6	7.22	0.28	0.58	5.29	1201.6
MW-318RR	03/01/2022 09:55	9.67	132.7	7.23	0.28	0.575	5.39	1202.1
MW-318RR	03/01/2022 10:00	9.38	133.9	7.21	0.27	0.567	5.67	1175.2
MW-318RR	03/01/2022 10:05	9.25	135.3	7.21	0.27	0.56	5.9	1033.1
MW-318RR	03/01/2022 10:10	8.91	137.8	7.19	0.27	0.547	5.97	799.9
MW-318RR	03/01/2022 10:15	8.43	138.2	7.16	0.26	0.528	6.07	760.2
MW-319	10/23/2014 09:40	3.26	200	6.46	0.40	0.813	9.89	0.0000
MW-319	10/23/2014 10:35	2.59	132	6.69	0.40	0.829	11.33	0.0000
MW-319	10/23/2014 10:40	2.64	140	6.67	0.40	0.823	11.54	0.0000
MW-319R	01/17/2013 09:06	23.35	-28.7	6.84	0.3	0.63	10.6	1122.5
MW-319R	01/17/2013 09:10	19.91	-38.3	6.86	0.3	0.64	11.2	913.9
MW-319R	01/17/2013 09:14	17.25	-42	6.89	0.3	0.64	11.2	672.3
MW-319R	01/17/2013 09:18	15.24	-44	6.91	0.3	0.64	11.3	485.5
MW-319R	01/17/2013 09:22	136.2	-43.3	6.93	0.3	0.64	11.2	355.7
MW-319R	01/17/2013 09:26	12.47	-43.7	6.92	0.3	0.64	11.4	275
MW-319R	01/17/2013 09:30	11.44	-44.1	6.91	0.3	0.64	11.7	259
MW-319R	01/17/2013 09:34	11.24	-38.7	6.95	0.3	0.64	11.8	244.7
MW-319R	01/17/2013 09:38	10.29	-28.7	6.94	0.3	0.64	12	199.2
MW-319R	01/17/2013 09:42	10.08	-27	6.94	0.3	0.64	11.9	190.7
MW-319R	01/17/2013 09:46	9.84	-24.8	6.96	0.3	0.64	11.7	178.9
MW-319R	01/17/2013 09:50	9.65	-23	6.93	0.3	0.64	11.7	165.3
MW-319R	01/17/2013 09:54	9.46	-21.1	6.94	0.3	0.64	12	162.4
MW-319R	01/17/2013 09:58	9.45	-20	6.94	0.31	0.641	11.97	159.30
MW-319R	01/17/2013 11:13	6.25	17.2	7.07	0.31	0.622	10.25	432.40
MW-319R	01/18/2013 11:13	6.25	17.2	7.07	0.31	0.622	10.25	432.40
MW-319R	05/14/2013 12:30	2.36	-80.4	7	0.3	0.49	15.6	13.2
MW-319R	05/14/2013 12:35	1.08	-37	6.71	0.3	0.43	14.9	19.2
MW-319R	05/14/2013 12:40	1.43	-39	6.72	0.3	0.43	14.8	18.9
MW-319R	05/14/2013 12:45	1.28	-38.1	6.74	0.3	0.43	14.9	19.8
MW-319R	05/14/2013 12:50	1.06	-38.5	6.72	0.3	0.44	15.3	19.7
MW-319R	05/14/2013 12:55	0.8	-18.3	6.73	0.3	0.44	15	13.8
MW-319R	05/14/2013 13:00	0.75	-18.5	6.74	0.3	0.44	15	12.9
MW-319R	05/14/2013 13:05	0.65	-19.5	6.74	0.3	0.45	14.8	14.1
MW-319R	05/14/2013 13:10	0.54	-20.5	6.72	0.27	0.45	14.7	14.9
MW-319R	05/14/2013 13:25	0.25	-12.5	6.78	0.28	0.453	13.23	124.4
MW-319R	05/15/2013 13:40	2.12	35.4	7.05	0.3	0.489	14.28	1232.9
MW-319R	01/15/2014 09:05	3.62	-84.7	6.20	0.24	0.489	8.45	414.60
MW-319R	01/15/2014 09:33	0.89	-133.4	6.66	0.23	0.464	12.36	113.00
MW-319R	01/15/2014 09:54	0.91	-135.1	6.71	0.23	0.465	12.40	112.70
MW-319R	08/22/2014 11:05	3.81	67.2	7.97	0.32	0.680	18.51	1.20
MW-319R	08/22/2014 11:50	0.50	48.5	6.58	0.30	0.637	41.89	7.40
MW-319R	08/22/2014 12:00	0.49	49.1	6.60	0.31	0.645	42.30	6.20
MW-319R	09/16/2014 10:05	3.46	88.1	7.37	0.16	0.329	9.09	87.90
MW-319R	09/16/2014 10:30	NM	NM	NM	NM	NM	20.63	NM

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-319R	09/16/2014 10:55	2.57	54	7.67	0.17	0.346	NM	96.80
MW-319R	09/16/2014 11:00	3.12	54.6	7.58	0.17	0.354	24.43	76.20
MW-319R	09/29/2014 09:40	4.11	116.8	6.74	0.26	0.554	34.30	0.0000
MW-319R	09/29/2014 10:20	1.70	34.6	6.74	0.26	0.538	23.13	0.0000
MW-319R	09/29/2014 10:35	1.33	24.4	6.85	0.26	0.537	25.63	1.30
MW-319R	01/21/2015 08:55	11.11	39.3	7.18	0.26	0.518	8.91	5.00
MW-319R	01/21/2015 09:40	3.28	90.2	6.69	0.16	0.329	11.79	49.70
MW-319R	01/21/2015 10:00	2.16	100.5	6.68	0.16	0.330	6.95	54.10
MW-319R	05/07/2015 14:00	0.55	-25	6.89	0.20	0.432	18.23	0.0000
MW-319R	07/08/2015 11:00	0.0000	161	7.02	0.10	0.182	19.23	20.30
MW-319R	07/08/2015 11:10	0.0000	141	6.77	0.10	0.182	20.10	119.00
MW-319R	04/14/2016 13:25	0.0000	102	7.51	0.10	0.178	15.64	0.0000
MW-319R	04/14/2016 14:05	3.00	9.5	7.66	0.10	0.178	15.45	0.0000
MW-319R	09/14/2016 15:05	4.12	66	6.93	0.33	0.674	27.92	192.20
MW-319R	09/14/2016 15:15	4.63	59.6	6.88	0.27	0.562	24.88	987.40
MW-319R	04/07/2017 08:45	5.12	338.00	6.03	0.10	0.185	10.19	52.20
MW-319R	04/07/2017 09:25	5.01	299.00	6.39	0.10	0.165	9.2	127.00
MW-319R	04/07/2017 09:45	3.25	291.00	6.44	0.10	0.157	9.03	386.00
MW-319R	04/04/2018 12:30	14.47	83.00	8.15	0.12	0.250	8.59	21.00
MW-319R	04/04/2018 13:15	14.75	121.70	8.25	0.12	0.244	8.92	665.70
MW-319R	04/04/2018 13:20	14.62	115.90	8.29	0.12	0.251	8.98	692.60
MW-319R	02/21/2019 12:25	5.62	63.30	8.66	0.20	0.427	10.52	147.50
MW-319R	02/21/2019 13:10	1.08	70.10	7.32	0.19	0.392	11.7	130.10
MW-319R	02/21/2019 13:25	6.57	87.60	7.49	0.18	0.377	11.17	1112.20
MW-319R	08/13/2019 10:15	2.5	61.3	6.63	NM	0.247	21.95	18.3
MW-319R	08/13/2019 11:00	2.65	-24.7	6.57	0.14	0.288	20.98	12.2
MW-319R	08/13/2019 11:20	3.85	-19.3	6.68	0.14	0.289	20.83	49.5
MW-319R	02/11/2020 14:57	1.11	79.5	6.66	0.18	0.378	13.04	184.7
MW-319R	08/21/2020 10:00	7.03	78.6	7.52	0.16	0.338	21.76	35.1
MW-319R	08/21/2020 10:40	4.9	111.9	6.4	0.17	0.355	21.58	13
MW-319R	08/21/2020 10:50	4.71	115.3	6.4	0.17	0.349	22.12	30.1
MW-319R	01/28/2021 12:30	6.4	187.9	7.43	0.2	0.418	11.32	54.6
MW-319R	01/28/2021 13:05	3.98	-113.6	7.09	0.22	0.448	8.95	345.8
MW-319R	01/28/2021 13:25	4.25	-73.8	6.9	0.22	0.446	11.32	500.4
MW-319R	08/19/2021 14:25	3.54	-50.2	6.4	0.29	0.597	21.93	100.8
MW-319R	08/19/2021 14:30	2.04	-36.7	6.11	0.28	0.531	20.93	70
MW-319R	08/19/2021 14:35	1.71	-42.3	6.11	0.28	0.583	20.98	47.5
MW-319R	08/19/2021 14:40	1.49	-75.2	6.22	0.29	0.594	21.04	33.2
MW-319R	08/19/2021 14:45	1.19	-83.2	6.28	0.27	0.509	21.1	99.7
MW-319R	08/19/2021 14:50	1.15	-82.5	6.29	0.26	0.473	21.09	96
MW-319R	08/19/2021 14:55	1	-84.2	6.28	0.24	0.503	20.92	77.5
MW-319R	08/19/2021 15:00	0.93	-81	6.25	0.24	0.459	20.83	62.9
MW-319R	08/19/2021 15:05	0.82	-79.1	6.24	0.24	0.455	20.87	44.8
MW-319R	08/19/2021 15:10	0.78	-81.6	6.27	0.24	0.458	21.19	46.1
MW-319R	02/28/2022 10:50	2.24	-97.9	6.45	0.25	0.513	6.66	59
MW-319R	02/28/2022 10:55	0.87	-105.7	6.39	0.25	0.513	7.53	22.2
MW-319R	02/28/2022 11:00	0.76	-114.4	6.37	0.25	0.512	7.12	16.3
MW-319R	02/28/2022 11:05	0.59	-119.2	6.36	0.24	0.504	7.4	26.3
MW-319R	02/28/2022 11:10	0.54	-122.3	6.35	0.24	0.493	7.45	54.9
MW-319R	02/28/2022 11:15	0.5	-121	6.34	0.23	0.48	7.58	56.7
MW-319R	02/28/2022 11:20	0.49	-117.2	6.32	0.22	0.477	7.61	55.1
MW-319R	02/28/2022 11:25	0.49	-115.3	6.32	0.22	0.473	7.58	53.6
MW-321	01/07/2013 08:56	3.25	64.2	7.12	0.20	0.421	13.10	86.50
MW-321	01/07/2013 09:51	1.99	11.4	7.14	0.24	0.495	13.35	150.50
MW-321	01/08/2013 10:11	2.48	3.7	7.10	0.24	0.494	11.81	1459.20
MW-321	05/14/2013 09:43	4.14	31	6.61	0.35	0.707	10.97	150.3
MW-321	05/14/2013 10:31	7.45	-1.3	6.72	0.33	0.665	11.11	262
MW-321	05/15/2013 10:56	4.86	-1.7	6.79	0.33	0.666	13.07	1277
MW-321	01/14/2014 14:22	1.88	104.1	7.24	0.46	0.961	12.06	72.80

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-321	01/14/2014 14:57	3.06	-28.3	7.05	0.47	0.948	11.92	192.30
MW-321	01/14/2014 15:07	3.36	-27.3	7.02	0.47	0.951	11.68	1759.30
MW-321	10/21/2014 13:10	5.67	-96	7.19	0.40	0.823	22.07	32.20
MW-321	10/21/2014 14:16	3.91	-79	7.13	0.40	0.814	22.28	40.00
MW-321	10/21/2014 14:26	2.98	-79	7.14	0.40	0.809	22.50	42.70
MW-321	01/20/2015 10:05	10.69	97	7.81	0.09	0.117	13.93	263.50
MW-321	01/20/2015 11:05	3.82	128.5	7.08	0.10	0.200	13.14	119.30
MW-321	01/20/2015 11:16	3.26	130.4	7.05	0.09	0.193	13.17	241.30
MW-321	07/08/2015 09:30	4.01	202	6.54	0.20	0.389	16.65	227.00
MW-321	07/08/2015 09:40	6.40	195	6.60	0.20	0.384	16.66	138.00
MW-321	12/04/2015 10:37	3.85	480	6.62	0.03	0.642	18.10	47.90
MW-321	12/04/2015 11:32	1.97	-41	7.17	0.05	0.983	18.18	1255.20
MW-321	04/20/2016 11:57	1.93	119	6.92	0.30	0.657	13.70	909.00
MW-321	04/20/2016 12:19	1.22	118	6.90	0.30	0.647	16.15	796.00
MW-321	09/13/2016 13:05	1.01	48.1	6.93	0.54	1.665	23.65	15.90
MW-321	09/13/2016 13:25	1.12	56.9	6.86	0.56	1.678	22.13	12.30
MW-321	06/02/2017 10:20	3.94	175.00	6.93	0.05	1.019	16.02	24.30
MW-321	06/02/2017 15:28	3.17	138.00	8.06	0.07	1.405	14.67	3088.40
MW-321	01/16/2018 09:50	4.92	78.90	7.21	0.26	0.531	11.83	77.70
MW-321	01/16/2018 10:55	4.88	93.90	7.50	0.35	0.720	10.65	48.70
MW-321	01/16/2018 11:20	3.88	121.80	7.15	0.28	0.572	10.84	451.90
MW-321	02/21/2019 10:20	10.96	167.80	6.31	0.12	0.113	10.4	46.90
MW-321	02/21/2019 12:15	8.21	114.80	7.27	0.10	0.122	9.69	169.90
MW-321	02/21/2019 12:30	8.71	118.20	7.41	0.10	0.129	9.82	222.50
MW-321	08/20/2019 10:05	4.4	97.3	7.3	NM	0.08	22.27	169.5
MW-321	08/20/2019 10:10	4.12	141.5	6.06	NM	0.079	21.94	154.4
MW-321	08/20/2019 10:15	3.98	129.8	6.16	NM	0.079	21.82	164.4
MW-321	08/20/2019 10:20	3.85	112.8	6.42	NM	0.08	21.85	138.1
MW-321	08/20/2019 10:25	3.82	105.2	6.53	NM	0.081	21.81	123.8
MW-321	08/20/2019 10:30	3.73	102.2	6.56	NM	0.084	21.8	101.3
MW-321	08/20/2019 10:35	3.49	90.2	6.71	NM	0.089	21.88	91.6
MW-321	08/20/2019 10:40	3.36	91.3	6.71	NM	0.094	21.83	89.6
MW-321	08/20/2019 10:45	3.07	86	6.79	NM	0.102	21.91	78.8
MW-321	08/20/2019 10:50	2.99	83.3	6.72	NM	0.106	21.87	71.5
MW-321	08/20/2019 10:51	2.99	83.3	6.72	NM	0.106	21.87	71.5
MW-321	08/20/2019 12:35	3.39	68.8	7.32	0.07	0.16	22.42	72.4
MW-321	08/20/2019 12:55	4.09	93	6.57	0.06	0.128	22.13	182.6
MW-329	04/23/2012 10:25	1.40	-59	6.60	NM	3.52	13.2	15.5
MW-329	04/23/2012 10:28	0.58	-63.3	6.40	NM	9.60	13.0	12.3
MW-329	04/23/2012 10:31	0.56	-67.3	6.36	NM	13.34	12.6	10.3
MW-329	04/23/2012 10:34	0.54	-70.4	6.38	NM	13.55	12.5	11.5
MW-329	04/23/2012 10:37	0.53	-72.2	6.39	NM	14.14	12.5	10.2
MW-329	04/23/2012 10:40	0.50	-73.2	6.40	NM	13.88	12.5	8.7
MW-329	04/23/2012 10:43	0.49	-77.2	6.42	NM	13.37	12.5	10.2
MW-329	04/23/2012 10:46	0.49	-78.6	6.42	NM	13.17	12.4	10.0
MW-329	04/23/2012 10:49	0.49	-81.2	6.41	NM	13.39	12.3	9.5
MW-329	04/23/2012 10:57	0.49	-86.1	6.42	NM	12.650	12.39	8.80
MW-329	04/23/2012 11:10	0.52	-82.02	6.43	NM	12.290	12.27	2.90
MW-329	04/24/2012 11:24	2.64	-71	6.45	NM	11.620	11.40	6.50
MW-329	06/21/2012 08:34	1.59	-115	6.37	12.6	21.20	26.0	37.8
MW-329	06/21/2012 09:00	1.33	-118	6.39	12.0	20.10	26.1	27.3
MW-329	06/21/2012 09:03	1.18	-120	6.40	11.8	19.80	26.2	23.6
MW-329	06/21/2012 09:06	1.08	-121	6.41	11.6	19.60	25.9	21.6
MW-329	06/21/2012 09:09	0.93	-123	6.41	11.3	19.10	25.9	19.5
MW-329	06/21/2012 09:12	0.84	-123	6.42	10.9	18.50	26.3	17.2
MW-329	06/21/2012 09:15	0.77	-124	6.43	10.8	18.40	26.4	16.3
MW-329	06/21/2012 09:18	0.71	-125	6.43	10.7	18.00	26.5	13.6
MW-329	06/21/2012 09:21	0.67	-125	6.42	11.0	18.50	26.3	14.0
MW-329	06/21/2012 09:24	0.62	-125	6.43	10.9	18.50	26.3	13.9

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-329	06/21/2012 09:27	0.58	-126	6.42	10.8	18.40	26.3	13.8
MW-329	06/21/2012 09:45	0.83	-114	6.64	3.40	5.740	27.82	27.30
MW-329	06/21/2012 10:20	1.01	-114	6.45	9.10	15.600	23.55	23.50
MW-329	06/22/2012 10:46	5.22	-101	6.70	8.80	15.200	22.87	110.00
MW-329	01/28/2013 13:33	0.78	-178	6.31	7.3	15.79	7.9	89.9
MW-329	01/28/2013 13:36	0.73	-183.1	6.34	7.3	8.67	7.9	80.4
MW-329	01/28/2013 13:39	0.48	-181.6	6.32	7.2	8.24	7.2	70.9
MW-329	01/28/2013 13:42	0.42	-184.1	6.3	7.2	8.3	7.3	61.3
MW-329	01/28/2013 13:45	0.36	-183.6	6.29	7.2	8.25	7.3	49.2
MW-329	01/28/2013 13:48	0.33	-178	6.29	7.1	8.22	7.3	48.3
MW-329	01/28/2013 13:51	0.3	-185.1	6.29	7.1	8.27	7.4	41.4
MW-329	01/28/2013 13:54	0.29	-186.4	6.28	7.1	8.11	7.4	36.9
MW-329	01/28/2013 13:57	0.27	-186.5	6.28	6.9	7.98	7.5	33.8
MW-329	01/28/2013 14:00	0.27	-186.2	6.28	6.8	7.96	7.5	31.7
MW-329	01/28/2013 14:03	0.26	-186	6.28	6.8	7.96	7.5	30.2
MW-329	01/28/2013 14:06	0.27	-186	6.28	6.8	7.96	7.5	30.4
MW-329	05/09/2013 14:40	3.85	-90	6.93	1.76	2.565	15.89	28.9
MW-329	05/10/2013 14:45	5.02	-123.1	6.93	1.76	2.788	15.95	303.2
MW-329	07/01/2013 09:47	0.55	-62	6.33	7.24	11.13	18.96	1
MW-329	07/01/2013 10:35	0.32	-61	6.42	7.98	11.91	21.43	6.9
MW-329	07/02/2013 10:15	0.58	-80	6	7.32	11.97	21.91	2.7
MW-329	10/15/2013 11:48	4.31	-115.9	6.28	5.92	10.130	18.97	234.70
MW-329	10/15/2013 12:05	3.70	-166	6.21	9.07	15.490	18.99	10.60
MW-329	10/15/2013 12:10	3.80	-148	6.28	7.29	13.150	19.12	353.00
MW-329	10/16/2013 12:10	3.80	-148	6.28	7.29	13.150	19.12	353.00
MW-329	12/18/2013 10:25	-0.13	-108.7	6.64	2.50	4.640	6.94	12.60
MW-329	12/18/2013 12:00	0.07	-114.6	6.58	3.39	6.230	6.97	4.60
MW-329	12/18/2013 12:12	0.01	-114.2	6.16	7.58	16.050	12.56	35.10
MW-329	07/09/2014 09:52	0.53	-57.7	6.41	13.05	21.660	20.43	0.90
MW-329	07/09/2014 10:20	0.0000	-57.5	6.37	13.48	22.300	17.89	1.50
MW-329	07/09/2014 11:10	0.45	-63.9	6.39	15.49	26.040	19.87	64.50
MW-329	03/10/2015 12:25	0.0000	-170	10.27	1.20	2.310	6.48	16.80
MW-329	03/10/2015 13:00	0.0000	-141	9.13	2.30	4.430	6.46	4.90
MW-329	03/10/2015 13:10	4.81	-133	9.81	2.40	4.610	6.71	70.20
MW-329	07/14/2015 12:45	0.0000	-271	6.38	17.30	28.200	18.42	17.80
MW-329	07/14/2015 12:50	1.78	-263	6.37	17.30	28.300	18.24	79.90
MW-329R	07/27/2016 11:22	0.39	-69.9	6.55	3.49	6.398	22.87	221.40
MW-329R	07/27/2016 11:35	0.46	-60.8	6.29	8.25	14.350	22.17	192.70
MW-329R	08/31/2016 11:11	0.65	-78	7.01	5.09	9.179	25.22	1.10
MW-329R	08/31/2016 11:20	1.27	-98	7.16	3.41	6.271	26.18	70.10
MW-329R	10/17/2016 11:30	1.62	-147.4	6.99	1.84	3.499	20.76	19.00
MW-329R	10/17/2016 11:40	2.76	-134.8	7.25	1.45	2.794	20.43	213.30
MW-329R	01/20/2017 09:50	4.43	-113.1	7.48	2.15	4.055	7.17	6.90
MW-329R	01/20/2017 10:10	5.11	-113.4	7.47	1.87	3.561	6.80	134.00
MW-329R	04/18/2017 10:10	0.44	-103.50	6.25	1.87	3.520	11.44	1.70
MW-329R	04/18/2017 10:40	2.41	-80.00	6.68	2.08	3.900	14.72	0.0000
MW-329R	04/18/2017 11:00	7.56	-56.10	6.69	1.93	3.640	13.98	71.30
MW-329R	01/09/2018 09:35	1.11	-24.10	6.68	1.01	1.981	6.45	17.10
MW-329R	01/09/2018 10:25	2.56	-70.80	6.89	1.21	2.348	8.12	7.50
MW-329R	01/09/2018 10:40	4.80	-94.00	7.23	0.86	1.691	6.59	914.00
MW-329R	08/28/2018 10:50	0.80	-117.60	6.76	2.98	5.534	25.46	2.30
MW-329R	08/28/2018 11:45	2.17	-122.40	6.96	2.36	4.438	23.85	27.80
MW-329R	08/28/2018 12:09	1.34	-95.70	7.01	2.31	3.746	25.69	216.50
MW-329R	02/11/2019 11:25	0.05	-118.90	10.53	9.20	15.890	5.35	1.10
MW-329R	02/11/2019 11:55	0.03	-145.40	10.42	8.24	14.270	6.95	1.20
MW-329R	02/11/2019 12:05	1.28	-109.90	9.89	9.53	16.270	9.02	65.50
MW-329R	05/16/2019 10:05	1.27	-188.2	9.64	NM	12.73	15.47	1.2
MW-329R	05/16/2019 10:40	4.81	-88	8.91	7.6	13.15	15.69	1.7
MW-329R	08/06/2019 10:05	0.64	-102.6	6.27	NM	17.24	20.9	2.4

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-329R	08/06/2019 10:10	0.57	-114.7	6.27	NM	17.26	21.06	0.8
MW-329R	08/06/2019 10:15	0.5	-126.3	6.28	NM	17.36	21.43	0.7
MW-329R	08/06/2019 10:20	0.46	-130.6	6.29	NM	17.47	21.8	0.5
MW-329R	08/06/2019 10:25	0.48	-131.4	6.37	NM	14.99	22.53	2.8
MW-329R	08/06/2019 10:30	0.4	-148.4	6.33	NM	16.077	22.11	0.3
MW-329R	08/06/2019 10:35	0.41	-143.9	6.35	NM	15.976	22.15	0.3
MW-329R	08/06/2019 10:40	0.43	-134.6	6.35	NM	15.43	22.24	0.7
MW-329R	08/06/2019 10:45	0.46	-133.9	6.36	NM	15.25	22.49	1.8
MW-329R	08/06/2019 10:50	0.48	-131.4	6.37	NM	14.99	22.53	2.8
MW-329R	08/06/2019 11:05	1.75	-96.5	6.6	6.42	11.28	22.47	2
MW-329R	08/06/2019 11:25	1.98	-89.6	6.73	5.43	9.656	23.29	29.3
MW-329R	02/05/2021 11:25	1.5	-42.1	6.87	9.19	15.77	8.96	15.5
MW-329R	02/05/2021 11:30	1.16	-44.9	6.83	9.19	15.73	8.72	17.6
MW-329R	02/05/2021 11:35	1	-47.3	6.82	9.15	15.69	8.23	15.1
MW-329R	02/05/2021 11:40	0.82	-54	6.83	8.96	15.43	7.56	9.7
MW-329R	02/05/2021 11:45	0.59	-65.2	6.88	8.88	15.39	7.07	5.6
MW-329R	02/05/2021 11:50	0.57	-67.3	6.89	8.89	15.3	6.92	10.8
MW-329R	02/05/2021 11:55	0.54	-69.5	6.89	8.84	15.25	6.85	6.8
MW-329R	02/05/2021 12:00	0.51	-72.5	6.9	8.79	15.17	6.8	7.8
MW-329R	02/05/2021 12:05	0.5	-73.9	6.89	8.78	15.11	7.02	7.2
MW-329R	02/05/2021 12:10	0.51	-74.8	6.9	8.7	15.04	6.65	10.8
MW-329R	02/05/2021 13:00	3.91	-14.9	7.08	7.52	13.15	7.02	2.8
MW-329R	02/05/2021 13:15	3.95	-64	7.02	6.51	11.56	4.25	31.7
MW-329R	08/25/2021 13:20	2.76	-116	6.67	7.5	14.46	31.03	31.3
MW-329R	08/25/2021 13:25	1.91	-125	6.74	9.02	15.51	26.94	26.6
MW-329R	08/25/2021 13:30	1.65	-127.5	6.76	7.98	13.87	26.87	25.9
MW-329R	08/25/2021 13:35	1.54	-129.6	6.77	7.62	13.23	27.05	24.6
MW-329R	08/25/2021 13:40	1.49	-130.8	6.77	7.11	12.46	27.32	30
MW-329R	08/25/2021 13:45	1.46	-135.5	6.75	7.22	12.62	27.27	28.9
MW-329R	08/25/2021 13:50	1.36	-140.6	6.74	7.25	12.7	27.24	28.5
MW-329R	02/04/2022 10:20	0.95	-141.5	7.64	7.04	12.39	5.1	62.8
MW-329R	02/04/2022 10:25	0.36	-147.1	7.63	7.11	12.5	5.18	35.4
MW-329R	02/04/2022 10:30	0.49	-147.2	7.66	7.03	12.41	4.19	49.2
MW-329R	02/04/2022 10:35	0.52	-146.4	7.65	7.04	12.41	4.38	52.3
MW-329R	02/04/2022 10:40	0.39	-146.7	7.65	7.07	12.47	4.4	55.9
MW-329R	02/04/2022 10:45	0.46	-146.8	7.65	7.11	12.53	4.41	56
MW-329R	02/04/2022 10:50	0.46	-146.8	7.64	7.11	12.53	4.55	52.6
MW-329R	02/04/2022 10:55	0.44	-146.9	7.63	7.13	12.56	4.56	52.4
MW-329R	02/04/2022 11:00	0.42	-146.2	7.61	7.13	12.57	4.53	51.5
MW-330	01/17/2013 13:08	0.84	-144.4	6.68	1.04	2.030	13.81	48.00
MW-330	01/17/2013 13:58	2.09	-81.9	6.68	1.05	2.044	14.26	82.80
MW-330	01/18/2013 15:31	0.68	-82.1	6.68	1.00	1.945	11.80	300.80
MW-330	05/17/2013 09:10	3.91	-64.4	6.67	1.21	1.905	13.74	128.9
MW-330	05/17/2013 09:37	5.4	-66.5	6.72	1.25	1.925	14.82	121.5
MW-330	05/18/2013 09:52	3.74	-65.9	6.74	1.24	2.091	17.79	275.9
MW-330	01/17/2014 10:27	0.0000	140.7	6.40	0.96	0.927	12.17	174.90
MW-330	01/17/2014 11:08	0.0000	125.6	6.45	0.48	0.957	12.51	40.50
MW-330	01/17/2014 11:18	0.0000	130.7	6.47	0.47	0.940	7.18	111.00
MW-330	10/27/2014 13:50	5.98	-242	6.43	0.70	1.390	37.69	118.00
MW-330	10/27/2014 14:40	1.67	-302	6.45	0.50	1.130	47.27	0.0000
MW-330	10/27/2014 14:55	0.99	-266	6.47	0.60	1.220	42.37	26.50
MW-330	01/20/2015 13:00	1.18	-192.3	6.72	0.94	1.876	34.61	39.60
MW-330	01/20/2015 13:22	-0.60	-317.8	6.58	0.82	1.660	36.63	4.30
MW-330	01/20/2015 13:35	-0.83	-316.4	6.58	0.83	1.618	30.37	10.40
MW-330	07/08/2015 10:20	0.0000	-279	6.80	0.80	1.560	23.26	27.40
MW-330	07/08/2015 10:25	0.0000	-274	6.78	0.80	1.650	23.48	26.50
MW-330	04/13/2016 10:58	0.0000	-216	7.25	0.50	0.979	15.55	247.00
MW-330	04/13/2016 11:37	0.0000	-242	7.40	0.50	1.040	16.31	194.00
MW-330	09/21/2016 11:50	1.61	-111.5	6.89	0.42	0.865	24.11	5.10

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-330	09/21/2016 12:10	1.45	-115.7	6.92	0.43	0.832	24.17	23.70
MW-330	04/13/2017 12:30	1.81	-229.00	7.05	1.20	2.360	13.67	99.10
MW-330	01/22/2018 13:10	0.25	-181.90	6.59	0.28	0.571	15.73	99.00
MW-330	01/22/2018 13:45	1.58	-116.90	6.90	0.17	0.362	13.29	32.60
MW-330	01/22/2018 14:55	2.61	-152.80	7.26	0.19	0.412	14.66	82.10
MW-330	04/05/2018 09:15	11.23	-58.70	6.37	0.74	1.474	9.66	127.70
MW-330	04/05/2018 10:00	9.47	-5.80	6.25	0.34	0.689	8.37	4.10
MW-330	04/05/2018 10:05	15.30	-35.10	7.24	0.65	1.301	10.14	332.60
MW-330	07/25/2018 01:30	3.27	-92.40	6.79	0.84	1.653	20.53	28.30
MW-330	07/25/2018 14:10	2.46	-153.80	6.65	0.74	1.462	20.07	15.20
MW-330	07/25/2018 14:20	2.54	-109.90	6.67	0.50	1.003	19.97	61.20
MW-330	02/27/2019 10:00	0.23	-139.80	10.54	4.22	7.602	15.46	12.60
MW-330	02/27/2019 10:45	6.03	-46.80	11.17	4.80	8.567	13.88	94.10
MW-330	02/27/2019 11:00	6.67	-56.80	11.41	5.24	9.295	15.24	1189.40
MW-330	05/07/2019 13:05	0.08	-76.7	10.11	NM	1.929	20.05	1425
MW-330	05/07/2019 14:00	1.41	17.2	10.69	2.92	5.387	20.24	445.1
MW-330	08/08/2019 09:55	0.7	-23.6	8.1	NM	0.4	23.78	40.5
MW-330	08/08/2019 10:05	1.53	-49.5	7.64	NM	0.093	21.45	245.3
MW-330	08/08/2019 10:10	1.24	-52.9	7.47	NM	0.078	21.97	233.3
MW-330	08/08/2019 10:15	1.14	-78	7.77	NM	0.057	22.54	161.8
MW-330	08/08/2019 10:20	1.06	-73.1	7.84	NM	0.055	23.04	112.3
MW-330	08/08/2019 10:25	0.88	-75.7	7.99	NM	0.054	23.45	121
MW-330	08/08/2019 10:30	0.84	-62.7	8.09	NM	0.057	23.72	107.8
MW-330	08/08/2019 10:35	0.82	-50.6	8.8	NM	0.074	23.65	84.4
MW-330	08/08/2019 10:40	2.95	-52.7	9.22	0.36	0.743	22.62	18.7
MW-330	08/08/2019 10:45	0.88	-20.1	8.22	NM	0.305	23.75	48.4
MW-330	08/08/2019 10:50	0.7	-23.6	8.1	0.32	0.4	23.78	40.5
MW-330	08/08/2019 13:00	3.09	-51.4	8.7	NM	0.661	22.42	75.7
MW-330	11/05/2019 12:15	0.74	-106.4	6.84	NM	0.122	20	1314.2
MW-330	11/05/2019 12:20	0.48	-120.7	6.81	NM	0.125	19.77	53.7
MW-330	11/05/2019 12:25	0.35	-128.8	6.84	NM	0.132	20.08	34.6
MW-330	11/05/2019 12:30	0.32	-132.7	6.85	NM	0.135	20.19	31.4
MW-330	11/05/2019 12:35	0.26	-136.6	6.85	NM	0.152	19.97	26.4
MW-330	11/05/2019 12:40	0.26	-142	6.87	NM	0.182	20.16	30.6
MW-330	11/05/2019 12:45	0.26	-144.3	6.89	NM	0.203	20.13	27.6
MW-330	11/05/2019 12:50	0.23	-137.5	6.9	NM	0.238	20.01	24.3
MW-330	11/05/2019 12:55	0.21	-149.7	6.93	NM	0.265	20.1	19.9
MW-330	11/05/2019 13:00	0.22	-150.9	6.94	NM	0.294	20.15	14.4
MW-330	11/05/2019 13:40	0.92	-101.3	7.31	0.26	0.545	20.94	22.5
MW-330	11/05/2019 13:55	1.15	-109.3	7.37	0.24	0.507	20.93	57.4
MW-330	11/13/2020 11:30	3.76	-119.3	7.3	0.19	0.399	17.71	20.8
MW-330	11/13/2020 11:45	4.75	-106.6	7.31	0.2	0.41	17.39	31.2
MW-330	02/10/2021 12:35	4.9	-112.8	7.33	0.65	1.298	11.46	43.6
MW-330	02/10/2021 13:25	5.25	-148.7	7.77	0.52	1.053	15.7	15.7
MW-330	02/10/2021 13:33	6.73	-140.2	7.8	0.38	0.765	15.42	44.5
MW-330	04/30/2021 10:25	1.84	-45.3	7.34	0.3	0.616	20.1	164.7
MW-330	04/30/2021 10:30	0.43	-64.3	6.99	0.27	0.549	19.56	160.6
MW-330	04/30/2021 10:35	1	-69	6.91	0.32	0.655	19.49	118.8
MW-330	04/30/2021 10:40	0.65	-71.9	7.03	0.36	0.731	18.43	96.6
MW-330	04/30/2021 10:45	0.32	-72.6	7.08	0.41	0.84	18.42	81.3
MW-330	04/30/2021 10:50	0.14	-78.6	7.21	0.49	0.997	18.4	70.4
MW-330	04/30/2021 10:55	0.09	-80.8	7.28	0.53	1.075	18.24	59
MW-330	04/30/2021 11:00	0.07	-82.5	7.33	0.57	1.146	18.38	45.5
MW-330	04/30/2021 11:05	0.1	-83.8	7.37	0.62	1.235	17.7	35
MW-330	04/30/2021 11:10	0.1	-85.2	7.4	0.64	1.286	17.73	30.3
MW-330	08/19/2021 14:50	3.57	-74.4	7.44	0.05	0.113	24.82	101
MW-330	08/19/2021 14:55	5.84	26.3	6.15	0.03	0.067	26.62	130
MW-330	08/19/2021 15:00	1.72	-75.7	6.3	0.12	0.265	24.51	76.2
MW-330	08/19/2021 15:05	1.03	-106.3	6.32	0.23	0.478	25.13	57.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-330	08/19/2021 15:10	0.67	-118.3	6.38	0.28	0.59	25.06	48.3
MW-330	08/19/2021 15:15	0.42	-124.2	6.38	0.33	0.671	24.95	34.7
MW-330	08/19/2021 15:20	0.44	-130.7	6.39	0.35	0.723	24.88	28.8
MW-330	08/19/2021 15:25	0.33	-133	6.39	0.36	0.746	24.53	26.2
MW-330	08/19/2021 15:30	0.29	-135.8	6.4	0.36	0.749	24.52	24.8
MW-330	08/19/2021 15:35	0.23	-143.2	6.4	0.37	0.754	24.42	20.8
MW-330	02/15/2022 13:30	4.09	54.6	7.31	1.38	2.648	13.88	387.7
MW-330	02/15/2022 13:35	3.03	54.5	7.17	1.38	2.644	13.66	304
MW-330	02/15/2022 13:40	2.66	54.6	7.12	1.37	2.64	13.6	249.1
MW-330	02/15/2022 13:45	3.09	52.2	7.08	1.36	2.619	13.39	175.3
MW-330	02/15/2022 13:50	2.34	32.4	7.06	1.35	2.597	13.44	168.8
MW-330	02/15/2022 13:55	2.01	-46.6	7.05	1.33	2.567	13.58	106.2
MW-330	02/15/2022 14:00	1.71	-84.1	7.03	1.31	2.531	13.94	89.5
MW-330	02/15/2022 14:05	1.51	-110.1	7.08	1.27	2.441	13.93	77.8
MW-330	02/15/2022 14:10	1.44	-124.9	7.07	1.23	2.37	13.8	54.2
MW-330	02/15/2022 14:15	1.38	-138.6	7.08	1.18	2.29	13.82	39.5
MW-331	01/04/2012 10:17	1.47	-45	6.52	0.78	1.152	11.69	NM
MW-331	01/04/2012 10:57	0.58	-44.7	6.33	0.80	1.166	11.23	NM
MW-331	01/04/2013 11:27	1.01	-52.4	6.27	0.79	1.142	10.89	NM
MW-331	05/15/2013 10:55	0.8	-66.2	7.13	0.88	1.729	12.2	159.6
MW-331	05/15/2013 11:17	0.57	-78.4	6.37	0.91	1.779	13.41	754.2
MW-331	05/16/2013 11:27	0.53	-78.7	6.36	0.91	1.776	13.51	725.2
MW-331	01/10/2014 13:54	2.41	-19.7	6.39	1.08	2.209	10.85	295.20
MW-331	01/10/2014 14:43	0.0000	-76.4	6.38	0.98	1.911	10.44	45.00
MW-331	01/10/2014 14:53	0.0000	-80.3	6.41	0.0000	1.763	10.36	57.00
MW-331	10/27/2014 11:45	2.04	-69	6.33	0.80	1.630	17.47	91.00
MW-331	10/27/2014 14:10	3.02	2	6.18	0.30	0.563	17.93	160.00
MW-331	10/27/2014 14:30	1.57	-70	6.27	0.80	1.530	18.37	89.70
MW-331	03/12/2015 14:20	1.09	17	4.29	0.70	1.410	9.09	110.00
MW-331	03/12/2015 14:45	1.18	29	6.60	0.30	0.635	8.95	29.00
MW-331	03/12/2015 14:55	0.0000	26	6.77	0.30	0.630	8.36	159.00
MW-331	07/08/2015 09:25	0	-34	5.63	0.2	0.432	15.15	10.9
MW-331	07/08/2015 09:40	0	-47	5.92	0.2	0.421	17.53	23.2
MW-331	04/19/2016 13:39	0.0000	-13	6.52	0.50	1.080	13.17	52.10
MW-331	04/19/2016 14:35	0.34	-10	6.56	0.50	1.030	13.92	318.00
MW-331	09/19/2016 13:45	0.61	-88.4	6.61	0.86	1.696	21.72	17.90
MW-331	09/19/2016 13:55	0.51	-88.5	6.55	0.85	1.679	21.66	670.10
MW-331	04/06/2017 13:25	6.22	-81.00	7.13	0.10	0.503	8.19	91.60
MW-331	04/06/2017 14:00	1.87	-101.00	7.14	0.30	0.554	7.64	35.60
MW-331	04/06/2017 14:10	0.40	-65.00	6.83	0.30	0.542	7.14	188.30
MW-331	04/09/2018 10:40	10.01	-32.20	8.39	0.24	3.023	8.44	596.50
MW-331	04/09/2018 11:30	12.30	23.00	8.19	0.30	0.605	8.99	14.00
MW-331	04/09/2018 11:35	11.42	48.30	8.05	0.23	0.469	9.65	1925.80
MW-331	02/19/2019 11:20	1.91	51.40	7.10	0.31	0.635	9.52	10.60
MW-331	02/19/2019 11:50	2.25	28.60	7.28	0.28	0.570	10.44	26.20
MW-331	02/19/2019 12:00	4.90	43.40	7.70	0.26	0.543	9.1	1270.50
MW-331	05/13/2019 10:10	1.21	52.7	6.62	NM	0.172	11.32	17.5
MW-331	05/17/2019 11:00	5.76	86.8	7	0.09	0.18	11.97	11.5
MW-331	08/12/2019 10:05	1.59	14.8	6.46	NM	0.311	21.82	42
MW-331	08/12/2019 10:10	1.04	21.1	6.45	NM	0.308	23.43	41.2
MW-331	08/12/2019 10:15	1.03	19.5	6.44	NM	0.319	24.01	39.6
MW-331	08/12/2019 10:20	0.93	17.5	6.43	NM	0.368	23.55	35.9
MW-331	08/12/2019 10:25	0.91	16.5	6.42	NM	0.406	23.45	30.5
MW-331	08/12/2019 10:30	0.89	17.3	6.41	NM	0.428	23.4	26
MW-331	08/12/2019 10:35	0.9	16.5	6.4	NM	0.459	23.23	23.4
MW-331	08/12/2019 10:40	0.88	15.8	6.38	NM	0.481	22.85	20.1
MW-331	08/12/2019 10:45	0.9	14.7	6.37	NM	0.499	23.17	16.5
MW-331	08/12/2019 10:50	0.9	14.7	6.37	NM	0.499	23.17	16.5
MW-331	08/12/2019 11:25	2.77	29.4	6.35	0.25	0.526	22.61	33.1

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-331	08/12/2019 11:40	3.36	12.5	6.34	0.23	0.477	20.25	426.9
MW-331	11/04/2019 09:10	4.2	169.4	7.29	NM	0.429	17.05	84.9
MW-331	11/04/2019 09:15	2.86	154.3	7.23	NM	0.39	17.35	79.6
MW-331	11/04/2019 09:20	1.86	111.5	7.17	NM	0.335	17.77	40.6
MW-331	11/04/2019 09:25	1.39	-27.2	6.96	NM	0.338	17.94	31.2
MW-331	11/04/2019 09:30	1.15	-31.7	6.94	NM	0.349	18	29.1
MW-331	11/04/2019 09:35	0.91	-25.1	6.93	NM	0.346	17.99	28.7
MW-331	11/04/2019 09:40	0.93	-9	6.95	NM	0.335	18.08	29.8
MW-331	11/04/2019 09:45	0.86	7.7	6.95	NM	0.326	18.05	24.1
MW-331	11/04/2019 09:50	0.73	13.5	6.85	NM	0.311	18.06	22.6
MW-331	11/04/2019 09:55	0.65	8	6.81	NM	0.309	18.05	18.5
MW-331	02/05/2020 12:50	1.15	82	6.45	NM	0.35	9.78	64.5
MW-331	02/05/2020 13:30	1.18	84.2	6.56	0.17	0.335	9.89	60.3
MW-331	11/13/2020 10:57	9.37	102.7	7.12	0.05	0.109	13.03	137.3
MW-331	11/13/2020 11:25	9.16	82.3	7.02	0.05	0.109	15.17	553.9
MW-331	02/12/2021 09:25	5.56	191.9	6.5	0.11	0.222	9.02	90.9
MW-331	02/12/2021 09:35	3.73	109.3	6.48	0.08	0.172	8.05	62.5
MW-331	02/12/2021 10:25	6.97	40.4	6.49	0.21	0.43	8.18	78.7
MW-331	04/29/2021 10:10	3.27	121.4	6.04	0.15	0.319	14.49	344.8
MW-331	04/29/2021 10:15	1.46	120.7	6.03	0.13	0.274	13.1	302.8
MW-331	04/29/2021 10:20	1.3	122.9	6.06	0.13	0.272	13.1	251.8
MW-331	04/29/2021 10:25	1.25	123.1	6.08	0.13	0.276	13.34	210.4
MW-331	04/29/2021 10:30	1.45	125.5	6.09	0.13	0.276	13.48	178
MW-331	04/29/2021 10:35	1.52	129.4	6.1	0.13	0.278	13.48	140.2
MW-331	04/29/2021 10:40	1.51	129.2	6.12	0.14	0.282	13.46	117.2
MW-331	04/29/2021 10:45	1.49	126.3	6.15	0.14	0.289	13.39	76.5
MW-331	04/29/2021 10:50	1.48	120.1	6.17	0.14	0.292	13.4	78.3
MW-331	04/29/2021 10:55	1.48	117.4	6.18	0.14	0.294	13.44	43.3
MW-331	02/28/2022 12:05	12.47	-8.2	7.54	0.19	0.39	4.75	600.9
MW-331	02/28/2022 12:10	12.24	31.7	7.46	0.19	0.39	5.12	483
MW-331	02/28/2022 12:15	12.3	45.1	7.45	0.19	0.393	4.87	340.5
MW-331	02/28/2022 12:20	12.47	53.6	7.44	0.19	0.397	4	287.8
MW-331	02/28/2022 12:25	12.37	65	7.44	0.19	0.395	3.19	229
MW-331	02/28/2022 12:30	12.1	67.7	7.44	0.19	0.389	4.26	275.8
MW-331	02/28/2022 12:35	12	70.6	7.41	0.19	0.391	4.66	116.8
MW-331	02/28/2022 12:40	11.78	73.5	7.38	0.19	0.39	4.53	72.7
MW-331	02/28/2022 12:45	11.69	71.2	7.38	0.19	0.388	4.57	68.4
MW-331	02/28/2022 12:50	11.6	69.8	7.38	0.19	0.387	4.6	66.8
MW-332	01/07/2013 10:32	0.85	38.5	7.39	0.35	0.717	13.45	69.40
MW-332	01/07/2013 11:08	0.21	74.9	7.56	0.38	0.773	13.95	41.50
MW-332	01/08/2013 11:30	0.71	118.3	7.59	0.39	0.790	12.38	493.10
MW-332	05/15/2013 13:31	2.97	-42.9	7.01	0.32	0.652	12.71	94.4
MW-332	05/15/2013 13:44	1.6	-55.3	7.29	0.39	0.785	12.61	110.1
MW-332	05/16/2013 14:03	1.93	-45.1	7.37	0.39	0.785	12.91	128.7
MW-332	01/15/2014 08:46	2.60	-7.1	6.98	0.40	0.813	9.92	120.50
MW-332	01/15/2014 09:13	0.49	-78.2	7.23	0.46	0.923	12.28	33.60
MW-332	01/15/2014 09:22	0.53	-74.6	7.29	0.46	0.917	8.33	28.10
MW-332	09/17/2014 11:05	4.54	53.2	6.99	0.25	0.515	21.35	89.50
MW-332	09/17/2014 11:20	2.25	26.6	7.23	0.38	0.781	19.00	42.80
MW-332	09/17/2014 11:35	2.71	22.6	7.35	0.44	0.884	19.15	11.50
MW-332	10/21/2014 09:40	11.52	-25	7.34	0.40	0.764	18.03	44.90
MW-332	10/21/2014 10:10	3.39	-51	7.62	0.50	1.000	18.06	1.20
MW-332	10/21/2014 10:20	4.81	-49	7.62	0.50	1.010	18.02	0.0000
MW-332	01/20/2015 12:10	8.65	81.5	7.49	0.11	0.223	12.02	286.00
MW-332	01/20/2015 12:50	8.10	81.9	7.63	0.07	0.145	13.21	64.70
MW-332	01/20/2015 13:00	8.19	84.2	7.60	0.07	0.140	13.01	57.00
MW-332	07/09/2015 11:16	0.0000	7	7.06	0.20	0.374	15.20	48.20
MW-332	07/09/2015 11:25	0.0000	4	7.12	0.20	0.378	15.38	46.60
MW-332	04/21/2016 09:57	1.14	144	7.76	0.10	0.216	14.74	75.00

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-332	04/21/2016 10:29	0.67	141	7.25	0.10	0.264	15.20	498.00
MW-332	09/14/2016 13:40	0.55	57	7.33	0.90	1.772	23.64	5.10
MW-332	09/14/2016 13:55	0.51	52.7	7.13	0.86	1.642	23.72	6.70
MW-332	02/14/2019 13:30	9.23	164.9	7.67	0.12	0.242	11.11	35.6
MW-341	01/21/2013 10:52	35.12	-26	6.48	0.2	0.44	9.5	114.6
MW-341	01/21/2013 10:55	31.76	-29.8	6.46	0.2	0.44	9.5	115.5
MW-341	01/21/2013 10:58	31.34	-32.7	6.39	0.2	0.44	9.7	108.9
MW-341	01/21/2013 11:01	31.45	-36.4	6.39	0.2	0.43	10	83.9
MW-341	01/21/2013 11:04	31.09	-38	6.41	0.2	0.44	9.9	80.4
MW-341	01/21/2013 11:07	30.47	-38.7	6.38	0.2	0.44	9.8	76.2
MW-341	01/21/2013 11:10	30.16	-59.7	6.38	0.2	0.45	9.8	43.1
MW-341	01/21/2013 11:13	20.5	-50.7	6.39	0.2	0.44	9.8	41.6
MW-341	01/21/2013 11:16	29.17	-52.9	6.41	0.2	0.46	10	35.5
MW-341	01/21/2013 11:19	27.53	-53.9	6.41	0.2	0.46	9.7	38.4
MW-341	01/21/2013 11:22	28.69	-54.9	6.40	0.22	0.456	9.87	37.30
MW-341	01/21/2013 11:37	21.95	-48.7	6.50	0.22	0.461	8.82	29.20
MW-341	01/22/2013 11:56	25.60	-55	6.52	0.22	0.465	5.20	180.00
MW-341	05/15/2013 09:55	4.15	-99.1	6.62	0.18	0.362	12.98	37.7
MW-341	05/15/2013 10:04	3.16	107.8	6.66	0.18	0.368	12.41	80.5
MW-341	05/16/2013 09:05	6.15	-57.9	6.35	0.2	0.32	13.5	189.6
MW-341	05/16/2013 09:10	6.22	-64.9	6.4	0.2	0.31	13.6	196.2
MW-341	05/16/2013 09:15	5.85	-71.7	6.41	0.2	0.32	13.4	159.4
MW-341	05/16/2013 09:20	5.56	-77.8	6.47	0.2	0.33	13.3	133.5
MW-341	05/16/2013 09:25	5.43	-80	6.5	0.2	0.33	13.2	118.3
MW-341	05/16/2013 09:30	5.15	-83.4	6.52	0.2	0.34	13.1	88.5
MW-341	05/16/2013 09:35	4.77	-90.5	6.56	0.2	0.35	12.9	65.2
MW-341	05/16/2013 09:40	4.44	-96.9	6.59	0.2	0.36	12.9	43.5
MW-341	05/16/2013 09:45	4.2	-98.3	6.61	0.2	0.37	12.9	40.9
MW-341	05/16/2013 09:50	4.18	-98.6	6.62	0.2	0.36	13	38.1
MW-341	05/16/2013 09:55	4.15	-99.1	6.62	0.2	0.36	13	37.7
MW-341	05/16/2013 11:05	1.95	-78.8	6.67	0.18	0.368	14.32	487.3
MW-341	01/15/2014 14:07	4.60	-112.6	6.52	0.24	0.501	11.68	15.20
MW-341	01/15/2014 14:25	4.07	-123.8	6.31	0.23	0.474	11.93	0.0000
MW-341	01/15/2014 14:30	2.74	-107	6.23	0.23	0.473	12.83	0.0000
MW-341	08/22/2014 13:30	5.99	54.4	6.53	0.19	0.342	19.21	18.10
MW-341	08/22/2014 14:15	4.85	26.4	6.10	0.19	0.449	32.27	5.10
MW-341	08/22/2014 14:25	4.19	40.3	6.20	0.19	0.445	39.47	11.40
MW-341	09/16/2014 12:40	2.54	66.9	6.12	0.12	0.253	16.68	43.80
MW-341	09/16/2014 13:20	1.43	60.2	6.00	0.12	0.257	17.56	14.90
MW-341	09/16/2014 13:35	1.40	60.3	6.02	0.12	0.255	20.04	15.40
MW-341	09/29/2014 09:36	0.98	80.5	5.84	0.17	0.358	10.08	6.80
MW-341	09/29/2014 10:21	3.37	37.1	5.81	0.16	0.329	15.12	4.20
MW-341	09/29/2014 10:27	3.53	35.4	5.84	0.15	0.322	19.09	3.40
MW-341	10/24/2014 09:40	2.19	-17	6.10	0.50	0.933	11.05	0.0000
MW-341	10/24/2014 10:30	1.27	-113	6.17	0.40	0.900	17.93	0.0000
MW-341	10/24/2014 10:55	1.45	-124	6.28	0.40	0.896	21.03	0.0000
MW-341	01/29/2015 10:25	2.80	-111	6.66	0.22	0.467	7.01	1.80
MW-341	01/29/2015 11:17	0.19	-121.4	6.54	0.22	0.453	10.80	-2.00
MW-341	01/29/2015 11:26	0.20	-121.7	6.57	0.22	0.457	10.83	-2.10
MW-341	04/13/2015 11:25	0.53	-79	6.62	0.40	0.754	20.04	30.90
MW-341	04/13/2015 11:38	0.45	-91	6.67	0.30	0.699	19.29	9.20
MW-341	04/13/2015 11:48	0.47	-93	6.69	0.30	0.697	19.35	17.40
MW-341	07/08/2015 13:30	0.0000	-76	6.33	0.10	0.247	22.93	0.0000
MW-341	07/08/2015 13:40	0.0000	-78	6.32	0.10	0.244	24.33	0.0000
MW-341	04/20/2016 12:35	0.0000	-76	7.16	0.10	0.190	13.88	46.60
MW-341	04/20/2016 13:06	0.0000	-69	7.21	0.10	0.185	14.25	0.0000
MW-341	09/15/2016 14:45	2.22	-58.2	6.82	0.15	0.317	24.05	10.00
MW-341	09/15/2016 15:00	2.26	-68.4	6.81	0.15	0.323	25.92	15.10
MW-341	04/12/2017 08:15	5.11	120.00	5.49	0.20	0.322	17.49	13.40

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-341	01/15/2018 10:25	1.31	-148.90	6.76	0.20	0.411	10.85	5.20
MW-341	03/08/2019 09:00	0.24	-51.8	6.93	NM	0.153	6.49	53.9
MW-341	03/08/2019 09:30	6.47	-26.9	8.17	0.08	0.171	7.67	43.2
MW-341	08/07/2019 09:35	1.88	-94.1	6.83	NM	0.127	21.63	19.2
MW-341	08/07/2019 10:05	1.34	-112.8	6.8	NM	0.205	20.46	63.7
MW-341	08/07/2019 10:10	1.32	-98.4	6.82	NM	0.168	20.91	62.7
MW-341	08/07/2019 10:15	1.37	-73.3	6.82	NM	0.155	21.2	51.5
MW-341	08/07/2019 10:20	2.48	-80.6	6.82	NM	0.151	21.45	44.4
MW-341	08/07/2019 10:25	2.66	-54.5	6.97	0.07	0.17	22.84	20.6
MW-341	08/07/2019 10:30	2.5	-90.5	6.83	NM	0.138	21.44	37
MW-341	08/07/2019 10:35	2.36	-93	6.83	0.06	0.131	21.47	36.6
MW-341	08/07/2019 10:40	2.23	-93	6.84	NM	0.128	21.48	29
MW-341	08/07/2019 10:45	1.99	-93.3	6.83	NM	0.127	21.6	22.4
MW-341	08/07/2019 10:50	1.88	-94.1	6.83	NM	0.127	21.63	19.2
MW-341	08/07/2019 13:00	3.66	-44.7	7	NM	0.127	19.29	294.9
MW-341	11/04/2019 10:40	2.54	-189.7	6.72	NM	0.637	15.27	472.1
MW-341	11/04/2019 11:10	3.27	-72.6	6.52	0.23	0.476	16.3	161.4
MW-341	11/04/2019 11:25	7.65	-39.7	6.72	0.22	0.448	16.13	169
MW-341	02/12/2020 10:11	8.34	105.7	6.69	0.09	0.179	11.22	62.5
MW-341	08/12/2020 10:20	4.74	-109.2	7.38	0.14	0.293	23.3	97.3
MW-341	08/12/2020 11:10	3.98	-40.2	6.79	0.11	0.241	21.39	8.8
MW-341	08/12/2020 11:20	1.82	-42.7	6.64	0.11	0.244	22.18	9.3
MW-341	02/09/2021 13:15	10.86	-25.1	6.97	0.12	0.259	7.64	652.6
MW-341	02/09/2021 13:39	8.98	-30.8	6.81	0.16	0.33	8.72	52.1
MW-341	02/09/2021 13:52	6.75	-63.1	6.62	0.12	0.243	9.14	293.3
MW-341	03/01/2022 12:30	3.47	98.3	6.43	0.07	0.153	9.37	114.3
MW-341	03/01/2022 12:35	0.85	90.1	6.33	0.07	0.149	9.3	59.5
MW-341	03/01/2022 12:40	0.76	89.2	6.33	0.07	0.149	9.31	48.2
MW-341	03/01/2022 12:45	0.65	82.9	6.32	0.07	0.148	9.24	114.8
MW-341	03/01/2022 12:50	0.54	19.7	6.33	0.07	0.148	9.3	166.7
MW-341	03/01/2022 12:55	0.49	-10.6	6.34	0.07	0.147	9.36	168.5
MW-341	03/01/2022 13:00	0.44	-17	6.34	0.07	0.146	9.35	240.9
MW-341	03/01/2022 13:05	0.41	-20	6.35	0.07	0.145	9.36	235
MW-341	03/01/2022 13:10	0.33	-23.7	6.35	0.07	0.144	9.37	545.8
MW-341	03/01/2022 13:15	0.31	-27.5	6.36	0.07	0.142	9.45	411.6
MW-342	01/22/2013 11:46	0.65	6	7.32	0.1	0.15	5.4	185.3
MW-342	01/22/2013 11:49	0.43	28.9	7.33	0.1	0.15	4	170.8
MW-342	01/22/2013 11:52	0.32	45.3	6.54	0.1	0.15	3.6	159
MW-342	01/22/2013 11:55	0.3	55.4	6.95	0.1	0.15	2.9	142.3
MW-342	01/22/2013 11:58	0.3	61	7.02	0.1	0.16	2.9	129.7
MW-342	01/22/2013 12:01	0.3	63.1	6.81	0.1	0.16	2.3	124.6
MW-342	01/22/2013 12:04	0.3	65.6	6.87	0.1	0.16	2.1	126
MW-342	01/22/2013 12:07	0.28	70.3	6.68	0.1	0.17	2	117.6
MW-342	01/22/2013 12:10	0.28	69.5	6.79	0.1	0.17	1.9	116.8
MW-342	01/22/2013 12:13	0.28	69.9	6.61	0.1	0.17	1.9	115
MW-342	01/22/2013 12:16	0.28	69.4	6.62	0.08	0.167	1.86	111.90
MW-342	01/22/2013 12:40	0.23	74.2	7.02	0.08	0.172	8.72	82.50
MW-342	01/23/2013 14:40	10.40	169.4	7.05	0.09	0.185	2.26	91.90
MW-342	03/28/2013 13:40	6.21	-57.3	7.11	0.3	0.59	9.6	93.4
MW-342	03/28/2013 13:44	3.57	-48.3	6.86	0.3	0.58	9.6	122
MW-342	03/28/2013 13:48	2.69	-42.9	6.8	0.3	0.58	9.5	131.3
MW-342	03/28/2013 13:52	2.13	-38.1	6.74	0.3	0.57	9.5	116.6
MW-342	03/28/2013 13:56	1.66	-33.6	6.73	0.3	0.58	9.5	117.8
MW-342	03/28/2013 14:00	1.2	-28.2	6.71	0.3	0.58	9.4	107.5
MW-342	03/28/2013 14:04	0.95	-25.7	6.71	0.3	0.58	9.5	101.4
MW-342	03/28/2013 14:08	0.8	-22.8	6.69	0.3	0.58	9.6	81.6
MW-342	03/28/2013 14:12	0.73	-23.4	6.7	0.3	0.58	9.6	84.8
MW-342	03/28/2013 14:16	0.69	-22.2	6.71	0.3	0.58	9.4	85.6
MW-342	03/28/2013 14:20	0.56	-21	6.72	0.3	0.59	9.5	72

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-342	03/28/2013 14:24	0.52	-20.2	6.73	0.3	0.59	9.6	57.5
MW-342	03/28/2013 14:28	0.52	-20.1	6.73	0.3	0.6	9.6	53.4
MW-342	03/28/2013 14:34	0.52	-20.1	6.73	0.29	0.596	9.63	53.4
MW-342	03/28/2013 14:53	0.61	-35.6	6.75	0.29	0.598	9.72	58
MW-342	03/29/2013 15:27	0.95	-57.7	6.81	0.29	0.603	9.28	100
MW-342	05/17/2013 09:31	0.97	-29.8	6.75	0.34	0.697	10.72	272.9
MW-342	05/17/2013 10:00	0	-43.5	6.57	0.31	0.311	11.17	1020.4
MW-342	05/18/2013 10:30	0	-39.6	6.6	0.32	0.663	12.6	736.5
MW-342	01/16/2014 09:22	0.0000	-72.5	6.69	0.33	0.675	9.64	460.10
MW-342	01/16/2014 09:43	0.0000	-118.6	6.78	0.35	0.714	9.99	514.30
MW-342	01/16/2014 10:03	0.0000	-132.7	6.86	0.36	0.728	9.25	138.30
MW-342	01/21/2014 12:00	2.18	-199.6	7.12	0.23	0.483	10.98	14.40
MW-342	01/21/2014 12:50	3.58	-290.5	6.99	0.23	0.978	9.37	-2.60
MW-342	01/21/2014 13:06	3.10	-261.4	7.01	0.23	0.468	9.22	-1.20
MW-342	09/16/2014 12:45	0.12	110.1	6.11	0.12	0.354	18.59	20.40
MW-342	09/16/2014 13:32	0.08	101.3	6.10	0.19	0.401	19.00	13.60
MW-342	09/16/2014 13:37	0.08	99.7	6.10	0.19	0.402	20.02	13.40
MW-342	09/29/2014 11:00	8.08	55.1	6.20	0.09	0.186	13.96	79.10
MW-342	09/29/2014 11:45	2.85	45.1	6.38	0.09	0.191	21.20	30.90
MW-342	09/29/2014 11:52	2.61	61.1	6.33	0.09	0.194	24.26	44.70
MW-342	10/24/2014 11:30	7.82	-74	6.52	0.30	0.662	6.57	0.20
MW-342	10/24/2014 12:15	2.80	-119	6.64	0.40	0.809	28.18	0.20
MW-342	05/07/2015 11:25	0.53	-271	6.94	0.30	0.522	19.07	11.70
MW-342	07/08/2015 09:23	0.0000	-150	6.54	0.20	0.318	23.15	0.0000
MW-342	07/08/2015 09:30	0.0000	-148	6.54	0.20	0.320	24.26	0.0000
MW-342	04/18/2016 14:25	3.31	-95	8.02	0.20	0.350	19.67	0.0000
MW-342	04/18/2016 15:15	2.23	-35	7.91	0.20	0.380	27.44	231.00
MW-342	09/16/2016 14:35	1.78	-97.3	6.89	0.27	0.535	21.04	53.20
MW-342	04/12/2017 09:30	6.32	-70.00	6.61	0.20	0.438	13.36	36.70
MW-342	03/08/2019 13:00	0.52	42.3	6.65	NM	0.266	8.54	178.1
MW-342	03/08/2019 13:50	0	0	0	0	0	0	0
MW-342	08/13/2019 09:25	7.02	-240.5	6.75	NM	0.512	19.59	29.6
MW-342	08/13/2019 09:55	9.38	-140.4	6.89	0.31	0.635	19.29	12.6
MW-342	08/13/2019 10:05	0.89	-203.9	6.83	0.24	0.996	19.09	40.3
MW-342	08/13/2019 10:10	0.71	-214.7	6.81	NM	0.982	19.28	39.7
MW-342	08/13/2019 10:15	0.48	-252.9	6.75	NM	0.849	19.55	33.5
MW-342	08/13/2019 10:20	0.66	-252.3	6.73	NM	0.725	19.71	31.9
MW-342	08/13/2019 10:25	1.03	-261.2	6.72	NM	0.65	19.65	36.5
MW-342	08/13/2019 10:30	1.33	-265.7	6.72	NM	0.601	19.59	41.9
MW-342	08/13/2019 10:35	2.46	-267.7	6.73	NM	0.558	19.61	43.6
MW-342	08/13/2019 10:40	3.23	-262.6	6.74	NM	0.524	19.64	39.9
MW-342	08/13/2019 10:45	5.89	-256.1	6.75	NM	0.511	19.62	36.9
MW-342	08/13/2019 10:50	7.02	-240.5	6.75	NM	0.512	19.59	29.6
MW-342	08/13/2019 13:00	6.11	89.3	6.8	NM	0.489	20.47	102.9
MW-342	02/12/2020 11:05	8.38	-91	7.12	0.5	1.005	10.69	7.15
MW-342	08/12/2020 08:55	2.7	1.6	7.88	0.83	1.493	22.34	19.9
MW-342	08/12/2020 09:40	6.59	-147.7	7.15	0.41	0.836	20.66	2.8
MW-342	08/12/2020 09:50	2.29	-96.5	6.53	0.43	0.857	21.86	5.3
MW-342	02/10/2021 10:20	5.05	-91.3	7.71	0.89	1.748	8.35	62.3
MW-342	02/10/2021 10:48	7.14	-101	7.45	0.6	1.198	8.74	24.9
MW-342	02/10/2021 11:04	5.91	-111	7.22	0.45	0.902	9.17	39.5
MW-342	03/01/2022 11:05	3.17	176	6.52	0.16	0.334	8.44	250
MW-342	03/01/2022 11:10	1.6	182.4	6.07	0.16	0.332	8.37	123.9
MW-342	03/01/2022 11:15	1.39	186.8	5.9	0.16	0.331	8.66	75.9
MW-342	03/01/2022 11:20	1.29	184.7	5.82	0.16	0.33	8.92	55.5
MW-342	03/01/2022 11:25	1.27	170.5	5.79	0.16	0.331	9.02	42.5
MW-342	03/01/2022 11:30	1.31	150.4	5.77	0.16	0.332	8.99	29.2
MW-342	03/01/2022 11:35	1.35	134.3	5.76	0.16	0.333	9.01	27.4
MW-342	03/01/2022 11:40	1.44	116.7	5.77	0.16	0.333	8.97	19.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-342	03/01/2022 11:45	1.4	115.5	5.76	0.16	0.333	9.01	19.3
MW-342	03/01/2022 11:50	1.38	114.7	5.76	0.16	0.333	9.02	18.8
MW-343	01/16/2013 10:35	2.39	-99.3	6.59	0.4	0.86	8.7	56.2
MW-343	01/16/2013 10:40	2.35	-99.3	6.6	0.4	0.86	8.7	55.1
MW-343	01/16/2013 10:45	2.34	-102.1	6.6	0.4	0.86	8.7	55.6
MW-343	01/16/2013 10:50	2.27	-104.4	6.61	0.4	0.85	8.7	47.3
MW-343	01/16/2013 10:55	2.18	-105.3	6.61	0.4	0.85	8.7	44.8
MW-343	01/16/2013 11:00	2.09	-106.1	6.62	0.4	0.85	8.8	38.7
MW-343	01/16/2013 11:05	2.03	-108.7	6.62	0.4	0.85	8.8	32.4
MW-343	01/16/2013 11:10	2.01	-104.4	6.62	0.4	0.85	9.2	32.9
MW-343	01/16/2013 11:15	2.01	-103.2	6.63	0.4	0.84	9.3	31.5
MW-343	01/16/2013 11:20	2.01	-101.6	6.63	0.42	0.840	9.26	31.60
MW-343	01/16/2013 14:18	0.49	-46.5	6.63	0.34	0.693	11.11	285.80
MW-343	01/17/2013 14:18	0.49	-46.5	6.63	0.34	0.693	11.11	285.80
MW-343	05/15/2013 09:45	5.45	-116.4	6.6	0.3	0.6	14.9	540.5
MW-343	05/15/2013 09:50	4.23	-113.9	6.57	0.3	0.6	14.6	550.9
MW-343	05/15/2013 09:55	2.53	-101.8	6.45	0.3	0.59	14.4	634.1
MW-343	05/15/2013 10:00	2.33	-98.8	6.5	0.3	0.59	14.1	664.5
MW-343	05/15/2013 10:05	2.21	-94	6.53	0.3	0.59	14.1	584.1
MW-343	05/15/2013 10:10	2.01	-93.9	6.51	0.3	0.59	14.3	491.6
MW-343	05/15/2013 10:15	1.96	-98.5	6.58	0.3	0.6	14.5	302.5
MW-343	05/15/2013 10:20	1.88	-103.9	6.58	0.3	0.59	14.7	197.9
MW-343	05/15/2013 10:25	1.79	-107.2	6.61	0.3	0.6	14.9	167
MW-343	05/15/2013 10:30	1.8	-107.9	6.61	0.3	0.6	14.8	156.1
MW-343	05/15/2013 10:35	1.8	-108	6.6	0.3	0.6	14.8	154
MW-343	05/15/2013 10:45	1.8	-108	6.6	0.29	0.596	14.76	154
MW-343	05/15/2013 10:50	3.53	-102.2	6.62	0.28	0.574	12.92	190.6
MW-343	05/16/2013 11:29	2.56	-95.3	6.69	0.28	0.578	15.25	721.7
MW-343	01/15/2014 10:15	0.71	-92.4	6.68	0.45	0.903	14.80	663.30
MW-343	01/15/2014 10:35	0.80	-120.7	6.63	0.44	0.893	13.75	248.00
MW-343	01/15/2014 10:47	0.0000	-118.2	6.59	0.43	0.874	13.95	1040.00
MW-343	08/22/2014 12:15	8.95	-44.3	6.73	0.13	6.396	15.80	21.80
MW-343	08/22/2014 13:00	2.32	-44.8	6.17	6.14	0.360	46.99	8.20
MW-343	08/22/2014 13:10	7.45	-44.3	6.17	0.15	0.349	46.81	7.70
MW-343	09/16/2014 12:35	3.28	112	6.48	0.07	0.140	14.36	148.60
MW-343	09/16/2014 13:15	1.02	40.8	6.21	0.06	0.138	21.79	0.0000
MW-343	09/16/2014 13:25	2.97	54.6	6.21	0.06	0.139	24.52	5.80
MW-343	09/29/2014 10:55	0.84	-0.9	5.94	0.08	0.172	22.33	10.80
MW-343	09/29/2014 11:35	0.0000	-8.3	6.16	0.08	0.168	23.58	8.70
MW-343	09/29/2014 11:50	0.0000	-5.4	6.04	0.08	0.168	26.56	7.80
MW-343	10/24/2014 09:45	5.91	-25	5.94	0.20	0.425	15.93	0.0000
MW-343	10/24/2014 10:35	5.97	-52	6.00	0.20	0.402	23.05	0.0000
MW-343	01/29/2015 10:00	1.43	-117.9	7.01	0.22	0.576	7.37	26.40
MW-343	01/29/2015 10:15	0.08	-116.4	6.50	0.19	0.409	7.67	-2.40
MW-343	01/29/2015 10:55	0.09	-116.2	6.51	0.19	0.408	7.67	-2.20
MW-343	07/08/2015 13:40	0.21	-69	6.28	0.10	0.309	24.49	7.00
MW-343	07/08/2015 13:55	0.80	-81	6.56	0.10	0.303	24.55	2.10
MW-343	04/15/2016 11:52	0.0000	-115	7.11	0.0000	0.246	16.74	75.50
MW-343	04/15/2016 12:10	2.23	-103	7.23	0.20	0.361	19.32	53.60
MW-343	09/15/2016 14:30	1.15	-78.7	6.64	0.18	0.381	20.36	4.20
MW-343	09/15/2016 14:50	0.82	-23.4	6.67	0.17	0.396	24.91	33.20
MW-343	04/06/2017 13:30	1.90	-67.00	6.96	0.20	0.431	9.37	30.10
MW-343	04/06/2017 14:00	1.70	-187.00	6.45	0.20	0.380	9.9	0.0000
MW-343	04/06/2017 14:20	8.30	-68.00	6.97	NM	0.416	10.41	160.00
MW-343	04/04/2018 08:45	12.45	-54.60	6.67	0.30	0.617	7.23	2.50
MW-343	04/04/2018 09:45	13.06	-56.20	7.27	0.30	0.608	7.4	42.00
MW-343	04/04/2018 09:50	13.94	-8.10	6.95	0.27	0.563	7.72	136.70
MW-343	02/15/2019 10:30	5.20	150.20	6.39	0.31	0.626	11.81	11.20
MW-343	02/15/2019 11:00	5.60	94.10	6.74	0.18	0.379	11.87	0.0000

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-343	02/15/2019 11:15	4.47	40.70	6.02	0.35	0.705	11.91	81.50
MW-343	08/13/2019 09:00	2.17	-149.8	6.82	NM	1.316	21.48	19.6
MW-343	08/13/2019 09:40	4.71	-137.2	6.82	0.38	0.781	20.79	2.1
MW-343	08/13/2019 09:56	3.99	99.3	6.64	0.3	0.623	22.86	60.6
MW-343	02/07/2020 09:42	4.27	-132.7	7.04	0.37	0.749	11.62	3.5
MW-343	03/01/2021 09:40	5.38	-123.8	7.18	0.34	0.692	9.28	13.3
MW-343	03/01/2021 10:15	4.01	-155.9	7.44	0.33	0.666	10.44	5.6
MW-343	03/01/2021 10:30	3.25	-152.6	7.4	0.33	0.667	9.85	72.3
MW-343	08/18/2021 15:00	3.85	-107	6.87	0.37	0.747	23.7	88.9
MW-343	08/18/2021 15:05	2.33	-104.5	6.7	0.34	0.683	22	77.8
MW-343	08/18/2021 15:10	1.92	-107.9	6.67	0.34	0.681	21.6	48.9
MW-343	08/18/2021 15:15	1.59	-113.4	6.68	0.34	0.682	21.6	24.2
MW-343	08/18/2021 15:20	1.5	-118.9	6.69	0.34	0.677	21.3	34.7
MW-343	08/18/2021 15:25	1.38	-121.1	6.71	0.34	0.677	21.2	33.14
MW-343	08/18/2021 15:30	1.35	-123.9	6.72	0.34	0.677	21.3	32.89
MW-343	08/18/2021 15:35	1.31	-126.4	6.73	0.34	0.677	21.3	32.51
MW-343	02/28/2022 09:40	4.13	-166.7	7.04	0.32	0.656	6.54	52.9
MW-343	02/28/2022 09:45	1.19	-113.5	6.84	0.32	0.645	7.07	42.5
MW-343	02/28/2022 09:50	1.17	-106	6.83	0.32	0.651	7.36	28.6
MW-343	02/28/2022 09:55	1.1	-103	6.84	0.32	0.658	7.8	17.7
MW-343	02/28/2022 10:00	1.02	-96.7	6.84	0.33	0.668	8	8.6
MW-343	02/28/2022 10:05	0.9	-103.2	6.85	0.33	0.671	8.26	6.6
MW-343	02/28/2022 10:10	0.86	-96.7	6.85	0.33	0.674	8.36	6.4
MW-343	02/28/2022 10:15	0.85	-99.5	6.86	0.33	0.677	8.3	6.3
MW-347	04/23/2013 09:35	2.55	-78.8	6.51	2.1	2.83	10.1	75.5
MW-347	04/23/2013 09:40	2.39	-76	6.52	2.1	2.79	10.1	48.5
MW-347	04/23/2013 09:45	2.12	-72.9	6.54	1.9	2.63	10	54.1
MW-347	04/23/2013 09:50	1.9	-70.2	6.56	1.8	2.41	10	41.7
MW-347	04/23/2013 09:55	1.62	-70.6	6.55	1.6	2.25	10.1	630.6
MW-347	04/23/2013 10:00	1.26	-70.6	6.54	1.5	2.08	10.1	29.8
MW-347	04/23/2013 10:05	1.23	-71.9	6.54	1.5	1.99	10	19.4
MW-347	04/23/2013 10:10	1.09	-72.9	6.54	1.4	1.92	10.1	17.9
MW-347	04/23/2013 10:15	1.05	-73.7	6.53	1.3	1.86	10.1	10.1
MW-347	04/23/2013 10:20	0.8	-74.8	6.52	1.3	1.79	10.2	8.5
MW-347	04/23/2013 10:25	0.76	-74.9	6.52	1.3	1.76	10.1	7.6
MW-347	04/23/2013 10:30	0.74	-74.9	6.52	1.26	1.745	10.14	6.6
MW-347	04/23/2013 11:30	1.14	-70.8	6.49	1.13	1.599	10.71	-0.1
MW-347	04/24/2013 12:10	0.66	-82.7	6.49	1.15	1.371	9.45	29.3
MW-347	05/21/2013 10:30	2.48	-92.1	6.62	0.31	0.52	16.15	73.2
MW-347	05/21/2013 11:17	2.78	-88.3	6.48	0.9	1.762	15.04	13.3
MW-347	05/22/2013 11:30	2.64	-90.6	6.49	0.91	1.536	18.27	128
MW-347	10/29/2013 11:30	0.83	-103.8	6.67	0.84	1.649	18.24	-0.10
MW-347	10/29/2013 11:35	0.82	-104.9	6.69	0.65	1.297	18.44	0.90
MW-347	10/29/2013 13:15	0.76	-138.1	6.72	0.72	1.413	18.45	13.10
MW-347	10/30/2013 13:15	0.76	-138.1	6.72	0.72	1.413	18.45	13.10
MW-347	07/15/2015 10:25	1.68	-379	NM	0.02	0.405	18.68	16.14
MW-347	07/15/2015 10:49	4.26	-79	6.91	0.13	2.484	16.23	1568.3
MW-347	01/12/2016 11:47	0	-3	5.62	16.6	27.3	14.65	53.2
MW-347	01/12/2016 12:12	8.42	-34	6.08	4	1.7	15.68	224
MW-347	02/11/2016 11:29	0.18	-71.2	5.97	3.54	6.241	7.91	1396.6
MW-347	02/11/2016 14:00	0.41	-39.2	5.98	3.19	5.923	4.45	1.9
MW-347	06/13/2016 13:10	0.77	-76.6	6.19	1.07	2.079	19.54	-5.10
MW-347	06/13/2016 13:57	1.72	-55.6	6.16	1.14	2.207	24.78	5.50
MW-347	09/13/2016 11:10	0.07	-53	6.11	2.11	3.979	23.38	0.0000
MW-347	09/13/2016 11:25	0.05	-47.6	6.14	2.72	5.081	25.28	0.0000
MW-347	12/08/2016 11:05	7.09	-51.4	6.59	0.48	0.976	10.88	5.8
MW-347	12/08/2016 11:55	6.48	-58.6	6.49	0.23	0.472	10.98	53
MW-347	02/28/2017 10:40	2.76	115.9	6.62	0.32	0.652	12.57	36.70
MW-347	02/28/2017 11:30	2.00	-59.2	6.58	0.27	0.553	10.52	23.20

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-347	03/09/2017 11:12	0.72	-112	6.61	0.06	1.232	8.25	8.30
MW-347	03/09/2017 13:44	-0.25	-129	6.78	0.05	0.957	9.82	54.30
MW-347	06/05/2017 10:00	4.79	-125.70	6.62	0.19	0.400	16.03	2.00
MW-347	06/05/2017 11:10	0.60	-114.70	2.21	0.28	0.582	17.65	2.50
MW-347	06/05/2017 12:00	3.79	-68.40	3.72	0.20	0.422	16.84	3.50
MW-347	02/16/2018 09:09	0.27	31.00	6.40	0.02	0.407	7.43	5.56
MW-347	02/16/2018 09:33	3.00	85.00	7.23	0.02	0.452	7.75	102.50
MW-347	02/16/2018 10:29	2.80	199.00	6.85	0.02	0.355	6	11.70
MW-347	06/07/2018 10:19	2.16	-181	7.03	0.020	0.417	18.51	2.3
MW-347	06/07/2018 10:21	1.35	-187	7.04	0.018	0.380	17	1.1
MW-347	06/07/2018 10:23	1.09	-192	7.04	0.018	0.376	16.75	2.5
MW-347	06/07/2018 10:25	1.02	-194	7.05	0.018	0.377	16.72	1.2
MW-347	06/07/2018 10:28	0.99	-196	7.05	0.018	0.378	16.74	1.3
MW-347	06/07/2018 10:30	0.96	-197	7.05	0.018	0.379	16.69	1.2
MW-347	06/07/2018 10:32	0.93	-197	7.04	0.018	0.381	16.71	2.7
MW-347	06/07/2018 10:34	0.91	-198	7.04	0.018	0.382	16.73	2.2
MW-347	06/07/2018 10:36	0.88	-199	7.04	0.018	0.383	16.76	1.9
MW-347	06/07/2018 10:38	0.89	-199	7.04	0.019	0.386	16.75	2.1
MW-347	06/07/2018 10:41	0.86	-199	7.03	0.019	0.385	16.72	1.8
MW-347	06/07/2018 10:43	0.86	-200	7.03	0.019	0.386	16.83	1.9
MW-347	06/07/2018 10:45	0.87	-200	7.03	0.019	0.387	16.84	2.1
MW-347	06/07/2018 10:47	0.88	-201	7.03	0.019	0.385	16.76	0.9
MW-347	06/07/2018 10:49	0.88	-202	7.03	0.019	0.386	16.82	0.8
MW-347	06/07/2018 10:51	0.89	-202	7.03	0.019	0.387	16.75	0.6
MW-347	06/07/2018 10:54	0.86	-204	7.03	0.019	0.387	16.63	1.8
MW-347	06/07/2018 10:56	0.86	-204	7.03	0.019	0.387	16.69	1.8
MW-347	06/07/2018 10:58	0.88	-205	7.03	0.019	0.388	16.75	0.9
MW-347	06/07/2018 11:00	0.85	-205	7.02	0.019	0.386	16.76	1.7
MW-347	06/07/2018 11:02	0.85	-206	7.02	0.019	0.385	16.85	1.5
MW-347	06/07/2018 11:04	0.84	-206	7.02	0.019	0.385	16.89	1.8
MW-347	06/07/2018 11:07	0.87	-207	7.02	0.019	0.386	16.89	0.6
MW-347	06/07/2018 11:09	0.86	-207	7.01	0.019	0.387	17.01	0.6
MW-347	06/08/2018 09:57	0.30	-158.00	6.66	0.02	0.406	15.69	5.80
MW-347	06/08/2018 11:08	0.86	-207.00	7.01	0.02	0.386	17.19	0.63
MW-347	06/08/2018 11:42	2.27	-138.00	7.02	0.02	0.382	15.7	8.40
MW-347	10/04/2018 12:50	3.21	-100.9	2.49	0.25	0.399	23.16	1.7
MW-347	10/04/2018 12:55	0.95	-96.8	6.88	0.25	0.513	22.72	1.3
MW-347	10/04/2018 13:00	0.92	-99.4	6.69	0.25	0.513	22.63	0.8
MW-347	10/04/2018 13:05	0.89	-100.2	6.73	0.25	0.511	22.52	0.8
MW-347	10/04/2018 13:10	0.88	-103.4	6.78	0.25	0.513	22.63	0.8
MW-347	10/04/2018 13:15	0.88	-103.40	6.77	0.25	0.513	22.63	0.80
MW-347	10/04/2018 14:00	0.76	-112.40	6.84	0.25	0.551	21.96	0.60
MW-347	10/04/2018 14:15	0.99	-101.60	6.86	0.25	0.531	21.61	3.40
MW-347	12/05/2018 10:30	0.33	-158.00	6.93	0.28	0.581	13.98	1.80
MW-347	12/05/2018 10:42	0.10	-176.20	6.94	0.31	0.641	14.62	2.10
MW-347	12/05/2018 10:50	0.03	-176.60	6.92	0.32	0.680	14.64	2.30
MW-347	03/18/2019 10:50	0.39	-111.6	7.02	NM	0.641	9.64	0.5
MW-347	03/18/2019 11:15	0.52	-98.5	7.08	0.32	0.652	9.61	2
MW-347	06/17/2019 10:05	3.27	-36.9	7.09	NM	0.505	14.95	6.9
MW-347	06/17/2019 10:10	0.95	-72	6.68	NM	0.493	15.46	3
MW-347	06/17/2019 10:15	0.76	-87.1	6.67	NM	0.495	15.36	2.5
MW-347	06/17/2019 10:20	0.68	-97.3	6.69	NM	0.499	15.52	1.8
MW-347	06/17/2019 10:25	0.68	-106.7	6.71	NM	0.516	15.4	1.1
MW-347	06/17/2019 10:30	0.67	-110.3	6.71	NM	0.518	15.42	1
MW-347	06/17/2019 10:35	0.67	-114.6	6.72	NM	0.518	15.43	1
MW-347	06/17/2019 10:40	0.45	-150.5	6.77	0.32	0.653	14.08	NM
MW-347	06/17/2019 10:45	0.43	-156.2	6.78	0.34	0.699	NM	0
MW-347	06/17/2019 10:50	NM	NM	NM	NM	NM	14.03	0.2
MW-347	06/17/2019 14:10	0.67	-114.6	6.72	NM	0.518	15.43	1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-347	06/17/2019 14:34	0.45	-150.5	6.77	0.32	0.653	14.08	0
MW-347	09/16/2019 10:30	1.48	163.2	6.81	NM	0.374	22.37	0.3
MW-347	09/16/2019 10:35	0.29	163.4	6.6	NM	0.364	22.15	1.2
MW-347	09/16/2019 10:40	0.2	149.9	6.67	NM	0.373	22.01	3.1
MW-347	09/16/2019 10:45	0.18	140.7	6.7	NM	0.39	22.11	2.8
MW-347	09/16/2019 10:50	0.17	132	6.7	NM	0.398	22.15	1
MW-347	09/16/2019 10:55	0.12	127.7	6.61	NM	0.399	22.17	2.4
MW-347	09/16/2019 11:00	1.12	113.6	6.72	NM	0.399	22.68	1.5
MW-347	09/16/2019 11:05	0.26	108.1	6.69	NM	0.398	22.53	0.4
MW-347	09/16/2019 11:10	0.19	98.4	6.72	NM	0.19	22.71	2.6
MW-347	09/16/2019 11:15	0.16	92.6	6.71	NM	0.4	22.64	2
MW-347	09/16/2019 11:50	0.14	88.4	6.73	0.19	0.401	22.59	6.4
MW-347	09/16/2019 12:05	0.41	131.8	6.63	0.19	0.396	22.64	5.4
MW-347	12/11/2019 09:20	2.32	-104.7	6.64	NM	0.092	9.48	12.6
MW-347	12/11/2019 09:25	2.29	-103.9	6.64	NM	0.092	9.17	12.9
MW-347	12/11/2019 09:30	2.17	-102.7	6.65	NM	0.094	8.82	9.9
MW-347	12/11/2019 09:35	2.16	-97.2	6.65	NM	0.098	8.94	7.2
MW-347	12/11/2019 09:40	2.15	-102.3	6.65	NM	0.102	9.16	3.9
MW-347	12/11/2019 09:45	2.17	-106.3	6.66	NM	0.103	9.24	3.9
MW-347	12/11/2019 09:50	2.16	-111.9	6.68	NM	0.105	9.26	2.6
MW-347	12/11/2019 09:55	2.46	-118.5	6.7	NM	0.107	9.33	1.4
MW-347	12/11/2019 10:00	3.72	-121.7	6.71	NM	0.107	9.45	1.1
MW-347	12/11/2019 10:05	1.65	-125.7	6.72	NM	0.108	9.45	1.5
MW-347	12/11/2019 11:00	3.54	-90.8	6.81	0.06	0.122	7.27	0.8
MW-347	12/11/2019 11:10	6.45	-72	6.96	0.05	0.101	7.83	12.4
MW-347	03/19/2020 13:10	0.34	-50	7.11	NM	0.191	8.26	0.1
MW-347	06/15/2020 09:55	9.21	-11	7.23	0.17	0.361	16.22	1.5
MW-347	06/15/2020 10:00	2.28	-100.4	6.99	0.16	0.338	17.51	0.2
MW-347	06/15/2020 10:05	2.18	-131.4	7	0.16	0.338	18.26	0
MW-347	06/15/2020 10:10	2.11	-156.9	6.99	0.16	0.339	18.53	0
MW-347	06/15/2020 10:15	1.95	-172.5	6.98	0.16	0.34	18.42	0.2
MW-347	06/15/2020 10:20	1.73	-183.7	7.02	0.16	0.34	18.67	0.2
MW-347	06/15/2020 10:25	1.48	-190.6	7.08	0.16	0.341	18.96	0.4
MW-347	06/15/2020 10:30	1.28	-195.2	7.14	0.16	0.342	19.09	0.5
MW-347	06/15/2020 10:35	1.12	-197.1	7.18	0.16	0.342	19.06	1.1
MW-347	06/15/2020 10:40	0.94	-199.3	7.21	0.16	0.342	19.02	0.4
MW-347	06/15/2020 10:41	0.94	-199.3	7.21	0.16	0.342	19.02	0.4
MW-347	06/15/2020 11:15	1.64	-22.5	6.64	0.18	0.379	16.81	2.8
MW-347	06/15/2020 11:30	1.98	100.8	6.17	0.22	0.46	16.59	83.4
MW-347	12/11/2020 08:45	1.66	-68.1	8.17	0.17	0.359	13.39	0
MW-347	12/11/2020 08:50	1.65	-69.9	8.16	0.17	0.358	13.56	0
MW-347	12/11/2020 08:55	1.45	-71.9	8.16	0.17	0.358	13.67	0
MW-347	12/11/2020 09:00	0.74	-86.2	7.99	0.17	0.361	14.39	0
MW-347	12/11/2020 09:05	0.75	-86.4	7.98	0.17	0.362	14.36	0
MW-347	12/11/2020 09:10	0.62	-99.5	7.82	0.18	0.365	14.58	0
MW-347	12/11/2020 09:15	0.62	-100.3	7.82	0.18	0.365	14.64	0
MW-347	12/11/2020 09:20	0.8	-116.2	7.69	0.18	0.374	14.78	0
MW-347	12/11/2020 09:25	0.81	-116.9	7.69	0.18	0.374	14.77	0
MW-347	12/11/2020 09:30	0.76	-117.6	7.68	0.18	0.373	14.87	0
MW-347	12/11/2020 10:10	2.52	-75.4	7.72	0.2	0.407	15.22	0
MW-347	12/11/2020 10:20	1.61	-83.8	7.6	0.2	0.413	15.63	0
MW-347	03/10/2021 11:50	11.23	-35.4	7.82	0.21	0.437	10.02	1.3
MW-347	03/10/2021 11:55	5.49	-78.6	7.73	0.2	0.435	9.88	1.5
MW-347	03/10/2021 12:00	2.33	-87.7	7.57	0.2	0.416	9.71	0.6
MW-347	03/10/2021 12:05	1.53	-88	7.5	0.2	0.414	9.64	0.2
MW-347	03/10/2021 12:10	1.1	-88.2	7.44	0.2	0.414	9.58	0.6
MW-347	03/10/2021 12:15	0.61	-93.2	7.34	0.2	0.419	9.41	0.3
MW-347	03/10/2021 12:20	0.42	-100.5	7.3	0.21	0.434	9.3	0.4
MW-347	03/10/2021 12:25	0.38	-102.4	7.29	0.21	0.436	9.31	0.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-347	03/10/2021 12:30	0.3	-110.2	7.27	0.22	0.445	9.4	0.5
MW-347	03/10/2021 12:35	0.29	-110.9	7.27	0.22	0.444	9.39	0.7
MW-347	03/10/2021 12:55	8.77	-74.8	7.44	0.24	0.495	10.08	8.2
MW-347	03/10/2021 13:12	5.25	-85.1	7.47	0.23	0.472	9.63	7.2
MW-347	05/05/2021 09:20	1.16	-93.8	6.81	0.5	1.038	12.06	13.1
MW-347	05/05/2021 09:25	1.09	-95.7	6.57	0.44	0.88	11.49	8.4
MW-347	05/05/2021 09:30	0.96	-103.4	6.61	0.42	0.855	11.23	5
MW-347	05/05/2021 09:35	0.93	-109.1	6.67	0.44	0.879	11.14	0.4
MW-347	05/05/2021 09:40	0.91	-119	6.71	0.45	0.909	11.12	1.1
MW-347	05/05/2021 09:45	0.79	-125.7	6.77	0.46	0.934	11.1	1.7
MW-347	05/05/2021 09:50	0.97	-130	6.79	0.47	0.946	11.08	1.5
MW-347	05/05/2021 09:55	0.95	-134	6.83	0.48	0.957	11.08	1.8
MW-347	05/05/2021 10:00	1.11	-138.3	6.85	0.49	0.983	11.09	1.9
MW-347	05/05/2021 10:05	1.09	-139.7	6.87	0.5	1.002	11.08	1.9
MW-348	10/29/2013 09:15	10.93	-108.6	6.91	1.23	2.373	16.90	27.60
MW-348	10/29/2013 14:55	0.50	-106.2	6.70	1.26	2.429	17.30	30.00
MW-348	10/30/2013 09:20	11.28	-105	6.90	1.23	2.370	16.88	26.00
MW-348	01/09/2014 10:25	11.82	-37.9	6.82	1.22	2.352	10.07	17.60
MW-348	01/09/2014 10:50	12.75	-69.6	7.01	1.24	2.395	10.08	18.80
MW-348	01/09/2014 11:05	12.09	-40.1	6.89	1.34	2.564	11.97	118.60
MW-348	01/12/2016 12:51	0	-86	6.7	1.1	2.19	15.49	23.9
MW-348	01/12/2016 13:02	0	-91	6.73	1.1	2.12	15.46	14.7
MW-348	02/17/2016 11:50	0.38	-161.2	6.71	1.42	2.723	11.71	0
MW-348	02/17/2016 12:00	0.38	-138.7	10.27	1.43	2.736	10.26	0.4
MW-348	06/14/2016 12:30	0.15	-92.2	6.74	1.88	3.533	17.86	2.40
MW-348	06/14/2016 12:45	0.19	-92.5	6.77	1.83	3.460	16.03	18.40
MW-348	09/12/2016 15:21	0.04	-41.4	6.54	1.82	3.444	19.36	0.0000
MW-348	09/12/2016 15:30	0.59	-31.9	6.71	2.07	3.913	22.00	0.0000
MW-348	12/08/2016 14:15	2.43	-127.4	7.01	2.04	3.842	13.74	1.2
MW-348	02/27/2017 13:30	4.51	-198.2	7.30	2.76	5.120	13.96	3.00
MW-348	06/06/2017 09:10	2.65	-303.40	6.99	1.71	3.251	13.08	8.50
MW-348	06/06/2017 09:35	0.99	-324.60	7.00	2.01	3.776	16.32	5.40
MW-348	06/06/2017 09:55	1.84	-302.60	7.39	1.87	3.529	13.76	19.60
MW-348	02/16/2018 09:20	0.10	-333.50	7.59	1.53	2.912	11.61	1.50
MW-348	02/16/2018 10:15	1.65	-276.20	8.13	2.02	3.803	11.8	3.40
MW-348	02/16/2018 10:55	1.29	-287.20	7.75	1.66	3.161	11.73	61.80
MW-348	06/07/2018 08:44	3.69	-186	7.08	0.167	3.161	17.07	14
MW-348	06/07/2018 08:47	1.78	-249	7.16	0.168	3.186	15.14	20.7
MW-348	06/07/2018 08:50	1.38	-272	7.28	0.168	3.199	14.95	13.7
MW-348	06/07/2018 08:52	1.3	-283	7.33	0.169	3.209	14.81	10.2
MW-348	06/07/2018 08:55	1.24	-291	7.35	0.170	3.224	14.74	4.5
MW-348	06/07/2018 08:58	1.16	-297	7.36	0.171	3.252	14.61	3
MW-348	06/07/2018 09:01	1.11	-302	7.35	0.173	3.285	14.55	2.2
MW-348	06/07/2018 09:03	1.11	-306	7.34	0.175	3.324	14.56	0.6
MW-348	06/07/2018 09:06	1.01	-310	7.32	0.178	3.370	14.56	1.3
MW-348	06/07/2018 09:09	1.08	-313	7.3	0.180	3.417	14.55	0.1
MW-348	06/07/2018 09:12	1.08	-315	7.29	0.183	3.463	14.5	-0.3
MW-348	06/07/2018 09:14	0.98	-319	7.28	0.185	3.492	14.53	0.5
MW-348	06/07/2018 09:17	1.05	-321	7.27	0.187	3.527	14.54	-0.8
MW-348	06/07/2018 09:20	1.06	-324	7.27	0.188	3.551	14.62	-1
MW-348	06/07/2018 09:23	1.05	-326	7.26	0.189	3.571	14.6	-1.2
MW-348	06/07/2018 09:25	1.04	-328	7.26	0.190	3.590	14.56	-1.4
MW-348	06/07/2018 09:28	0.95	-330	7.26	0.191	3.609	14.62	-0.4
MW-348	06/07/2018 09:31	0.94	-333	7.26	0.192	3.626	14.61	-0.5
MW-348	06/07/2018 09:34	1.02	-334	7.25	0.194	3.655	14.84	-1.7
MW-348	06/08/2018 09:09	0.52	-277.00	7.25	0.14	2.670	15.3	34.60
MW-348	06/08/2018 09:33	1.02	-334.00	7.25	0.19	3.639	15.02	-1.73
MW-348	06/08/2018 10:02	1.38	-274.00	7.19	0.14	2.719	15.71	13.40
MW-348	10/01/2018 10:15	0.12	-290.30	7.45	1.46	2.812	19.13	5.10

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-348	10/01/2018 10:45	0.20	-288.40	7.39	1.47	2.861	19.07	3.10
MW-348	10/01/2018 11:15	3.42	-316.10	7.54	1.47	2.438	19.36	26.10
MW-348	12/05/2018 14:45	0.55	-343.20	7.41	1.48	2.829	14.06	36.70
MW-348	12/05/2018 14:55	0.51	-336.10	7.69	1.47	2.794	14.02	11.80
MW-348	12/05/2018 15:05	0.60	-343.90	7.43	1.54	2.944	13.83	2.30
MW-348	03/18/2019 12:45	4.59	-198.5	7.8	1.49	2.859	10.96	6.6
MW-348	09/05/2019 09:10	2.21	-145.6	8.85	NM	2.486	19.44	4.2
MW-348	09/05/2019 09:37	1.86	-107.2	8.56	1.68	3.199	18.55	3.8
MW-348	09/05/2019 09:50	4.12	-106.4	8.58	0.84	1.656	19.11	7
MW-348	03/20/2020 12:30	5.88	-43.9	7.71	1.56	3.003	13.29	6.2
MW-348	09/04/2020 09:55	1.97	-109.1	7.33	1.28	2.476	20.62	8.8
MW-348	09/04/2020 10:25	0.39	-224.2	7.18	1.44	2.78	18.25	1.4
MW-348	09/04/2020 10:35	0.36	-234.6	7.15	1.54	2.835	17.93	15.8
MW-348	03/11/2021 10:45	9.65	-55.4	6.99	0.7	1.388	12.24	12.2
MW-348	03/11/2021 10:57	9.21	-111.1	7.3	0.96	1.882	12.54	0.6
MW-348	03/11/2021 11:06	9.75	-119.3	7.34	0.96	1.878	12.12	15.7
MW-348	05/05/2021 12:50	4.57	-21.5	7.53	2.12	3.985	13.13	78.5
MW-348	05/05/2021 12:55	2.77	-70.2	7.26	2.2	4.111	12.73	63.4
MW-348	05/05/2021 13:00	1.47	-93.6	7.16	2.33	4.343	12.32	35.2
MW-348	05/05/2021 13:05	1.22	-105.7	7.17	2.36	4.398	12.25	18.3
MW-348	05/05/2021 13:10	1.25	-114.1	7.18	2.35	4.395	12.13	8.1
MW-348	05/05/2021 13:15	0.95	-122.8	7.21	2.36	4.409	12.2	3.1
MW-348	05/05/2021 13:20	1.04	-130.5	7.21	2.42	4.506	12.17	1.2
MW-348	05/05/2021 13:25	1.01	-138.6	7.21	2.53	4.692	12.17	0.7
MW-348	05/05/2021 13:30	0.97	-147.5	7.22	2.57	4.931	12.18	0.2
MW-348	05/05/2021 13:35	0.94	-163.1	7.23	2.36	5.021	13.32	0.9
MW-348	08/18/2021 12:35	1.52	-25.4	7.02	0.97	1.909	23.25	38
MW-348	08/18/2021 12:40	0.34	-58.9	7.04	96	1.887	23.07	30.6
MW-348	08/18/2021 12:45	0.12	-91.9	6.91	0.97	1.9	23.39	15.1
MW-348	08/18/2021 12:50	0.13	-108.4	6.85	1	1.962	23.29	13.3
MW-348	08/18/2021 12:55	0.51	-114.2	6.83	1.03	2.02	23.03	7.5
MW-348	08/18/2021 13:00	0.55	-123.9	6.8	1.08	2.105	22.69	3.9
MW-348	08/18/2021 13:05	0.6	-131.9	6.81	1.11	2.167	22.55	2.4
MW-348	08/18/2021 13:10	0.57	-136.6	6.82	1.12	2.186	22.62	5.2
MW-348	08/18/2021 13:15	0.6	-143.2	6.82	1.12	2.21	22.43	3
MW-348	08/18/2021 13:20	0.56	-150.2	6.82	1.14	2.226	22.55	5.2
MW-348	03/18/2022 08:50	1.31	140.2	6.83	1.43	2.742	12.64	177.9
MW-348	03/18/2022 08:55	0.59	38.4	6.83	1.43	2.742	12.14	35.9
MW-348	03/18/2022 09:00	0.61	22.3	6.85	1.43	2.744	12.19	29.5
MW-348	03/18/2022 09:05	0.51	-15.6	6.85	1.42	2.723	12.22	19.6
MW-348	03/18/2022 09:10	0.47	-21	6.85	1.42	2.722	12.19	18
MW-348	03/18/2022 09:15	0.51	-35.4	6.85	1.42	2.725	12.2	13.6
MW-348	03/18/2022 09:20	0.41	-49.1	6.87	1.44	2.754	12.22	10.2
MW-348	03/18/2022 09:25	0.4	-49.8	6.86	1.44	2.757	12.22	10.7
MW-348	03/18/2022 09:30	0.34	-54.4	6.87	1.45	2.779	12.22	10
MW-348	03/18/2022 09:35	0.31	-60.5	6.87	1.47	2.817	12.22	7.7
MW-381	01/13/2014 10:06	1.64	57	4.58	0.12	3.176	9.79	102.40
MW-381	01/13/2014 10:59	2.72	59	5.69	0.17	3.214	10.25	81.40
MW-381	01/14/2014 12:05	2.42	36	5.42	0.25	4.675	6.82	44.10
MW-381	04/17/2014 13:47	3.97	-329	5.34	0.08	1.636	8.28	202.40
MW-381	04/17/2014 14:42	7.10	-84	6.20	0.05	1.060	7.95	121.00
MW-381	04/18/2014 10:35	3.99	-295	5.28	0.05	1.086	8.31	52.90
MW-381	07/14/2014 09:09	0.38	65	4.98	0.05	1.002	18.14	36.86
MW-381	07/14/2014 10:04	1.83	128	5.46	0.04	0.790	17.70	74.30
MW-381	07/15/2014 09:40	4.91	207	5.51	0.01	0.189	21.14	652.60
MW-381	04/14/2015 11:36	-0.80	130	5.32	0.05	0.979	8.87	23.92
MW-381	04/14/2015 12:09	0.20	61	5.20	0.65	0.996	8.14	2376.10
MW-381	04/15/2015 10:19	7.42	94	5.15	0.03	0.532	7.64	268.70
MW-381	06/25/2015 10:59	8.67	153	4.88	0.08	1.494	18.47	24.1

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-381	06/25/2015 11:43	6.72	-4	5.77	0.08	1.646	15.16	2747.1
MW-381	09/03/2015 10:03	4.26	1264	4.73	0.02	0.437	22.81	53.1
MW-381	09/03/2015 10:28	2.51	1060	6.9	0.01	0.305	19.47	1382
MW-381	11/05/2015 11:57	8.32	106	4.78	0.09	1.812	16.45	57.3
MW-381	11/05/2015 14:17	3.42	43	5.68	0.59	10.34	17.03	348.1
MW-381	05/13/2016 10:51	5.54	203	5.03	0.16	3.039	12.34	127.70
MW-381	05/13/2016 13:40	5.03	171	6.78	0.12	2.345	13.70	997.70
MW-381	11/08/2016 09:04	2.41	58.00	4.91	0.04	0.754	16.25	55.60
MW-381	11/08/2016 14:40	1.61	-4	5.41	0.28	5.159	16.60	75.60
MW-381	06/13/2017 09:17	0.64	96.00	5.52	0.06	1.199	19.11	69.02
MW-381	06/13/2017 09:40	2.32	73.00	5.30	0.04	0.733	19.35	138.10
MW-381	06/13/2017 09:48	1.10	72.00	7.36	0.07	1.451	14.56	287.10
MW-381	05/12/2021 10:05	5.83	125.8	5.28	0.24	0.489	12.76	476.6
MW-381	05/12/2021 10:10	5.28	129.4	5.42	0.22	0.45	12.67	314.9
MW-381	05/12/2021 10:15	8.92	126.5	5.29	0.22	0.451	12.63	218.6
MW-381	05/12/2021 10:20	4.93	122.2	5.4	0.23	0.481	12.46	91.5
MW-381	05/12/2021 10:25	8.18	121.4	5.73	0.24	0.486	12.49	42.9
MW-381	05/12/2021 10:30	8.36	121.4	5.57	0.24	0.489	12.49	38.4
MW-381	05/12/2021 10:35	7.48	119.4	5.37	0.25	0.511	12.45	33.7
MW-381	05/12/2021 10:40	6.1	118.3	5.49	0.26	0.532	12.47	20
MW-381	05/12/2021 10:45	4.1	122.6	5.46	0.27	0.555	12.35	46.9
MW-381	04/04/2022 12:05	4.07	182.7	5.61	0.24	0.496	8.8	540.8
MW-381	04/04/2022 12:10	1.27	201.5	5.13	0.22	0.457	7.81	369.1
MW-381	04/04/2022 12:15	1.23	200.3	5.12	0.22	0.457	7.8	290.8
MW-381	04/04/2022 12:20	1.27	199.8	5.12	0.22	0.457	7.77	294.1
MW-381	04/04/2022 12:25	1.23	195.3	5.13	0.22	0.456	7.74	246.6
MW-381	04/04/2022 12:30	1.01	164.5	5.23	0.22	4.62	7.68	88.1
MW-381	04/04/2022 12:35	1.02	161.8	5.25	0.22	0.463	7.65	74.3
MW-381	04/04/2022 12:40	0.82	148.6	5.29	0.23	0.467	7.54	50.4
MW-381	04/04/2022 12:45	0.84	146.2	5.3	0.23	0.467	7.54	39.1
MW-381	04/04/2022 12:50	0.84	144	5.31	0.23	0.467	7.56	45.1
MW-382	01/13/2014 15:03	1.31	-71	6.68	0.12	2.433	10.04	10.66
MW-382	01/13/2014 15:50	2.23	130	6.75	0.09	1.863	10.68	32.90
MW-382	01/14/2014 12:45	1.72	19	6.76	0.13	2.536	9.35	22.30
MW-382	04/17/2014 10:55	2.70	-385	6.82	0.05	0.934	8.51	11.95
MW-382	04/17/2014 11:39	6.47	-166	7.00	0.03	0.622	8.13	29.40
MW-382	04/18/2014 09:48	3.62	-417	6.78	0.03	0.649	8.14	7.80
MW-382	07/14/2014 10:52	0.50	-23	6.34	0.02	0.343	20.33	6.88
MW-382	07/14/2014 11:42	1.61	32	6.82	0.02	0.375	14.34	28.30
MW-382	07/15/2014 10:29	-0.10	28	5.95	0.01	0.279	17.91	50.90
MW-382	04/14/2015 09:47	-0.75	-21	7.00	0.03	0.551	9.18	23.53
MW-382	04/14/2015 10:29	1.21	-62	6.62	0.02	0.442	7.69	349.30
MW-382	04/15/2015 09:26	1.93	-87	6.66	0.01	0.236	7.62	195.80
MW-382	06/25/2015 12:15	6.32	8	6.33	0.06	1.218	14.79	74.6
MW-382	06/25/2015 15:48	3.33	45	6.63	0.05	1.092	14.87	749.2
MW-382	09/01/2015 11:09	0.07	1128	6.49	0.1	1.925	21.05	24.2
MW-382	09/01/2015 12:13	4.56	1106	7.88	0.06	1.139	19.38	390.4
MW-382	11/03/2015 11:29	1.19	266	6.08	0.02	0.396	17.53	7.4
MW-382	11/03/2015 11:56	7.14	-149	6.43	0.03	0.621	17.6	148.7
MW-382	05/13/2016 09:29	0.54	117	6.38	0.02	0.444	12.02	20.10
MW-382	05/13/2016 11:20	2.07	153	7.40	0.02	0.417	13.23	833.00
MW-382	11/09/2016 09:01	1.70	-57.00	6.25	0.02	0.360	17.61	27.70
MW-382	11/09/2016 10:08	2.62	-82	6.60	0.12	2.226	18.08	58.50
MW-382	06/06/2017 09:33	1.22	-32.00	6.79	0.07	1.433	16.04	300.50
MW-382	06/06/2017 10:05	2.21	62.00	6.58	0.02	0.349	16.36	111.40
MW-382	06/06/2017 10:06	1.65	-51.00	7.58	0.08	1.543	13.68	319.60
MW-384	01/13/2014 13:30	4.07	29	5.95	0.16	3.102	9.61	48.14
MW-384	01/13/2014 14:25	4.03	168	5.86	0.13	2.463	11.45	707.60
MW-384	01/14/2014 12:28	5.80	47	6.23	0.19	3.637	7.04	87.40

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-384	04/17/2014 09:02	3.66	-333	5.93	0.05	0.957	9.07	34.46
MW-384	04/17/2014 09:48	9.22	-62	6.68	0.03	0.682	8.41	116.00
MW-384	04/18/2014 09:06	6.43	-199	6.10	0.03	0.682	9.68	235.30
MW-384	07/14/2014 13:15	0.37	67	5.97	0.02	0.390	20.05	22.87
MW-384	07/14/2014 13:58	1.97	111	6.92	0.02	0.428	15.79	132.10
MW-384	07/15/2014 11:20	0.02	104	5.99	0.02	0.432	17.88	624.30
MW-384	05/13/2015 09:58	6.05	146	6.22	0.03	0.521	13.12	51.80
MW-384	05/13/2015 10:08	1.35	126	6.93	0.02	0.435	13.51	1712.40
MW-384	09/01/2015 10:43	3.03	1234	6.63	0.06	1.235	20.61	236.5
MW-384	09/01/2015 10:56	0.54	983	7.42	0.07	1.366	18.38	2503.6
MW-384	11/03/2015 10:37	3.63	-41	6.33	0.03	0.592	18.57	435
MW-384	11/03/2015 10:46	6.38	295	6.02	0.02	0.489	18.59	32.5
MW-384	11/09/2016 12:37	2.18	-53.00	6.34	0.02	0.450	18.45	194.00
MW-384	11/09/2016 14:48	4.76	-116	6.97	0.15	2.770	20.21	5.40
MW-384	06/06/2017 10:48	5.34	157.00	5.94	0.01	0.308	16.44	23.30
MW-384	06/06/2017 11:19	0.60	-7.00	6.25	0.06	1.228	19.01	4.15
MW-384	06/06/2017 11:55	4.83	-76.00	8.08	0.06	1.147	14.41	235.80
MW-385	10/28/2013 13:40	6.89	-84	6.78	1.05	2.040	17.65	103.00
MW-385	10/28/2013 14:15	7.18	-84	7.03	1.02	2.011	17.61	101.00
MW-385	10/28/2013 14:20	6.80	-93	6.82	1.07	2.085	17.68	223.00
MW-385	10/29/2013 14:20	6.80	-93	6.82	1.07	2.085	17.68	223.00
MW-385	01/08/2014 14:30	10.29	62.5	6.71	0.79	1.555	8.95	255.00
MW-385	01/08/2014 14:50	4.38	-60	6.79	1.00	1.960	10.28	373.30
MW-385	01/08/2014 15:10	10.11	-87.8	6.70	1.13	2.208	4.70	1878.80
MW-385	01/12/2016 11:00	1.48	-131	6.65	0.3	0.505	15.2	49.5
MW-385	01/12/2016 11:10	7.9	-128	6.64	0.2	0.466	15.01	113
MW-385	02/17/2016 10:35	0.87	-58.6	6.44	0.27	0.559	9.25	6.1
MW-385	02/17/2016 10:50	0.76	-50.8	6.49	0.28	0.573	8.49	6.6
MW-385	06/14/2016 15:05	4.50	68	5.89	14.05	23.250	17.68	24.30
MW-385	06/14/2016 15:22	5.55	44.9	6.12	8.40	14.550	18.11	165.50
MW-385	09/13/2016 14:31	0.67	-82.7	6.42	0.50	1.005	23.00	0.0000
MW-385	09/13/2016 14:40	0.45	-85.1	6.52	0.48	0.077	25.90	0.0000
MW-385	12/08/2016 10:45	0.29	-196	7.05	0.68	1.354	10.41	9.70
MW-385	12/08/2016 11:10	4.04	-79.5	6.42	0.22	0.462	13.76	188.20
MW-385	02/28/2017 14:20	0.15	-39.2	6.91	0.31	0.626	12.72	8.80
MW-385	02/28/2017 14:30	0.19	-48.6	6.88	0.30	0.613	12.59	7.40
MW-385	06/05/2017 13:55	0.16	-79.00	6.72	0.17	0.355	16.46	17.80
MW-385	06/05/2017 14:35	0.28	-70.40	6.64	0.17	0.344	14.91	4.30
MW-385	06/05/2017 14:50	2.24	-61.50	6.77	0.20	0.407	16.22	9.70
MW-385	02/16/2018 08:55	3.46	-129.30	9.00	0.54	1.096	9.62	88.60
MW-385	02/16/2018 09:50	6.85	-92.30	7.50	0.16	0.338	10.76	47.20
MW-385	02/16/2018 10:00	7.03	-94.50	7.61	0.16	0.362	10.78	92.10
MW-385	06/08/2018 10:23	1.25	-81.00	6.48	0.01	0.266	16.2	4.30
MW-385	06/08/2018 13:59	1.37	-116.00	6.77	0.01	0.222	13.59	33.70
MW-385	10/02/2018 10:30	3.84	-104.20	7.06	0.22	0.462	22	15.70
MW-385	10/02/2018 11:20	4.31	-116.10	7.16	0.23	0.464	21.36	8.70
MW-385	10/02/2018 11:30	3.96	-129.80	7.14	0.22	0.451	22.41	63.40
MW-385	12/07/2018 08:50	7.60	20.20	6.87	0.06	0.127	9.83	34.60
MW-385	12/07/2018 09:06	5.56	-79.80	6.88	0.10	0.206	9.59	4.90
MW-385	12/07/2018 09:15	4.54	-83.60	6.84	0.10	0.206	9.11	5.20
MW-386	11/17/2013 15:10	0.27	-129	6.84	0.46	0.932	18.20	13.90
MW-386	11/17/2013 15:25	0.26	-127.2	6.84	0.46	0.920	18.28	13.70
MW-386	11/17/2013 15:30	0.41	-123	6.84	0.46	0.923	15.87	21.90
MW-386	12/20/2013 09:50	0.88	-133.7	6.98	0.53	1.070	12.71	18.10
MW-386	12/20/2013 10:10	0.58	-155.5	6.98	0.55	1.109	15.22	6.70
MW-386	12/20/2013 10:28	1.05	-136.5	6.98	0.54	1.085	12.02	66.60
MW-386	06/23/2014 09:45	3.31	-104.3	6.97	0.58	1.169	17.28	26.60
MW-386	06/23/2014 10:00	0.84	-119.3	6.29	0.57	1.133	15.54	2.60
MW-386	06/23/2014 10:20	1.01	-116.5	6.47	0.56	1.131	18.64	10.70

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-386	03/16/2015 09:25	0.86	-79.3	6.93	0.47	0.946	8.15	180.70
MW-386	03/16/2015 10:05	0.49	-109.7	7.03	0.52	1.039	8.55	70.30
MW-386	03/16/2015 10:25	3.74	-116.5	7.10	0.56	1.126	8.42	51.20
MW-386	07/20/2015 12:11	0.0000	-145	7.46	8.00	13.800	20.13	0.0000
MW-386	07/20/2015 12:20	0.0000	-156	7.44	8.20	14.100	25.48	4.50
MW-386	10/29/2015 12:15	0.44	-148.6	6.99	10.02	17.060	21.99	2.50
MW-386	12/01/2015 10:49	0.02	-159.1	7.05	10.42	17.600	18.16	0.70
MW-386	12/01/2015 11:08	0.0000	-165.5	7.04	11.42	19.290	18.03	186.00
MW-386R	06/07/2016 11:35	2.46	-47.1	7.92	3.58	6.578	26.27	17.20
MW-386R	09/06/2016 15:06	0.92	-139.5	7.20	2.88	5.335	23.32	1.80
MW-386R	12/02/2016 14:15	1.5	-156.9	7.1	1.49	2.748	13.53	5.6
MW-386R	03/06/2017 11:00	3.14	-15	7.35	2.55	4.728	11.84	61.40
MW-386R	03/06/2017 11:20	5.02	-40.9	7.73	2.00	3.777	10.77	221.40
MW-386R	06/08/2017 10:05	0.70	-32.90	6.79	1.33	2.555	16.68	59.80
MW-386R	06/08/2017 11:10	3.96	-89.60	6.86	1.49	2.867	15.66	3.80
MW-386R	06/08/2017 11:30	0.91	-77.10	7.06	1.35	2.598	16.92	200.60
MW-386R	12/05/2018 09:05	2.74	8.40	7.33	0.85	1.670	9.5	3.00
MW-386R	12/05/2018 09:40	2.89	16.80	7.21	0.87	1.705	8.51	2.50
MW-386R	12/05/2018 09:50	4.10	2.10	7.12	0.92	1.795	10.85	966.80
MW-386R	03/25/2019 13:25	2.06	-16.2	7.39	NM	1.167	8.53	8.6
MW-386R	03/25/2019 13:50	0.39	-21.8	7.42	0.61	1.214	8.5	2.3
MW-386R	06/10/2019 10:05	1.4	-39.2	7.2	NM	1.535	18.02	6.2
MW-386R	06/10/2019 10:10	1.26	-43.7	7.18	NM	1.548	18.12	5.4
MW-386R	06/10/2019 10:15	1.07	-48.6	7.15	NM	1.555	18.23	5.2
MW-386R	06/10/2019 10:20	1.01	-49.7	7.15	NM	1.557	18.47	4.7
MW-386R	06/10/2019 10:25	1	-49.8	7.14	NM	1.559	18.64	4.5
MW-386R	06/10/2019 10:30	0.99	-47.7	7.13	NM	1.56	18.66	4.5
MW-386R	06/10/2019 10:35	0.99	-47	7.13	NM	1.56	18.66	4.3
MW-386R	06/10/2019 10:40	1.16	-51	7.14	0.78	1.549	18.25	NM
MW-386R	06/10/2019 10:45	1.41	-99	7.28	0.73	1.443	NM	11.9
MW-386R	06/10/2019 10:50	NM	NM	NM	NM	NM	15.56	1
MW-386R	06/10/2019 13:30	0.99	-47	7.13	NM	1.56	18.66	4.3
MW-386R	06/10/2019 13:50	1.16	-51	7.14	0.78	1.549	18.25	11.9
MW-386R	12/04/2019 10:00	1.11	76.2	6.77	NM	1.262	10.43	39.2
MW-386R	12/04/2019 10:05	1.09	73.4	6.78	NM	1.267	10.52	24
MW-386R	12/04/2019 10:10	1.08	65.3	6.84	NM	1.271	10.91	22.6
MW-386R	12/04/2019 10:15	0.86	48.2	6.99	NM	1.255	10.84	23.3
MW-386R	12/04/2019 10:20	0.67	40.1	7.05	NM	1.27	11.15	2
MW-386R	12/04/2019 10:25	0.47	31.2	7.09	NM	1.268	11.49	0.2
MW-386R	12/04/2019 10:30	0.64	29.2	7.1	NM	1.264	11.68	0.2
MW-386R	12/04/2019 10:35	0.45	25.4	7.11	NM	1.265	11.76	0.2
MW-386R	12/04/2019 10:40	0.37	19.5	7.13	NM	1.264	11.7	0.2
MW-386R	12/04/2019 10:45	0.36	15.5	7.16	NM	1.262	11.63	0.2
MW-386R	12/04/2019 11:10	1.83	60.9	7.24	0.64	1.268	9.1	5.8
MW-386R	12/04/2019 11:25	4.95	-15	7.58	0.62	1.232	7.48	23.3
MW-386R	03/17/2020 09:50	0.6	-62.6	7.23	NM	1.536	10	5.5
MW-386R	03/17/2020 10:25	0.45	-80.3	7.22	0.76	1.554	10.01	3.2
MW-386R	06/09/2020 09:00	1.06	-123.3	7.24	NM	1.454	16.33	9.3
MW-386R	06/09/2020 09:16	1.2	-126.2	7.28	0.69	1.379	15.87	5.5
MW-386R	09/11/2020 08:30	7.14	24	7.03	0.71	1.424	22.78	66
MW-386R	09/11/2020 08:35	5.87	-70.8	7.15	0.69	1.379	22.24	56.9
MW-386R	09/11/2020 08:40	4.99	-110	7.25	0.64	1.273	21.88	24.4
MW-386R	09/11/2020 08:45	5	-133	7.31	0.61	1.214	21.82	11.8
MW-386R	09/11/2020 08:50	4.95	-144.9	7.35	0.59	1.183	21.81	9.4
MW-386R	09/11/2020 08:55	4.8	-164.9	7.4	0.56	1.119	21.68	9.1
MW-386R	09/11/2020 09:00	4.11	-176.9	7.43	0.54	1.085	21.64	6.5
MW-386R	09/11/2020 09:05	4.18	-185.3	7.46	0.52	1.057	21.62	3.6
MW-386R	09/11/2020 09:10	3.82	-192.3	7.47	0.51	1.037	21.64	4.3
MW-386R	09/11/2020 09:15	3.79	-195.4	7.48	0.51	1.023	21.66	3.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-386R	09/11/2020 09:30	3.33	-198.1	7.49	0.49	0.984	21.34	2.8
MW-386R	09/11/2020 09:45	3.27	-196.9	7.53	0.45	0.905	21.23	20.4
MW-386R	12/15/2020 09:00	2.76	16.9	7.18	0.9	1.776	9.08	34.5
MW-386R	12/15/2020 09:05	1.33	0.3	7.15	0.9	1.786	10.02	29.7
MW-386R	12/15/2020 09:10	5.31	-12.2	7.15	0.89	1.754	10.75	25.4
MW-386R	12/15/2020 09:15	11.14	-26	7.16	0.89	1.735	10.95	19.8
MW-386R	12/15/2020 09:20	11	-32	7.17	0.89	1.743	11.21	16.3
MW-386R	12/15/2020 09:25	10.99	-42.6	7.18	0.88	1.737	11.34	13.5
MW-386R	12/15/2020 09:30	12.07	-51.3	7.19	0.88	1.725	11.44	10.4
MW-386R	12/15/2020 09:35	13.29	-58.8	7.21	0.87	1.716	11.48	9
MW-386R	12/15/2020 09:40	14.14	-64.5	7.22	0.87	1.71	11.32	7.6
MW-386R	12/15/2020 09:45	14.97	-68.4	7.22	0.87	1.707	11.38	6.5
MW-386R	12/15/2020 10:25	14.14	-35.3	7.52	0.8	1.575	12.77	1.7
MW-386R	12/15/2020 10:35	9.25	-73.2	7.38	0.8	1.577	14.06	1.2
MW-386R	03/10/2021 08:35	3.41	121.7	6.73	0.55	112.6	8.22	7.2
MW-386R	03/10/2021 08:40	1.48	19.6	7.02	0.52	1.05	8.24	0
MW-386R	03/10/2021 08:45	1.26	-0.8	7.1	0.53	1.06	8.33	0
MW-386R	03/10/2021 08:50	1.17	-18.6	7.18	0.53	1.071	9.71	0
MW-386R	03/10/2021 08:55	1.2	-24.9	7.22	0.53	1.068	9.92	0
MW-386R	03/10/2021 09:00	1.23	-28.6	7.25	0.53	1.073	9.63	0
MW-386R	03/10/2021 09:05	10.14	37.6	7.44	0	0.004	13.82	0
MW-386R	03/10/2021 09:10	9.47	73.6	7.57	0	0.003	16.31	0
MW-386R	03/10/2021 09:15	8.83	115	7.46	0	0.003	18.83	0
MW-386R	03/10/2021 09:20	8.09	148.6	6.78	0	0.002	22.07	0
MW-386R	03/10/2021 10:00	3.7	-27.4	7.65	0.59	1.187	9.48	0
MW-386R	03/10/2021 10:15	3.96	-21.3	7.65	0.6	1.19	8.87	71.4
MW-387	11/07/2013 11:10	14.80	-140	7.71	0.83	1.430	15.94	130.00
MW-387	11/07/2013 11:25	14.80	-134	7.60	6.83	1.630	15.93	122.00
MW-387	11/07/2013 15:20	0.35	-104	7.23	0.83	1.624	13.67	154.20
MW-387	11/08/2013 11:25	14.80	-134	7.60	6.83	1.630	15.93	122.00
MW-387	12/19/2013 12:45	0.85	-81.3	7.19	0.38	0.770	10.14	21.00
MW-387	12/19/2013 13:25	8.64	-94.2	7.29	0.46	0.935	12.58	28.60
MW-387	12/19/2013 15:00	5.64	-49.4	7.12	0.52	1.049	13.62	1654.50
MW-387	07/20/2015 15:30	0.63	-256	12.70	40.90	60.100	31.52	86.10
MW-387	07/20/2015 15:58	16.46	-184	12.81	47.30	69.200	26.72	196.00
MW-387	10/30/2015 11:47	0.38	313.4	6.8	62.1	88.53	18.05	542.7
MW-387	10/30/2015 13:12	0.19	370.3	7.11	66.89	92.66	23.05	698.5
MW-387	11/30/2015 15:28	1.12	153.8	8.56	58.14	82.760	17.47	1276.50
MW-387R	06/07/2016 14:10	2.90	41.6	7.21	2.07	3.923	25.57	4.80
MW-387R	09/07/2016 10:46	1.57	-85.2	6.96	1.65	3.156	22.88	11.90
MW-387R	09/07/2016 12:35	1.19	-114.2	7.01	1.63	3.167	22.67	21.70
MW-387R	12/05/2016 14:50	2.41	-45.4	7.08	1.22	2.359	12.84	9.7
MW-387R	12/05/2016 15:10	4.08	-47.9	7.24	0.98	1.913	11.24	121.8
MW-387R	03/02/2017 14:25	4.68	-49.4	7.27	0.50	1.009	9.74	5.50
MW-387R	03/02/2017 14:40	7.51	29.5	7.61	0.30	0.619	9.23	108.60
MW-387R	06/07/2017 09:15	0.80	-15.70	7.41	0.28	0.582	15.59	16.40
MW-387R	06/07/2017 09:50	0.56	-15.50	7.40	0.30	0.612	15.82	3.60
MW-387R	06/07/2017 10:45	4.61	207.70	7.44	0.33	0.672	16.13	139.60
MW-387R	12/04/2018 14:35	3.91	111.30	7.84	0.06	0.134	10.09	17.50
MW-387R	12/04/2018 14:55	5.22	125.10	7.90	0.07	0.139	10.53	4.20
MW-387R	12/04/2018 15:10	4.39	98.00	7.79	0.07	0.145	10.8	69.80
MW-387R	06/24/2019 10:05	2.1	64.9	7.83	NM	0.57	20.49	6.2
MW-387R	06/24/2019 10:10	0.81	49.5	7.56	NM	0.549	20.68	7.3
MW-387R	06/24/2019 10:15	0.62	36.6	7.56	NM	0.545	20.76	1.3
MW-387R	06/24/2019 10:20	0.49	30	7.56	NM	0.541	20.76	11.4
MW-387R	06/24/2019 10:25	0.45	27.3	7.56	NM	0.539	20.66	0.5
MW-387R	06/24/2019 10:30	0.45	26.2	7.55	NM	0.538	20.64	0.7
MW-387R	06/24/2019 10:35	0.46	25	7.57	NM	0.537	20.65	0.6
MW-387R	06/24/2019 10:40	0.37	-6.6	7.62	0.25	0.524	17.93	NM

Appendix B5 East Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-387R	06/24/2019 10:45	0.34	-17.8	7.62	0.26	0.527	NM	0.1
MW-387R	06/24/2019 10:50	NM	NM	NM	NM	NM	18.52	1
MW-387R	12/12/2019 12:55	16.4	45.9	7.74	NM	0.1	8.24	44.2
MW-387R	12/12/2019 13:00	13.8	31.9	7.74	NM	0.097	8.2	17.4
MW-387R	12/12/2019 13:05	15	12.2	7.82	NM	0.092	8.44	0.3
MW-387R	12/12/2019 13:10	18.45	8.4	7.85	NM	0.09	7.93	11.3
MW-387R	12/12/2019 13:15	18.27	6.8	7.88	NM	0.089	7.94	6.6
MW-387R	12/12/2019 13:20	17.75	6.6	7.9	NM	0.089	8.05	1.9
MW-387R	12/12/2019 13:25	18.07	6.9	7.91	NM	0.089	8.27	1.7
MW-387R	12/12/2019 13:30	19.01	7.7	7.91	NM	0.09	8.24	2
MW-387R	12/12/2019 13:35	16.25	6.4	7.91	NM	0.092	8.04	2
MW-387R	12/12/2019 13:40	15.62	4.4	7.91	NM	0.093	8.07	0.9
MW-387R	12/12/2019 14:30	18.58	69.9	7.9	0.05	0.11	7.21	2.1
MW-387R	12/12/2019 14:45	16.69	58.8	8.02	0.04	0.095	6.48	51.8
MW-388	11/07/2013 09:56	8.03	-106	6.74	0.23	0.473	17.16	49.30
MW-388	11/07/2013 10:15	3.75	-124	6.78	0.23	0.478	17.03	48.90
MW-388	11/07/2013 10:20	3.63	-125	6.79	0.23	0.479	17.00	60.40
MW-388	11/08/2013 10:20	3.63	-125	6.79	0.23	0.479	17.00	60.40
MW-388	12/19/2013 09:50	1.04	-91.9	6.93	0.23	0.484	6.48	52.70
MW-388	12/19/2013 10:10	0.36	-123	6.69	0.24	0.502	10.53	86.00
MW-388	12/19/2013 10:30	0.52	-121.9	6.95	0.24	0.502	10.69	772.40
MW-388	03/17/2015 10:20	79.10	58.8	6.58	0.32	0.652	5.97	174.20
MW-388	03/17/2015 11:30	4.44	-50.7	7.02	0.25	0.511	7.21	18.30
MW-388	03/17/2015 11:40	3.70	-52.2	7.04	0.24	0.502	8.65	128.90
MW-388	07/20/2015 13:26	0.0000	-124	7.33	0.30	0.614	21.75	0.0000
MW-388	07/20/2015 13:40	0.0000	-123	7.33	0.30	0.624	26.22	20.10
MW-388	10/29/2015 13:35	0.40	-120.5	6.80	0.30	0.622	18.58	18.10
MW-388	10/29/2015 13:47	0.39	-114.9	6.80	0.31	0.627	19.34	27.30
MW-388	11/30/2015 13:35	4.73	-81	6.91	0.26	0.541	12.79	12.30
MW-388	11/30/2015 14:00	4.77	-109.9	6.85	0.26	0.542	12.55	27.60
MW-388	06/07/2016 14:20	2.52	-75.5	7.92	0.34	0.694	21.72	8.40
MW-388	06/07/2016 14:45	2.95	-61.4	7.37	0.28	0.577	20.69	121.50
MW-388	09/07/2016 10:50	1.16	-111.9	6.97	0.52	1.035	25.83	0.0000
MW-388	09/07/2016 11:15	0.62	-105	6.81	0.49	1.003	24.48	4.00
MW-388	11/30/2016 13:00	6.84	-107.1	6.92	0.17	0.355	13.59	4.4
MW-388	11/30/2016 14:00	3.31	-121.9	6.97	0.18	0.366	13.68	12.1
MW-388	03/02/2017 11:00	4.28	-57.4	7.10	0.28	0.565	11.19	42.40
MW-388	03/02/2017 11:35	4.88	-80.5	7.03	0.26	0.521	9.72	43.10
MW-388	06/08/2017 13:30	0.30	-43.20	6.61	0.21	0.430	16.69	16.00
MW-388	06/08/2017 14:05	0.22	-72.10	6.69	0.22	0.460	15.7	7.40
MW-388	06/08/2017 14:30	0.26	-35.10	6.72	0.22	0.455	16.94	140.60
MW-388	06/05/2019 09:35	1.35	68.4	6.31	NM	0.261	14.67	29.9
MW-388	06/05/2019 09:51	0.46	79.5	6.36	0.13	0.279	13.92	14.2
MW-388	06/05/2019 10:05	2.04	58.9	7.4	NM	0.297	12.79	47.6
MW-388	06/05/2019 10:10	2.32	94.9	6.55	0.14	0.284	14.5	39.8
MW-388	06/05/2019 10:15	2.29	112.4	6.4	NM	0.265	15.64	38.2
MW-388	06/05/2019 10:20	2.01	124	6.34	NM	0.256	14.58	39.3
MW-388	06/05/2019 10:25	1.79	110.1	6.31	NM	0.256	14.56	36.6
MW-388	06/05/2019 10:30	1.62	103.6	6.31	NM	0.258	14.39	37.9
MW-388	06/05/2019 10:35	1.54	57	6.31	NM	0.259	14.37	33
MW-388	06/05/2019 10:40	1.48	61.4	6.31	NM	0.259	14.58	29.4
MW-388	06/05/2019 10:45	1.45	63	6.31	NM	0.26	14.5	30.5
MW-388	06/05/2019 10:50	1.35	68.4	6.31	NM	0.261	14.67	29.9
MW-388	06/05/2019 11:10	0.39	61	6.42	NM	0.297	13.71	14.5
MW-388	12/12/2019 12:55	10.44	51.3	7.06	NM	0.272	8.87	32.1
MW-388	12/12/2019 13:00	9.71	85	6.34	NM	0.247	8.95	31.2
MW-388	12/12/2019 13:05	9.48	93.2	6.34	NM	0.245	9.4	32.7
MW-388	12/12/2019 13:10	0.43	94.9	6.73	NM	0.236	9.43	29
MW-388	12/12/2019 13:15	0.43	97.1	6.61	NM	0.28	9.39	28

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-388	12/12/2019 13:20	1.87	99.3	6.57	NM	0.266	9.4	26.9
MW-388	12/12/2019 13:25	6.87	99.8	6.52	NM	0.267	9.7	26.1
MW-388	12/12/2019 13:30	6.02	98.6	6.56	NM	0.258	9.39	31.3
MW-388	12/12/2019 13:35	6.71	99.6	6.55	NM	0.249	9.22	25.3
MW-388	12/12/2019 13:40	6.22	99.6	6.55	NM	0.245	9.52	25.1
MW-388	12/12/2019 14:05	10.11	99.7	6.74	0.13	0.264	10.21	23.4
MW-388	12/12/2019 14:25	10.79	108.7	6.96	0.12	0.253	9.17	145.5
MW-388	06/03/2020 08:59	2.42	287.7	6.14	0.22	0.464	17.5	1.4
MW-388	12/10/2020 09:40	3.47	-11.9	7.07	0.12	0.255	11.21	6.8
MW-388	12/10/2020 09:50	2.22	-28.4	7.43	0.12	0.254	11.12	5.3
MW-388	03/18/2022 08:45	9.81	107.7	7.68	0.12	0.249	10.72	42.5
MW-388	03/18/2022 08:50	8.88	143.9	6.2	0.12	0.243	9.9	23.4
MW-388	03/18/2022 08:55	8.59	141.2	6.22	0.12	0.245	10.28	22.7
MW-388	03/18/2022 09:00	8.3	138.1	6.27	0.12	0.242	10.44	21.2
MW-388	03/18/2022 09:05	7.91	136.9	6.31	0.11	0.235	10.35	20.1
MW-388	03/18/2022 09:10	7.77	137.2	6.33	0.11	0.234	10.34	18.9
MW-388	03/18/2022 09:15	7.52	138.1	6.34	0.11	0.233	10.44	16.8
MW-388	03/18/2022 09:20	7.38	139.5	6.35	0.11	0.231	10.4	16.5
MW-388	03/18/2022 09:25	7.29	141.2	6.35	0.11	0.23	10.41	16.1
MW-389	11/05/2013 13:20	1.83	-126	6.50	0.48	0.996	18.16	22.00
MW-389	11/05/2013 13:30	1.20	-126	6.47	0.48	0.967	18.08	13.80
MW-389	11/06/2013 13:45	1.63	-124	6.67	0.48	0.973	18.10	35.00
MW-389	12/20/2013 12:05	0.93	-89.2	6.60	0.51	1.021	12.89	50.10
MW-389	12/20/2013 12:25	0.69	-109.4	6.64	0.47	0.939	15.37	24.00
MW-389	12/20/2013 12:40	1.20	-100.4	6.68	0.53	1.051	12.47	68.00
MW-389	03/18/2015 08:50	3.10	-104.3	6.39	0.61	1.216	6.86	2.50
MW-389	03/18/2015 09:30	1.69	-100.2	6.60	0.50	1.025	7.90	0.70
MW-389	03/18/2015 09:40	5.31	-155.5	6.98	0.64	1.269	8.24	4.60
MW-389	12/01/2015 14:00	0.04	-22.4	6.51	0.62	0.037	13.46	0.60
MW-389	12/01/2015 14:20	0.02	-11.4	6.48	0.52	0.045	12.36	29.40
MW-389	06/08/2016 12:05	0.44	-69.8	6.51	1.60	3.042	14.73	1.30
MW-389	07/20/2016 11:45	0	-150	6.59	0.6	1.26	18.29	9.1
MW-389	07/20/2016 12:00	0	-156	6.65	0.6	1.22	18.94	17.3
MW-389	09/07/2016 14:35	0.96	-89	6.55	1.58	3.028	22.81	8.30
MW-389	09/07/2016 14:55	0.66	-72.2	6.57	1.67	3.208	26.87	12.70
MW-389	12/02/2016 10:25	0.24	-150.2	7.04	0.64	1.277	13.24	3.4
MW-389	12/02/2016 10:50	3.03	-146	6.77	0.5	0.997	15.6	13.1
MW-389	03/06/2017 14:00	2.87	-16.6	7.02	0.72	1.426	14.27	8.90
MW-389	03/06/2017 14:20	4.12	-27.8	7.12	0.79	1.553	13.02	11.80
MW-389	06/05/2019 10:05	1.25	-124.3	6.78	NM	1.743	14.61	3.3
MW-389	06/05/2019 10:10	0.76	-131.7	6.77	NM	1.764	16.57	0.8
MW-389	06/05/2019 10:15	0.67	-134.2	6.76	NM	1.773	16.36	1.3
MW-389	06/05/2019 10:20	0.63	-135.2	6.77	NM	1.764	16.32	1.4
MW-389	06/05/2019 10:25	0.89	-123.5	6.77	NM	1.635	16.54	1
MW-389	06/05/2019 10:30	0.87	-115.1	6.79	NM	1.634	16.52	1
MW-389	06/05/2019 10:35	0.88	-117.1	6.77	NM	1.633	16.51	1
MW-389	06/05/2019 10:40	0.46	-124.7	6.84	0.83	1.638	13.5	NM
MW-389	06/05/2019 10:45	0.48	-125.4	6.79	0.82	1.622	NM	4.7
MW-389	06/05/2019 10:50	NM	NM	NM	NM	NM	14.23	6.7
MW-389	06/05/2019 13:15	0.88	-117.1	6.77	NM	1.633	16.51	1
MW-389	06/05/2019 13:35	0.46	-124.7	6.84	0.83	1.638	13.5	4.7
MW-389	12/12/2019 12:50	46.58	18.3	6.95	NM	0.998	14.36	7.3
MW-389	12/12/2019 12:55	25.34	-38.8	6.82	NM	0.995	15.49	4
MW-389	12/12/2019 13:00	26.32	-68.3	6.81	NM	0.998	15.3	0.8
MW-389	12/12/2019 13:05	26.15	-71.1	6.82	NM	0.997	15.4	0.5
MW-389	12/12/2019 13:10	25.71	-71.2	6.83	NM	1	15.44	0.5
MW-389	12/12/2019 13:15	24.11	-104.6	6.79	NM	1.001	15.91	0.3
MW-389	12/12/2019 13:20	17.54	-109.3	6.78	NM	0.997	15.88	0.4
MW-389	12/12/2019 13:25	16.1	-112.2	6.78	NM	0.996	15.92	0.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-389	12/12/2019 13:30	14.2	-115.4	6.78	NM	0.998	15.9	0.5
MW-389	12/12/2019 13:35	12.42	-118.1	6.78	NM	0.997	16.01	0.5
MW-389	12/12/2019 14:17	24.2	-69.9	6.85	0.5	0.997	12.91	9.7
MW-389	12/12/2019 15:01	75.86	-65.2	6.67	0.5	1.012	14.68	9.8
MW-389	06/03/2020 10:30	2.06	16.2	6.02	0.79	1.561	19.48	7.8
MW-389	12/10/2020 13:05	3.53	-124.5	7.35	0.61	1.21	16.5	0
MW-389	12/10/2020 13:15	2.54	-84.7	7.08	0.61	1.224	16.67	0.4
MW-389	03/17/2022 10:55	8.45	39.8	6.28	0.68	1.345	11.4	59.8
MW-389	03/17/2022 11:00	7.28	-60.4	6.55	0.72	1.427	11.68	27.9
MW-389	03/17/2022 11:05	8.19	-84.3	6.63	0.72	1.418	11.54	18.5
MW-389	03/17/2022 11:10	5.18	-88.4	6.6	0.71	1.41	11.48	14
MW-389	03/17/2022 11:15	6.89	-93.8	6.66	0.71	1.405	11.44	12.5
MW-389	03/17/2022 11:20	4.35	-96.4	6.67	0.7	1.392	11.57	10.1
MW-389	03/17/2022 11:25	3.66	-99.9	6.67	0.69	1.373	11.66	9
MW-389	03/17/2022 11:30	3.22	-101.9	6.67	0.68	1.343	11.8	6.9
MW-389	03/17/2022 11:35	2.78	-102.6	6.67	0.66	1.317	11.84	6.2
MW-389	03/17/2022 11:40	2.45	-102.9	6.67	0.66	1.314	11.82	5.3
MW-399	12/16/2015 11:00	0.27	-107.9	6.55	0.37	1.715	14.10	5.70
MW-399	12/16/2015 11:20	1.04	-89.2	6.54	0.91	1.778	14.66	142.60
MW-399	12/29/2016 11:15	1.68	-79.2	6.62	0.85	1.688	6.6	24.9
MW-399	12/29/2016 11:40	3.28	-76.6	6.62	0.85	1.675	7.76	28.8
MW-399	02/02/2017 10:20	3.09	15.5	6.62	0.60	1.189	9.83	15.80
MW-399	02/02/2017 10:35	6.26	6.6	6.74	0.61	1.215	8.90	20.80
MW-399	04/12/2019 10:20	0.75	-348.8	8.82	NM	27.48	11.19	NM
MW-399R	09/05/2018 10:05	0.38	-72.70	7.23	1.11	2.182	25.14	1.90
MW-399R	09/05/2018 10:50	3.14	-62.80	7.54	1.20	2.343	26.15	1.70
MW-399R	09/05/2018 11:00	2.44	-41.60	7.22	1.19	2.319	25.32	2.46
MW-399R	12/03/2018 11:00	0.36	34.20	8.07	1.02	1.979	12.44	39.60
MW-399R	12/03/2018 11:30	4.55	43.50	7.63	1.13	2.189	12.53	12.20
MW-399R	12/03/2018 11:40	6.67	50.80	7.35	1.11	2.164	10.99	189.90
MW-399R	03/14/2019 13:10	2.58	106.7	7.86	NM	0.822	10	NM
MW-399R	03/14/2019 14:10	3.84	143.7	7.78	0.7	1.394	9.95	1.2
MW-399R	06/05/2019 09:25	1.8	89.9	7.91	NM	0.759	19.22	NM
MW-399R	06/05/2019 10:05	3.08	89.4	8.18	NM	0.783	19.41	5.2
MW-399R	06/05/2019 10:10	1.75	89.2	8.1	NM	0.767	18.74	1.9
MW-399R	06/05/2019 10:15	1.9	104.7	7.8	0.6	1.21	20.38	9.5
MW-399R	06/05/2019 10:20	1.5	88.6	8.04	NM	0.707	18.79	2.4
MW-399R	06/05/2019 10:25	2.25	88.3	8.06	0.54	0.667	19	2.8
MW-399R	06/05/2019 10:30	2.64	89	8.07	NM	0.648	18.93	2.3
MW-399R	06/05/2019 10:35	2.38	89.9	8.03	NM	0.667	19.04	1.5
MW-399R	06/05/2019 10:40	2.18	90	7.99	NM	0.702	19	1.3
MW-399R	06/05/2019 10:45	2	90	7.95	NM	0.734	19.06	0.7
MW-399R	06/05/2019 10:50	1.8	89.9	7.91	NM	0.759	19.22	0
MW-399R	06/05/2019 13:00	6.04	98.2	7.88	NM	1.083	18.47	47.9
MW-399R	09/10/2019 13:05	2.8	97.6	6.73	NM	1.476	22.81	18.7
MW-399R	09/10/2019 13:10	2.28	78.1	6.84	NM	1.436	23.06	11.3
MW-399R	09/10/2019 13:15	2.29	71.1	6.98	NM	1.421	23.42	6.1
MW-399R	09/10/2019 13:20	2.41	66.2	7.06	NM	1.407	23.53	3.2
MW-399R	09/10/2019 13:25	2.26	64.1	7.08	NM	1.405	23.41	2.2
MW-399R	09/10/2019 13:30	1.98	62.6	7.09	NM	1.408	23.38	0.5
MW-399R	09/10/2019 13:35	1.81	62	7.1	NM	1.406	23.51	0.9
MW-399R	09/10/2019 13:40	1.68	59.9	7.1	NM	1.408	23.57	0.5
MW-399R	09/10/2019 13:45	1.61	58.7	7.1	NM	1.413	23.61	0.6
MW-399R	09/10/2019 13:50	1.5	57.7	7.11	NM	1.418	23.83	0.9
MW-399R	09/10/2019 14:26	2.3	29.4	7.22	0.78	1.554	25.69	1.5
MW-399R	09/10/2019 14:48	3.04	30.6	7.45	0.7	1.391	23.88	232.7
MW-399R	12/11/2019 10:00	59.08	150.4	7.24	NM	0.249	10.11	51.9
MW-399R	12/11/2019 10:05	62.52	124.6	7.19	NM	0.224	9.52	42.7
MW-399R	12/11/2019 10:10	62.11	114.5	7.29	NM	0.222	9.28	30.9

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-399R	12/11/2019 10:15	59.97	110.6	7.4	NM	0.224	9.21	19.2
MW-399R	12/11/2019 10:20	61.65	108.1	7.52	NM	0.225	9.11	17.2
MW-399R	12/11/2019 10:25	60.18	106.6	7.59	NM	0.23	9.21	13.1
MW-399R	12/11/2019 10:30	58.11	106.9	7.64	NM	0.237	9.11	12.5
MW-399R	12/11/2019 10:35	55.76	106.9	9.11	NM	0.247	9.14	12.1
MW-399R	12/11/2019 10:40	53.64	106.8	7.69	NM	0.26	9.1	11.4
MW-399R	12/11/2019 10:45	50.65	106.9	7.7	NM	0.275	9.14	12
MW-399R	12/11/2019 11:25	21.69	122.5	7.7	0.17	0.361	8.13	24.6
MW-399R	12/11/2019 11:50	18.95	110.1	7.75	0.19	0.403	8.21	125.4
MW-399R	06/16/2020 09:30	1.27	108.5	7.4	0.46	0.925	20.87	0
MW-399R	06/16/2020 09:35	0.81	109.4	7.34	0.44	0.9	20.61	0
MW-399R	06/16/2020 09:40	0.79	114.2	7.33	0.44	0.895	20.28	0
MW-399R	06/16/2020 09:45	0.86	-117.8	7.32	0.44	0.89	20.09	0
MW-399R	06/16/2020 09:50	0.95	124.9	7.32	0.44	0.885	19.83	0
MW-399R	06/16/2020 09:55	1.05	128.9	7.32	0.44	0.882	19.8	0
MW-399R	06/16/2020 10:00	1.15	132	7.32	0.43	0.877	19.8	1.16
MW-399R	06/16/2020 10:05	1.29	134.7	7.32	0.43	0.873	19.86	0
MW-399R	06/16/2020 10:10	1.39	137	7.32	0.43	0.871	20.13	0
MW-399R	06/16/2020 10:15	1.48	137.1	7.33	0.43	0.872	19.99	0
MW-399R	06/16/2020 10:16	1.48	137.1	7.33	0.43	0.872	19.99	0
MW-399R	06/16/2020 10:40	4.84	133.6	7.53	0.43	0.877	20.89	0
MW-399R	06/16/2020 10:50	1.54	143	7.42	0.43	0.874	21.01	0
MW-399R	02/19/2021 12:00	10.96	54.3	7.83	0.31	0.639	5.67	1.9
MW-399R	02/19/2021 12:10	10.51	54.5	7.84	0.31	0.644	6.84	30
MW-399R	01/10/2022 11:15	9.11	-10.7	7.27	0.29	0.595	8.27	63.5
MW-399R	01/10/2022 11:20	8.42	-16.8	7.31	0.24	0.485	9.42	37
MW-399R	01/10/2022 11:25	8.3	-18.3	7.35	0.22	0.453	9.17	28.7
MW-399R	01/10/2022 11:30	8.27	-16.1	7.36	0.22	0.448	8.82	22.9
MW-399R	01/10/2022 11:35	8.19	-12.8	7.4	0.22	0.451	8.99	18.3
MW-399R	01/10/2022 11:40	8.06	-9.9	7.43	0.22	0.454	9.48	14.6
MW-399R	01/10/2022 11:45	7.91	-6.9	7.43	0.22	0.46	9.76	9.4
MW-399R	01/10/2022 11:50	7.87	-2.9	7.45	0.22	0.461	9.7	9
MW-399R	01/10/2022 11:55	7.76	0.4	7.45	0.23	0.463	9.63	8.8
MW-399R	03/24/2022 09:00	5.94	71.6	7.65	0.23	0.472	10.47	53.6
MW-399R	03/24/2022 09:05	5.39	88.3	7.32	0.23	0.468	10.14	35.5
MW-399R	03/24/2022 09:10	4.99	92.9	7.32	0.23	0.477	9.91	24.5
MW-399R	03/24/2022 09:15	4.92	94.5	7.32	0.23	0.481	9.89	19.4
MW-399R	03/24/2022 09:20	4.57	95	7.36	0.23	0.483	9.86	16.5
MW-399R	03/24/2022 09:25	3.9	95.3	7.38	0.24	0.486	9.85	13.6
MW-399R	03/24/2022 09:30	3.92	94.8	7.4	0.24	0.485	9.86	13
MW-399R	03/24/2022 09:35	3.75	93.8	7.41	0.23	0.482	9.87	12.9
MW-400	12/28/2016 10:45	3.85	-70.5	6.68	0.39	0.797	7.34	18.5
MW-400	12/28/2016 11:00	3.78	-87.2	6.69	0.37	0.761	7.32	1217.9
MW-400	02/01/2017 10:25	5.66	5.8	6.67	0.25	0.519	7.82	11.30
MW-400	02/01/2017 10:55	6.03	31.7	6.97	0.25	0.516	7.88	1111.30
MW-400	02/16/2018 13:40	1.69	-86.40	7.29	0.90	1.711	7.36	17.50
MW-400	02/16/2018 14:20	2.13	-84.10	7.18	0.83	1.639	8.42	5.60
MW-400	02/16/2018 14:40	1.41	-106.10	8.61	0.69	2.167	9.01	36.70
MW-400	04/17/2018 09:55	0.79	-127.40	6.45	0.57	1.119	9.13	6.30
MW-400	04/17/2018 10:55	6.28	-76.00	7.00	0.50	1.163	9.64	7.50
MW-400	04/17/2018 11:45	3.19	-81.40	6.38	0.59	1.172	9.49	141.30
MW-400	09/04/2018 13:30	0.31	-53.70	6.15	0.60	1.185	24.58	10.90
MW-400	09/04/2018 13:45	3.17	-33.60	7.10	0.73	1.465	26.51	7.50
MW-400	09/04/2018 14:05	2.89	-41.40	6.82	0.72	1.457	26.52	32.60
MW-400	12/03/2018 11:30	2.79	-107.60	7.05	0.63	1.253	12.52	14.30
MW-400	12/03/2018 11:55	2.70	-102.40	6.94	0.63	-1.246	17.49	8.90
MW-400	12/03/2018 12:10	3.12	-97.50	6.95	0.66	-1.303	10.7	524.60
MW-400	03/15/2019 13:15	1.87	-80.2	6.93	NM	1.163	17.41	21.9
MW-400	03/15/2019 14:00	1.87	-80.2	6.93	0.58	1.163	17.41	21.9

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-400	06/04/2019 09:30	0.34	-119.6	6.8	NM	1.058	18.76	NM
MW-400	06/04/2019 10:05	4.72	-43.7	6.87	0.57	1.15	20.36	9.8
MW-400	09/09/2019 10:55	1.1	-74.1	6.28	NM	0.872	23.1	88.7
MW-400	09/09/2019 11:00	0.51	-108.2	6.47	NM	0.88	23.21	31.3
MW-400	09/09/2019 11:05	0.45	-133.9	6.58	NM	0.932	23.31	13.4
MW-400	09/09/2019 11:10	0.5	-139.3	6.61	NM	0.927	23.51	5.3
MW-400	09/09/2019 11:15	0.45	-141.3	6.63	NM	0.927	23.79	2.6
MW-400	09/09/2019 11:20	0.45	-143.6	6.62	NM	0.958	23.83	0.8
MW-400	09/09/2019 11:25	0.47	-144.2	6.62	NM	0.952	24.12	0.5
MW-400	09/09/2019 11:30	0.47	-144.8	6.61	NM	0.973	23.8	4.8
MW-400	09/09/2019 11:35	0.53	-142.5	6.59	NM	0.978	23.52	4.4
MW-400	09/09/2019 11:40	0.47	-142.1	6.58	NM	0.976	23.51	3.8
MW-400	09/09/2019 12:15	2.57	-108.7	6.59	0.54	1.108	28.88	17.2
MW-400	09/09/2019 12:30	2.78	-86.2	6.51	0.51	1.044	26.72	809.6
MW-400	12/10/2019 13:45	2.6	36.9	7.05	NM	0.955	11.03	52.1
MW-400	12/10/2019 13:50	0.97	-27.3	6.8	NM	0.975	10.86	33.3
MW-400	12/10/2019 13:55	0.77	-60.2	6.74	NM	0.989	11.01	27.6
MW-400	12/10/2019 14:00	0.91	-76.2	6.69	NM	1.006	11.02	23.4
MW-400	12/10/2019 14:05	0.61	-80.6	6.67	NM	1.01	10.95	17.9
MW-400	12/10/2019 14:10	0.55	-84.3	6.66	NM	1.024	10.87	16.5
MW-400	12/10/2019 14:15	0.42	-88.8	6.65	NM	1.033	10.86	12.6
MW-400	12/10/2019 14:20	0.35	-91.9	6.65	NM	1.044	10.72	11.6
MW-400	12/10/2019 14:25	0.29	-92.3	6.64	NM	1.047	10.63	10.6
MW-400	12/10/2019 14:30	0.31	-92	6.64	NM	1.045	10.59	9.2
MW-400	12/12/2019 09:45	58.81	-58.5	6.76	NM	0.742	9.79	46.9
MW-400	12/12/2019 10:42	47.41	-92.4	6.83	0.39	0.784	9.39	6.4
MW-400	12/12/2019 11:00	69.61	-87.7	7.06	0.38	0.775	8.95	189.7
MW-400	03/16/2020 10:25	0.11	-107.1	7.18	NM	0.936	8.65	1472.3
MW-400	03/16/2020 10:55	1.36	-50.7	6.95	0.46	0.919	9.84	350.3
MW-400	06/17/2020 09:10	1.73	-143.3	7.2	0.63	1.257	20.02	6.9
MW-400	06/17/2020 09:15	0.58	-140	6.89	0.61	1.22	20.01	5.4
MW-400	06/17/2020 09:20	0.38	-142.3	6.9	0.6	1.205	20.17	3.3
MW-400	06/17/2020 09:25	0.3	-142.5	6.91	0.61	1.221	20.25	2.6
MW-400	06/17/2020 09:30	0.29	-142.6	6.91	0.61	1.223	20.34	2.7
MW-400	06/17/2020 09:35	0.25	-141.7	6.91	0.61	1.221	20.33	2
MW-400	06/17/2020 09:40	0.22	-140.9	6.91	0.61	1.219	20.3	1.5
MW-400	06/17/2020 09:45	0.2	-140.1	6.9	0.61	1.22	20.3	1.1
MW-400	06/17/2020 09:50	0.18	-139.1	6.9	0.61	1.216	20.31	1.3
MW-400	06/17/2020 09:55	0.16	-138.7	6.9	0.6	1.212	20.33	1.1
MW-400	06/17/2020 09:56	0.16	-138.7	6.9	0.6	1.212	20.33	1.1
MW-400	06/17/2020 10:10	5.24	-83.5	7.06	0.63	1.254	20.82	7.5
MW-400	06/17/2020 10:20	1.33	-116.6	6.94	0.63	1.257	20.88	5.9
MW-400	03/01/2021 11:20	8.82	-55.4	7.19	0.69	1.347	7.08	33.1
MW-400	03/01/2021 11:25	3.19	-59	7.12	0.62	1.243	6.48	23.3
MW-400	03/01/2021 11:30	2.57	-60.3	7.09	0.6	1.209	6.31	13.7
MW-400	03/01/2021 11:35	1.75	-63.1	7.09	0.62	1.236	6.31	7.5
MW-400	03/01/2021 11:40	1.28	-65.2	7.11	0.64	1.288	6.43	4.7
MW-400	03/01/2021 11:45	0.97	-68.5	7.14	0.67	1.333	6.59	5.4
MW-400	03/01/2021 11:50	0.74	-70.3	7.14	0.68	1.349	6.5	3.9
MW-400	03/01/2021 11:55	0.55	-70.3	7.15	0.68	1.364	6.53	3.5
MW-400	03/01/2021 12:00	0.41	-71.4	7.14	0.69	1.373	6.51	2.5
MW-400	03/01/2021 12:05	0.33	-72.1	7.15	0.69	1.382	6.49	2.2
MW-400	03/01/2021 12:30	0.22	-70.4	7.04	0.64	1.273	6.04	2.5
MW-400	03/01/2021 13:15	0.42	-100.2	7.12	0.69	1.374	6.74	88.3
MW-400	03/24/2022 11:50	5.5	-65.8	6.83	0.48	0.956	9.32	41.6
MW-400	03/24/2022 11:55	1.09	-111.2	6.98	0.59	1.174	9.3	25.6
MW-400	03/24/2022 12:00	0.98	-133	6.99	0.57	1.134	9.09	18.3
MW-400	03/24/2022 12:05	0.86	-152.9	6.98	0.59	1.17	9.2	17.1
MW-400	03/24/2022 12:10	0.82	-161.9	6.97	0.6	1.199	9.23	13.9

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-400	03/24/2022 12:15	0.8	-165.6	6.96	0.6	1.204	9.19	13.5
MW-400	03/24/2022 12:20	0.79	-168.9	6.95	0.6	1.209	9.15	13.2
MW-401	08/24/2015 14:26	4.85	-84	6.44	1.01	1.99	25.24	101.7
MW-401	08/24/2015 14:49	3.08	-79.8	6.41	0.98	1.931	23.82	NM
MW-401	07/14/2016 15:45	0.31	-193.1	6.52	1.27	2.460	22.73	7.00
MW-401	12/28/2016 14:40	4.04	-113.2	6.85	1.09	2.125	9.99	23.7
MW-401	12/28/2016 15:00	2.23	-128.8	6.82	1.04	2.024	11.55	1204.2
MW-401	02/01/2017 13:25	3.30	13.2	6.93	0.93	1.817	11.62	129.60
MW-401	02/01/2017 13:55	4.49	-2.5	6.81	0.93	1.738	11.67	1258.20
MW-401R	03/05/2018 13:00	2.69	95.90	7.02	0.99	1.935	7.38	42.20
MW-401R	03/05/2018 13:55	3.22	75.90	6.70	1.18	2.285	8.26	10.70
MW-401R	03/05/2018 14:15	3.10	-9.90	6.70	1.08	2.115	7.9	447.00
MW-401R	09/04/2018 09:45	2.98	-16.50	6.78	16.10	3.293	23.47	26.40
MW-401R	09/04/2018 10:55	3.32	72.10	6.17	1.82	3.467	23.55	14.10
MW-401R	09/04/2018 11:15	3.85	44.90	6.09	1.93	3.664	23.38	47.40
MW-401R	12/03/2018 12:30	4.80	14.60	6.60	1.85	3.501	12.79	409.70
MW-401R	12/03/2018 13:10	4.00	-34.20	6.64	1.00	1.949	11.94	38.10
MW-401R	12/03/2018 13:20	7.87	-62.10	6.28	1.71	3.258	10.6	430.40
MW-401R	02/26/2019 14:30	5.36	-80.60	6.93	1.92	3.631	8.94	279.40
MW-401R	02/26/2019 14:50	8.60	-58.80	6.76	1.89	3.594	6.76	19.50
MW-401R	02/26/2019 15:00	4.18	-60.00	6.74	1.89	3.587	6.97	11.80
MW-401R	06/03/2019 13:55	3.25	-23	6.67	1.64	3.118	16.89	15.6
MW-401R	09/09/2019 14:16	9.01	-9.1	6.52	NM	3.153	22.77	20.9
MW-401R	09/09/2019 14:46	6.8	-44.3	6.49	1.73	3.297	22.12	5.7
MW-401R	09/09/2019 14:59	6.52	-46.2	6.49	1.75	3.329	22.06	18.6
MW-401R	12/10/2019 09:25	0.36	-109.6	6.71	NM	3.402	13.19	895.7
MW-401R	12/10/2019 09:50	3.11	-52.3	6.5	1.67	3.171	11.61	19
MW-401R	12/10/2019 10:03	5.12	-20.4	6.67	1.34	2.583	10.33	306.4
MW-401R	06/05/2020 10:20	6.65	58.3	7.26	1.26	2.44	17.26	87
MW-401R	06/05/2020 10:55	7.83	21.9	7.12	1.33	2.559	17.11	7.6
MW-401R	06/05/2020 11:05	2.43	-4.8	6.69	1.32	2.538	17.98	4.1
MW-401R	03/01/2021 10:50	7.91	-49	6.86	1.21	2.358	6.41	11.3
MW-401R	03/01/2021 11:00	7.54	-52.9	6.89	1.24	2.407	6.61	33
MW-401R	03/14/2022 12:50	6.54	-25.7	6.86	0.97	1.834	11.23	192
MW-401R	03/14/2022 12:55	4.39	-44.9	6.5	1.02	1.992	9.99	170.8
MW-401R	03/14/2022 13:00	7.35	-28.6	6.56	0.98	1.922	9.1	26.3
MW-401R	03/14/2022 13:05	7.15	-29.6	6.47	0.99	1.93	9.05	20.2
MW-401R	03/14/2022 13:10	6.66	-29.2	6.52	1.03	2.014	8.95	8.1
MW-401R	03/14/2022 13:15	6.76	-27.4	6.5	1.04	2.022	8.9	8.8
MW-401R	03/14/2022 13:20	6.2	-29.2	6.48	1.09	2.123	9	0.3
MW-401R	03/14/2022 13:25	6.24	-26.8	6.48	1.11	2.164	9	3.6
MW-401R	03/14/2022 13:30	5.89	-29.5	6.45	1.15	2.233	8.96	1.3
MW-401R	03/14/2022 13:35	5.85	-30.7	6.46	1.15	2.238	8.89	2
MW-408R	11/14/2019 10:50	3.21	-38.9	6.22	NM	15.09	13.91	27.2
MW-408R	11/14/2019 11:17	2.24	-13.3	6	9.48	16.14	11.08	93.5
MW-408R	11/14/2019 11:35	3.22	-10.9	6.06	8.41	14.42	17.35	428.8
MW-408R	05/20/2020 13:20	0.14	53.9	5.76	NM	12.45	14.34	55.1
MW-408R	05/20/2020 13:55	1.49	26.7	5.83	9.52	16.22	15.41	79.5
MW-408R	08/26/2020 13:15	0.95	-4.5	6.05	23.36	36.84	20.74	39.7
MW-408R	11/10/2020 13:20	5.71	-30.5	6.29	4.11	7.377	19.43	8.6
MW-408R	11/10/2020 13:25	4.2	-37.7	6.15	4.51	8.078	19.59	8.5
MW-408R	11/10/2020 13:30	3.28	-45.4	6.1	8.6	8.594	19.39	7.7
MW-408R	11/10/2020 13:35	3.93	-52.5	6.06	6.06	10.59	19.31	11.1
MW-408R	11/10/2020 13:40	4.4	-55.5	6.04	6.68	11.66	19.33	12.8
MW-408R	11/10/2020 13:45	3.96	-62	6.04	6.67	11.65	19.45	9.5
MW-408R	11/10/2020 13:50	3.01	-63.3	6.03	6.73	12.85	19.56	8.3
MW-408R	11/10/2020 13:55	2.79	-67.3	6.04	6.92	13.2	19.45	10.6
MW-408R	11/10/2020 14:00	2.73	-66.9	6.04	7.82	13.55	19.65	8.7
MW-408R	11/10/2020 14:05	2.17	-70	6.04	8.08	13.9	19.52	8.3

Appendix B5 East Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-408R	11/10/2020 14:20	4.82	-30	6.02	10.29	17.38	20.54	18.9
MW-408R	11/10/2020 14:35	2.35	-10.8	5.86	12.51	20.83	20.97	100
MW-408R	03/02/2021 08:55	8.71	174.5	6.98	0.27	0.557	4.89	6.3
MW-408R	03/02/2021 09:00	4.75	137.8	6.78	0.29	0.594	4.69	4.4
MW-408R	03/02/2021 09:05	4.13	61.5	6.83	0.31	0.636	4.41	3.9
MW-408R	03/02/2021 09:10	3.72	45.4	6.84	0.34	0.692	3.91	3.8
MW-408R	03/02/2021 09:15	3.12	39.8	6.85	0.4	0.813	3.68	3.3
MW-408R	03/02/2021 09:20	2.57	20.2	6.79	0.51	1.036	3.67	2.1
MW-408R	03/02/2021 09:25	2.22	-9.7	6.76	0.89	1.743	3.9	0.6
MW-408R	03/02/2021 09:30	3.09	-43.1	6.77	1.57	3.008	3.98	0.1
MW-408R	03/02/2021 09:35	3.84	-54	6.8	1.8	3.435	4.01	0.3
MW-408R	03/02/2021 09:40	4.64	-61.3	6.83	1.95	3.727	4.02	-1
MW-408R	03/02/2021 10:20	5.42	-45	6.83	1.62	3.101	6.62	5.7
MW-408R	03/02/2021 10:30	5.66	-71	6.87	2.15	4.057	6.33	17
MW-408R	05/13/2021 12:55	2.84	-17.4	7.34	2.29	4.3	13.61	73.4
MW-408R	05/13/2021 13:00	1.32	-17.4	6.96	2.31	4.361	13.06	46.1
MW-408R	05/13/2021 13:05	0.33	-28.7	6.45	4.84	8.612	10.78	7.2
MW-408R	05/13/2021 13:10	0.32	-30	6.46	5.14	8.999	10.87	7.7
MW-408R	05/13/2021 13:15	0.3	-62	6.47	8.49	14.57	11.48	7.5
MW-408R	05/13/2021 13:20	0.29	-63.7	6.46	8.52	15.03	11.57	6.8
MW-408R	05/13/2021 13:25	0.3	-69.7	6.27	9.05	15.54	11.74	8
MW-408R	05/13/2021 13:30	0.31	-75.4	6.47	8.65	15.34	12.05	6.8
MW-408R	05/13/2021 13:35	0.32	-76.6	6.47	8.73	14.45	11.89	6.7
MW-408R	05/13/2021 13:40	0.35	-81.8	6.45	8.18	14.14	12.08	7.5
MW-408R	08/20/2021 12:55	4.95	-41.1	6.71	4.62	8.668	25.58	57.1
MW-408R	08/20/2021 13:00	4.62	-33.5	6.38	3.66	6.591	24.23	48.9
MW-408R	08/20/2021 13:05	4.29	-35.4	6.34	3.29	5.885	23.6	33.9
MW-408R	08/20/2021 13:10	0.68	-44.5	6.32	3.34	5.942	23.07	31.4
MW-408R	08/20/2021 13:15	0.59	-47.8	6.31	3.66	6.452	23.01	36.9
MW-408R	08/20/2021 13:20	0.54	-52.1	6.32	3.87	6.763	22.87	36.3
MW-408R	08/20/2021 13:25	0.46	-61.4	6.32	6.32	10.63	22.38	72.3
MW-408R	08/20/2021 13:30	0.38	-72.3	6.32	7.53	12.36	22.19	63.4
MW-408R	08/20/2021 13:35	0.39	-79	6.34	7.49	12.25	22.03	54.4
MW-408R	08/20/2021 13:40	0.36	-83.9	6.33	7.05	11.55	22.01	41.4
MW-408R	02/01/2022 10:10	1.97	-47.2	7.45	7.95	13.74	9.06	44.6
MW-408R	02/01/2022 10:15	0.88	-37.2	7.04	8.06	13.93	8.18	27.4
MW-408R	02/01/2022 10:20	0.81	-31.9	6.79	7.94	13.77	7.64	31
MW-408R	02/01/2022 10:25	0.8	-29.4	6.68	8.67	14.88	7.31	19.5
MW-408R	02/01/2022 10:30	0.69	-29.7	6.64	9.1	15.6	7.78	12.9
MW-408R	02/01/2022 10:35	0.66	-29.7	6.61	9.12	15.65	7.81	12.5
MW-408R	02/01/2022 10:40	0.64	-30.4	6.59	9.13	15.67	7.83	12.1
MW-409	02/10/2016 11:35	1.39	-63.2	6.38	0.63	1.256	6.38	6.1
MW-409	02/10/2016 12:15	0.81	-57.1	6.4	0.64	1.273	-7.2	5.7
MW-409R	10/12/2016 10:05	3.94	-48.3	6.69	2.41	4.444	16.35	7.30
MW-409R	10/12/2016 10:20	5.31	-52.1	6.69	2.41	4.508	20.50	174.30
MW-409R	02/02/2017 14:10	8.81	93.8	7.08	0.95	1.860	8.54	4.00
MW-409R	02/02/2017 14:20	8.91	93.2	7.15	0.94	1.837	8.55	19.10
MW-409R	04/14/2017 08:55	8.11	-54.00	7.47	0.60	1.180	7.84	0.0000
MW-409R	04/14/2017 09:10	7.95	2.00	7.21	0.60	1.230	8.65	0.0000
MW-409R	04/14/2017 09:25	5.26	28.00	7.15	0.50	1.090	10.69	0.0000
MW-409R	01/22/2018 12:35	2.24	122.00	8.07	0.99	1.941	9.02	11.20
MW-409R	01/22/2018 12:45	2.30	127.00	7.78	1.02	1.994	8.73	2.60
MW-409R	01/22/2018 12:55	2.20	133.30	7.68	1.08	2.106	8.78	36.70
MW-409R	02/20/2018 10:05	1.39	175.40	7.35	0.38	0.767	9.9	23.90
MW-409R	02/20/2018 10:40	0.93	231.40	7.26	0.40	0.817	10.96	2.50
MW-409R	02/20/2018 11:10	0.99	202.50	7.44	0.38	0.768	8.28	14.20
MW-409R	04/17/2018 13:20	8.12	35.70	7.12	0.43	1.052	9.92	24.40
MW-409R	04/17/2018 14:00	6.85	44.00	7.11	0.55	1.101	10.44	4.50
MW-409R	04/17/2018 14:30	6.12	62.40	6.91	0.54	1.092	9.99	22.20

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-409R	01/28/2019 10:10	10.92	222.00	7.07	0.16	0.341	4.89	13.60
MW-409R	01/28/2019 10:22	11.47	210.30	7.55	0.13	0.275	4.91	5.00
MW-409R	01/28/2019 10:35	9.91	209.90	7.50	0.13	0.268	5.05	4.80
MW-409R	04/23/2019 13:05	6.14	-76.1	7.28	0.68	1.301	15.89	12.8
MW-409R	08/09/2019 09:25	8.77	9.7	6.02	NM	2.172	23.59	1.6
MW-409R	08/09/2019 09:40	9.88	36.2	6.82	1.14	2.234	23.31	0
MW-409R	08/09/2019 09:50	9.33	87.7	6.76	1.12	2.196	24.11	44.2
MW-409R	10/21/2019 10:10	3.86	-59.4	6.87	NM	1.472	19.07	3.4
MW-409R	10/21/2019 10:30	5.36	-28.3	6.95	0.87	1.715	19.16	2.5
MW-409R	10/21/2019 10:45	7.8	-12.6	7.01	0.95	1.855	19.14	24.1
MW-409R	01/23/2020 12:27	21.47	6.7	7.05	NM	1.917	9.73	0.4
MW-409R	01/23/2020 12:41	16.61	20.7	6.96	1.03	2.009	9.46	0.5
MW-409R	01/23/2020 12:55	14.23	30.9	6.95	1.02	1.991	9.95	19.1
MW-409R	04/24/2020 09:45	14.58	35.4	6.76	0.86	1.681	11.11	1.1
MW-410	08/19/2014 08:40	1.06	-128.1	6.70	0.59	1.190	20.46	206.80
MW-410	08/19/2014 09:30	0.32	-128.9	6.76	0.59	1.177	19.88	13.50
MW-410	08/19/2014 09:50	0.96	-130.1	6.75	0.59	1.179	20.05	23.10
MW-410	11/10/2014 11:25	2.12	-99.9	6.65	0.57	1.143	17.59	27.40
MW-410	11/10/2014 12:15	1.44	-116.7	6.75	0.57	1.150	17.64	8.50
MW-410	11/10/2014 12:30	1.52	-117.3	6.76	0.58	1.160	18.51	19.70
MW-410	12/01/2014 13:15	1.19	-89.9	6.62	0.70	1.397	14.73	128.50
MW-410	12/01/2014 14:00	0.51	-104.6	6.63	0.71	1.409	15.65	0.0000
MW-410	12/01/2014 14:05	1.62	-92.6	6.64	0.71	1.403	15.68	5.30
MW-410	12/04/2014 10:30	5.84	-33.1	6.50	0.52	1.045	11.82	72.10
MW-410	12/04/2014 11:10	2.39	-87.8	6.66	0.54	1.079	12.44	53.50
MW-410	12/04/2014 11:20	4.59	-92.9	6.72	0.54	1.087	13.15	2.70
MW-410	12/08/2014 09:05	1.17	-75.5	6.77	0.56	1.110	4.09	144.90
MW-410	12/08/2014 09:55	0.33	-101.5	6.74	0.56	1.135	10.18	6.30
MW-410	12/08/2014 10:05	0.39	-101.6	6.74	0.57	1.148	9.49	4.80
MW-410	12/23/2014 09:05	0.55	-135.1	6.55	0.50	1.014	11.85	9.20
MW-410	12/23/2014 09:50	0.32	-145.1	6.73	0.51	1.025	11.63	1.80
MW-410	12/23/2014 10:15	2.94	-101.1	6.68	0.51	1.020	11.39	4.60
MW-410	01/20/2015 13:10	0.80	-114.8	6.62	0.54	1.083	8.33	21.10
MW-410	01/20/2015 13:55	0.23	-124.7	6.65	0.55	1.114	9.63	3.60
MW-410	01/21/2015 14:30	0.78	-110.2	6.63	0.54	1.072	8.24	20.70
MW-410	03/10/2015 13:09	6.98	88	8.38	0.36	0.246	7.35	55.40
MW-410	03/10/2015 13:45	1.82	70.1	6.90	0.44	0.887	7.97	7.90
MW-410	03/10/2015 13:50	1.84	71.4	6.93	0.44	0.885	8.56	23.40
MW-410	12/16/2015 09:30	0.63	-136.40	6.88	0.65	1.294	11.78	155.60
MW-410	12/16/2015 10:30	0.36	-129.70	6.85	0.60	1.189	11.79	26.80
MW-410	09/29/2016 14:15	0.56	-112.70	6.76	0.55	1.097	19.8	3.90
MW-410	09/29/2016 14:45	0.38	-115.60	6.77	0.94	1.091	19.3	132.60
MW-410	03/29/2018 09:10	1.08	-146.90	7.16	0.60	1.205	8.85	0.0000
MW-410	06/04/2018 11:35	0.64	-123.40	6.72	0.54	1.084	14.65	14.40
MW-411	08/18/2014 12:50	1.06	-122.7	6.52	1.07	2.084	22.63	263.80
MW-411	08/18/2014 13:45	0.49	-129.2	6.55	1.13	2.198	22.05	10.50
MW-411	08/18/2014 14:05	0.93	-131	6.55	1.10	2.195	22.14	9.80
MW-411	11/11/2014 10:20	0.42	-83.2	6.72	0.46	0.845	16.63	290.40
MW-411	11/11/2014 11:10	0.11	-123.4	6.81	0.75	1.440	17.43	37.40
MW-411	11/11/2014 11:30	0.21	-116.7	6.82	0.74	1.536	17.84	80.20
MW-411	12/01/2014 11:30	0.46	-53.3	6.42	1.15	2.209	14.55	263.00
MW-411	12/01/2014 12:15	0.21	-66	6.45	1.27	2.452	14.93	16.80
MW-411	12/01/2014 12:30	2.98	-58.9	6.28	1.26	2.429	14.87	43.20
MW-411	12/04/2014 13:30	0.68	-109.5	6.49	1.11	2.159	13.47	13.60
MW-411	12/04/2014 14:10	0.49	-112.2	6.52	1.14	2.212	11.67	8.90
MW-411	12/04/2014 14:20	7.42	-63.9	6.37	1.10	2.128	11.78	31.40
MW-411	12/08/2014 12:25	0.79	-29.8	6.71	0.41	0.830	7.64	40.60
MW-411	12/08/2014 13:05	0.31	-100	6.69	0.83	1.622	7.90	0.0000
MW-411	12/08/2014 13:15	7.09	-56.8	6.69	0.86	1.688	6.32	16.50

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-411	01/22/2015 09:15	0.88	-154.4	7.19	0.95	1.865	7.57	74.20
MW-411	01/22/2015 10:05	0.33	-127.7	6.97	0.96	1.884	7.90	10.90
MW-411	01/22/2015 10:30	3.85	-116.8	6.93	0.97	1.896	9.40	24.40
MW-411	03/06/2015 11:40	12.38	-114.3	6.79	0.87	1.713	6.97	116.90
MW-411	03/06/2015 12:25	3.69	-136.1	6.87	0.88	1.740	6.88	11.90
MW-411	03/06/2015 12:40	4.12	-122.4	6.94	0.87	1.724	6.89	13.70
MW-411	07/01/2015 08:10	1.77	-102.50	6.83	0.76	1.513	19.47	37.10
MW-411	07/01/2015 08:55	0.41	-111.00	6.81	0.73	1.460	17.95	1.80
MW-411	10/27/2015 09:25	3.32	-129.00	6.92	0.80	1.610	16.69	446.00
MW-411	10/27/2015 09:55	0.0000	-136.00	6.85	0.80	1.560	17.28	101.00
MW-411	03/31/2016 14:10	1.52	-194.10	7.36	0.93	1.831	14.44	120.60
MW-411	03/31/2016 14:35	0.55	-207.50	6.79	0.90	1.760	13.58	23.60
MW-411	06/28/2016 13:55	4.20	-76.50	6.73	0.36	0.738	19.84	25.10
MW-411	06/28/2016 14:35	0.32	-110.00	6.80	0.35	0.719	19.9	2.40
MW-411	10/05/2016 13:05	2.50	-96.40	6.87	0.69	1.373	22.26	8.30
MW-411	10/05/2016 13:50	1.18	-125.60	6.59	0.64	1.284	21.89	0.90
MW-411	03/26/2018 10:30	0.80	-152.00	6.91	0.71	1.403	9.66	0.0000
MW-411	05/30/2018 13:30	0.16	-129.90	6.73	0.77	1.527	15.23	0.40
MW-412	08/18/2014 10:10	1.04	-123	6.75	0.86	1.692	18.64	220.90
MW-412	08/18/2014 11:05	0.37	-126.7	6.77	0.78	1.544	19.17	3.20
MW-412	08/18/2014 11:25	0.97	-126.3	6.74	0.78	1.579	19.16	11.30
MW-412	11/11/2014 13:15	0.21	-80.8	6.83	0.62	1.244	16.84	266.80
MW-412	11/11/2014 14:00	0.15	-91.8	6.79	0.56	1.124	16.75	27.10
MW-412	11/11/2014 14:10	0.20	-88.4	6.82	0.58	1.134	16.82	52.70
MW-412	12/01/2014 11:25	0.70	-93.2	6.58	0.83	1.629	14.24	45.80
MW-412	12/01/2014 12:10	0.47	-106.3	6.59	0.71	1.410	14.75	0.0000
MW-412	12/04/2014 13:10	2.25	-32.3	6.40	0.23	0.592	12.15	90.60
MW-412	12/04/2014 13:55	0.41	-73	6.56	0.51	1.011	12.43	25.90
MW-412	12/04/2014 14:05	2.01	-78.5	6.55	0.51	1.027	12.90	6.40
MW-412	12/08/2014 12:50	5.67	2.6	6.35	0.42	0.705	8.40	11.60
MW-412	12/08/2014 13:30	0.30	-49.8	6.27	0.74	1.465	8.58	0.0000
MW-412	12/08/2014 13:40	0.32	-57	6.28	0.77	1.519	7.90	0.0000
MW-412	12/23/2014 12:25	0.85	-100.4	6.58	0.70	1.375	15.23	1.40
MW-412	01/23/2015 09:55	0.58	-97.3	6.85	0.80	1.570	10.58	46.40
MW-412	01/23/2015 10:35	0.42	-105.3	6.85	0.74	1.469	10.58	4.10
MW-412	01/23/2015 10:55	5.74	-92.6	7.04	0.73	1.448	11.40	5.20
MW-412	03/11/2015 10:20	5.06	112.4	6.31	1.82	3.504	7.10	116.00
MW-412	03/11/2015 11:15	0.80	35.2	6.54	1.23	2.381	7.27	8.50
MW-412	03/11/2015 11:30	2.89	17.1	6.63	1.24	2.395	9.36	17.80
MW-412	07/01/2015 11:10	0.96	-85.30	6.67	0.67	1.237	16.89	33.10
MW-412	07/01/2015 11:55	0.85	-110.00	6.92	0.59	1.179	17.98	0.0000
MW-412	10/26/2015 13:30	0.0000	-132.00	6.81	0.80	1.510	18.12	818.00
MW-412	10/26/2015 13:55	0.0000	-142.00	6.86	0.80	1.500	18.01	101.00
MW-412	12/14/2015 14:55	1.77	-126.10	6.79	0.92	1.804	15.83	98.60
MW-412	12/14/2015 15:25	1.96	-132.80	6.75	0.88	1.779	15.6	48.80
MW-412	03/31/2016 09:55	1.05	-188.60	7.12	0.82	1.610	13.74	107.60
MW-412	03/31/2016 10:30	0.40	-213.10	6.81	0.72	1.419	13.51	9.90
MW-412	10/05/2016 10:20	1.75	-73.60	6.70	0.75	1.480	18.92	28.50
MW-412	10/05/2016 10:50	0.62	-117.50	6.67	0.72	1.431	19.26	6.20
MW-412	03/23/2018 10:45	1.49	99.70	7.07	0.62	1.230	10.34	9.40
MW-412	05/30/2018 13:40	0.19	-127.50	6.87	0.71	1.391	16.13	0.10
MW-413	08/18/2014 08:50	1.10	-135.2	6.68	1.14	2.229	20.13	49.90
MW-413	08/18/2014 09:20	0.49	-126.2	6.74	1.01	1.978	20.03	3.20
MW-413	08/18/2014 09:50	0.61	-128	6.73	1.01	1.965	20.05	8.90
MW-413	11/11/2014 14:25	0.24	-122.7	6.79	0.82	1.612	17.60	84.30
MW-413	11/11/2014 15:05	0.38	-113.1	6.84	0.79	1.557	17.42	5.10
MW-413	11/11/2014 15:15	0.43	-121	6.83	0.79	1.555	17.55	7.10
MW-413	12/01/2014 09:30	0.54	-89	6.64	1.00	1.951	14.91	25.80
MW-413	12/01/2014 10:15	0.28	-106.4	6.66	0.98	1.920	15.54	0.0000

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-413	12/01/2014 10:23	1.54	-95.7	6.66	0.99	1.934	15.42	2.30
MW-413	12/04/2014 12:05	2.48	-62.5	6.65	0.68	1.337	11.32	61.00
MW-413	12/04/2014 12:50	0.54	-99.4	6.66	0.82	1.620	13.05	22.40
MW-413	12/04/2014 13:00	2.84	-98.6	6.61	0.81	1.596	12.07	3.00
MW-413	12/08/2014 11:35	1.09	-91.4	6.57	1.04	2.022	10.99	37.20
MW-413	12/08/2014 12:15	0.34	-124	6.59	1.04	2.033	11.63	7.80
MW-413	12/08/2014 12:25	0.37	-121.5	6.59	1.07	2.077	9.73	7.40
MW-413	01/23/2015 08:25	0.81	-147.4	7.06	1.30	2.520	10.37	15.40
MW-413	01/23/2015 09:05	0.51	-153.5	6.92	1.09	2.120	10.45	4.10
MW-413	01/23/2015 09:20	3.94	-108.3	6.89	1.10	2.151	9.95	6.70
MW-413	03/11/2015 09:00	5.65	-119.1	6.86	1.20	2.364	9.07	122.60
MW-413	03/11/2015 09:50	4.60	-139.2	6.89	0.94	1.839	9.39	18.90
MW-413	03/11/2015 10:10	9.72	-97.8	6.79	0.93	1.829	9.02	56.80
MW-413	07/01/2015 10:10	4.42	-109.80	6.84	0.73	1.451	17.6	33.10
MW-413	07/01/2015 10:55	1.56	-92.30	6.88	0.68	1.348	18.24	0.0000
MW-413	10/26/2015 12:25	0.82	-129.00	6.75	0.80	1.590	18.49	184.00
MW-413	10/26/2015 12:55	0.0000	-137.00	6.84	0.80	1.520	18.71	57.70
MW-413	03/31/2016 09:00	0.70	-236.60	8.26	1.08	2.105	13.15	42.00
MW-413	03/31/2016 09:30	0.37	-302.70	6.80	0.84	1.648	13.11	9.90
MW-413	06/28/2016 12:40	8.05	-132.10	7.00	0.81	0.030	24.71	45.40
MW-413	06/28/2016 13:25	0.25	-117.60	6.80	0.75	1.481	18.89	11.70
MW-413	10/05/2016 09:25	0.72	-112.80	7.80	0.76	1.509	19.98	7.80
MW-413	10/05/2016 09:55	0.41	-126.80	6.70	0.72	1.440	20.84	1.50
MW-413	03/23/2018 09:25	1.64	25.10	7.15	0.66	1.333	9.34	9.90
MW-413	05/30/2018 10:50	0.26	-115.70	6.77	0.67	11.341	16.31	8.20
MW-413	11/05/2019 11:00	2.25	-138.7	6.32	NM	0.706	18.54	46
MW-413	11/05/2019 11:05	0.5	-160.9	6.55	NM	0.701	18.69	27
MW-413	11/05/2019 11:10	0.17	-184.1	6.68	NM	0.701	18.77	10
MW-413	11/05/2019 11:15	0.12	-189.2	6.72	NM	0.704	18.8	7
MW-413	11/05/2019 11:20	0.09	-191.8	6.75	NM	0.704	18.73	6.6
MW-413	11/05/2019 11:25	0.08	-224.1	6.76	NM	0.702	18.69	8.8
MW-413	11/05/2019 11:30	0.07	-139.8	6.77	NM	0.702	18.71	10.1
MW-413	11/05/2019 11:35	0.06	-160.7	6.78	NM	0.701	18.71	10.6
MW-413	11/05/2019 11:40	0.06	-186.9	6.78	NM	0.7	18.7	10.4
MW-413	11/05/2019 11:45	0.05	-146.1	6.78	NM	0.7	18.67	8.1
MW-413	11/05/2019 11:57	0.06	-153.2	6.78	0.34	0.698	18.72	8.8
MW-413	11/05/2019 12:10	0.14	-192.5	6.78	0.34	0.7	18.59	354.8
MW-413	03/17/2020 14:45	0.23	-107.1	6.78	NM	1.398	11.22	0.1
MW-413	06/10/2020 08:45	4	60.2	8.07	0.5	1.005	19.52	23.2
MW-413	06/10/2020 08:50	0.91	11.2	6.69	0.46	0.926	18.02	7.3
MW-413	06/10/2020 08:55	0.65	-2	6.55	0.46	0.925	17.51	3.9
MW-413	06/10/2020 09:00	0.49	-91.1	6.67	0.61	1.218	16.95	2.3
MW-413	06/10/2020 09:05	0.41	-116.3	6.81	0.64	1.266	17.11	1
MW-413	06/10/2020 09:10	0.4	-122	6.85	0.64	1.272	17.2	0.5
MW-413	06/10/2020 09:15	0.43	-118.1	6.87	0.63	1.264	17.3	0.3
MW-413	06/10/2020 09:20	0.46	-119	6.87	0.63	1.266	18.56	0.5
MW-413	06/10/2020 09:25	0.38	-125	6.89	0.64	1.274	16.54	3
MW-413	06/10/2020 09:30	0.36	-125.5	6.9	0.64	1.278	16.38	5.7
MW-425	03/28/2018 11:05	0.46	-117.70	7.00	0.36	0.735	8.63	9.10
MW-425	06/05/2018 13:40	5.61	-85.90	6.43	0.36	0.728	16.92	0.0000
MW-425	10/16/2019 08:20	1.08	-137.5	6.73	NM	1.059	17.91	6.2
MW-425	10/16/2019 08:25	0.4	-138.8	6.65	NM	0.929	17.96	3.5
MW-425	10/16/2019 08:30	0.37	-122.7	6.6	NM	0.845	18.08	29.9
MW-425	10/16/2019 08:35	0.38	-122.9	6.56	NM	0.799	18.14	0
MW-425	10/16/2019 08:40	0.36	-113.6	6.56	NM	0.771	18.12	0
MW-425	10/16/2019 08:45	0.33	-113.2	6.52	NM	0.756	18.2	0
MW-425	10/16/2019 08:50	0.34	-104.2	6.52	NM	0.768	18.22	0
MW-425	10/16/2019 09:30	1.57	-89.9	7.16	1.32	1.478	18.77	11.5
MW-425	10/16/2019 10:05	2.23	-85.9	6.62	0.43	0.9	18.57	34.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-425	03/17/2020 09:45	0.32	-110.6	6.67	NM	0.328	9.33	3
MW-425	06/12/2020 12:05	1.79	-118.2	6.92	0.33	0.677	20.16	0
MW-425	06/12/2020 12:10	0.58	-113.1	6.79	0.33	0.677	18.1	0
MW-425	06/12/2020 12:15	0.52	-111.7	6.79	0.33	0.679	18.25	0
MW-425	06/12/2020 12:20	0.34	-109.9	6.77	0.33	0.676	17.67	0
MW-425	06/12/2020 12:25	0.29	-108.7	6.75	0.33	0.672	17.56	0
MW-425	06/12/2020 12:30	0.26	-105.1	6.74	0.33	0.671	17.74	0
MW-425	06/12/2020 12:35	0.26	-101.5	6.73	0.32	0.665	17.64	0
MW-425	06/12/2020 12:40	0.27	-101.6	6.72	0.33	0.665	17.64	0
MW-425	09/11/2020 09:00	2.69	-90.1	6.88	0.47	1.041	19.8	32.2
MW-425	09/11/2020 09:05	2.83	-77.6	6.5	0.37	0.749	19.95	20.7
MW-425	09/11/2020 09:10	2.83	-75.8	6.52	0.37	0.747	20.3	21
MW-425	09/11/2020 09:15	2.81	-78.6	6.55	0.37	0.748	20.35	12.3
MW-425	09/11/2020 09:20	2.8	-80.4	6.58	0.37	0.75	20.34	7
MW-425	09/11/2020 09:25	2.86	-89.6	6.59	0.37	0.75	20.27	6
MW-425	09/11/2020 09:30	2.9	-85.5	6.59	0.37	0.75	20.21	5.1
MW-425	09/11/2020 09:35	2.82	-83.1	6.62	0.37	0.752	20.41	16.2
MW-425	09/11/2020 09:40	2.88	-87.9	6.64	0.37	0.751	20.39	9.6
MW-425	09/11/2020 09:45	3.06	-88.3	6.62	0.37	0.75	20.08	13.5
MW-427	04/11/2018 13:20	0.39	-149.60	7.11	0.48	0.976	10.88	0.0000
MW-427	06/05/2018 08:30	0.90	-148.30	7.09	0.48	0.958	10.03	0.0000
MW-427	10/16/2019 12:15	0.71	-73.4	7.58	NM	1.064	18.74	51.8
MW-427	10/16/2019 12:20	0.53	-107.5	7.48	NM	1.001	18.82	25.3
MW-427	10/16/2019 12:25	0.51	-117.8	7.27	NM	0.976	18.82	17.6
MW-427	10/16/2019 12:30	0.44	-122	7.16	NM	0.975	18.8	5.1
MW-427	10/16/2019 12:35	0.39	-125	7.11	NM	0.966	18.8	6.3
MW-427	10/16/2019 12:40	0.35	-126.8	7.09	NM	0.825	18.82	4.8
MW-427	10/16/2019 12:45	0.32	-129.9	7.07	NM	0.984	18.85	2.6
MW-427	10/16/2019 12:50	0.31	-129.4	7.05	NM	0.975	18.9	0.3
MW-427	10/16/2019 12:55	0.31	-125.5	7.03	NM	1.007	18.8	1.6
MW-427	10/16/2019 13:00	0.3	-123.4	7.02	NM	1.006	18.77	11.3
MW-427	10/16/2019 13:30	5.19	-20.3	7.16	0.54	0.936	18.66	4
MW-427	10/16/2019 13:45	6.08	-56.4	7.11	0.48	0.959	18.57	374.8
MW-427	03/16/2020 10:15	0.2	-107.7	6.94	NM	0.635	9.56	10.5
MW-427	06/11/2020 08:20	2.8	-107.5	6.98	0.49	0.98	18.96	5
MW-427	06/11/2020 08:25	0.6	-106.5	6.8	0.48	0.973	17.82	2
MW-427	06/11/2020 08:30	0.41	-110.9	6.8	0.48	0.976	17.5	0.9
MW-427	06/11/2020 08:35	0.35	-113.3	6.8	0.48	0.975	17.34	0.3
MW-427	06/11/2020 08:40	0.32	-114.8	6.81	0.48	0.976	17.45	0.7
MW-427	06/11/2020 08:45	0.29	-117.8	6.81	0.49	0.981	17.26	0
MW-427	06/11/2020 08:50	0.29	-119	6.81	0.49	0.981	16.99	0
MW-427	06/11/2020 08:55	0.28	-119.1	6.81	0.49	0.981	16.98	0
MW-431	03/27/2018 08:40	0.83	-118.00	6.89	0.76	1.513	6.74	10.50
MW-431	06/04/2018 13:25	0.56	-107.50	6.57	0.88	1.680	15.53	6.50
MW-442	02/09/2016 11:35	0.79	-83.3	6.96	0.83	1.642	9.52	2.1
MW-442	02/09/2016 11:55	0.5	-84.8	6.94	0.84	1.653	8.37	1.9
MW-443	02/10/2016 11:55	0.09	-100.8	6.77	0.81	1.6	9.1	0
MW-443	02/10/2016 12:25	0.25	-82.9	6.71	0.8	1.597	11.44	1236.2
MW-443	10/12/2016 13:23	2.84	-99.5	6.59	0.71	1.404	20.56	4.40
MW-443	10/12/2016 13:40	3.23	-74.2	6.54	0.64	1.289	21.71	61.00
MW-443	02/02/2017 10:10	4.49	98	6.77	0.61	1.222	10.47	4.70
MW-443	02/02/2017 10:23	2.80	56.2	6.70	0.57	1.142	10.48	211.20
MW-443	04/14/2017 08:00	3.77	-27.00	6.34	1.00	1.920	10.11	0.0000
MW-443	04/14/2017 08:25	4.11	-61.00	6.65	0.80	1.620	8.05	0.0000
MW-443	04/14/2017 08:35	11.32	-59.00	6.58	0.70	1.330	7.6	381.00
MW-443	01/22/2018 13:40	2.13	-52.00	6.61	1.05	2.041	12.81	85.80
MW-443	01/22/2018 14:00	2.50	-68.30	7.17	0.81	1.602	12.65	5.10
MW-443	01/22/2018 14:10	2.60	-71.90	7.16	0.77	1.528	13.03	79.20
MW-443	02/19/2018 13:20	3.17	40.20	6.90	0.88	1.721	11.55	2.10

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-443	02/19/2018 14:05	6.69	-18.50	7.13	0.72	1.426	11.27	32.00
MW-443	02/19/2018 14:20	5.49	-37.70	6.89	0.73	1.446	11.36	92.60
MW-443	01/28/2019 11:15	4.68	-56.2	7.13	0.59	1.173	10.61	4.8
MW-443	04/23/2019 10:28	2.89	-60.6	6.83	0.84	1.643	12.73	3.1
MW-443	08/09/2019 08:40	1.11	-110	7.26	NM	2.491	23.6	18
MW-443	08/09/2019 09:05	2.88	-103.5	6.75	0.68	1.352	22.87	0.1
MW-443	08/09/2019 09:13	2.85	-93.8	6.71	0.55	1.101	23.22	59.3
MW-443	10/21/2019 08:40	2.05	-94.6	6.79	NM	2.064	16.9	3.7
MW-443	10/21/2019 09:10	4.17	-139.4	7.11	0.63	1.266	19.06	0.7
MW-443	10/21/2019 09:25	6.74	-171	7.37	0.52	1.056	18.71	2.2
MW-443	01/23/2020 10:47	9.38	-61.3	6.72	NM	1.784	9.87	86.8
MW-443	01/23/2020 11:22	15.77	-70.2	6.83	0.73	1.444	9.57	5.1
MW-443	01/23/2020 11:35	8.74	-76.2	6.84	0.65	1.291	10.26	46.7
MW-443	04/23/2020 14:03	0.99	-124.1	5.3	0.65	1.3	10.99	21.3
MW-443	10/28/2020 09:45	14.72	-49.8	7.29	1.01	1.963	16.92	17.2
MW-443	10/28/2020 09:50	13.15	-50.9	7.26	1.02	1.985	17.58	11.9
MW-443	10/28/2020 09:55	12.36	-53.2	7.25	1.02	1.987	17.81	7
MW-443	10/28/2020 10:00	10.04	-61.3	7.26	1.02	1.983	18.17	0
MW-443	10/28/2020 10:05	8.74	-66.3	7.27	1	1.963	18.25	0
MW-443	10/28/2020 10:10	7.2	-76.8	7.3	0.97	1.906	18.35	0
MW-443	10/28/2020 10:15	6.42	-83.5	7.31	0.95	1.86	18.4	0
MW-443	10/28/2020 10:20	-96.1	-95.9	7.35	0.9	1.774	18.43	0
MW-443	10/28/2020 10:25	4.61	-107.2	7.38	0.86	1.692	18.49	0
MW-443	10/28/2020 10:30	4.5	-108.7	7.38	0.85	1.68	18.47	0
MW-443	10/28/2020 10:45	2.98	-139.3	7.53	0.51	1.031	18.38	0
MW-443	10/28/2020 10:55	2.65	-139.9	7.54	0.51	1.031	18.26	0
MW-443	01/25/2021 10:35	2.55	-138.9	7.15	0.8	1.573	9.06	0.4
MW-443	01/25/2021 10:45	2.39	-157.2	7.19	0.6	1.93	8.98	13.8
MW-443	04/14/2021 12:25	3.18	27.5	6.72	1.1	2.12	15.6	369.9
MW-443	04/14/2021 12:30	3.03	-38.9	6.76	1.11	2.148	13.2	167.7
MW-443	04/14/2021 12:35	1.84	-71	6.83	1.09	2.109	11.55	107.4
MW-443	04/14/2021 12:40	1.36	85.9	6.85	1.06	2.072	11.19	62.4
MW-443	04/14/2021 12:45	1.47	96	6.86	1.03	2.015	11.1	41.4
MW-443	04/14/2021 12:50	2.59	-107.3	6.87	0.99	1.921	10.99	18
MW-443	04/14/2021 12:55	1.68	-115.1	6.89	0.93	1.832	11.06	8.7
MW-443	04/14/2021 13:00	1.84	-121.1	6.89	0.9	1.765	11.03	13.7
MW-443	04/14/2021 13:05	1.84	-129.6	6.9	0.84	1.651	11.09	11.6
MW-443	04/14/2021 13:10	1.88	-136.6	6.9	0.79	1.568	10.89	6.2
MW-443	03/25/2022 10:25	5.39	9.1	6.75	1.21	2.356	11.87	444.7
MW-443	03/25/2022 10:30	1.9	-19.6	6.7	1.23	2.38	10.83	316.5
MW-443	03/25/2022 10:35	1.53	-47.2	6.65	1.22	2.362	10.37	170.6
MW-443	03/25/2022 10:40	1.31	-65.6	6.69	1.21	2.338	10.49	93.6
MW-443	03/25/2022 10:45	1.31	-74.2	6.71	1.19	2.309	10.19	51.9
MW-443	03/25/2022 10:50	1.29	-77.7	6.72	1.19	2.3	10.22	48.5
MW-443	03/25/2022 10:55	1.25	-79.1	6.73	1.19	2.297	10.27	47.6
MW-444	02/20/2018 13:15	0.68	-71.30	6.79	0.67	1.331	10.55	20.90
MW-444	02/20/2018 13:50	0.11	-52.90	6.76	0.68	1.345	12.34	7.50
MW-444	02/20/2018 14:20	1.04	-178.10	7.81	0.72	1.469	11.88	26.70
MW-444	04/18/2018 14:00	1.01	-106.70	6.75	0.69	1.373	9.65	6.10
MW-444	04/18/2018 14:20	3.21	-85.90	6.68	0.70	1.387	10.74	10.10
MW-444	04/18/2018 14:50	3.75	-71.30	6.32	0.68	1.349	11.5	241.70
MW-444	11/15/2019 10:35	5.38	-228.4	6.94	NM	0.374	11.12	63.9
MW-444	11/15/2019 11:00	4.08	-98.4	6.7	0.5	0.998	12.98	28.3
MW-444	11/15/2019 11:10	9.91	-87.7	6.88	0	0.012	14.44	210.8
MW-444	05/21/2020 09:50	0.68	-97.1	6.89	NM	0.761	16.48	60.3
MW-444	05/21/2020 10:50	2.69	-50.2	6.98	0.41	0.841	18.76	65.1
MW-444	08/26/2020 10:25	3.98	-123	6.79	NM	1.268	18.87	30.5
MW-444	08/26/2020 10:40	3.5	-82.8	6.88	0.67	1.333	20.51	56.3
MW-444	11/10/2020 10:45	2.6	-77.4	6.51	0.41	0.836	17.82	194.4

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-444	11/10/2020 10:50	1.94	-83.6	6.43	0.39	0.794	17.49	140.4
MW-444	11/10/2020 10:55	1.85	-85.9	6.41	0.38	0.77	17.41	126.3
MW-444	11/10/2020 11:00	2.03	-92.9	6.42	0.37	0.75	17.41	90.5
MW-444	11/10/2020 11:05	1.86	-97.4	6.43	0.36	0.74	17.46	69.8
MW-444	11/10/2020 11:10	1.66	-96.1	6.43	0.36	0.732	17.46	56.5
MW-444	11/10/2020 11:15	1.86	-102.9	6.43	0.36	0.728	17.49	49.9
MW-444	11/10/2020 11:20	1.7	-101.1	6.43	0.35	0.723	17.55	39.7
MW-444	11/10/2020 11:25	1.78	-103.6	6.43	0.35	0.723	17.58	39.9
MW-444	11/10/2020 11:30	1.49	-101.3	6.44	0.36	0.724	17.6	36.5
MW-444	11/10/2020 12:05	2.82	-78.3	6.66	0.81	1.603	18.11	10.6
MW-444	11/10/2020 12:20	1.98	-83.1	6.55	0.42	0.849	17.95	44.7
MW-444	03/02/2021 09:05	4.46	13.7	6.73	0.33	0.683	3.71	114.6
MW-444	03/02/2021 09:10	1.89	-15.5	6.72	0.3	0.624	3.18	14
MW-444	03/02/2021 09:15	1.81	-12.7	6.75	0.3	0.615	3.13	10.4
MW-444	03/02/2021 09:20	1.69	-8.6	6.84	0.29	0.603	3.16	11
MW-444	03/02/2021 09:25	1.64	-11.6	6.95	0.29	0.601	3.16	7
MW-444	03/02/2021 09:30	1.69	-21.1	6.97	0.29	0.599	3.32	6.4
MW-444	03/02/2021 09:35	1.75	-94.4	7.02	0.29	0.6	3.38	4.1
MW-444	03/02/2021 09:40	1.76	-103.8	7.05	0.29	0.601	3.3	2.3
MW-444	03/02/2021 09:45	1.8	-103	7.07	0.29	0.601	3.33	5.3
MW-444	03/02/2021 09:50	1.86	-103.8	7.08	0.29	0.603	3.46	8.5
MW-444	03/02/2021 10:00	2.09	-108.8	7.21	0.29	0.599	4.06	94
MW-444	03/02/2021 10:10	2.19	-105.6	7.05	0.29	0.594	3.26	79
MW-444	05/13/2021 11:20	2.18	-0.3	6.85	0.21	0.443	15.76	1305.5
MW-444	05/13/2021 11:25	1.89	-3.2	6.86	0.23	0.446	15.4	1320.9
MW-444	05/13/2021 11:30	1.26	-13.5	6.85	0.25	0.511	14.16	1379
MW-444	05/13/2021 11:35	0.96	-19.2	6.82	0.26	0.526	13.98	1377
MW-444	05/13/2021 11:40	0.37	-33.1	6.82	0.25	0.517	13.45	1372.3
MW-444	05/13/2021 11:45	0.29	-43.1	6.86	0.25	0.533	12.78	1038.8
MW-444	05/13/2021 11:50	0.3	-43	6.87	0.26	0.533	12.77	909.7
MW-444	05/13/2021 11:55	0.32	-52.2	6.89	0.27	0.556	12.31	382.9
MW-444	05/13/2021 12:00	0.32	-53.3	6.89	0.28	0.574	12.48	333.8
MW-444	05/13/2021 12:05	0.33	-64.7	6.93	0.28	0.576	12.05	145.3
MW-444	08/20/2021 13:05	2.5	-104.8	6.4	0.34	20.59	20.64	119.1
MW-444	08/20/2021 13:10	1.58	-117.5	6.24	0.34	0.697	20.86	123.1
MW-444	08/20/2021 13:15	1.3	-113.7	6.2	0.34	0.698	20.95	130.5
MW-444	08/20/2021 13:20	1.07	-125.7	6.3	0.34	0.704	20.76	123
MW-444	08/20/2021 13:25	0.6	-127	6.33	0.34	0.704	20.8	107.3
MW-444	08/20/2021 13:30	0.38	-128.9	6.36	0.35	0.707	20.54	89.8
MW-444	08/20/2021 13:35	0.35	-133.7	6.41	0.35	0.707	20.56	74.7
MW-444	08/20/2021 13:40	0.31	-146.2	6.52	0.35	0.709	20.38	66.7
MW-444	08/20/2021 13:45	0.28	-147.3	6.55	0.35	0.708	20.52	55.8
MW-444	08/20/2021 13:50	0.25	-148.4	6.55	0.35	0.709	20.37	43.8
MW-444	02/08/2022 09:55	4.86	97.5	6.66	0.25	0.516	4.92	645.3
MW-444	02/08/2022 10:00	3.96	64.2	6.7	0.24	0.497	5.18	1380.3
MW-444	02/08/2022 10:05	4.62	59.2	6.73	0.24	0.494	5.26	1361.4
MW-444	02/08/2022 10:10	3.62	15.2	6.91	0.23	0.483	5.39	384.1
MW-444	02/08/2022 10:15	4.21	-5	6.97	0.23	0.481	5.61	124.7
MW-444	02/08/2022 10:20	3.1	-19.2	6.97	0.23	0.479	5.63	56
MW-444	02/08/2022 10:25	3.38	-19.7	6.96	0.23	0.479	5.66	60.6
MW-444	02/08/2022 10:30	5.88	-19.3	6.97	0.23	0.479	5.69	54.3
MW-444	02/08/2022 10:35	5.62	-28.7	7.03	0.23	0.479	5.9	27.6
MW-444	02/08/2022 10:40	4	-30.9	7.03	0.23	0.479	5.91	23.6
MW-445	02/10/2016 14:30	0.68	-65.5	6.55	1.05	2.03	11.03	12
MW-445	02/10/2016 14:45	0.77	-64.5	6.53	1.06	2.058	10.03	1
MW-446	02/09/2016 12:58	0.39	-89.3	6.85	0.65	1.296	7.6	2.6
MW-446	02/09/2016 13:28	0.7	-82.4	6.88	0.65	1.304	6.1	70.3
MW-446R	10/12/2016 11:47	2.98	-78.8	7.01	1.22	2.370	21.74	1.40
MW-446R	10/12/2016 12:05	2.72	-65.4	6.96	1.18	2.296	21.96	619.10

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-446R	02/03/2017 11:45	5.27	40.3	6.81	0.59	1.212	7.62	426.20
MW-446R	02/03/2017 12:00	5.13	35.1	6.88	0.57	1.143	7.68	458.00
MW-446R	04/14/2017 09:35	8.61	-16.00	7.22	1.10	2.130	8.43	110.00
MW-446R	04/14/2017 09:50	6.36	-61.00	7.25	0.70	1.420	7.24	94.00
MW-446R	04/14/2017 10:05	3.76	-59.00	7.16	0.70	1.390	7.95	306.00
MW-446R	01/23/2018 08:10	1.44	135.90	5.34	0.72	1.422	8.36	716.30
MW-446R	01/23/2018 08:25	0.76	100.60	6.22	0.76	1.476	9.38	81.40
MW-446R	01/23/2018 08:35	0.99	106.30	6.28	0.74	1.464	9.39	100.60
MW-446R	10/08/2018 11:00	4.76	-86.70	7.04	0.75	1.485	20.48	106.40
MW-446R	10/08/2018 11:25	4.26	-67.90	7.07	0.39	0.795	19.93	97.50
MW-446R	10/08/2018 11:30	4.63	-55.40	7.06	0.75	1.490	19.89	446.30
MW-446R	01/28/2019 10:50	7.35	14.90	7.49	0.41	0.826	6.26	1702.90
MW-446R	01/28/2019 11:02	11.07	-66.90	7.47	0.32	0.879	6.64	650.10
MW-446R	01/28/2019 11:15	8.32	-60.80	7.46	0.40	0.808	6.63	1707.10
MW-446R	04/23/2019 13:02	5.27	-58.2	7.18	0.49	985	14.33	287.6
MW-446R	08/09/2019 09:25	2.49	-88.8	6.95	NM	1.189	26.99	332
MW-446R	08/09/2019 09:50	2.57	-123.4	7	0.73	1.463	23.95	102.3
MW-446R	08/09/2019 10:00	3.44	-78.9	6.98	0.7	1.404	24.41	1038.8
MW-446R	10/21/2019 12:50	3.14	-98.1	7.13	NM	1.425	20.83	14.8
MW-446R	10/21/2019 13:15	5.24	-110	7.13	0.71	1.413	21.88	18.1
MW-446R	10/21/2019 13:30	5.48	-100.6	7.04	0.72	1.426	22.08	143.6
MW-446R	01/23/2020 13:12	9.13	5.8	7.04	NM	1.486	9.37	138.6
MW-446R	01/23/2020 13:34	8.35	-35.8	7.14	0.65	1.287	9.17	20.1
MW-446R	01/23/2020 13:50	7.24	-41.6	7.18	0.65	1.29	9.07	1290.4
MW-446R	04/24/2020 10:15	12.78	-55.1	7.17	0.77	1.526	10.69	901
MW-446R	10/23/2020 09:35	NM	NM	NM	NM	NM	NM	106.3
MW-446R	10/28/2020 08:30	3.89	-46.9	7.62	0.6	1.202	17.75	23.1
MW-446R	10/28/2020 08:35	2.33	-42.4	7.6	0.6	1.201	17.79	19.2
MW-446R	10/28/2020 08:40	2.09	-48.6	7.57	0.6	1.2	17.65	10.7
MW-446R	10/28/2020 08:45	2.26	-49.9	7.57	0.6	1.204	17.63	7.5
MW-446R	10/28/2020 08:50	3.24	-54.2	7.57	0.6	1.204	17.67	4
MW-446R	10/28/2020 08:55	5.8	-58.4	7.57	0.6	1.194	17.73	0.1
MW-446R	10/28/2020 09:00	9.52	-63.2	7.57	0.59	1.173	17.89	0
MW-446R	10/28/2020 09:05	12.46	-65.3	7.57	0.58	1.162	17.92	0
MW-446R	10/28/2020 09:10	15.54	-68	7.58	0.57	1.151	17.94	0
MW-446R	10/28/2020 09:15	16.47	-68.8	7.58	0.57	1.145	17.93	0
MW-446R	10/28/2020 09:25	19.05	-62.3	7.54	0.56	1.123	18.67	107.2
MW-446R	10/28/2020 09:35	13.32	-61.2	7.55	0.56	1.122	18.55	NM
MW-446R	01/25/2021 09:45	3.21	-112.6	7.29	0.57	1.142	7.71	170.3
MW-446R	01/25/2021 09:55	2.27	-118.2	7.29	0.61	1.207	7.97	814.8
MW-446R	04/15/2021 09:30	2.16	-79.8	6.93	0.84	12.21	12.19	619.7
MW-446R	04/15/2021 09:35	0.91	-86.1	6.94	0.81	1.601	1.599	429.8
MW-446R	04/15/2021 09:40	1.93	-99.3	7.01	0.77	1.514	11.34	207.7
MW-446R	04/15/2021 09:45	0.79	-109.4	7.05	0.73	1.436	11.15	75.5
MW-446R	04/15/2021 09:50	0.78	-115	7.07	0.71	1.4	11.1	38.8
MW-446R	04/15/2021 09:55	1.24	-118	7.09	0.69	1.372	11.12	24
MW-446R	04/15/2021 10:00	0.86	-119.4	7.09	0.68	1.355	11.18	19.5
MW-446R	04/15/2021 10:05	0.87	-120	7.09	0.68	1.343	11.18	18.4
MW-446R	04/15/2021 10:10	1.19	-121.7	7.11	0.67	1.328	11.14	14.5
MW-446R	04/15/2021 10:15	0.87	-121.4	7.1	0.67	1.321	11.15	16.4
MW-447	02/21/2018 10:15	1.25	-20.60	6.39	0.60	1.223	11.23	25.00
MW-447	02/21/2018 10:45	0.96	-23.90	6.48	0.68	1.357	19.48	39.70
MW-447	02/21/2018 11:55	4.61	-56.80	8.14	0.42	3.147	20.16	506.80
MW-447	04/18/2018 11:00	0.25	-74.40	6.40	0.74	1.456	9.81	6.70
MW-447	04/18/2018 11:20	1.16	-50.80	6.39	0.85	1.676	12.56	5.30
MW-447	04/18/2018 11:45	3.08	-42.30	6.32	0.77	1.526	10.74	33.30
MW-447R	11/14/2019 09:40	3.34	-167.2	6.6	NM	1.047	15.16	54
MW-447R	11/14/2019 10:08	4.4	-122.1	4.99	0.55	1.093	13.88	10
MW-447R	11/14/2019 10:18	4.02	-97	6.54	0.27	0.546	15.91	31.6

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-447R	05/19/2020 09:45	0.17	-99.9	6.54	NM	2.503	16.2	2.4
MW-447R	05/19/2020 10:10	1.97	-69.1	6.56	1.07	2.088	17.28	7.8
MW-447R	11/09/2020 11:35	5.74	-100.8	6.72	1.82	3.438	19.05	11.5
MW-447R	11/09/2020 11:40	5.39	-110.9	6.61	1.97	3.67	18.96	10.2
MW-447R	11/09/2020 11:45	4.07	-133.1	6.47	2.2	4.185	18.8	8.6
MW-447R	11/09/2020 11:50	4.14	-173.9	6.48	1.78	3.378	18.76	8
MW-447R	11/09/2020 11:55	5.9	-217.2	6.48	1.74	3.319	18.8	6.7
MW-447R	11/09/2020 12:00	3.92	-238.8	6.44	1.66	3.172	18.7	5.8
MW-447R	11/09/2020 12:05	4.47	-252.7	6.39	1.5	2.882	18.68	4.9
MW-447R	11/09/2020 12:10	5.84	-259.8	6.37	1.42	2.743	18.79	4.3
MW-447R	11/09/2020 12:15	7.62	-265	6.35	1.32	2.553	18.84	3.8
MW-447R	11/09/2020 12:20	8.69	-269.6	6.34	1.25	2.414	18.87	3.5
MW-447R	11/09/2020 12:40	2.23	-214.9	6.4	1.97	3.729	20.07	1.5
MW-447R	11/09/2020 12:55	0.69	-219.2	6.48	0.93	1.824	18.93	5.7
MW-447R	03/03/2021 08:45	5.78	-84.1	6.41	10.87	18.26	6.64	7.3
MW-447R	03/03/2021 08:50	1.93	-61.3	6.47	7.29	12.76	6.67	4.9
MW-447R	03/03/2021 08:55	1.6	-53.8	6.49	6.94	12.16	6.51	3.7
MW-447R	03/03/2021 09:00	1.43	-52.4	6.51	6.7	11.8	6.45	3.1
MW-447R	03/03/2021 09:05	1.27	-52.2	6.55	6.55	11.54	6.49	2.9
MW-447R	03/03/2021 09:10	1.18	-53.7	6.56	6.4	11.29	6.49	2.7
MW-447R	03/03/2021 09:15	1.2	-55.2	6.57	6.22	11	6.49	2.4
MW-447R	03/03/2021 09:20	1.15	-58.1	6.5	5.8	10.29	6.55	2
MW-447R	03/03/2021 09:25	1.15	-60.3	6.57	5.58	9.92	6.54	1.7
MW-447R	03/03/2021 09:30	1.18	-61.8	6.56	5.29	9.447	6.59	1.7
MW-447R	03/03/2021 09:40	1.73	-66.6	6.57	4.12	7.481	6.92	2.7
MW-447R	03/03/2021 09:50	1.37	-70.9	6.59	2.64	4.954	7.04	5.2
MW-447R	05/12/2021 12:35	1.17	-133.4	6.51	6.36	11.18	15.19	24.5
MW-447R	05/12/2021 12:40	0.39	-199.2	6.53	5.57	9.829	14.65	13.5
MW-447R	05/12/2021 12:45	0.11	-284	6.52	3.93	7.115	13.27	4
MW-447R	05/12/2021 12:50	0.05	-287.2	6.51	3.88	7.022	13.25	1.7
MW-447R	05/12/2021 12:55	0.11	-300.6	6.48	3.18	5.885	13.09	3.1
MW-447R	05/12/2021 13:00	0.11	-303.3	6.48	3.1	5.721	13.1	2.8
MW-447R	05/12/2021 13:05	0.1	-301.9	6.46	2.71	5.06	13.19	4.7
MW-447R	05/12/2021 13:10	0.09	-298.1	6.45	2.54	4.753	13.06	5.6
MW-447R	05/12/2021 13:15	0.21	-300.5	6.44	2.39	4.46	13.09	6.1
MW-447R	05/12/2021 13:20	0.1	-299.4	6.44	2.28	4.274	13.14	6.4
MW-447R	02/01/2022 12:40	0.69	-3.2	6.46	7.68	13.45	8.65	75.5
MW-447R	02/01/2022 12:45	0.69	-9.7	6.54	5.28	9.396	8.89	36.6
MW-447R	02/01/2022 12:50	0.8	-18.3	6.59	3.82	6.942	9.13	8.6
MW-447R	02/01/2022 12:55	0.44	-23.9	6.6	3.5	6.421	9.18	4.9
MW-447R	02/01/2022 13:00	0.6	-32.4	6.6	3.18	5.846	9.39	3.5
MW-447R	02/01/2022 13:05	0.59	-34.4	6.62	3.17	5.835	9.35	3.3
MW-447R	02/01/2022 13:10	0.57	-36.8	6.62	3.16	5.822	9.39	3.4
MW-448	01/11/2016 10:00	1.16	-113	6.54	0.7	1.42	14.21	8.8
MW-448	01/11/2016 10:30	0.5	-105	6.59	0.9	1.68	13.34	8
MW-448	07/05/2016 13:17	0.31	-98.1	6.62	0.77	1.527	19.17	6.20
MW-448	07/05/2016 13:53	0.47	-72.6	6.56	0.90	1.763	18.56	109.60
MW-448	01/19/2018 10:15	0.60	-140.50	6.76	2.84	5.296	9.39	19.90
MW-448	01/19/2018 10:50	2.81	-128.30	7.40	2.76	5.117	9.32	5.10
MW-448	01/19/2018 11:30	5.18	-147.70	7.80	2.60	4.841	8.81	260.40
MW-448	07/13/2018 11:35	1.34	335.60	2.96	0.80	1.631	21.5	11.70
MW-448	07/13/2018 12:15	0.43	338.40	3.72	1.46	2.824	22.11	86.70
MW-448	07/13/2018 12:40	0.66	335.40	3.28	2.07	3.919	23.07	1326.20
MW-448	10/10/2018 12:40	0.75	-60.60	6.38	0.51	1.024	21.3	43.60
MW-448	10/10/2018 13:00	0.66	-66.20	6.36	0.63	1.270	21.21	43.70
MW-448	10/10/2018 13:05	3.58	-44.20	6.48	0.96	1.879	21.86	264.20
MW-448	01/24/2019 09:40	9.11	130.60	9.34	0.06	0.133	10.98	844.30
MW-448	01/24/2019 10:30	6.97	50.60	8.25	0.05	0.112	11.51	941.00
MW-448	01/24/2019 10:40	8.89	75.10	7.40	0.04	0.089	10.62	1844.30

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-448	04/02/2019 14:10	NM	192	6.74	NM	0.227	11.9	382
MW-448	04/03/2019 10:40	1.35	8	6.81	0.27	0.562	11.41	133
MW-448	08/01/2019 10:05	0.68	-65.2	6.34	NM	0.762	20.82	45.2
MW-448	08/01/2019 10:10	0.53	-74.9	6.34	NM	0.775	21.4	47.1
MW-448	08/01/2019 10:15	0.45	-84.8	6.41	NM	0.85	21.71	44.8
MW-448	08/01/2019 10:20	0.43	-92.9	6.47	NM	0.923	22	41.4
MW-448	08/01/2019 10:25	0.43	-98.7	6.5	NM	0.987	22.15	42.8
MW-448	08/01/2019 10:30	0.43	-104.7	6.55	NM	1.09	22.4	42.8
MW-448	08/01/2019 10:35	0.45	-109.9	6.57	NM	1.193	22.53	36.6
MW-448	08/01/2019 10:40	0.45	-112.5	6.61	NM	1.259	22.9	37
MW-448	08/01/2019 10:45	0.44	-113.1	6.62	NM	1.32	22.99	35.3
MW-448	08/01/2019 10:50	0.45	-115.3	6.64	NM	1.399	22.9	29
MW-448	08/01/2019 11:00	0.45	-115.3	6.64	NM	1.399	22.9	29
MW-448	08/01/2019 11:45	2.96	-125.4	6.91	1.33	2.572	24.63	26
MW-448	08/01/2019 12:00	3.1	-111	6.96	0.01	0.027	25.94	516.2
MW-448	01/24/2020 12:20	2.29	41.8	7.23	NM	0.339	11.42	9.9
MW-448	01/24/2020 12:25	0.71	79.5	6.75	NM	0.342	11.43	10.9
MW-448	01/24/2020 12:30	0.53	92.1	6.65	NM	0.347	11.31	9.9
MW-448	01/24/2020 12:35	0.46	93.9	6.65	NM	0.359	11.33	6.6
MW-448	01/24/2020 12:40	0.45	92.7	6.66	NM	0.372	11.33	8.3
MW-448	01/24/2020 12:45	0.44	91.4	6.67	NM	0.388	11.32	6.1
MW-448	01/24/2020 12:50	0.42	87.7	6.67	NM	0.409	11.36	4.4
MW-448	01/24/2020 12:55	0.46	81.1	6.69	NM	0.44	11.43	5.9
MW-448	01/24/2020 13:00	0.47	75.5	6.71	NM	0.468	11.4	9.2
MW-448	01/24/2020 13:05	0.45	73.8	6.7	NM	0.482	11.4	11
MW-448	01/24/2020 13:30	3.41	-100.9	7.1	0.55	1.109	11.86	47
MW-448	01/24/2020 13:40	5.98	-56.9	7.35	0.6	1.19	11.1	1802.5
MW-448	02/20/2020 10:20	10.37	116.8	7.44	NM	0.431	7.34	229.4
MW-448	02/20/2020 10:55	6.98	134.5	7.19	0.22	0.559	7.44	188.2
MW-448	04/06/2020 14:15	28.78	22.1	6.52	NM	1.274	14.29	0.3
MW-448	04/06/2020 14:40	25.4	67.43	6.34	0.6	1.609	14.89	4.34
MW-448	10/21/2020 13:00	NM	NM	NM	NM	NM	NM	971.5
MW-448	10/23/2020 11:15	2.74	-41	6.79	0.71	1.414	19.84	10.6
MW-448	10/23/2020 11:20	2.23	-61.7	6.7	0.72	1.427	19.96	8.1
MW-448	10/23/2020 11:25	2.02	-69.1	6.75	0.72	1.435	19.82	22.3
MW-448	10/23/2020 11:30	2.07	-78.4	6.77	0.72	1.431	19.89	28.1
MW-448	10/23/2020 11:35	2.15	-84	6.78	0.72	1.431	19.85	26
MW-448	10/23/2020 11:40	2.17	-86.8	6.8	0.73	1.445	19.87	19.2
MW-448	10/23/2020 11:45	2.01	-92	6.81	0.73	1.456	19.86	17.2
MW-448	10/23/2020 11:50	2.01	-90.1	6.81	0.73	1.455	19.87	14.5
MW-448	10/23/2020 11:55	19.89	2.15	6.83	0.75	1.481	19.88	12.7
MW-448	10/23/2020 12:00	2.11	-97.2	6.84	0.75	1.489	19.89	18.7
MW-448	10/23/2020 12:45	3.62	-60.8	6.93	0.97	1.909	20.3	64.8
MW-448	10/23/2020 13:00	4.2	-57.5	6.93	0.9	1.768	19.8	NM
MW-448	01/19/2021 12:15	2.38	83.5	6.84	0.26	0.539	9.65	171.8
MW-448	01/19/2021 12:20	1.28	64.3	6.71	0.27	0.553	8.68	119.4
MW-448	01/19/2021 12:25	1	40.5	6.63	0.27	0.55	7.91	105.8
MW-448	01/19/2021 12:30	0.8	17.9	6.59	0.27	0.551	7.87	93.3
MW-448	01/19/2021 12:35	0.71	3.5	6.61	0.27	0.553	7.84	86.7
MW-448	01/19/2021 12:40	0.65	-6.8	6.63	0.27	0.547	8.35	81.8
MW-448	01/19/2021 12:45	0.62	-9.4	6.67	0.27	0.546	8.4	78
MW-448	01/19/2021 12:50	0.61	-23.6	6.68	0.28	0.572	8.32	68.4
MW-448	01/19/2021 12:55	0.56	-31.9	6.7	0.29	0.588	8.36	67
MW-448	01/19/2021 13:00	0.55	-35.5	6.7	0.29	0.596	8.34	63.2
MW-448	01/19/2021 13:50	3.6	-78.7	7.08	0.54	1.079	10.39	24.5
MW-448	01/19/2021 14:10	3.03	-97.9	7.17	0.58	1.165	11.22	752.9
MW-448	04/05/2021 10:10	1.92	25.8	5.87	0.15	0.315	10.44	69.5
MW-448	04/05/2021 10:15	0.82	30.3	5.78	0.14	0.288	8.92	58.1
MW-448	04/05/2021 10:20	0.44	28.2	5.73	0.14	0.291	8.17	42.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-448	04/05/2021 10:25	0.36	4.6	6.11	0.17	0.35	8.03	25.8
MW-448	04/05/2021 10:30	0.33	-28.7	6.4	0.21	0.441	7.86	18
MW-448	04/05/2021 10:35	0.3	-31.8	6.44	0.22	0.457	7.74	16.9
MW-448	04/05/2021 10:40	0.29	-31.6	6.48	0.23	0.475	7.75	12.8
MW-448	04/05/2021 10:45	0.28	-31	6.49	0.24	0.493	7.73	12.9
MW-448	04/05/2021 10:50	0.26	-31	6.51	0.25	0.518	7.67	12.9
MW-448	04/05/2021 10:55	0.27	-31.5	6.53	0.26	0.54	7.7	10.9
MW-448	07/16/2021 12:30	1.53	-65.9	6.63	0.4	0.831	24.96	1502.1
MW-448	07/16/2021 12:35	0.69	-59	6.3	0.35	0.728	26.11	1606.2
MW-448	07/16/2021 12:40	0.58	-66.2	6.33	0.35	0.712	25.98	1326.5
MW-448	07/16/2021 12:45	0.53	-71.8	6.37	0.34	0.704	0.704	1556.6
MW-448	07/16/2021 12:50	0.51	-77.1	6.4	0.35	0.711	25.11	1441.9
MW-448	07/16/2021 12:55	0.5	-80.8	6.43	0.35	0.726	24.56	928.4
MW-448	07/16/2021 13:00	0.5	-85.8	6.44	0.37	0.768	25.18	802.8
MW-448	07/16/2021 13:05	0.51	-89	6.47	0.38	0.784	24.96	983.99
MW-448	07/16/2021 13:10	0.52	-92.5	6.52	0.4	0.818	24.56	877.8
MW-448	07/16/2021 13:15	0.52	-95.8	6.55	0.42	0.836	24.86	130.6
MW-448	01/25/2022 12:45	1.33	120.7	7.26	0.06	0.135	9.53	999.8
MW-448	01/25/2022 12:50	0.96	60.4	6.85	0.08	0.166	9.4	521.3
MW-448	01/25/2022 12:55	0.97	57.8	6.83	0.08	0.167	9.22	488
MW-448	01/25/2022 13:00	1.2	21.3	6.67	0.09	0.193	8.86	358.3
MW-448	01/25/2022 13:05	1.13	7.8	6.63	0.1	0.211	8.89	359.7
MW-448	01/25/2022 13:10	1.02	-2.4	6.6	0.11	0.225	9.05	271.2
MW-448	01/25/2022 13:15	1.03	-2.7	6.59	0.11	0.226	9.01	244.3
MW-448	01/25/2022 13:20	0.85	-13	6.57	0.12	0.256	9.71	176.8
MW-448	01/25/2022 13:25	0.86	-14.7	6.57	0.12	0.261	9.69	158.9
MW-448	01/25/2022 13:30	0.81	-16.7	6.58	0.13	0.265	9.75	148.4
MW-449	04/14/2016 14:12	0.44	-91.7	6.53	0.32	0.645	12.20	-1.90
MW-449	04/14/2016 14:40	0.55	-105	6.71	0.32	0.645	14.28	7.30
MW-449	07/14/2016 11:40	0.25	-62.2	6.39	0.11	0.230	20.63	4.10
MW-449	07/14/2016 12:12	0.44	-54	6.42	0.11	0.237	21.68	154.90
MW-449	01/30/2018 11:20	18.72	209.10	8.92	21.28	34.720	10.98	9.10
MW-449	01/30/2018 11:43	20.99	213.30	9.81	30.99	47.520	12.78	262.10
MW-449	01/30/2018 12:30	21.18	169.90	10.51	38.44	58.270	12.65	337.60
MW-449	04/10/2018 13:35	2.35	153.00	7.53	24.20	38.090	12.19	51.70
MW-449	04/10/2018 14:20	5.54	-139.50	9.35	26.08	40.870	11.64	63.20
MW-449	04/10/2018 14:25	3.80	223.40	8.75	19.22	30.960	11.12	500.20
MW-449	10/10/2018 13:55	1.42	205.90	7.74	1.09	2.124	21.72	149.40
MW-449	10/10/2018 14:54	1.16	298.30	8.62	2.01	3.841	20.87	435.70
MW-449	10/10/2018 15:40	1.39	268.80	8.54	1.88	3.566	23.42	334.80
MW-449	02/11/2019 13:25	2.61	-31.90	8.10	0.30	0.613	7.32	457.40
MW-449	02/11/2019 13:45	0.08	-106.30	10.69	1.98	3.740	8.67	0.50
MW-449	04/02/2019 12:05	NM	242	6.93	NM	0.275	10.67	93.6
MW-449	04/03/2019 09:20	4.13	19	8.07	1.15	2.27	11.2	57.2
MW-449	08/01/2019 10:05	3.83	142.5	6.64	NM	0.571	22.1	1319.2
MW-449	08/01/2019 10:10	2.93	118	6.57	NM	0.521	21.72	1307.9
MW-449	08/01/2019 10:15	3.67	117.5	6.61	NM	0.547	21.3	702.4
MW-449	08/01/2019 10:20	4.64	123.7	6.76	NM	0.593	22.77	207.8
MW-449	08/01/2019 10:25	5.21	67.5	6.93	NM	0.632	23.57	80.6
MW-449	08/01/2019 10:30	4.96	18.2	6.85	NM	0.64	23.22	51.3
MW-449	08/01/2019 10:35	3.85	0.6	6.75	NM	0.592	22.9	49
MW-449	08/01/2019 10:40	3.17	54.1	6.75	NM	0.53	22.23	56.1
MW-449	08/01/2019 10:45	2.77	0.481	6.78	NM	0.476	21.57	47.9
MW-449	08/01/2019 10:50	1.88	7.9	6.82	NM	0.377	21.01	28
MW-449	08/01/2019 11:45	3.44	126.2	7.15	0.19	0.391	23.53	379
MW-449	08/01/2019 12:05	2.48	127.3	7.32	0.3	0.614	22.18	1308.9
MW-449	04/06/2020 14:15	1.5	93.9	6.55	NM	0.445	13.46	8.2
MW-449	04/06/2020 14:50	5.47	66.3	6.93	0.2	0.406	14.12	451.1
MW-449	10/21/2020 11:55	3.59	-16.3	8.44	0.14	0.293	18.59	1286.5

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-449	10/21/2020 12:00	3.56	-0.3	8.23	0.13	0.283	18.81	1160.7
MW-449	10/21/2020 12:05	3.59	7.2	8.19	0.13	0.28	18.77	331
MW-449	10/21/2020 12:10	3.55	8.7	8.18	0.13	0.276	19.11	117.2
MW-449	10/21/2020 12:15	3.43	12.9	8.1	0.13	0.264	19.34	124.2
MW-449	10/21/2020 12:20	3.26	14.4	8.03	0.12	0.254	19.31	162.4
MW-449	10/21/2020 12:25	2.7	15.6	7.87	0.11	0.233	19.48	80.9
MW-449	10/21/2020 12:30	2.38	16.3	7.74	0.1	0.215	19.41	105.5
MW-449	10/21/2020 12:35	2.14	16.2	7.64	0.1	0.202	19.45	49.7
MW-449	10/21/2020 12:40	2.21	22.1	7.48	0.09	0.194	19.61	NM
MW-449	10/22/2020 08:45	6.34	186.5	7.9	0.27	0.562	18.31	196
MW-449	10/22/2020 09:00	5.55	131.9	7.36	0.2	0.412	18.26	260.6
MW-449	10/22/2020 12:40	NM	NM	NM	NM	NM	NM	50.1
MW-449	01/19/2021 09:35	10.16	147	7.4	0.23	0.468	8.63	55.2
MW-449	01/19/2021 09:40	9.89	146.7	7.37	0.23	0.468	8.59	45.6
MW-449	01/19/2021 09:45	9.85	151	7.32	0.22	0.46	8.18	44
MW-449	01/19/2021 09:50	9.66	151.8	7.29	0.21	0.43	8.2	52.6
MW-449	01/19/2021 09:55	9.49	149.4	7.29	0.2	0.406	8.05	64.8
MW-449	01/19/2021 10:00	9.14	145	7.29	0.19	0.387	8.09	79.2
MW-449	01/19/2021 10:05	9	143.1	7.31	0.18	0.381	8.28	81.1
MW-449	01/19/2021 10:10	8.92	139.4	7.34	0.18	0.377	8.31	79.1
MW-449	01/20/2021 09:20	8.03	219.5	7.24	0.25	0.515	9.29	147.8
MW-449	01/20/2021 09:35	7.08	196.5	7.21	0.16	0.327	9.09	326.1
MW-449	04/05/2021 11:35	5.94	95.9	6.95	0.19	0.384	10.62	288.3
MW-449	04/05/2021 11:40	5.51	115	6.82	0.18	0.379	10.04	75.8
MW-449	04/05/2021 11:45	4.85	124	6.84	0.18	0.38	9.43	52.1
MW-449	04/05/2021 11:50	4.27	124.1	6.9	0.18	0.376	9.51	43.2
MW-449	04/05/2021 11:55	3.86	127.2	6.88	0.18	0.371	9.54	42.7
MW-449	04/05/2021 12:00	3.68	132.1	6.78	0.18	0.366	10.38	33.5
MW-449	04/05/2021 12:05	3.78	134.3	6.78	0.17	0.363	11.03	37.2
MW-449	04/05/2021 12:10	3.8	132.7	6.86	0.18	0.373	10.84	73.2
MW-449	04/05/2021 12:15	3.57	130.2	6.94	0.18	0.377	10.94	63.7
MW-449	04/05/2021 12:20	3.33	127	6.99	0.18	0.378	10.91	41.9
MW-449	01/25/2022 10:50	12.12	61.6	8.65	0.07	0.142	7.24	1827.1
MW-449	01/25/2022 10:55	12.14	70.7	8.43	0.06	0.135	7.21	1827.1
MW-449	01/25/2022 11:00	11.73	107.2	8.03	0.06	0.13	6.83	870.6
MW-449	01/25/2022 11:05	11.27	119.9	7.88	0.05	0.115	6.91	695.2
MW-449	01/25/2022 11:10	11.26	120.4	7.9	0.05	0.115	6.91	664.3
MW-449	01/25/2022 11:15	11.15	125.1	7.84	0.05	0.11	7.03	615.5
MW-449	01/25/2022 11:20	11.04	129.3	7.78	0.05	0.107	7.14	601
MW-449	01/25/2022 11:25	10.91	135.9	7.67	0.05	0.111	6.94	696.7
MW-449	01/25/2022 11:30	10.87	136.9	7.69	0.05	0.111	6.94	685.1
MW-449	01/25/2022 11:35	10.81	137.5	7.68	0.05	0.115	6.93	673.7
MW-450	12/09/2015 13:20	15.21	-76	6.45	0.40	0.828	13.16	136.00
MW-450	12/09/2015 13:52	2.60	-70	7.09	0.40	0.859	13.93	0.0000
MW-450	07/07/2016 12:44	0.21	-71	6.53	0.32	0.655	19.27	2.40
MW-450	01/19/2018 13:35	1.24	-113.60	6.95	0.63	1.266	7.8	3.10
MW-450	01/19/2018 14:05	0.96	-116.40	7.01	0.63	1.269	7.99	1.10
MW-450	01/19/2018 14:20	3.67	-80.40	7.17	0.64	1.277	7.91	62.10
MW-450	04/09/2018 13:30	1.20	-30.70	6.33	0.62	1.231	8.55	28.30
MW-450	04/09/2018 14:10	11.40	10.00	7.39	0.68	1.358	9.89	50.70
MW-450	04/09/2018 14:15	19.81	-60.40	7.27	0.68	1.359	9.12	2052.30
MW-450	07/13/2018 08:45	3.06	12.50	4.64	0.47	0.952	20.4	251.20
MW-450	07/13/2018 09:25	1.83	96.80	4.19	0.49	0.996	22.71	40.80
MW-450	07/13/2018 10:20	0.49	69.20	5.02	0.42	1.051	21.91	1029.10
MW-450	01/22/2019 12:25	1.55	87.4	6.42	NM	0.651	5.46	157.8
MW-450	01/22/2019 13:10	3.19	15.1	6.86	0.34	0.696	6.68	928.6
MW-450	04/05/2019 12:55	NM	-86	6.86	NM	1.04	7.83	764
MW-450	04/05/2019 13:19	0	-93	6.84	0.5	1.03	7.93	0
MW-450	07/24/2019 10:05	1.14	-112.9	6.62	NM	0.693	22.35	632

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-450	07/24/2019 10:10	0.45	-121.5	6.67	NM	0.692	22.7	574.7
MW-450	07/24/2019 10:15	0.3	-128.8	6.7	NM	0.686	23.25	313.8
MW-450	07/24/2019 10:20	0.24	-133.5	6.72	NM	0.687	23.55	326.5
MW-450	07/24/2019 10:25	0.24	-133.7	6.74	NM	0.679	23.36	90
MW-450	07/24/2019 10:30	0.21	-135.2	6.75	NM	0.675	23.52	66.4
MW-450	07/24/2019 10:35	0.21	-136.6	6.77	NM	0.668	23.12	142.8
MW-450	07/24/2019 10:40	0.21	-136.3	6.77	NM	0.655	22.54	84.7
MW-450	07/24/2019 10:45	0.18	-130.5	6.78	NM	0.651	23.25	23.7
MW-450	07/24/2019 10:50	0.17	-126.9	6.81	NM	0.643	23.83	15.9
MW-450	07/24/2019 13:05	0.17	-126.9	6.81	NM	0.643	23.83	15.9
MW-450	07/24/2019 13:50	1.72	-93.2	6.78	0.29	0.606	24.91	88.4
MW-450	07/24/2019 14:00	2.29	-88.2	6.77	0.28	0.582	22.58	1685.2
MW-450	01/23/2020 12:15	10.56	30.9	7.87	NM	0.722	8.95	432.2
MW-450	01/23/2020 12:20	2.91	83.3	6.92	NM	1.266	8.92	268.8
MW-450	01/23/2020 12:25	2.32	130.3	6.31	NM	1.236	8.86	228.6
MW-450	01/23/2020 12:30	1.9	119.5	6.25	NM	1.28	8.98	187.3
MW-450	01/23/2020 12:35	1.81	78.7	6.37	NM	1.411	9.06	110.3
MW-450	01/23/2020 12:40	1.42	70.7	6.38	NM	1.435	9.03	116.4
MW-450	01/23/2020 12:45	1.22	61.8	6.4	NM	1.467	8.94	177.7
MW-450	01/23/2020 12:50	1.28	47.3	6.45	NM	1.504	9.1	145.3
MW-450	01/23/2020 13:30	5.45	1.6	6.7	0.83	1.627	9.26	170.2
MW-450	01/23/2020 13:40	8.6	-16.7	6.98	0.81	1.601	9.34	1822.1
MW-450	04/07/2020 09:10	3.5	-61.3	6.32	0.58	1.163	11.88	633.7
MW-450	10/23/2020 10:45	NM	NM	NM	NM	NM	NM	122.6
MW-450	10/26/2020 09:10	2.2	15.3	6.66	0.32	0.663	17.74	189.4
MW-450	10/26/2020 09:15	1.4	-18.2	6.78	0.32	0.652	17.52	137.1
MW-450	10/26/2020 09:20	1.32	-32.3	6.86	0.31	0.639	17.61	94.5
MW-450	10/26/2020 09:25	1.24	-33.3	6.86	0.3	0.622	17.74	74.9
MW-450	10/26/2020 09:30	1.15	-30.4	6.85	0.3	0.607	17.84	55.5
MW-450	10/26/2020 09:35	1.16	-28.3	6.83	0.29	0.599	17.87	49.7
MW-450	10/26/2020 09:40	1.21	-25.7	6.83	0.29	0.588	17.93	50.1
MW-450	10/26/2020 09:45	1.13	-22.5	6.82	0.28	0.578	17.96	40.7
MW-450	10/26/2020 09:50	1.05	-21.4	6.82	0.28	0.572	17.94	32.4
MW-450	10/26/2020 09:55	1.04	-20.7	6.82	0.27	0.562	17.98	26
MW-450	10/26/2020 10:30	2.25	-2.5	6.96	0.24	0.502	17.46	56.8
MW-450	10/26/2020 10:45	3.68	-10.8	7	0.23	0.477	17.63	NM
MW-450	01/21/2021 13:00	2.35	-13	7.78	0.68	1.351	8.25	464.7
MW-450	01/21/2021 13:05	2.06	-6.6	7.62	0.68	1.355	8.38	405.9
MW-450	01/21/2021 13:10	1.95	0.5	7.45	0.68	1.361	8.5	314.7
MW-450	01/21/2021 13:15	1.98	21	7.13	0.69	1.369	8.94	239.3
MW-450	01/21/2021 13:20	2.01	26.2	6.98	0.69	1.375	9.27	223.1
MW-450	01/21/2021 13:25	1.93	29.9	6.87	0.7	1.38	9.6	205.7
MW-450	01/21/2021 13:30	1.92	31.6	6.81	0.7	1.382	9.7	186.6
MW-450	01/21/2021 13:35	1.94	32.3	6.76	0.69	1.383	9.75	181.7
MW-450	01/21/2021 13:40	1.94	33.5	6.74	0.7	1.38	9.76	176.1
MW-450	01/21/2021 14:30	2.98	-75.9	6.82	0.72	1.429	9.82	170
MW-450	01/21/2021 14:45	3.38	-73.6	6.89	0.67	1.329	8.91	1177.9
MW-450	04/06/2021 11:00	2.49	22.6	7.45	0.32	0.662	8.87	51.3
MW-450	04/06/2021 11:05	1.17	6.4	6.54	0.3	0.616	8.28	45.7
MW-450	04/06/2021 11:10	1.23	-39.5	6.5	0.33	0.668	7.79	37.3
MW-450	04/06/2021 11:15	1.19	-57.3	6.57	0.35	0.714	7.43	39
MW-450	04/06/2021 11:20	1.48	-75.9	6.67	0.38	0.769	7.45	31.6
MW-450	04/06/2021 11:25	1.29	-89.4	6.76	0.4	0.814	7.35	28.3
MW-450	04/06/2021 11:30	1.55	-99.3	6.82	0.42	0.844	7.42	26.2
MW-450	04/06/2021 11:35	1.93	-107.6	6.87	0.43	0.873	7.37	25.1
MW-450	04/06/2021 11:40	1.09	-113.6	5.89	0.44	0.891	7.34	22.3
MW-450	04/06/2021 11:45	1.75	-117.9	5.91	0.45	0.903	7.36	20.4
MW-450	07/19/2021 12:30	0.1	-153.1	6.84	0.27	0.557	24.79	571.3
MW-450	07/19/2021 12:35	0.11	-155.8	6.86	0.27	0.556	25.08	408.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-450	01/24/2022 13:50	42.72	-70.7	6.8	0.21	0.437	7.68	1350.6
MW-450	01/24/2022 13:55	45.67	-77.3	6.8	0.22	0.453	7.75	1588
MW-450	01/24/2022 14:00	52.32	-119.5	6.97	0.27	0.561	8.25	1860.5
MW-450	01/24/2022 14:05	51.02	-132.7	7.04	0.28	0.577	8.51	1855.5
MW-450	01/24/2022 14:10	45.85	-143	7.1	0.29	0.59	8.65	1726.4
MW-450	01/24/2022 14:15	42.84	-148.1	7.12	0.29	0.594	8.79	1763.4
MW-450	01/24/2022 14:20	32.73	-154.6	7.16	0.3	0.608	9.06	1357.3
MW-450	01/24/2022 14:25	25.8	-161.3	7.19	0.3	0.614	9.22	1441.9
MW-450	01/24/2022 14:30	24.8	-162.5	7.18	0.3	0.614	9.24	1573
MW-450	01/24/2022 14:35	21.17	-164.7	7.19	0.3	0.616	9.32	1037.8
MW-451	01/11/2016 12:00	0.1	-131	6.95	0.3	0.059	14.97	14.4
MW-451	01/11/2016 12:15	0	-131	6.96	0.3	0.68	14.75	15
MW-451	07/06/2016 11:55	8.80	-76	6.88	0.39	0.800	17.10	16.30
MW-451	07/06/2016 12:10	5.94	-70.2	6.85	0.40	0.804	18.11	22.90
MW-451	01/18/2018 10:45	0.30	-97.50	6.77	0.19	0.399	11.41	4.00
MW-451	01/18/2018 11:10	1.13	-86.80	6.86	0.21	0.430	9.95	0.40
MW-451	01/18/2018 14:45	0.58	-92.00	6.97	0.21	0.443	11.23	29.20
MW-451	04/10/2018 10:35	2.09	-109.10	6.81	0.25	0.513	9.58	45.20
MW-451	04/10/2018 11:25	11.77	-40.70	7.15	0.28	0.569	10.35	42.80
MW-451	04/10/2018 11:35	14.34	-72.00	7.41	0.25	0.517	10.14	61.50
MW-451	01/23/2019 13:55	3.81	-73.90	6.65	0.20	0.413	10.2	8.80
MW-451	01/23/2019 14:30	4.51	-66.50	6.85	0.23	0.481	10.47	3.60
MW-451	01/23/2019 14:45	8.40	-98.10	6.95	0.23	0.478	10.84	222.70
MW-451	04/04/2019 13:45	0.03	-134	7.07	NM	0.387	12.2	NM
MW-451	04/04/2019 14:10	0	-141	7.16	0.2	0.432	10.67	0
MW-451	07/31/2019 10:05	1.49	-110.4	6.49	NM	0.445	21.04	7.1
MW-451	07/31/2019 10:10	1.16	-111.3	6.5	NM	0.422	20.34	6.4
MW-451	07/31/2019 10:15	2.52	-98	6.52	NM	0.418	20.17	2.7
MW-451	07/31/2019 10:20	3.93	-100.9	6.54	NM	0.415	19.95	2
MW-451	07/31/2019 10:25	7.53	-107.5	6.58	NM	0.411	19.8	0.5
MW-451	07/31/2019 10:30	8.18	-109.3	6.61	NM	0.412	19.53	0.1
MW-451	07/31/2019 10:35	8.8	-111.5	6.65	NM	0.413	19.19	0.1
MW-451	07/31/2019 10:40	8.91	-114.2	6.65	NM	0.414	19.08	0.2
MW-451	08/01/2019 10:50	0.55	-117	6.76	NM	0.377	21.46	0.9
MW-451	08/01/2019 14:45	0.34	-118.2	6.95	0.19	0.4	19.74	-1.2
MW-451	08/01/2019 15:02	2.85	-89.8	6.81	0.11	0.224	25.03	22.9
MW-451	01/24/2020 09:20	9.51	-64.7	7.3	NM	0.259	10.47	37.8
MW-451	01/24/2020 09:25	0.79	-91.7	6.91	NM	0.442	10.83	19.9
MW-451	01/24/2020 09:30	0.78	-83.1	6.96	NM	0.429	10.9	10.2
MW-451	01/24/2020 09:35	0.74	-86.3	7	NM	0.425	10.9	9.8
MW-451	01/24/2020 09:40	0.59	-89.7	7.01	NM	0.419	10.97	7.7
MW-451	01/24/2020 09:45	0.55	-95.2	7.04	NM	0.416	11.05	7
MW-451	01/24/2020 09:50	0.5	-95.2	7.06	NM	0.414	11.11	6.1
MW-451	01/24/2020 09:55	0.42	-98.9	7.07	NM	0.413	11.08	5.2
MW-451	01/24/2020 10:00	0.39	-100.4	7.08	NM	0.412	11.03	4.3
MW-451	01/24/2020 10:40	5.25	-147.5	7.01	0.21	0.439	11.53	75.8
MW-451	01/24/2020 10:50	6.86	-88.9	7.01	0.2	0.416	11.17	20.5
MW-451	04/07/2020 14:30	1.09	-47.7	6.72	0.21	0.433	13.96	3.6
MW-451	10/22/2020 09:45	NM	NM	NM	NM	NM	NM	2.9
MW-451	10/23/2020 08:20	2.23	-69.5	6.39	0.19	0.402	18.57	0.1
MW-451	10/23/2020 08:25	0.96	-93	6.46	0.19	0.397	18.54	0.4
MW-451	10/23/2020 08:30	0.84	-99.1	6.52	0.19	0.395	18.46	0.4
MW-451	10/23/2020 08:35	0.88	-106.5	6.61	0.19	0.389	18.45	0.3
MW-451	10/23/2020 08:40	0.72	-107.3	6.66	0.18	0.384	18.43	0.2
MW-451	10/23/2020 08:45	0.66	-108.3	6.7	0.18	0.383	18.43	0.2
MW-451	10/23/2020 08:50	0.71	-109.1	6.72	0.18	0.382	18.42	0.2
MW-451	10/23/2020 09:30	3.35	-67.4	6.8	0.18	0.381	18.51	3.4
MW-451	10/23/2020 09:45	2.39	-72.3	6.9	0.17	0.356	18.48	NM
MW-451	01/20/2021 13:15	1.52	-98.1	7.03	0.28	0.578	10.81	8

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-451	01/20/2021 13:20	1.14	-99.8	6.89	0.28	0.572	10.63	7.6
MW-451	01/20/2021 13:25	0.89	-104.6	6.73	0.28	0.566	10.41	6.9
MW-451	01/20/2021 13:30	0.83	-110	6.67	0.27	0.558	10.22	6.3
MW-451	01/20/2021 13:35	0.77	-110.2	6.67	0.27	0.553	10.1	6.2
MW-451	01/20/2021 13:40	0.96	-108.5	6.67	0.27	0.548	9.65	6
MW-451	01/20/2021 13:45	0.81	-105.2	6.66	0.27	0.541	9.45	6
MW-451	01/20/2021 13:50	0.71	-107.5	6.65	0.26	0.53	9.75	6.2
MW-451	01/20/2021 13:55	0.59	-111.9	6.67	0.23	0.531	10.17	6.1
MW-451	01/20/2021 14:00	0.59	-115.4	6.66	0.25	0.523	10.42	6
MW-451	01/20/2021 14:35	2.81	-85.7	6.77	0.24	0.499	11.94	2.8
MW-451	01/20/2021 14:50	3.83	-89	6.83	0.22	0.461	10.84	8.7
MW-451	04/05/2021 12:55	2.27	-84.2	6.67	0.23	0.47	12.2	62.9
MW-451	04/05/2021 13:00	0.62	-88.9	6.63	0.23	0.468	9.83	48.4
MW-451	04/05/2021 13:05	0.35	-95.3	6.65	0.23	0.468	9.37	23.8
MW-451	04/05/2021 13:10	0.28	100.5	6.67	0.23	0.468	9.28	18.2
MW-451	04/05/2021 13:15	0.25	-104.1	6.68	0.23	0.47	9.21	19.1
MW-451	04/05/2021 13:20	0.22	-106.7	6.69	0.23	0.468	9.03	9.3
MW-451	04/05/2021 13:25	0.2	-109.5	6.7	0.22	0.462	9.07	6.6
MW-451	04/05/2021 13:30	0.18	-113.1	6.72	0.22	0.456	8.93	6.4
MW-451	04/05/2021 13:35	0.18	-115.4	6.73	0.22	0.452	8.91	5.7
MW-451	04/05/2021 13:40	0.16	-118.5	6.76	0.21	0.444	9.01	9.6
MW-451	01/24/2022 12:30	67.08	-142.5	6.75	0.36	0.745	11.14	55.6
MW-451	01/24/2022 12:35	99.92	-147	6.68	0.33	0.681	11.31	17.5
MW-451	01/24/2022 12:40	96.74	-152.5	6.67	0.31	0.626	11.54	2.6
MW-451	01/24/2022 12:45	105.4	-152.6	6.68	0.3	0.619	11.51	2.2
MW-451	01/24/2022 12:50	75.75	-156.9	6.72	0.26	0.537	11.6	-0.3
MW-451	01/24/2022 12:55	73.21	-156.3	6.74	0.26	0.534	11.6	-0.3
MW-451	01/24/2022 13:00	76.79	-156.6	6.74	0.26	0.532	11.61	-0.3
MW-451	01/24/2022 13:05	64.24	-158.7	6.77	0.25	0.516	11.6	-0.4
MW-451	01/24/2022 13:10	61.89	-161.4	6.79	0.24	0.488	11.67	-0.8
MW-451	01/24/2022 13:15	52.76	-161.7	6.79	0.24	0.486	11.69	-0.8
MW-451	04/14/2022 12:00	1.06	-98.2	6.47	0.18	0.374	18.56	68.1
MW-451	04/14/2022 12:05	0.96	-99.8	6.45	0.18	0.368	17.25	38.5
MW-451	04/14/2022 12:10	0.98	-101.8	6.47	0.17	0.363	16.52	11.7
MW-451	04/14/2022 12:15	0.96	-102.3	6.48	0.17	0.36	16.34	4.1
MW-451	04/14/2022 12:20	0.96	-102	6.47	0.17	0.355	15.98	1.2
MW-451	04/14/2022 12:25	0.82	-102	6.48	0.17	0.353	16.18	0
MW-451	04/14/2022 12:30	0.9	-102	6.48	0.17	0.352	16.15	0
MW-451	04/14/2022 12:35	0.8	-99.8	6.47	0.17	0.347	16.25	0
MW-451	04/14/2022 12:40	0.81	-99.8	6.47	0.17	0.344	16.32	0
MW-451	04/14/2022 12:45	0.84	-99.2	6.47	0.16	0.338	16.24	0
MW-452	01/07/2016 14:15	5.05	-268	7.70	0.0000	0.626	17.13	153.00
MW-452	01/07/2016 14:50	1.18	-222	7.52	0.30	0.622	16.10	308.00
MW-452	07/11/2016 12:21	2.51	-83.4	6.85	0.34	0.688	19.01	80.90
MW-452	07/11/2016 12:49	2.42	-106.6	6.90	0.34	0.704	22.62	538.40
MW-452	01/19/2018 12:05	9.31	125.70	9.53	15.16	25.250	10.59	167.50
MW-452	01/19/2018 12:20	15.35	107.20	9.29	16.57	26.940	11.31	18.60
MW-452	01/19/2018 13:35	12.10	134.80	8.97	14.12	23.190	9.2	123.60
MW-452	07/12/2018 11:00	1.20	390.00	5.10	4.99	8.898	20.13	10.40
MW-452	07/12/2018 11:15	1.17	391.50	5.02	4.97	8.972	20.09	9.00
MW-452	07/12/2018 11:35	1.14	392.60	5.13	4.91	8.964	20.02	24.50
MW-452	10/10/2018 09:55	0.14	-188.00	7.98	2.74	5.094	21.94	15.50
MW-452	10/10/2018 10:34	2.52	-145.00	9.35	8.29	14.270	21.36	1.00
MW-452	10/10/2018 12:30	7.49	152.00	9.89	19.59	31.380	22.79	52.60
MW-452	01/23/2019 09:55	2.53	-4.5	9.77	NM	16.69	9.55	15.1
MW-452	01/23/2019 10:40	2.72	26.7	9.91	9.84	16.76	9.28	3.3
MW-452	04/03/2019 12:25	0.16	-182	7.74	NM	5.72	13.13	37.4
MW-452	04/03/2019 12:55	2.34	-374	9.13	5.36	9.69	10.24	17.1
MW-452	07/30/2019 10:05	1.75	-309	8.25	NM	9.634	28.15	13.3

Appendix B5 East Yard
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Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-452	07/30/2019 10:10	3.85	-322.2	8.09	NM	10.48	25.59	110.4
MW-452	07/30/2019 10:15	2.48	-353.6	8.77	NM	11.76	26.01	10.6
MW-452	07/30/2019 10:20	2.68	-351.1	8.85	NM	12.09	25.7	32.4
MW-452	07/30/2019 10:25	3.45	-362.8	8.84	NM	11.98	24.45	22.3
MW-452	07/30/2019 10:30	3.1	-321.8	8.84	NM	11.87	24.41	2.8
MW-452	07/30/2019 10:35	3.79	-330.1	8.81	NM	11.57	23.6	40.7
MW-452	07/30/2019 10:40	3.76	-302.2	8.82	NM	11.47	23.16	32.4
MW-452	07/30/2019 10:45	3.82	-320	0.82	NM	11.16	22.91	29.4
MW-452	07/30/2019 10:50	3.46	-301.2	8.8	NM	11.06	22.71	23.2
MW-452	07/30/2019 14:30	3.46	-301.2	8.8	NM	11.06	22.71	23.2
MW-452	07/30/2019 14:45	2.03	-275.4	7.1	0.32	0.456	20.89	24.4
MW-452	07/30/2019 15:05	1.16	-280.6	6.88	0.32	1.079	21.2	187.7
MW-452	04/07/2020 11:10	12.86	140.7	12.09	NM	33.7	12.73	19.3
MW-452	04/07/2020 11:30	11.84	123.3	12.27	21.1	33.74	16.15	27.8
MW-452	10/22/2020 13:20	7.2	83.7	9.29	3.25	5.956	20.18	26.9
MW-452	10/22/2020 13:25	5.71	76.5	9.33	3.25	5.957	20.46	20.8
MW-452	10/22/2020 13:30	9.1	76.4	9.45	3.5	6.375	20.3	13.6
MW-452	10/22/2020 13:35	10.51	77.5	9.52	3.64	6.624	20.31	9.7
MW-452	10/22/2020 13:40	11.42	79.1	9.57	3.83	6.946	20.31	8.2
MW-452	10/22/2020 13:45	12.9	84.2	9.65	4.15	7.49	20.35	5.7
MW-452	10/22/2020 13:50	13.35	86.3	9.67	4.29	7.721	20.28	5.6
MW-452	10/22/2020 13:55	13.83	88.2	9.69	4.42	7.938	20.15	6
MW-452	10/22/2020 14:00	13.71	91.2	9.7	4.56	8.172	20.09	6
MW-452	10/22/2020 14:05	13.9	93.6	9.72	4.78	8.529	20.03	6.1
MW-452	10/22/2020 14:40	17.39	159.5	10.04	9.28	15.83	21.16	13.1
MW-452	10/22/2020 14:55	5.83	230.9	8.56	2.44	4.549	20.15	26.1
MW-452	01/21/2021 09:30	12.6	179.5	9.74	5.6	9.451	9.08	15.6
MW-452	01/21/2021 09:35	13.95	174.1	10	6.57	11.42	8.92	16.6
MW-452	01/21/2021 09:40	14.65	154.6	10.46	10.35	17.54	8.18	17
MW-452	01/21/2021 09:45	14.32	134.3	10.23	9.32	16.01	8.56	13.1
MW-452	01/21/2021 09:50	9.17	122.3	9.91	8.07	13.98	8.53	10.2
MW-452	01/21/2021 09:55	8.6	117.3	9.88	8.05	13.92	8.49	9.3
MW-452	01/21/2021 10:00	8.36	115.2	9.88	8.15	14.07	8.77	9.2
MW-452	01/21/2021 10:05	8.28	114	9.86	8.4	14.49	8.66	8.5
MW-452	01/21/2021 10:10	8.28	114.1	9.86	8.48	14.62	8.31	8
MW-452	01/21/2021 10:15	8.3	114.7	9.87	8.6	14.82	7.68	7.9
MW-452	01/21/2021 10:50	10.66	173.5	10.22	18.17	29.44	9.85	5.9
MW-452	01/21/2021 11:20	7.61	154.4	8.88	4.04	7.304	10.42	119.6
MW-452	04/06/2021 09:05	2.4	197.9	8.07	1.84	3.48	8.46	39.2
MW-452	04/06/2021 09:10	2.42	173.6	8.83	2.12	3.99	8.06	41.7
MW-452	04/06/2021 09:15	2.46	151.3	9.11	2.26	4.238	7.7	30.3
MW-452	04/06/2021 09:20	2.88	142	9.23	2.34	4.379	7.66	22.6
MW-452	04/06/2021 09:25	4.1	134.9	9.4	2.55	4.761	7.54	17.1
MW-452	04/06/2021 09:30	4.95	129.7	9.52	2.77	5.136	7.52	13.3
MW-452	04/06/2021 09:35	6.16	126.7	9.59	3	5.537	7.53	8.1
MW-452	04/06/2021 09:40	6.91	125.8	9.64	3.15	5.796	7.58	7.1
MW-452	04/06/2021 09:45	7.47	126	9.67	3.37	6.174	7.5	4.4
MW-452	04/06/2021 09:50	8.09	126.9	9.71	3.59	6.56	7.52	2.5
MW-452	07/19/2021 13:40	9.99	105.6	9.15	25.8	40.45	23.95	198.6
MW-452	07/19/2021 13:45	6.57	181.3	7.92	19.09	30.78	24.83	279.8
MW-452	07/19/2021 13:50	5.11	206	7.14	15.14	24.98	24.63	286.5
MW-452	07/19/2021 13:55	4.53	209.4	6.97	13.45	22.37	24.51	255.7
MW-452	07/19/2021 14:00	4.19	208.9	6.88	11.83	19.9	24.18	145.7
MW-452	07/19/2021 14:05	3.88	203.7	6.85	9.63	16.49	24.43	68.7
MW-452	07/19/2021 14:10	3.8	198.6	6.89	8.45	14.58	24.49	67.5
MW-452	07/19/2021 14:15	3.96	194.1	6.95	7.64	13.29	24.63	91.9
MW-452	07/19/2021 14:20	4.17	190.9	7	7.15	12.46	24.61	126.6
MW-452	07/19/2021 14:25	4.57	187	7.12	6.72	11.82	24.62	28.5
MW-452	01/25/2022 09:20	5.94	30.5	7.14	1.91	3.627	7.66	417.9

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-452	01/25/2022 09:25	6.66	13.2	8.09	2.31	4.334	8.91	204.6
MW-452	01/25/2022 09:30	4.75	15.7	8.12	2.35	4.391	9.05	197.4
MW-452	01/25/2022 09:35	8.19	40.4	8.62	2.6	4.798	9.35	94.2
MW-452	01/25/2022 09:40	7.31	42	8.71	2.6	4.832	9.41	86.9
MW-452	01/25/2022 09:45	8.58	54	9.01	2.66	4.919	9.57	41.9
MW-452	01/25/2022 09:50	8.79	55.2	9.01	2.66	4.931	9.63	37.8
MW-452	01/25/2022 09:55	9	59.9	9.02	2.69	4.988	9.57	25.4
MW-452	01/25/2022 10:00	8.77	63.5	9.02	2.73	5.062	8.93	22.3
MW-452	01/25/2022 10:05	7.67	64.5	8.93	2.67	4.945	9.8	17.5
MW-452	04/15/2022 09:10	29.79	53.6	11.18	17.1	28.25	13.82	50.3
MW-452	04/15/2022 09:15	20.67	67.2	10.27	10.18	17.32	13.16	40.3
MW-452	04/15/2022 09:20	12.48	60.5	10.02	8	13.77	13.12	20.7
MW-452	04/15/2022 09:25	10.21	56.6	9.93	7.31	12.83	12.9	42.1
MW-452	04/15/2022 09:30	9.23	54	9.87	7	12.24	12.59	43
MW-452	04/15/2022 09:35	8.77	51.2	9.84	6.72	11.73	12.69	17.8
MW-452	04/15/2022 09:40	8.62	49.3	9.83	6.62	11.56	12.83	17.8
MW-452	04/15/2022 09:45	8.53	46.9	9.83	6.43	11.25	13.03	20.3
MW-452	04/15/2022 09:50	8.53	46	9.83	6.33	11.05	12.74	35.1
MW-452	04/15/2022 09:55	8.41	45.5	9.82	6.15	10.81	12.75	26.5
MW-453	01/07/2016 15:00	0.68	119	7.58	0.50	1.080	16.68	0.0000
MW-453	01/07/2016 15:30	0.67	119	7.60	0.50	1.090	16.68	0.0000
MW-453	07/08/2016 11:23	0.46	14.2	7.47	0.62	1.230	15.96	1.50
MW-453	07/08/2016 12:35	3.07	16.2	9.28	0.31	0.639	21.73	8.10
MW-453	01/19/2018 14:10	0.82	146.40	8.51	1.41	2.725	13.74	64.40
MW-453	01/19/2018 15:05	4.27	403.10	8.04	2.94	5.401	13.96	5.70
MW-453	01/19/2018 15:25	3.03	320.30	9.11	1.02	2.004	13.17	61.40
MW-453	10/12/2018 10:05	3.05	403.80	10.15	5.04	9.347	18.05	32.70
MW-453	10/12/2018 11:30	9.13	451.40	6.49	17.13	27.740	16.61	0.0000
MW-453	10/12/2018 12:10	4.95	448.70	6.52	16.02	26.180	18.33	19.40
MW-453	04/04/2019 10:05	NM	243	6.7	NM	53.5	11.66	96.3
MW-453	04/04/2019 11:30	0	278	6.68	37.53	57.1	14.91	0
MW-453	07/31/2019 10:05	2.66	291.9	6.52	NM	35.46	18.7	214.3
MW-453	07/31/2019 10:10	2.58	293	6.52	NM	35.49	18.67	177.9
MW-453	07/31/2019 10:15	2.54	295.7	6.51	NM	35.87	18.67	57.5
MW-453	07/31/2019 10:20	2.2	305.1	6.51	NM	36.04	18.52	93.3
MW-453	07/31/2019 10:25	1.99	305.8	6.5	NM	36.1	18.88	2.4
MW-453	07/31/2019 10:30	1.96	307.9	6.5	NM	36.22	19.09	1.3
MW-453	07/31/2019 10:35	1.94	313.6	6.49	NM	33.39	19.05	1.5
MW-453	07/31/2019 10:40	1.49	317.6	6.49	NM	33.51	19.13	1.8
MW-453	07/31/2019 10:45	1.47	321.6	6.48	NM	33.81	18.87	10.9
MW-453	07/31/2019 10:50	1.72	324.9	6.48	NM	36.43	18.46	12.3
MW-453	07/31/2019 12:00	2.83	269.1	6.59	23.97	37.8	21.31	22.8
MW-453	07/31/2019 12:10	5.78	258.1	6.03	1.29	2.49	21.52	225.2
MW-453	02/03/2020 10:15	22.48	358.2	10.94	NM	109.8	12.98	114.4
MW-453	02/03/2020 11:15	16.78	303.2	10.92	8.02	10.35	12.06	119.8
MW-453	04/07/2020 11:05	19.18	235.9	8.86	NM	38.01	15.29	83.3
MW-453	04/07/2020 12:40	6.3	415.5	6.44	23.73	37.35	18.96	44.3
MW-453	10/22/2020 09:15	3.49	116.6	9.23	1.74	3.302	18.52	59.9
MW-453	10/22/2020 09:20	2.18	106.4	9.47	1.95	3.662	18.4	48.5
MW-453	10/22/2020 09:25	1.43	101.4	9.68	2.58	4.745	18.35	30.2
MW-453	10/22/2020 09:30	1.05	88.3	10.08	3.09	5.677	18.87	24.9
MW-453	10/22/2020 09:35	0.91	76.3	9.68	3.27	5.974	19.02	34.6
MW-453	10/22/2020 09:40	0.79	80.1	8.98	3.54	6.442	19.05	35.4
MW-453	10/22/2020 09:45	0.77	91.7	8.81	4.13	7.433	19.07	35.1
MW-453	10/22/2020 09:50	0.77	94.4	9.01	4.48	8.011	19.11	34.4
MW-453	10/22/2020 09:55	0.78	104.7	8.52	4.97	8.836	19.14	29.7
MW-453	10/22/2020 10:00	0.9	117.1	8.17	5.46	9.661	19.16	30.2
MW-453	10/22/2020 11:30	4.3	250.7	6.84	19.24	30.87	17.66	8.8
MW-453	10/22/2020 11:45	6.85	189.5	8.57	1.65	3.144	18.78	NM

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-453	10/26/2020 11:45	NM	NM	NM	NM	NM	NM	86.8
MW-453	01/20/2021 10:00	9.54	149.4	8.97	0.27	0.549	11.67	48
MW-453	01/20/2021 10:05	9.21	142.4	9.17	0.27	0.547	11.69	39
MW-453	01/20/2021 10:10	9.4	138.8	9.35	0.27	0.553	10.85	33.7
MW-453	01/20/2021 10:15	9.29	132.8	9.54	0.27	0.55	10	26.1
MW-453	01/20/2021 10:20	9.26	125.8	9.7	0.27	0.55	0.551	29.6
MW-453	01/20/2021 10:25	9.24	122.7	9.66	0.27	0.55	10.09	32.6
MW-453	01/20/2021 10:30	9.13	117.3	9.41	0.27	0.551	10.5	26.91
MW-453	01/20/2021 10:35	9.12	116.5	9.4	0.27	0.552	10.55	24.8
MW-453	01/20/2021 10:40	9.11	113.7	9.37	0.27	0.555	10.58	25.4
MW-453	01/20/2021 12:15	1.73	194.7	7.06	13.37	22.02	14.52	5.5
MW-453	01/20/2021 12:45	9.31	224.1	8.42	1.32	2.542	14.79	81.5
MW-453	04/02/2021 12:55	10.85	-59.9	9.79	0.5	1.03	10.41	79
MW-453	04/02/2021 13:00	10.53	-53.5	9.86	0.32	0.661	11.49	35.2
MW-453	04/02/2021 13:05	10.46	-51.9	9.94	0.25	0.504	12.16	60.7
MW-453	04/02/2021 13:10	10.43	-48.3	9.91	0.23	0.473	12.43	59.6
MW-453	04/02/2021 13:15	10.42	-44.4	9.89	0.22	0.454	12.3	60.7
MW-453	04/02/2021 13:20	10.37	-43	9.87	0.22	0.453	12.31	55
MW-453	04/02/2021 13:25	10.38	-40.5	9.86	2.11	0.453	12.52	52.7
MW-453	04/02/2021 13:30	4.49	-20.1	7.2	15.91	25.58	12.71	27.8
MW-453	04/02/2021 13:35	2.67	-14.1	7.02	18.45	29.73	12.88	18.2
MW-453	04/02/2021 13:40	2.41	-11.9	6.98	18.85	30.3	12.77	16.5
MW-453	07/16/2021 13:39	47.1	129	7.44	9.89	12.91	26.34	50.4
MW-453	07/16/2021 13:44	1.52	180.7	6.38	16.12	26.1	20.31	63.3
MW-453	07/16/2021 13:49	0.61	191.5	6.23	16.31	26.67	20.14	59.1
MW-453	07/16/2021 13:54	0.45	194.8	6.19	16.27	26.51	20.11	56.8
MW-453	07/16/2021 13:59	0.44	196.1	6.14	16.19	26.39	19.46	50
MW-453	07/16/2021 14:04	0.34	200.3	6.14	16.3	26.55	19.84	24.8
MW-453	07/16/2021 14:09	0.31	202.1	6.16	16.37	26.65	20.31	18.4
MW-453	07/16/2021 14:14	0.31	203.4	6.14	16.41	26.73	19.68	18.4
MW-453	07/16/2021 14:19	0.3	204.4	6.15	16.41	26.75	20	17.4
MW-453	07/16/2021 14:24	0.32	204.8	6.17	16.4	26.73	20.1	17.3
MW-453	01/24/2022 10:05	31.88	116.3	9.9	0.37	0.754	13.88	48.2
MW-453	01/24/2022 10:10	39.9	107.7	10.04	0.39	0.795	14.07	44.4
MW-453	01/24/2022 10:15	27.85	135.2	9.23	5.85	8.5	14.12	50.2
MW-453	01/24/2022 10:20	20.25	214.8	6.66	19.02	30.46	14.11	15.2
MW-453	01/24/2022 10:25	18.89	217.3	6.76	19.24	30.87	14.05	48.4
MW-453	01/24/2022 10:30	16.19	219.5	6.75	19.51	31.22	14.07	151.7
MW-453	01/24/2022 10:35	13.44	244.9	6.69	21.3	33.88	14.09	9.5
MW-453	01/24/2022 10:40	12.88	256.6	6.69	21.61	34.3	14.15	155.9
MW-453	01/24/2022 10:45	13.92	279.9	6.7	22.21	35.2	14.17	11
MW-453	01/24/2022 10:50	13.37	280.8	6.72	22.24	35.25	14.19	12.8
MW-455	12/16/2015 08:50	0.0000	-78	6.74	0.30	0.553	13.91	20.70
MW-455	12/16/2015 09:17	0.0000	-7	6.82	0.30	0.536	13.61	0.0000
MW-455	07/18/2016 12:05	0.08	-122.8	6.88	0.32	0.648	21.51	0.0000
MW-455	07/18/2016 13:04	0.36	-128.5	6.92	0.31	0.646	22.01	97.10
MW-455	01/19/2018 09:45	0.92	-101.70	6.53	0.33	0.670	7.2	2.30
MW-455	01/19/2018 10:35	0.68	-111.10	6.49	0.32	0.679	8.12	0.80
MW-455	01/19/2018 10:50	0.99	-101.60	6.63	0.33	0.672	8.51	36.10
MW-455	10/09/2018 11:18	2.86	-132.00	6.98	0.30	0.627	20.57	2.10
MW-455	10/09/2018 11:48	1.81	-141.10	6.90	0.31	0.630	20.25	1.30
MW-455	10/09/2018 12:30	1.76	-143.30	6.91	0.30	0.614	20.56	42.40
MW-455	01/23/2019 10:10	5.62	-94.20	6.91	0.29	0.596	9.72	14.90
MW-455	01/23/2019 10:50	4.26	-105.10	6.96	0.31	0.625	9.58	12.10
MW-455	01/23/2019 11:05	4.60	-106.60	7.00	0.30	0.616	8.94	25.00
MW-455	04/05/2019 10:05	NM	-133	6.98	NM	0.51	8.97	NM
MW-455	04/05/2019 10:29	0	-148	7.07	0.25	0.526	9.8	3.4
MW-455	07/24/2019 09:25	0.33	-166.3	7.1	NM	0.592	21.96	NM
MW-455	07/24/2019 10:05	0.7	-146.1	7.09	NM	0.619	21.22	0

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-455	07/24/2019 10:10	3.15	-132.7	7.32	0.32	0.659	24.54	24.4
MW-455	07/24/2019 10:15	0.49	-163.7	7.1	NM	0.61	22.01	0
MW-455	07/24/2019 10:20	0.38	-165.7	7.08	NM	0.592	21.83	0
MW-455	07/24/2019 10:25	0.36	-166.3	7.09	NM	0.593	21.89	0
MW-455	07/24/2019 10:30	0.34	-166.2	7.1	NM	0.593	21.97	0
MW-455	07/24/2019 10:35	0.33	-166.3	7.1	NM	0.592	21.96	0
MW-455	07/24/2019 10:40	3.15	-132.7	7.32	0.32	0.659	24.54	NM
MW-455	07/24/2019 10:45	2.72	-121.4	6.88	0.27	0.564	NM	24.4
MW-455	07/24/2019 10:50	NM	NM	NM	NM	NM	20.74	39.6
MW-455	03/03/2020 09:40	0.24	-158.1	6.98	NM	0.481	12.28	0.6
MW-455	03/03/2020 10:00	0.22	-154.3	7.03	0.43	0.547	11.12	2.1
MW-455	04/06/2020 11:20	5.79	-98.5	6.88	NM	0.613	14.64	NM
MW-455	04/06/2020 11:40	18.06	8.8	6.88	0.31	0.637	13.93	6.5
MW-455	10/26/2020 12:15	1.46	-112.6	6.96	0.25	0.516	17.93	26
MW-455	10/26/2020 12:20	1.32	-120.3	6.95	0.25	0.514	17.7	21
MW-455	10/26/2020 12:25	1.21	-123.4	6.92	0.24	0.501	17.13	15.3
MW-455	10/26/2020 12:30	1.11	-132	7.02	0.24	0.486	16.98	11
MW-455	10/26/2020 12:35	1.05	-134.2	7.05	0.23	0.48	16.84	7.7
MW-455	10/26/2020 12:40	1.1	-134.9	7.08	0.23	0.473	16.7	6.6
MW-455	10/26/2020 12:45	1.06	-133.8	7.09	0.23	0.468	16.5	6.4
MW-455	10/26/2020 12:50	0.98	-134.8	7.1	0.23	0.465	16.7	6.1
MW-455	10/26/2020 12:55	1	-136.7	7.11	0.22	0.462	16.71	4.1
MW-455	10/26/2020 13:00	1.01	-137.5	7.12	0.22	0.459	16.71	5
MW-455	10/26/2020 13:35	2.57	-102.4	7.19	0.22	0.45	18.21	8.3
MW-455	10/26/2020 13:50	2.54	-101.5	7.07	26.8	0.444	18.62	NM
MW-455	10/28/2020 13:50	NM	NM	NM	NM	NM	NM	35.4
MW-455	01/22/2021 09:05	9.44	24	6.92	0.27	0.558	9.08	68.5
MW-455	01/22/2021 09:10	3.4	-71.5	6.73	0.27	0.545	9.48	34.2
MW-455	01/22/2021 09:15	1.89	-98	6.72	0.26	0.537	8.79	23.6
MW-455	01/22/2021 09:20	1.69	-109.7	6.74	0.25	0.52	8.22	15.1
MW-455	01/22/2021 09:25	1.27	-119.6	6.78	0.24	0.496	8.26	7.3
MW-455	01/22/2021 09:30	1.19	-121.5	6.83	0.489	0.49	8.31	6.9
MW-455	01/22/2021 09:35	0.98	-121	6.89	0.23	0.476	8.5	6.3
MW-455	01/22/2021 09:40	0.92	-121	6.88	0.23	0.466	9.05	6.1
MW-455	01/22/2021 09:45	0.88	-127.2	6.96	0.22	0.464	8.86	5.9
MW-455	01/22/2021 09:50	0.8	-132.7	6.97	0.22	0.455	9	5.5
MW-455	01/22/2021 10:30	3.97	-105.4	7.07	0.23	0.465	10.97	10.4
MW-455	01/22/2021 10:45	3.62	-126.1	7.15	0.22	0.455	11.35	15.7
MW-455	04/06/2021 13:20	1.97	-151.5	7.08	0.28	0.579	12.42	2.8
MW-455	04/06/2021 13:25	1.17	-154.5	7.05	0.28	0.567	11.11	2.8
MW-455	04/06/2021 13:30	0.77	-161	7.1	0.28	0.567	10.85	5.2
MW-455	04/06/2021 13:35	0.89	-164.5	7.14	0.28	0.571	10.89	0.5
MW-455	04/06/2021 13:40	0.43	-165.6	7.16	0.28	0.572	10.68	0
MW-455	04/06/2021 13:45	0.46	-167.6	7.18	0.28	0.569	10.96	0
MW-455	04/06/2021 13:50	0.49	-169	7.2	0.28	0.576	10.61	0
MW-455	04/06/2021 13:55	0.46	-169.3	7.2	0.28	0.574	10.6	0
MW-455	04/06/2021 14:00	0.4	-169.1	7.21	0.28	0.578	10.64	0
MW-455	04/06/2021 14:05	0.34	-169.6	7.21	0.28	0.578	10.37	0
MW-455	01/26/2022 09:15	1.78	-107.5	6.51	0.34	0.694	10.28	66.2
MW-455	01/26/2022 09:20	1.11	-110.7	6.57	0.34	0.694	10.32	80
MW-455	01/26/2022 09:25	1.4	-127	6.85	0.34	0.683	10.22	26.8
MW-455	01/26/2022 09:30	2.35	-138.7	6.93	0.33	0.666	10.05	19.5
MW-455	01/26/2022 09:35	1.84	-144.2	6.97	0.32	0.65	10.14	12.1
MW-455	01/26/2022 09:40	1.94	-145.1	7.01	0.32	0.65	10.25	7.7
MW-455	01/26/2022 09:45	1.62	-148.5	7.01	0.31	0.637	10.21	6.3
MW-455	01/26/2022 09:50	2.87	-148.4	7.01	0.31	0.637	10.1	5.3
MW-455	01/26/2022 09:55	3.32	-150.4	7.04	0.31	0.627	10.2	4.5
MW-455	01/26/2022 10:00	2.78	-150.5	7.04	0.31	0.626	10.28	3.3
MW-455	04/18/2022 09:20	1.47	-114.9	6.69	0.27	0.548	12.72	44.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-455	04/18/2022 09:25	1.08	-109.7	6.63	0.26	0.539	12.43	21.4
MW-455	04/18/2022 09:30	0.94	-113.2	6.72	0.26	0.533	12.28	18.4
MW-455	04/18/2022 09:35	0.88	-116.9	6.77	0.26	0.528	12.45	9.8
MW-455	04/18/2022 09:40	0.87	-117.4	6.79	0.26	0.526	12.56	12.2
MW-455	04/18/2022 09:45	0.82	-120.1	6.82	0.25	0.521	12.27	9.5
MW-455	04/18/2022 09:50	0.85	-120.1	6.84	0.25	0.52	12.57	9.2
MW-455	04/18/2022 09:55	0.8	-122.1	6.87	0.25	0.513	12.63	7.1
MW-455	04/18/2022 10:00	0.79	-126.2	6.89	0.25	0.509	12.36	5.8
MW-455	04/18/2022 10:05	0.78	-126.7	6.9	0.25	0.505	12.17	5
MW-456	07/15/2016 10:54	0.42	-163	6.99	0.36	6.425	21.17	77.70
MW-456	07/15/2016 11:26	4.18	-112	6.98	0.35	6.307	23.29	2679.60
MW-456	10/20/2016 09:30	2.18	-135.00	6.78	0.12	2.400	21.93	80.90
MW-456	10/20/2016 09:34	2.31	-112	6.70	0.22	4.160	22.43	926.40
MW-457	07/14/2016 09:30	6.35	-180	7.00	0.31	5.672	20.89	400.10
MW-457	07/14/2016 09:50	3.25	-136	6.95	0.36	6.581	19.79	1998.70
MW-457	10/26/2016 09:42	4.61	-151	6.82	0.11	2.116	19.14	1243.40
MW-457	10/26/2016 10:55	0.20	-230.00	6.98	0.07	1.452	19.30	347.30
MW-458	07/14/2016 10:58	0.59	-87.00	6.45	NM	1.725	21.64	245.30
MW-458	07/14/2016 13:57	5.87	-99	6.80	NM	14.850	22.29	916.70
MW-458	09/01/2016 12:01	1.06	-18.4	6.99	1.65	3.173	24.97	0.0000
MW-458	09/01/2016 12:10	0.64	-41.8	6.98	1.64	3.145	26.66	2.10
MW-458	10/20/2016 11:20	6.02	-128.00	6.70	0.10	1.950	19.15	99.00
MW-458	10/20/2016 13:51	2.13	-115	6.48	0.22	4.086	21.24	1054.20
MW-458	12/07/2016 13:50	2.59	-91.1	6.81	1.05	2.041	11.45	14
MW-458	12/07/2016 14:10	3.54	-108.7	6.82	0.98	1.916	11.97	250.8
MW-458	01/25/2017 14:35	11.28	-103	6.73	0.79	1.564	10.29	10.50
MW-458	01/25/2017 14:55	3.83	-109.5	6.75	0.78	1.552	7.02	348.00
MW-458	04/20/2017 13:35	1.25	-62.10	5.37	1.23	2.370	12.76	45.00
MW-458	04/20/2017 14:04	7.14	36.10	5.86	1.16	2.256	13.61	28.70
MW-458	04/20/2017 14:10	4.66	-36.30	5.28	1.00	2.002	14.19	250.10
MW-458	01/10/2018 13:25	0.85	-99.90	6.80	1.30	2.545	7.45	187.10
MW-458	01/10/2018 13:55	0.81	-100.30	6.71	1.30	2.414	7.58	161.10
MW-458	01/10/2018 14:10	3.45	-60.40	6.88	1.30	2.367	7.31	321.40
MW-458	08/28/2018 14:40	1.62	-89.20	6.43	0.57	1.147	25.13	14.20
MW-458	08/28/2018 15:15	1.05	-135.50	6.62	0.61	1.232	24.42	70.10
MW-458	08/28/2018 15:25	1.80	-88.80	6.58	0.61	1.228	23.8	38.40
MW-458	02/05/2019 13:00	1.60	-239.00	8.26	2.46	4.615	12.04	176.50
MW-458	02/05/2019 13:26	1.77	-197.20	8.01	2.17	4.219	12.12	201.50
MW-458	02/05/2019 13:30	4.09	-186.40	7.77	1.44	2.744	13.18	1095.10
MW-458	05/08/2019 11:10	3.72	-204.5	7.17	0.85	1.665	13.55	33.3
MW-458	08/05/2019 10:05	5.91	-107.8	6.55	NM	1.909	24.38	38.5
MW-458	08/05/2019 10:10	2.98	-118.8	6.6	NM	1.798	22.75	18.3
MW-458	08/05/2019 10:15	2.56	-102.5	6.58	NM	1.799	23.08	8.1
MW-458	08/05/2019 10:20	2.3	-105.5	6.57	NM	1.8	23.36	5.7
MW-458	08/05/2019 10:25	2.22	-112	6.59	NM	0.807	23.27	6
MW-458	08/05/2019 10:30	1.98	-117.2	6.6	NM	1.802	23.2	6.4
MW-458	08/05/2019 10:35	1.41	-106.9	6.6	NM	1.798	23.55	6.6
MW-458	08/05/2019 10:40	1.51	-111.3	6.59	NM	1.8	23.47	10.5
MW-458	08/05/2019 10:45	1.2	-108.9	6.59	NM	1.793	23.77	8.9
MW-458	08/05/2019 10:50	1.24	-107.8	6.59	NM	1.811	23.47	8
MW-458	08/05/2019 11:45	1.24	-107.8	6.59	NM	1.811	23.47	8
MW-458	08/05/2019 11:57	6.78	-98.2	6.75	0.92	1.824	23.86	11
MW-458	08/05/2019 12:10	6.33	-82.4	6.65	0.87	1.708	24.65	137.8
MW-458	02/03/2021 13:20	1.92	-165.4	7.19	0.89	1.737	5.66	154.2
MW-458	02/03/2021 13:25	0.34	-160.8	6.71	0.81	1.604	5.87	60.8
MW-458	02/03/2021 13:30	0.31	-167.3	6.49	0.8	1.593	6.05	38.6
MW-458	02/03/2021 13:35	0.27	-170.6	6.36	0.79	1.572	6.26	20.5
MW-458	02/03/2021 13:40	0.27	-172.9	6.28	0.78	1.552	6.24	15.3
MW-458	02/03/2021 13:45	0.26	-174.2	6.23	0.78	1.539	6.33	11.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-458	02/03/2021 13:50	0.25	-175.7	6.21	0.78	1.543	6.37	11.5
MW-458	02/03/2021 13:55	0.24	-175.9	6.22	0.78	1.554	6.37	10.9
MW-458	02/03/2021 14:10	0.23	-181.4	6.24	0.79	1.562	6.53	3.1
MW-458	02/03/2021 14:25	0.39	-180.3	6.26	0.79	1.56	6.59	235.5
MW-458	08/24/2021 12:30	5.61	-165.2	6.54	1.22	2.381	25.56	10.1
MW-458	08/24/2021 12:35	5.88	-169.3	6.55	1.23	2.398	25.31	6.1
MW-458	08/24/2021 12:40	5.41	-173.5	6.55	1.23	2.403	25.6	8.2
MW-458	08/24/2021 12:45	5.15	-175.8	6.56	1.24	2.417	25.81	7.4
MW-458	08/24/2021 12:50	4.38	-178.8	6.56	1.24	2.425	25.71	7
MW-458	02/09/2022 12:10	3.5	-149.7	7.01	1.34	2.604	7.99	66
MW-458	02/09/2022 12:15	2.8	-155.5	6.94	1.21	2.353	8.04	50.8
MW-458	02/09/2022 12:20	2.79	-157.3	6.95	1.21	2.347	7.97	48.1
MW-458	02/09/2022 12:25	2.5	-151.7	6.89	1.19	2.317	7.94	42.6
MW-458	02/09/2022 12:30	2.41	-151.6	6.88	1.19	2.311	8.03	42.3
MW-458	02/09/2022 12:35	2.31	-151.3	6.88	1.19	2.313	7.96	38.5
MW-458	02/09/2022 12:40	2.24	-150.7	6.95	1.18	2.297	7.84	31.4
MW-458	02/09/2022 12:45	2.29	-150.6	6.85	1.18	2.293	7.88	23.2
MW-458	02/09/2022 12:50	2.24	-150.1	6.82	1.19	2.301	7.97	19.51
MW-458	02/09/2022 12:55	2.27	-150.1	6.82	1.19	2.301	7.69	11.5
MW-459	07/13/2016 10:19	0.97	-122	6.47	0.03	0.577	16.89	207.10
MW-459	07/13/2016 12:06	3.55	-112	6.74	0.09	1.825	19.15	168.90
MW-459	10/19/2016 11:02	0.46	-104.00	6.52	0.02	0.456	16.84	113.20
MW-459	10/19/2016 11:27	4.98	-96	6.43	0.12	2.253	18.05	129.20
MW-460	07/14/2016 10:17	0.50	-148.00	7.31	NM	0.746	22.18	247.90
MW-460	07/14/2016 11:28	5.65	-118	7.50	NM	1.836	24.25	94.20
MW-460	10/21/2016 09:20	1.02	-149.00	7.41	0.04	0.807	19.26	80.60
MW-460	10/21/2016 10:13	3.31	-102	7.23	0.07	1.411	19.92	269.50
MW-461	07/19/2016 09:17	0.15	-151	6.68	0.38	6.844	19.98	455.50
MW-461	07/19/2016 09:55	2.45	-126	6.82	0.35	6.284	22.06	664.30
MW-461	10/20/2016 10:31	0.24	-123.00	6.66	0.04	0.857	19.65	764.10
MW-461	10/20/2016 11:20	3.42	-105	6.77	0.15	2.938	20.75	220.30
MW-462	07/13/2016 10:59	0.67	-189	7.14	0.04	0.825	20.19	40.30
MW-462	07/13/2016 14:04	3.79	-112	7.20	0.08	1.560	23.72	234.30
MW-462	10/19/2016 10:22	2.80	-162	7.11	0.03	0.677	20.56	226.70
MW-462	10/19/2016 13:29	1.92	-161	7.02	0.10	2.028	22.12	650.60
MW-463	07/14/2016 09:39	1.69	-13.00	7.12	NM	1.973	20.59	198.70
MW-463	07/14/2016 09:53	6.06	-61	7.16	NM	8.562	21.50	133.10
MW-463	10/21/2016 10:13	1.74	-127.00	7.16	0.06	1.121	19.25	213.50
MW-463	10/21/2016 11:39	6.22	-53	7.10	0.08	1.489	20.12	116.10
MW-464	02/08/2016 12:57	3.22	-96	6.35	0.42	0.845	9.46	22.1
MW-464	02/08/2016 15:50	2.37	-53.3	6.37	0.55	1.135	7.75	680.7
MW-464	10/12/2016 13:55	1.86	-35.9	6.28	0.44	0.884	21.95	29.70
MW-464	01/22/2018 13:05	1.64	-96.40	7.72	0.24	6.491	11.8	67.10
MW-464	01/22/2018 13:20	1.43	-38.90	6.94	0.37	0.745	11.47	87.70
MW-464	01/22/2018 13:30	2.10	-50.40	7.03	0.32	0.701	11.69	100.60
MW-464	01/28/2019 10:10	3.58	4.50	6.07	0.17	0.352	8.84	103.60
MW-464	01/28/2019 10:30	3.20	23.90	6.37	0.24	0.493	7.07	-31.60
MW-464	01/28/2019 10:40	5.64	27.00	6.42	0.24	0.507	4.42	-34.40
MW-464	04/23/2019 09:53	2.38	-64.6	6.4	0.38	0.777	12.9	6.7
MW-464	08/09/2019 08:45	3.32	-97	6.5	NM	0.45	21.34	49.8
MW-464	08/09/2019 09:05	4.74	-65.6	6.39	0.25	0.514	24.16	3.1
MW-464	08/09/2019 09:15	6.04	-43.9	6.25	0.21	0.445	24.36	101.3
MW-464	10/21/2019 09:30	4.39	-95.6	6.46	NM	0.438	18.16	43
MW-464	10/21/2019 09:50	3.25	-89.1	6.45	0.27	0.554	20.45	7.1
MW-464	10/21/2019 10:05	7.04	-90.2	6.14	0.31	0.63	20.06	13.1
MW-464	01/23/2020 09:46	5.79	-97.7	6.27	NM	0.446	9.22	117.2
MW-464	01/23/2020 10:08	4.65	-101.2	6.61	0.35	0.719	6.67	34.5
MW-464	01/23/2020 10:25	2.84	-92.5	6.51	0.28	0.566	9.28	24.6
MW-464	04/24/2020 09:04	3.24	-94.2	6.39	0.29	0.598	10.85	73.1

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-464	10/12/2020 13:00	NM	NM	NM	NM	NM	NM	26.5
MW-464	10/28/2020 12:50	1.04	-57.8	6.96	0.23	0.47	18.06	14.2
MW-464	10/28/2020 13:00	0.93	-49	6.9	0.2	0.41	18.54	NM
MW-464	01/25/2021 11:10	1.3	-116.8	6.64	0.26	0.534	9.27	16.7
MW-464	01/25/2021 11:20	1.46	-120.6	6.65	0.26	0.539	9.5	18.7
MW-464	04/14/2021 10:55	2.5	-32.2	6.49	0.29	0.584	14.8	207.1
MW-464	04/14/2021 11:00	1.3	-86.5	6.49	0.29	0.59	12.41	81.6
MW-464	04/14/2021 11:05	0.13	-103.4	6.49	0.32	0.66	11.48	10.7
MW-464	04/14/2021 11:10	0.09	-119.4	6.51	0.34	0.698	11.31	6.8
MW-464	04/14/2021 11:15	0.06	-129.4	6.51	0.35	0.712	11.29	2
MW-464	04/14/2021 11:20	0.06	-138.9	6.52	0.35	0.722	11.26	1.1
MW-464	04/14/2021 11:25	0.06	-145.1	6.51	0.36	0.724	11.42	0.7
MW-464	04/14/2021 11:30	0.06	-130.6	6.44	0.36	0.73	11.36	0.8
MW-464	04/14/2021 11:35	0.05	-156.9	6.51	0.36	0.733	11.27	1.4
MW-464	04/14/2021 11:40	0.05	-163.4	6.52	0.36	0.738	11.19	1.6
MW-464	03/25/2022 09:20	2.19	-86.9	6.42	0.34	0.688	11.28	355.9
MW-464	03/25/2022 09:25	0.95	-85.5	6.3	0.37	0.742	10.97	395.1
MW-464	03/25/2022 09:30	0.67	-90.3	6.33	0.41	0.828	11.13	417.6
MW-464	03/25/2022 09:35	0.65	-110.4	6.35	0.45	0.9	10.84	190.9
MW-464	03/25/2022 09:40	0.59	-120.5	6.35	0.48	0.965	10.42	162.2
MW-464	03/25/2022 09:45	0.57	-124	6.34	0.48	0.97	10.38	166.4
MW-464	03/25/2022 09:50	0.56	-126.5	6.36	0.48	0.972	10.5	170.5
MW-465	02/21/2018 14:25	0.29	-98.10	6.66	0.50	1.013	15.43	0.0000
MW-465	02/21/2018 14:40	0.99	-69.70	7.01	0.59	1.168	19.46	5.60
MW-465	02/21/2018 15:05	0.61	-80.10	8.61	0.60	1.147	18.71	26.40
MW-465	11/15/2019 13:10	4	-108.2	6.89	NM	0.339	0.16	23.3
MW-465	11/15/2019 13:26	3.98	-97.7	6.73	0.17	0.356	16.68	22.7
MW-465	11/15/2019 13:38	4.05	-94.8	6.72	0.17	0.347	17.23	31.8
MW-465	05/20/2020 09:35	0.19	-108.7	6.5	NM	0.951	15.8	0.4
MW-465	05/20/2020 10:05	1.58	-68.2	6.41	0.47	0.944	15.99	12.9
MW-465	11/10/2020 08:40	1.15	-112.9	6.56	0.57	1.163	18.12	9.6
MW-465	11/10/2020 08:45	1.24	-97.6	6.16	0.52	1.044	18.04	9.6
MW-465	11/10/2020 08:50	1.13	-85.1	6.12	0.965	0.967	18.1	10.3
MW-465	11/10/2020 08:55	1.09	-81.3	6.18	0.46	0.933	18.29	9
MW-465	11/10/2020 09:00	1.32	-82.1	6.2	0.45	0.905	18.45	6.8
MW-465	11/10/2020 09:05	0.98	-73.2	6.22	0.43	0.88	18.59	6.2
MW-465	11/10/2020 09:10	0.99	-71.7	6.23	0.42	0.857	18.66	6
MW-465	11/10/2020 09:15	1.07	-74.8	6.23	0.41	0.837	18.68	5.7
MW-465	11/10/2020 09:20	1.03	-69.9	6.24	0.4	0.823	18.81	5.8
MW-465	11/10/2020 09:25	1.05	-73.9	6.24	0.4	0.813	18.99	6
MW-465	11/10/2020 09:55	2.33	-82.3	6.33	0.42	0.86	20.12	5
MW-465	11/10/2020 10:15	2.27	-70.7	6.32	0.38	0.778	19.96	95.6
MW-465	03/03/2021 11:25	3.13	-62.1	7.03	0.28	0.572	10.08	11.4
MW-465	03/03/2021 11:30	0.93	-62.7	7.18	0.27	0.559	10.19	3.1
MW-465	03/03/2021 11:35	0.69	-59.6	7	0.27	0.553	9.79	1.1
MW-465	03/03/2021 11:40	0.45	-58.9	6.86	0.26	0.544	9.63	0.3
MW-465	03/03/2021 11:45	0.4	-59.8	6.81	0.27	0.547	9.73	0
MW-465	03/03/2021 11:50	0.33	-60.8	6.73	0.27	0.55	9.83	0
MW-465	03/03/2021 11:55	0.31	-61.8	6.711	0.27	0.555	9.4	0
MW-465	03/03/2021 12:00	0.28	-63.4	6.64	0.27	0.561	9.53	0
MW-465	03/03/2021 12:05	0.32	-63.6	6.63	0.27	0.563	9.53	0
MW-465	03/03/2021 12:10	0.25	-63.2	6.66	0.27	0.564	9.4	0
MW-465	03/03/2021 12:40	3.17	-34.6	6.4	0.28	0.57	9.46	6.9
MW-465	03/03/2021 13:00	4.07	-28.5	6.47	0.27	0.555	10.14	11.5
MW-465	05/14/2021 10:10	1.75	-66	6.68	0.43	0.886	16.42	17.7
MW-465	05/14/2021 10:15	1.15	-66.1	6.6	0.43	0.877	15.74	9.7
MW-465	05/14/2021 10:20	0.53	-69.9	6.5	0.43	0.877	15.14	6.5
MW-465	05/14/2021 10:25	0.39	-65.8	6.45	0.43	0.865	14.89	2.5
MW-465	05/14/2021 10:30	0.39	-66.3	6.44	0.43	0.862	14.81	2.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-465	05/14/2021 10:35	0.37	-66.5	6.43	0.42	0.849	15.1	2.4
MW-465	05/14/2021 10:40	0.36	-67.6	6.43	0.42	0.841	15.11	2.6
MW-465	02/03/2022 08:55	1.58	-124.8	6.24	0.46	0.924	11.32	594
MW-465	02/03/2022 09:00	0.93	-121.4	6.38	0.45	0.915	12.56	274.2
MW-465	02/03/2022 09:05	1.04	-116.1	6.39	0.46	0.927	12.1	118.1
MW-465	02/03/2022 09:10	1.11	-113.1	6.42	0.46	0.93	12.05	59.3
MW-465	02/03/2022 09:15	12.15	-112.3	6.45	0.46	0.929	12.14	25.9
MW-465	02/03/2022 09:20	1.2	-114.3	6.48	0.46	0.929	12.2	42.5
MW-465	02/03/2022 09:25	1.26	-115.4	6.48	0.46	0.928	12.25	21.3
MW-465	02/03/2022 09:30	1.22	-112.2	6.5	0.46	0.927	12.12	15
MW-465	02/03/2022 09:35	1.1	-111.9	6.49	0.46	0.923	12.07	9.1
MW-465	02/03/2022 09:40	1.12	-113.2	6.53	0.45	0.928	12.13	8.3
MW-468	03/23/2018 13:30	1.59	-63.60	7.17	0.56	1.136	11.44	0.0000
MW-468	06/01/2018 13:35	0.12	128.20	6.94	0.58	1.159	16.77	0.0000
MW-469	03/29/2018 13:15	2.71	10.90	6.99	0.76	1.495	8.6	12.10
MW-469	06/01/2018 09:25	0.10	-22.90	6.70	0.79	1.557	18.62	0.30
MW-470	12/18/2015 09:10	1.62	47.3	8.06	0.46	0.931	12.32	135.6
MW-470	12/18/2015 09:15	0.63	80.8	6.83	0.42	0.853	12.13	92.9
MW-470	12/18/2015 09:20	0.31	30.2	6.44	0.47	0.943	11.74	58
MW-470	12/18/2015 09:25	0.33	-5.2	6.37	0.5	1.011	11.82	37.4
MW-470	12/18/2015 09:30	0.43	-24.6	6.37	0.54	10.73	12	19.5
MW-470	12/18/2015 09:35	0.47	-34.9	6.37	0.55	1.108	12.05	15.5
MW-470	12/18/2015 09:40	0.46	-40.7	6.38	0.57	1.14	11.78	9.8
MW-470	03/29/2016 12:20	4.33	-110	7.15	0.65	1.296	10.33	74.7
MW-470	03/29/2016 12:25	2.56	-111.8	6.65	0.62	1.237	10.36	35.7
MW-470	03/29/2016 12:30	1.85	-117.8	6.53	0.62	1.244	10.2	16.7
MW-470	03/29/2016 12:35	1.36	-123	6.49	0.63	1.264	10.18	13.2
MW-470	03/29/2016 12:40	1	-129.5	6.48	0.64	1.277	10.21	9.5
MW-470	03/29/2016 12:45	0.86	-146	6.46	0.65	1.286	10.27	9.6
MW-470	03/29/2016 12:50	0.73	-153.5	6.47	0.65	1.297	10.28	8.5
MW-470	03/29/2016 12:55	0.66	-160	6.45	0.65	1.302	10.21	9.2
MW-470	03/29/2016 13:00	0.62	-167.3	6.46	0.66	1.305	10.24	10.6
MW-470	06/29/2016 12:20	2.09	112.4	6.39	0.17	0.352	22.15	0
MW-470	06/29/2016 12:25	0.88	85.8	6.23	0.16	0.334	20.45	0
MW-470	06/29/2016 12:30	0.56	77.3	6.23	0.16	0.33	20.01	0
MW-470	06/29/2016 12:35	0.43	74.8	6.25	0.16	0.333	19.79	0
MW-470	06/29/2016 12:40	0.35	75.3	6.25	0.16	0.337	19.69	0
MW-470	06/29/2016 12:45	0.35	70.9	6.28	0.16	0.341	19.5	0
MW-470	06/29/2016 12:50	0.32	71.8	6.27	0.16	0.344	19.32	0
MW-470	10/06/2016 13:30	4.15	29.2	6.51	0.51	1.025	19.47	52.6
MW-470	10/06/2016 13:35	2.57	-2.7	6.31	0.54	1.085	19.4	28.6
MW-470	10/06/2016 13:40	1.25	-5.7	6.3	0.5	1.014	19.53	12.4
MW-470	10/06/2016 13:45	1.01	-7.7	6.29	0.5	0.996	19.6	9
MW-470	10/06/2016 13:50	0.65	-12.4	6.3	0.49	0.984	19.65	5.4
MW-470	10/06/2016 13:55	0.5	-14.3	6.3	0.48	0.973	19.72	4.1
MW-470	10/06/2016 14:00	0.4	-17	6.3	0.48	0.97	19.75	3.2
MW-470	10/06/2016 14:05	0.38	-19.2	6.3	0.48	0.967	19.77	3
MW-470	10/06/2016 14:10	0.36	-20	6.31	0.48	0.963	19.78	3.1
MW-470	03/19/2018 09:40	5.83	208.1	5.61	0.55	1.098	7.28	0
MW-470	03/19/2018 09:45	3.56	212.6	5.42	0.52	1.057	7.23	0
MW-470	03/19/2018 09:50	2.21	211.9	5.31	0.52	1.038	7.75	0
MW-470	03/19/2018 09:55	1.97	210.1	5.3	0.52	1.042	6.94	0
MW-470	03/19/2018 10:00	1.47	207.5	5.2	0.51	1.032	7.62	0
MW-470	03/19/2018 10:05	1.31	204.8	5.27	0.52	1.035	7.68	0.2
MW-470	03/19/2018 10:10	1.42	205.1	5.25	0.51	1.04	7.71	0
MW-470	03/19/2018 10:15	1.4	206.1	5.17	0.51	1.035	7.7	0
MW-470	03/19/2018 10:20	1.39	204.9	5.16	0.51	1.033	7.69	0
MW-470	03/19/2018 10:25	1.37	204.1	5.15	0.51	1.032	7.71	0
MW-470	03/19/2018 10:30	1.37	203.9	5.14	0.51	1.033	7.7	0

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-470	03/19/2018 10:35	1.36	203.6	5.14	0.51	1.033	7.71	0
MW-470	06/06/2018 09:35	0.78	69.40	6.22	0.91	1.788	18.76	0.0000
MW-471	03/19/2018 13:35	0.88	198.40	4.52	0.37	0.741	9.07	0.0000
MW-471	05/29/2018 11:25	1.99	196.00	6.33	0.21	0.421	14.84	0.80
MW-472	03/20/2018 09:20	1.12	26.50	7.09	0.76	1.490	8.13	0.0000
MW-472	05/29/2018 14:45	0.70	-89.00	6.69	0.74	1.540	14.77	0.40
MW-473	12/16/2015 11:00	4.33	161.7	6.64	0.62	1.242	13.81	0.80
MW-473	12/16/2015 11:52	4.19	200.5	6.69	0.62	1.233	13.84	140.50
MW-473	07/15/2016 11:37	0.39	150	6.18	0.48	0.964	19.85	4.70
MW-473	12/28/2016 11:05	8.72	80.1	7.09	0.49	0.998	5.48	86.5
MW-473	12/28/2016 11:55	8.01	71.4	7.23	0.52	1.12	5.72	462.7
MW-473	01/27/2017 11:40	5.42	159.3	6.50	0.42	0.852	7.87	41.90
MW-473	01/27/2017 12:05	3.98	143.8	6.49	0.39	0.795	8.53	525.60
MW-473	03/06/2018 09:15	8.10	84.90	7.36	0.21	0.439	8.83	52.00
MW-473	03/06/2018 09:55	5.35	94.50	6.84	0.19	0.393	8.83	30.00
MW-473	03/06/2018 10:15	5.22	96.20	6.85	0.19	0.392	8.84	84.20
MW-473	09/04/2018 11:30	0.29	32.70	6.64	0.31	0.638	26.12	8.20
MW-473	09/04/2018 12:00	2.01	52.90	6.87	0.39	0.796	22.96	15.20
MW-473	09/04/2018 12:10	2.84	93.40	6.87	0.33	0.671	24.27	186.60
MW-473	02/26/2019 12:55	2.87	-220.30	8.80	0.51	1.036	7.45	17.10
MW-473	02/26/2019 13:35	3.85	-186.50	8.16	0.33	0.667	7.48	6.10
MW-473	02/26/2019 13:45	5.03	-174.90	8.06	0.31	0.637	7.18	9.00
MW-473	03/18/2019 13:05	3.15	155.2	6.68	NM	0.518	9.95	NM
MW-473	03/18/2019 13:50	5.33	146	7.14	0.25	0.522	9.28	3.4
MW-473	06/03/2019 10:10	0.52	19.2	6.78	NM	0.546	18.77	NM
MW-473	06/03/2019 10:45	4.2	102	7.12	0.3	0.614	17.91	15.2
MW-473	09/09/2019 11:06	1.87	-92.4	6.54	NM	0.531	22.1	67.3
MW-473	09/09/2019 11:11	0.64	-103	6.73	NM	0.514	22.74	75.7
MW-473	09/09/2019 11:16	4.46	-84	6.78	NM	0.531	23.39	47.5
MW-473	09/09/2019 11:21	4.8	-75.7	6.78	NM	0.56	23.1	27.1
MW-473	09/09/2019 11:26	4.66	-73.1	6.78	NM	0.555	23.33	17.9
MW-473	09/09/2019 11:31	4.33	-56.9	6.76	NM	0.541	22.34	11
MW-473	09/09/2019 11:36	4.61	-50.4	6.75	NM	0.535	22.84	7.8
MW-473	09/09/2019 11:41	5.57	-52.5	6.74	NM	0.535	23.14	6.1
MW-473	09/09/2019 11:46	7.2	-58.7	6.74	NM	0.535	23.93	6
MW-473	09/09/2019 11:51	5.84	-51.5	6.73	NM	0.53	22.87	5.1
MW-473	09/09/2019 12:15	6.1	-69.8	6.74	100	0.555	22.69	22.8
MW-473	09/09/2019 13:11	5.28	-81	6.71	0.27	0.565	23.33	179.9
MW-473	12/04/2019 09:50	3.38	212.50	6.88	0.14	0.291	11.54	43.80
MW-473	12/04/2019 10:20	4.49	98.60	7.03	0.14	0.298	12.71	11.10
MW-473	12/04/2019 10:35	5.06	91.20	7.06	0.14	0.312	12.97	221.60
MW-473	12/10/2019 10:40	1.93	20.4	7.34	NM	0.578	13.5	15.4
MW-473	12/10/2019 10:45	0.51	-15.5	7.11	NM	0.554	13.02	6.5
MW-473	12/10/2019 10:50	0.58	-29.3	6.98	NM	0.54	12.75	3.3
MW-473	12/10/2019 10:55	0.41	-34.2	6.93	NM	0.54	12.77	1.7
MW-473	12/10/2019 11:00	0.4	-35.7	6.91	NM	0.537	12.74	1.5
MW-473	12/10/2019 11:05	0.31	-37.4	6.89	NM	0.525	12.87	1.4
MW-473	12/10/2019 11:10	0.37	-36.2	6.89	NM	0.516	12.98	1.3
MW-473	12/10/2019 11:15	0.41	-35.2	6.87	NM	0.513	13.01	1.2
MW-473	12/10/2019 11:20	0.42	-34.8	6.85	NM	0.512	13.09	0.9
MW-473	12/10/2019 11:25	0.47	-35	6.87	NM	0.512	13.15	1.2
MW-473	12/11/2019 09:50	1.32	9	6.82	NM	0.858	10.17	98.4
MW-473	12/11/2019 10:45	3.95	-17.2	6.74	0.27	0.55	12.13	8.3
MW-473	12/11/2019 11:40	5.25	-44.6	6.83	0.27	0.557	11.88	492.1
MW-473	06/05/2020 08:00	3.56	-53.2	7.81	0.46	0.954	17.42	8.4
MW-473	06/05/2020 08:05	2.61	-41.1	6.98	0.36	0.737	16.92	6.7
MW-473	06/05/2020 08:10	2.96	-38.7	6.85	0.34	0.689	16.83	4.8
MW-473	06/05/2020 08:15	2.73	-32.4	6.83	0.33	0.674	16.62	3.7
MW-473	06/05/2020 08:20	2.53	-26.4	6.8	0.33	0.676	16.78	4.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-473	06/05/2020 08:25	2.52	-30.2	6.85	0.35	0.71	16.39	5.3
MW-473	06/05/2020 08:30	2.67	-25.8	6.78	0.34	0.705	16.24	5.2
MW-473	06/05/2020 08:35	2.99	-20.2	6.76	0.32	0.661	16.13	2.9
MW-473	06/05/2020 08:40	2.96	-20	6.76	0.32	0.685	16.16	3
MW-473	06/05/2020 08:45	2.81	-19.8	6.76	0.32	0.656	16.11	3
MW-473	06/05/2020 08:46	2.81	-19.8	6.76	0.32	0.656	16.11	3
MW-473	06/05/2020 09:10	2.37	-20.8	6.77	0.31	0.559	15.98	3.9
MW-473	06/05/2020 09:20	2.33	-38.9	6.77	0.38	0.285	17.02	58.9
MW-473	03/24/2022 10:20	1.41	-85.5	6.75	0.26	0.527	9.26	25.4
MW-473	03/24/2022 10:25	1.35	-93.5	6.83	0.26	0.528	9.36	25.4
MW-473	03/24/2022 10:30	1.04	-87.4	6.84	0.26	0.528	9.31	29.9
MW-473	03/24/2022 10:35	0.93	-89.6	6.85	0.26	0.526	9.21	22.8
MW-473	03/24/2022 10:40	0.91	-82.9	6.84	0.25	0.522	9.22	14.4
MW-473	03/24/2022 10:45	1.07	-91.4	6.83	0.26	0.527	9.21	9.9
MW-473	03/24/2022 10:50	0.89	-102.3	6.86	0.26	0.535	9.18	7.7
MW-473	03/24/2022 10:55	0.87	-106.2	6.87	0.26	0.535	9.17	7.4
MW-473	03/24/2022 11:00	0.85	-111.4	6.9	0.26	0.534	9.18	7.5
MW-475	01/22/2018 09:50	0.92	-126.60	6.79	0.97	1.897	14.82	3.90
MW-475	01/22/2018 10:25	4.00	-125.10	6.85	0.50	0.997	12.29	25.30
MW-475	01/22/2018 10:35	2.76	-116.60	6.86	1.05	2.045	15.22	1474.80
MW-476	02/19/2019 11:20	1.42	64.90	7.73	0.33	0.714	10.4	23.10
MW-476	02/19/2019 12:25	2.13	38.70	7.62	0.38	0.767	10.44	30.40
MW-476	02/19/2019 12:40	2.25	39.20	7.63	0.38	0.764	10.44	35.20
MW-476	05/21/2019 10:15	4.23	142.5	7.16	NM	0.143	15.92	27.9
MW-476	05/21/2019 11:15	4.07	153.1	6.34	0.26	0.532	16.2	24.7
MW-476	08/12/2019 10:05	5.23	138.8	8.83	NM	0.274	20.99	111.5
MW-476	08/12/2019 10:10	4.87	147.5	7.9	NM	0.18	20.13	106.1
MW-476	08/12/2019 10:15	4.42	159.5	7.27	NM	0.113	20.86	72.8
MW-476	08/12/2019 10:20	4.37	151.8	7.29	NM	0.106	21.51	61
MW-476	08/12/2019 10:25	4.29	145.8	7.28	NM	0.105	21.61	147.7
MW-476	08/12/2019 10:30	4.13	142.2	7.27	NM	0.105	21.63	49.3
MW-476	08/12/2019 10:35	3.92	136.9	7.23	NM	0.106	22.02	57.1
MW-476	08/12/2019 10:40	3.73	132.5	7.23	NM	0.107	21.81	46.9
MW-476	08/12/2019 10:45	3.55	128.6	7.22	NM	0.108	21.82	47.7
MW-476	08/12/2019 10:50	3.19	124.9	7.19	NM	0.111	21.87	47.7
MW-476	08/12/2019 11:54	3.05	40.6	7.31	0.33	0.677	20.76	32.9
MW-476	08/12/2019 12:10	7.11	63.9	7.36	0.06	0.132	21.7	136.1
MW-476	11/05/2019 08:15	4.19	118.4	7.66	NM	0.764	14.93	122.8
MW-476	11/05/2019 08:20	4.18	71.1	7.42	NM	0.762	14.4	138.2
MW-476	11/05/2019 08:25	3.94	134.1	7.22	NM	0.753	14.43	131.5
MW-476	11/05/2019 08:30	3.56	109.9	7.08	NM	0.761	14.28	138.7
MW-476	11/05/2019 08:35	3.26	117.6	6.99	NM	0.761	14.5	161.3
MW-476	11/05/2019 08:40	2.96	126.6	6.89	NM	0.764	14.53	176.8
MW-476	11/05/2019 08:45	2.54	135.7	6.79	NM	0.769	14.79	138.4
MW-476	11/05/2019 08:50	2.15	143.6	6.71	NM	0.778	14.89	106.3
MW-476	11/05/2019 08:55	1.74	152.7	6.65	NM	0.786	14.92	83.5
MW-476	11/05/2019 09:00	1.53	158.7	6.63	NM	0.789	14.9	74.8
MW-476	11/05/2019 10:35	23.6	67.6	6.72	2	23.2	16.4	24.5
MW-476	11/05/2019 10:50	3.48	38.8	7.66	0.33	0.683	17.2	151.8
MW-476	02/05/2020 09:40	2.21	233.4	6.68	NM	0.737	11.66	69.1
MW-476	02/05/2020 11:00	3.07	233.4	6.76	2.06	3.865	10.99	69.3
MW-476	11/13/2020 09:58	6.14	48.2	6.66	2.28	4.257	14.48	12.4
MW-476	11/13/2020 10:10	14.47	41.8	7.78	0.24	0.5	15.36	177.2
MW-476	02/11/2021 12:43	4.41	66	7.37	0.1	0.2	7.09	474.3
MW-476	02/11/2021 13:43	0.82	86.4	6.66	2.87	5.246	12.16	10.4
MW-476	02/11/2021 13:52	2.11	32.1	7.69	0.29	0.65	10.98	71.6
MW-476	04/29/2021 12:45	6.08	197.9	5.67	0.15	0.319	20.05	58
MW-476	04/29/2021 12:50	5.87	197.3	5.85	0.15	0.315	15.48	41.6
MW-476	04/29/2021 12:55	5.83	196.7	5.86	0.15	0.315	15.43	44.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-476	04/29/2021 13:00	5.71	194.7	5.91	0.15	0.317	15.53	57.5
MW-476	04/29/2021 13:05	3.47	192.2	6.09	0.33	0.66	16.21	57.8
MW-476	04/29/2021 13:10	1.97	182.3	6.27	0.51	1.029	16.36	53.7
MW-476	04/29/2021 13:15	1.64	170.6	6.36	0.79	1.561	16.26	53.4
MW-476	04/29/2021 13:20	0.73	143.4	6.42	1.05	2.048	16.36	53.3
MW-476	04/29/2021 13:25	0.61	110.6	6.46	1.41	2.66	16.16	48.9
MW-476	04/29/2021 13:30	0.56	73.9	6.49	1.76	3.297	16.31	41
MW-476	08/19/2021 12:30	4.98	167.8	5.84	0.16	0.322	16.75	136.4
MW-476	08/19/2021 12:35	4.28	168.7	5.83	0.3	0.561	16.74	170
MW-476	08/19/2021 12:40	2.77	158.7	6.15	1.391	1.371	16.63	115.6
MW-476	08/19/2021 12:45	2.13	111.2	6.27	1.12	2.141	16.44	86.7
MW-476	08/19/2021 12:50	1.76	63	6.34	1.85	3.45	16.41	90.4
MW-476	08/19/2021 12:55	1.39	22.5	6.4	2.36	4.369	16.41	120.8
MW-476	08/19/2021 13:00	1.08	15.8	6.41	2.55	4.717	16.31	128
MW-476	08/19/2021 13:05	0.92	20.2	6.39	2.61	4.837	16.45	113
MW-476	08/19/2021 13:10	0.78	24	6.41	2.67	4.952	16.66	98
MW-478	03/27/2018 11:05	1.12	-111.00	6.77	0.58	1.163	9.24	0.0000
MW-478	06/01/2018 10:50	0.04	-21.90	6.56	0.55	1.106	18.73	0.30
MW-479	03/27/2018 09:55	0.93	-160.00	10.27	0.13	0.273	9.26	24.60
MW-479	06/05/2018 10:00	1.39	-119.60	7.03	0.23	0.476	17.54	0.20
MW-480	03/28/2018 13:30	0.64	-120.20	7.32	0.46	0.731	7.66	0.0000
MW-480	06/05/2018 11:00	3.46	-91.80	6.60	0.33	0.680	16.52	0.0000
MW-481	03/28/2018 08:50	1.04	-128.30	7.17	0.73	1.451	7.71	6.60
MW-481	06/04/2018 10:15	0.74	-98.50	6.76	0.69	1.357	15.15	2.80
MW-494	09/14/2016 08:55	1.32	-30	5.5	10.5	17.76	23.44	82
MW-494	09/14/2016 09:00	0.57	-37.5	5.55	10.64	17.99	23.58	97.6
MW-494	09/14/2016 09:05	0.48	-46.3	5.57	10.67	18.05	23.75	94.5
MW-494	09/14/2016 09:10	0.44	-52.9	5.57	10.64	18	23.83	91.8
MW-494	09/14/2016 09:15	0.39	-56.6	5.57	10.59	17.92	23.87	85.1
MW-494	09/14/2016 09:20	0.43	-60.4	5.57	10.52	17.81	23.9	77.8
MW-494	09/14/2016 09:25	0.44	-65.3	5.56	10.34	17.54	23.88	71.2
MW-494	09/14/2016 09:30	0.42	-69.1	5.56	10.29	17.47	23.86	68.3
MW-494	09/14/2016 09:35	0.43	-65.4	5.56	10.24	17.35	23.81	72.4
MW-494	09/14/2016 10:46	0.48	-158.2	5.44	8.93	15.310	23.58	42.50
MW-494	09/14/2016 10:55	0.45	-181.3	5.44	9.80	16.680	25.42	88.30
MW-494	12/27/2016 10:25	0.69	-135	6.08	3.21	5.875	15.19	34.8
MW-494	12/27/2016 10:30	0.34	-145.3	6.07	3.24	5.933	15	30.6
MW-494	12/27/2016 10:35	0.34	-154.7	6.06	3.25	5.948	14.94	29.7
MW-494	12/27/2016 10:40	0.23	-166.7	6.06	3.24	5.926	15.06	28.4
MW-494	12/27/2016 10:45	0.16	-178.4	6.06	3.24	5.923	15.06	28.7
MW-494	12/27/2016 10:50	0.12	-192.4	6.06	3.23	5.911	15.09	28.6
MW-494	12/27/2016 10:55	0.04	-210.4	6.05	3.22	5.889	15.09	26.7
MW-494	12/27/2016 11:00	0.01	-229.8	6.05	3.23	5.866	15.12	25.4
MW-494	12/27/2016 11:05	0	-241.6	6.05	3.18	5.832	15.15	24.8
MW-494	12/27/2016 11:10	0	-249.6	6.05	3.17	5.809	15.17	24.8
MW-494	12/27/2016 11:15	0	-256.4	6.05	3.14	5.758	15.27	24.7
MW-494	12/27/2016 11:20	0	-256.4	6.05	3.12	5.721	15.46	26.7
MW-494	12/27/2016 12:15	2.36	-235.6	6.09	3.66	6.652	16.46	46.3
MW-494	12/27/2016 12:45	0.92	-267.6	6.1	3.78	6.85	16.77	27.3
MW-494	07/15/2019 10:05	0.84	-74.6	6.3	NM	1.807	25.49	10.2
MW-494	07/15/2019 10:10	0.41	-77.5	6.25	NM	2.168	24.08	6.5
MW-494	07/15/2019 10:15	0.25	-92.3	6.24	NM	2.603	23.77	8.1
MW-494	07/15/2019 10:20	0.18	-85.4	6.27	NM	2.227	24.06	14.3
MW-494	07/15/2019 10:25	0.17	-83	6.26	NM	1.991	24.28	14.9
MW-494	07/15/2019 10:30	0.16	-76.8	6.24	NM	1.827	24.36	15.7
MW-494	07/15/2019 10:35	0.17	-78	6.13	NM	1.831	23.43	11.1
MW-494	07/15/2019 10:40	0.18	-74.6	6.22	NM	1.867	23.25	11.7
MW-494	07/15/2019 10:45	0.18	-73.5	6.2	NM	1.923	23.26	10.5
MW-494	07/15/2019 10:50	0.17	-73.9	6.2	NM	1.936	23.26	10.2

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-494	07/15/2019 13:30	0.84	-74.6	6.3	0.91	1.807	25.49	10.2
MW-494	07/15/2019 13:35	0.41	-77.5	6.25	1.13	2.168	24.08	6.5
MW-494	07/15/2019 13:40	0.25	-92.3	6.24	1.35	2.603	23.77	8.1
MW-494	07/15/2019 13:45	0.18	-85.4	6.27	1.14	2.227	24.06	14.3
MW-494	07/15/2019 13:50	0.17	-83	6.26	1.01	1.991	24.28	14.9
MW-494	07/15/2019 13:55	0.16	-76.8	6.24	0.92	1.827	24.36	15.7
MW-494	07/15/2019 14:00	0.17	-78	6.13	0.93	1.831	23.43	11.1
MW-494	07/15/2019 14:05	0.18	-74.6	6.22	0.95	1.867	23.25	11.7
MW-494	07/15/2019 14:10	0.18	-73.5	6.2	0.98	1.923	23.26	10.5
MW-494	07/15/2019 14:15	0.17	-73.9	6.2	0.99	1.936	23.26	10.2
MW-494	08/22/2019 09:15	5.16	-31.9	6.57	NM	2.15	27.74	15.2
MW-494	08/22/2019 09:20	1.91	-35.5	6.26	NM	2.078	27.04	10
MW-494	08/22/2019 09:25	0.86	-42	6.24	NM	2.102	26.86	5.2
MW-494	08/22/2019 09:30	0.63	-46.4	6.24	NM	2.149	26.73	3.7
MW-494	08/22/2019 09:35	0.59	-48.3	6.24	NM	2.269	26.78	3.5
MW-494	08/22/2019 09:40	0.57	-52.8	6.27	NM	2.289	26.85	3.2
MW-494	08/22/2019 09:45	0.56	-55.9	6.25	NM	2.302	26.53	3.1
MW-494	08/22/2019 09:50	0.56	-58.1	6.25	NM	2.311	26.4	3
MW-494	08/22/2019 09:55	0.58	-58.9	6.25	NM	2.319	26.18	3
MW-494	08/22/2019 10:00	0.57	-60.1	6.25	NM	2.329	26.11	3
MW-494	05/26/2020 13:50	0.52	-112.3	6.43	NM	2.885	16.88	2.3
MW-494	12/03/2020 10:00	1.41	-227.6	6.28	2	3.768	15.04	16.1
MW-494	12/03/2020 10:05	11.24	-248.3	5.9	1.99	3.768	15.34	12.4
MW-494	12/03/2020 10:10	1.93	-287.5	5.82	1.99	3.745	15.65	11.6
MW-494	12/03/2020 10:15	2.87	-298.3	5.81	1.98	3.723	15.9	10.7
MW-494	12/03/2020 10:20	3.19	-296.9	5.76	1.98	3.73	15.89	10.8
MW-494	12/03/2020 10:25	4.04	-299.7	5.79	1.96	3.688	16.06	9.9
MW-494	12/03/2020 10:30	4.4	-299.5	5.79	1.93	3.65	16.23	9.3
MW-494	12/03/2020 10:35	4.82	-299.8	5.78	1.89	3.569	16.54	8.6
MW-494	12/03/2020 10:40	4.99	-301.6	5.78	1.86	3.532	16.71	8.2
MW-494	12/03/2020 10:45	5.43	-303.4	5.76	1.8	3.416	16.82	8.3
MW-495	09/15/2016 09:25	0.25	-53.8	5.84	1.42	2.75	24.24	15.8
MW-495	09/15/2016 09:30	0.28	-54.4	5.84	1.42	2.742	24.25	18
MW-495	09/15/2016 09:35	0.3	-54.6	5.84	1.41	2.724	24.2	23.4
MW-495	09/15/2016 09:40	0.27	-55.4	5.86	1.4	2.711	24.04	20.5
MW-495	09/15/2016 09:45	0.25	-55.9	5.87	1.4	2.707	23.98	18.7
MW-495	09/15/2016 09:50	0.23	-55.8	5.87	1.4	2.705	23.91	17.3
MW-495	09/15/2016 09:55	0.22	-56.2	5.89	1.39	2.694	23.88	16.7
MW-495	09/15/2016 10:51	0.22	-42.7	5.84	1.37	2.652	23.78	10.00
MW-495	09/15/2016 11:00	0.22	-43.1	5.81	1.37	2.652	24.39	68.30
MW-495	12/21/2016 10:20	1.8	-90.9	6.17	1.37	2.638	13.21	15
MW-495	12/21/2016 10:25	1.39	-92.1	6.21	1.38	2.645	14.01	2.1
MW-495	12/21/2016 10:30	1.33	-94.1	6.21	1.37	2.64	14.34	-2.4
MW-495	12/21/2016 10:35	0.99	-92.1	6.21	1.37	2.635	14.49	12.9
MW-495	12/21/2016 10:40	0.83	-93.6	6.2	1.37	2.626	15.58	11.3
MW-495	12/21/2016 10:45	0.75	-94.7	6.2	1.36	2.614	14.6	12.7
MW-495	12/21/2016 10:50	0.76	-95.2	6.2	1.35	2.605	14.36	12.1
MW-495	12/21/2016 10:55	0.74	-95.3	6.2	1.35	2.61	14.45	12.2
MW-495	12/21/2016 11:30	3.02	-25.6	6.26	1.33	2.553	19.43	62.9
MW-495	12/21/2016 13:50	2.79	-57.1	6.29	1.37	2.628	15.55	482.7
MW-495	07/16/2019 10:00	4.03	-64.1	6.42	1	2.001	28.92	9.9
MW-495	07/16/2019 10:05	1.13	-71.7	6.26	0.95	1.877	25.63	5.1
MW-495	07/16/2019 10:10	0.73	-73.8	6.26	0.95	1.872	25.23	5.5
MW-495	07/16/2019 10:15	0.41	-76.6	6.29	0.96	1.904	25.6	5.4
MW-495	07/16/2019 10:20	0.31	-78.2	6.3	0.99	1.956	25.6	6.9
MW-495	07/16/2019 10:25	0.24	-84.7	6.32	1.01	1.992	25.53	4.8
MW-495	07/16/2019 10:30	0.18	-85.1	6.34	1.03	2.029	25.64	4.8
MW-495	07/16/2019 10:35	0.16	-90	6.35	1.05	2.062	25.74	4.8
MW-495	07/16/2019 10:40	0.15	-92	6.36	1.06	2.088	25.79	4.6

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-495	07/16/2019 10:45	0.14	-94.6	6.37	1.07	2.105	25.83	4.7
MW-495	07/16/2019 10:50	0.14	-94.6	6.37	NM	2.105	25.83	4.7
MW-495	08/22/2019 10:15	0.86	-50.4	6.47	1.02	2.01	28.11	21.9
MW-495	08/22/2019 10:20	0.58	-53	6.47	1.03	2.019	28.07	16.8
MW-495	08/22/2019 10:25	0.54	-52.7	6.48	1.03	2.039	27.96	10.8
MW-495	08/22/2019 10:30	0.5	-64.3	6.5	1.04	2.052	27.96	1.7
MW-495	08/22/2019 10:35	0.48	-75.6	6.55	1.05	2.081	28.52	1.7
MW-495	08/22/2019 10:40	0.49	-76.5	6.55	1.06	2.092	28.39	1.7
MW-495	08/22/2019 10:45	0.5	-82.3	6.56	1.06	2.1	28.6	1.7
MW-495	08/22/2019 10:50	0.5	-85.2	6.58	1.07	2.113	28.72	1.7
MW-495	04/02/2020 12:30	0.3	-98.3	6.37	NM	0.944	14.24	4.9
MW-495	05/27/2020 14:00	0.19	-60.4	6.56	NM	1.594	16.77	15.9
MW-495	12/02/2020 09:55	1.76	-151.8	7.82	0.44	0.891	14.49	14.7
MW-495	12/02/2020 10:00	0.72	-118.1	7.05	0.45	0.91	14.77	12.7
MW-495	12/02/2020 10:05	0.46	-81.7	6.61	0.45	0.916	15.52	12.2
MW-495	12/02/2020 10:10	0.43	-76.7	6.5	0.46	0.926	15.7	11.8
MW-495	12/02/2020 10:15	0.34	-77.2	6.39	0.47	0.94	16.18	10.9
MW-495	12/02/2020 10:20	0.31	-84.3	6.35	0.48	0.961	16.2	9.5
MW-495	12/02/2020 10:25	0.28	-87.8	6.3	0.49	0.991	16.04	8.8
MW-495	12/02/2020 10:30	0.22	-87.9	6.28	0.49	0.994	16.2	8.7
MW-495	12/02/2020 10:35	0.21	-89.2	6.29	0.5	1.011	16.29	8.4
MW-495	12/02/2020 10:40	0.19	-90	6.28	0.51	1.025	16.29	8.2
MW-496	09/15/2016 14:25	0.22	-46.9	6.10	0.52	1.046	20.91	0.0000
MW-496	09/15/2016 14:35	1.14	-47.1	6.36	0.56	1.131	21.28	18.20
MW-496	12/21/2016 11:05	6.35	-104.9	6.75	0.5	1.008	12.26	18.1
MW-496	12/21/2016 13:50	4.92	-86.9	6.76	0.5	0.997	12.58	143.7
MW-499	01/31/2018 09:55	6.21	21.00	6.68	0.63	1.260	12.46	1.00
MW-499	01/31/2018 11:05	0.48	69.60	7.04	0.77	1.528	10.01	2.10
MW-499	01/31/2018 11:15	7.56	64.80	7.42	0.22	0.457	8.47	7.80
MW-499	03/14/2019 09:00	9.38	32	9.42	0.14	0.293	12.87	1.4
MW-499	03/14/2019 09:05	9.48	46.9	8.92	0.07	0.143	11.87	2.8
MW-499	03/14/2019 09:10	9.44	51.6	8.87	0.06	0.119	11.95	0
MW-499	03/14/2019 09:15	9.46	51.4	8.88	0.05	0.114	12.09	0
MW-499	03/14/2019 09:20	9.43	50.9	8.88	0.06	0.118	12.37	0
MW-499	03/14/2019 09:25	9.41	51	8.88	0.05	0.113	12.51	0
MW-499	03/14/2019 09:30	9.43	51.8	8.84	0.05	0.112	12.33	0
MW-499	03/14/2019 09:35	9.44	54.3	8.88	0.05	0.111	12.36	0
MW-499	03/14/2019 11:00	2.83	96.8	8.09	0.41	0.834	15.97	0
MW-499	03/14/2019 11:10	9.86	44	8.4	0.08	0.161	12.7	18.1
MW-499	05/22/2019 10:10	3.19	84.7	7.79	NM	0.421	14.2	10.5
MW-499	05/22/2019 11:30	1.51	124.2	7.37	0.46	0.924	16.64	4.8
MW-500	01/30/2018 10:35	5.19	74.80	12.30	1.08	1.901	12.81	58.10
MW-500	01/30/2018 12:00	1.63	132.50	7.98	10.35	17.490	12.45	6.30
MW-500	01/30/2018 12:15	9.45	89.20	10.64	0.58	1.168	11.79	43.50
MW-500	03/11/2019 14:05	6.98	95.4	7.78	NM	1.694	12.02	122.2
MW-500	03/11/2019 15:40	4.16	87.1	7.05	8.24	14.12	14.69	37.2
MW-500	05/10/2019 09:15	2.08	110.4	8.13	NM	2.459	14.94	5
MW-500	05/10/2019 11:20	1.22	75.5	7.18	9.77	16.56	15.91	9.4
MW-500	08/06/2019 13:45	4.36	85.3	7.31	NM	15.77	18.25	34.5
MW-500	08/06/2019 14:50	4.08	49.8	6.98	10.08	17.12	20.15	3.9
MW-500	08/06/2019 15:00	8.51	24.5	9.85	0.86	1.691	17.82	17.3
MW-500	06/02/2021 12:30	5.22	218.8	5.71	0.4	0.81	22.55	58.2
MW-500	03/31/2022 09:05	3.98	122.9	6.94	0.57	1.136	11.87	50.5
MW-500	03/31/2022 09:10	3.75	128.7	6.66	0.6	1.205	11.7	45.6
MW-500	03/31/2022 09:15	3.7	128	6.65	0.61	1.207	11.71	39.3
MW-500	03/31/2022 09:20	3.49	127.8	6.68	0.61	1.221	11.92	72.9
MW-500	03/31/2022 09:25	3.48	127.3	6.69	0.61	1.222	11.91	68.4
MW-500	03/31/2022 09:30	2.51	143.6	6.64	3.16	5.225	11.9	70.4
MW-500	03/31/2022 09:35	1.39	150	6.89	7.78	13.31	11.89	53.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-500	03/31/2022 09:40	1.39	148.4	6.9	8	13.71	11.9	55.5
MW-500	03/31/2022 09:45	1.39	126.6	6.92	10.09	17.1	12.03	40.8
MW-500	03/31/2022 09:50	1.37	124.6	6.93	10.16	17.2	12.04	38.1
MW-501	01/30/2018 13:45	0.15	-12.80	6.75	5.62	9.711	13.51	1.20
MW-501	01/30/2018 14:50	4.37	40.30	7.34	4.92	8.758	10.74	3.10
MW-501	01/30/2018 15:20	5.35	-104.90	7.05	4.81	6.112	13.08	8.40
MW-501	03/12/2019 10:30	2.73	119.8	7.18	NM	4.048	9.37	22.1
MW-501	03/12/2019 12:00	0.9	92.6	7.18	3.88	7.016	13.96	0.8
MW-501	05/22/2019 13:35	1.37	67.6	7.04	NM	7.813	19.06	4.8
MW-501	05/22/2019 14:55	2.09	61.4	7.5	4.86	8.675	19.01	6.8
MW-501	08/16/2019 10:05	6.74	142.7	7.33	NM	2.682	19.92	72.9
MW-501	08/16/2019 10:10	2.59	120.2	6.94	NM	6.633	18.92	42.9
MW-501	08/16/2019 10:15	1.79	80.9	6.98	NM	7.811	19.41	44.5
MW-501	08/16/2019 10:20	1.71	54.7	6.99	NM	7.936	19.4	42.3
MW-501	08/16/2019 10:25	1.36	41.7	7	NM	7.932	19.21	41.6
MW-501	08/16/2019 10:30	1.21	31.7	7.01	NM	7.926	18.7	41.8
MW-501	08/16/2019 10:35	1.21	28	7.01	NM	7.946	18.87	22.6
MW-501	08/16/2019 10:40	1.17	23.7	7.01	NM	7.921	18.69	29.1
MW-501	08/16/2019 10:45	1.53	19.3	7.02	NM	7.982	19	36.9
MW-501	08/16/2019 10:50	1.53	19.3	7.02	NM	7.982	19	36.9
MW-501	08/16/2019 12:15	2.06	195.1	7.22	4.59	8.236	19.92	2
MW-501	08/16/2019 12:38	7.31	110.7	8.08	0.25	0.528	22.24	75
MW-501	10/31/2019 12:10	6.28	101	7.53	NM	0.133	17.5	43.9
MW-501	10/31/2019 12:15	5.65	102.2	7.36	NM	0.136	17.98	33.1
MW-501	10/31/2019 12:20	5.34	98.1	7.46	NM	0.135	18.25	29.4
MW-501	10/31/2019 12:25	5.03	108.2	7.35	NM	0.128	18.24	26.9
MW-501	10/31/2019 12:30	4.88	113	7.22	NM	0.128	18.27	25.9
MW-501	10/31/2019 12:35	4.85	117	7.17	NM	0.128	18.25	27
MW-501	10/31/2019 12:40	5.08	118.2	7.16	NM	0.129	18.2	26.9
MW-501	10/31/2019 14:15	1.27	122.9	7.1	4.94	8.81	16.8	1.1
MW-501	10/31/2019 14:35	5.84	43.1	7.74	0.35	0.716	18.14	65.6
MW-501	02/11/2020 12:55	7.59	145.7	7.27	NM	0.082	11.93	106.4
MW-501	02/11/2020 14:25	6.11	172.1	8.02	0.05	0.083	11.1	110.1
MW-501	05/15/2020 09:15	0.99	-26.4	6.69	NM	8.574	14.73	10
MW-501	05/15/2020 10:43	2.97	46.2	7.26	5.36	9.491	17.07	0
MW-504	08/31/2016 14:21	0.79	-62.8	7.00	1.56	3.009	26.10	0.0000
MW-504	08/31/2016 14:30	0.52	-79.4	6.89	1.71	3.274	25.04	78.20
MW-504	10/17/2016 11:20	0.99	-105.8	6.62	1.35	2.599	21.60	22.00
MW-504	10/17/2016 11:30	0.93	-97.7	6.63	1.35	2.605	22.50	22.70
MW-504	12/07/2016 10:30	4.06	-69.4	6.58	1.45	3.114	12.94	158.1
MW-504	12/07/2016 10:35	3.53	-74.2	6.62	1.44	2.754	13.07	133.6
MW-504	01/20/2017 11:45	4.03	-120.4	7.11	2.39	4.465	10.31	13.30
MW-504	01/20/2017 12:10	4.14	-114	7.06	2.30	4.304	9.45	149.20
MW-504	04/18/2017 12:50	2.36	-67.90	5.94	2.42	4.502	12.39	2.40
MW-504	04/18/2017 13:25	5.97	-37.50	6.20	2.49	4.632	14.3	2.30
MW-504	04/18/2017 13:35	6.40	-57.50	6.01	2.55	4.728	13.55	41.70
MW-504	01/09/2018 12:45	1.13	-6.10	6.34	2.85	5.300	8.02	63.90
MW-504	01/09/2018 13:25	0.96	-21.10	6.32	2.33	4.131	9.41	10.40
MW-504	01/09/2018 13:40	3.46	-18.10	6.31	2.64	5.112	9.31	88.60
MW-504	08/17/2018 09:15	0.26	-103.40	6.90	2.07	3.919	22.81	20.50
MW-504	08/17/2018 10:20	0.83	-69.50	6.89	1.30	2.527	24.97	6.50
MW-504	08/17/2018 11:00	0.78	-54.20	7.19	1.44	2.788	24.74	23.80
MW-504	02/05/2019 12:10	6.67	-61.70	7.78	3.51	6.387	8.4	16.30
MW-504	02/05/2019 12:35	4.56	-203.00	7.80	2.62	4.864	11.44	12.00
MW-504	02/05/2019 12:45	4.51	-211.80	7.81	2.51	4.871	11.29	28.90
MW-504	05/06/2019 13:30	4.35	-171.8	7.3	1.85	4.65	14.35	3.7
MW-504	02/03/2021 11:45	0.78	165.4	6.62	3.66	6.722	5.39	21
MW-504	02/03/2021 11:50	0.35	-32.3	6.66	3.54	6.488	5.58	15.4
MW-504	02/03/2021 11:55	0.3	-88.7	6.68	3.21	5.91	5.8	13.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-504	02/03/2021 12:00	0.27	-126.2	6.67	2.95	5.463	6.1	12.6
MW-504	02/03/2021 12:05	0.26	-153.3	6.66	2.79	5.18	6.41	9.9
MW-504	02/03/2021 12:10	0.25	-166.6	6.66	2.78	5.158	6.49	9.6
MW-504	02/03/2021 12:15	0.24	-180	6.66	2.68	5.003	6.24	8.6
MW-504	02/03/2021 12:20	0.24	-188.7	6.66	2.67	4.984	5.91	8.8
MW-504	02/03/2021 12:25	0.23	-212.2	6.66	2.62	4.88	6.71	5.7
MW-504	02/03/2021 12:30	0.22	-216.5	6.66	2.58	4.865	6.81	4.8
MW-504	02/03/2021 12:45	0.26	-239.9	6.65	2.6	4.841	7.3	4.4
MW-504	02/03/2021 13:00	0.29	-252.6	6.63	2.88	5.337	7.16	6.1
MW-504	08/24/2021 12:30	0.32	-222.2	6.94	3.6	6.618	22.19	12.4
MW-504	08/24/2021 12:35	0.3	-232	6.97	3.39	6.234	22.05	11
MW-504	08/24/2021 12:40	0.31	-244.8	6.99	3.31	6.079	22.06	10.6
MW-504	08/24/2021 12:45	0.33	-256.4	7	3.17	5.837	22.07	9.8
MW-504	08/24/2021 12:50	0.33	-269.7	7.02	3.01	5.567	21.94	8.9
MW-504	08/24/2021 12:55	0.35	-284.4	7.02	2.93	5.419	21.86	7.9
MW-504	08/24/2021 13:00	0.36	-289.7	7.02	2.92	5.406	21.88	8.2
MW-504	02/04/2022 08:55	0.66	-70.9	7.15	5.31	9.499	5.92	80.6
MW-504	02/04/2022 09:00	0.67	-79.7	7.24	5.21	9.366	4.71	73.7
MW-504	02/04/2022 09:05	0.6	-89.9	7.26	5.02	9.028	5.37	79.2
MW-504	02/04/2022 09:10	0.46	-112.9	7.34	4.9	8.835	5.4	66.2
MW-504	02/04/2022 09:15	0.39	-142.3	7.43	4.84	8.729	5.38	57.1
MW-504	02/04/2022 09:20	0.27	-156.9	7.45	4.81	8.674	5.51	52.3
MW-504	02/04/2022 09:25	0.26	-159.6	7.47	4.8	8.655	5.55	50.7
MW-504	02/04/2022 09:30	0.27	-161.5	7.47	4.8	8.641	5.58	48.5
MW-506	01/25/2018 08:30	27.58	-33.90	6.45	0.62	1.242	8.99	41.00
MW-506	01/25/2018 08:45	0.63	-78.20	7.78	0.68	1.369	9.29	108.40
MW-506	01/25/2018 10:35	0.52	-42.20	6.64	0.69	1.406	8.32	15.90
MW-506	08/30/2019 10:25	8.79	-81.4	9.58	NM	0.755	19.62	19.9
MW-506	08/30/2019 10:30	5.5	-102.8	6.69	NM	0.747	20.21	24.3
MW-506	08/30/2019 10:35	5.83	-111.7	6.72	NM	0.802	20.79	23.9
MW-506	08/30/2019 10:40	6.36	-115.1	6.3	NM	0.798	21.31	20.9
MW-506	08/30/2019 10:45	6.59	-115.5	6.74	NM	0.792	21.21	22
MW-506	08/30/2019 10:50	6.15	-115.7	6.74	NM	0.795	20.78	32.6
MW-506	08/30/2019 10:55	5.89	-115.1	6.72	NM	0.779	20.87	19.8
MW-506	08/30/2019 11:00	5.52	-113.7	6.69	NM	0.784	20.72	16.9
MW-506	08/30/2019 11:05	5.29	-112.5	6.7	NM	0.795	21.09	15.4
MW-506	08/30/2019 11:10	4.79	-109.7	6.67	NM	0.825	20.34	23.6
MW-506	10/22/2019 13:10	0.71	-50.9	6.34	NM	0.921	19.03	25.7
MW-506	10/22/2019 13:15	0.47	-74.3	6.36	NM	0.909	19.27	21.7
MW-506	10/22/2019 13:20	0.67	-84.4	6.45	NM	1.355	19.03	405.5
MW-506	10/22/2019 13:25	0.39	-110.9	6.48	NM	1.373	19.34	174.3
MW-506	10/22/2019 13:30	0.32	-116.9	6.55	NM	1.164	19.4	59.8
MW-506	10/22/2019 13:35	0.33	-121.3	6.55	NM	1.245	19.44	29.7
MW-506	10/22/2019 13:40	0.34	-120.8	6.52	NM	1.407	19.44	22.3
MW-506	10/22/2019 13:45	0.38	-119.5	6.45	NM	1.637	19.39	24.5
MW-506	10/22/2019 13:50	1.39	-109	6.47	NM	1.71	19.14	228.3
MW-506	10/22/2019 13:55	1.58	-96.8	6.51	NM	1.704	19.19	176
MW-506	03/23/2022 10:45	5.37	19.3	7.55	0.29	0.603	8.65	238.7
MW-506	03/23/2022 10:50	2.99	35.8	6.9	0.3	0.609	8.46	124.5
MW-506	03/23/2022 10:55	2.99	31.5	6.79	0.3	0.609	8.38	97
MW-506	03/23/2022 11:00	2.89	28.5	6.75	0.29	0.604	8.27	71.8
MW-506	03/23/2022 11:05	2.59	28.9	6.73	0.29	0.594	8.25	42.7
MW-506	03/23/2022 11:10	2.5	29.8	6.73	0.29	0.59	8.29	43.9
MW-506	03/23/2022 11:15	2.46	30	6.74	0.29	0.588	8.36	41.5
MW-508	01/24/2018 08:50	4.49	16.60	6.79	0.22	0.458	6.65	6.90
MW-508	01/24/2018 09:10	6.20	69.50	6.85	0.20	0.248	5.03	10.30
MW-508	01/24/2018 09:25	5.85	30.30	6.90	0.23	0.467	4.96	53.30
MW-508	08/30/2019 09:15	5.67	-134.1	7.46	NM	0.659	19.64	37.6
MW-508	08/30/2019 09:20	5.56	-133.2	7.09	NM	0.544	20.14	9.9

Appendix B5 East Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-508	08/30/2019 09:25	8.47	-133	6.99	NM	0.536	20.49	3.7
MW-508	08/30/2019 09:30	10.3	-137.5	6.94	NM	0.531	20.63	7.2
MW-508	08/30/2019 09:35	6.53	-141.7	6.91	NM	0.53	20.67	1
MW-508	08/30/2019 09:40	6.28	-135.3	6.89	NM	0.524	20.7	0.2
MW-508	08/30/2019 09:45	9.04	-138.7	6.88	NM	0.522	20.84	1.8
MW-508	08/30/2019 09:50	9.3	-140.2	6.88	NM	0.521	20.87	1.6
MW-508	08/30/2019 09:55	9.5	-141.4	6.87	NM	0.52	20.92	0.1
MW-508	08/30/2019 10:00	9.84	-141.6	6.85	NM	0.519	20.92	0.1
MW-508	10/22/2019 09:15	0.72	-128.4	6.59	NM	0.647	18.82	27.4
MW-508	10/22/2019 09:20	0.65	-119.2	6.51	NM	0.636	18.65	11.5
MW-508	10/22/2019 09:25	0.56	-115.3	6.48	NM	0.62	18.59	8.4
MW-508	10/22/2019 09:30	0.49	-117	6.48	NM	0.628	18.62	5.9
MW-508	10/22/2019 09:35	0.46	-119.6	6.49	NM	0.834	18.63	2.3
MW-508	10/22/2019 09:40	0.45	-123.6	6.51	NM	0.644	18.76	0.1
MW-508	10/22/2019 09:45	0.43	-182.2	6.52	NM	0.656	18.91	0
MW-508	10/22/2019 09:50	0.43	-129.7	6.5	NM	0.66	18.89	0
MW-508	10/22/2019 09:55	0.44	-132.6	6.51	NM	0.669	18.92	0
MW-508	10/22/2019 10:00	0.45	-134	6.51	NM	0.68	18.84	0
MW-510	12/29/2016 10:20	5.47	191.5	6.11	0.22	0.445	9.58	62.1
MW-510	12/29/2016 10:40	5.14	163.9	6.37	0.17	0.35	10.78	385.5
MW-510	02/02/2017 11:45	8.26	64.3	7.06	0.17	0.382	10.60	29.30
MW-510	02/02/2017 12:05	6.40	59.3	6.86	0.17	0.357	10.64	1079.40
MW-510	09/04/2018 13:55	0.65	92.40	6.97	0.03	0.001	28.76	205.40
MW-510	09/04/2018 14:30	4.00	59.10	6.62	0.26	0.533	26.71	29.80
MW-510	09/04/2018 14:45	3.52	94.70	6.30	0.24	0.510	25.2	846.00
MW-510	12/03/2018 14:05	4.37	63.90	6.47	0.26	0.543	13.06	223.90
MW-510	12/03/2018 14:25	4.31	65.60	6.46	0.26	0.539	12.97	681.20
MW-510	12/03/2018 14:35	4.19	79.10	6.39	0.25	0.522	13.92	1451.00
MW-510	03/15/2019 09:25	7.27	185	6.51	NM	0.318	11.26	48.3
MW-510	03/15/2019 10:25	10.5	189.3	6.45	0.18	0.367	14.53	382.3
MW-510	06/06/2019 09:25	0.81	110.8	6.21	NM	0.405	20.72	11.5
MW-510	06/06/2019 10:05	3.71	86.1	7.63	NM	0.395	19.29	8.6
MW-510	06/06/2019 10:10	3.46	91.8	6.58	NM	0.296	20.57	20.8
MW-510	06/06/2019 10:15	3.77	91.4	6.33	NM	0.277	20.89	37.4
MW-510	06/06/2019 10:20	5.42	117.4	6.63	0.19	0.394	23.15	265
MW-510	06/06/2019 10:25	4.23	97.1	6.23	NM	0.275	20.88	48.8
MW-510	06/06/2019 10:30	4.02	103.6	6.08	NM	0.313	21.02	42.6
MW-510	06/06/2019 10:35	2.62	107.7	6.06	NM	0.347	21.14	23.6
MW-510	06/06/2019 10:40	1.84	109	6.1	NM	0.369	21.03	19
MW-510	06/06/2019 10:45	1.18	0.393	6.18	NM	0.394	20.74	15.1
MW-510	06/06/2019 10:50	0.81	110.8	6.21	NM	0.405	20.72	11.5
MW-510	06/06/2019 13:10	4.47	121.8	6.29	0.18	0.366	16.84	1117.4
MW-510	09/10/2019 09:10	1.99	126.3	6.11	NM	0.455	21.85	5.6
MW-510	09/10/2019 09:15	1.76	104.3	6.13	NM	0.388	22.07	22.3
MW-510	09/10/2019 09:20	2.5	115.8	6.12	NM	0.323	22.16	30.2
MW-510	09/10/2019 09:25	1.9	122.5	6.08	NM	0.328	22.25	27.3
MW-510	09/10/2019 09:30	1.43	125.9	6.08	NM	0.344	22.3	23.4
MW-510	09/10/2019 09:35	1.14	121.9	6.13	NM	0.389	22.34	19.1
MW-510	09/10/2019 09:40	1.27	117.4	6.18	NM	0.416	22.38	18.1
MW-510	09/10/2019 09:45	1.36	111.7	6.19	NM	0.434	22.42	18.3
MW-510	09/10/2019 09:50	1.4	97.6	6.2	NM	0.448	22.45	24
MW-510	09/10/2019 09:55	1.44	84.8	6.19	NM	0.458	22.43	27.8
MW-510	09/10/2019 10:10	4.4	89.4	6.36	0.23	0.484	22.56	406.8
MW-510	09/10/2019 10:28	3.63	80.3	6.35	0.22	0.465	21.68	1638.4
MW-510	12/10/2019 11:30	5.78	154.9	6.2	NM	0.336	12.6	48.4
MW-510	12/10/2019 11:35	4.79	156.9	6.16	NM	0.332	12.37	51.1
MW-510	12/10/2019 11:40	3.65	159.4	6.15	NM	0.347	12	60.4
MW-510	12/10/2019 11:45	2.69	157.7	6.2	NM	0.377	12.03	56.1
MW-510	12/10/2019 11:50	2.08	152.1	6.22	NM	0.404	12.3	40.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-510	12/10/2019 11:55	2.16	125.3	6.23	NM	0.424	12.78	80.8
MW-510	12/10/2019 12:00	2.39	122.5	6.2	NM	0.418	12.66	100.1
MW-510	12/10/2019 12:05	2.61	123.7	6.18	NM	0.416	13.04	116
MW-510	12/10/2019 12:10	2.8	125.4	6.17	NM	0.394	13.16	177.7
MW-510	12/10/2019 12:15	2.88	140.4	6.14	NM	0.362	13.32	226.8
MW-510	12/11/2019 13:25	6.69	113.2	6.28	NM	0.415	12.66	915.3
MW-510	12/11/2019 14:15	9.25	173.1	6.17	0.1	0.207	10.9	172.9
MW-510	12/11/2019 14:45	6.24	162.8	6.18	0.19	0.393	12.83	1209.5
MW-510	03/12/2020 10:30	0.88	206.7	6.12	NM	0.544	9.98	30.4
MW-510	03/12/2020 11:15	4.7	201.3	6.3	0.29	0.593	9.58	74
MW-510	06/15/2020 09:05	8.24	119.4	6.13	0.36	0.732	19.44	31.3
MW-510	06/15/2020 09:10	11.88	165.9	6.96	0.31	0.637	19.54	26.6
MW-510	06/15/2020 09:15	13.18	171.9	7	0.3	0.621	20.03	27.3
MW-510	06/15/2020 09:20	14.18	182.8	6.96	0.29	0.588	19.84	22.9
MW-510	06/15/2020 09:25	14.1	199.6	6.86	0.28	0.576	20.07	18.9
MW-510	06/15/2020 09:30	12.51	218.5	6.8	0.28	0.581	20.05	18.6
MW-510	06/15/2020 09:35	10.56	233.9	6.79	0.29	0.589	19.94	17.4
MW-510	06/15/2020 09:40	8.55	244.1	6.79	0.29	0.595	19.75	18.8
MW-510	06/15/2020 09:45	6.61	221.2	6.78	0.29	0.6	19.47	16.7
MW-510	06/15/2020 09:50	5.72	171	6.78	0.29	0.603	19.32	14.8
MW-510	06/15/2020 09:51	5.72	171	6.78	0.29	0.603	19.32	14.8
MW-510	06/15/2020 10:20	5.23	210.7	6.69	0.33	0.622	19.45	18.4
MW-510	06/15/2020 10:30	6.88	201.9	6.88	0.43	0.676	19.41	48.7
MW-510	02/26/2021 11:55	0.59	6.5	6.7	0.23	0.484	9.08	9
MW-510	02/26/2021 12:10	0.87	4.3	6.64	0.25	0.515	10.27	78.7
MW-510	03/22/2022 08:15	4.87	63.6	8.25	0.16	0.325	10.32	106.4
MW-510	03/22/2022 08:20	2.58	122.3	6.46	0.15	0.318	9.93	98.5
MW-510	03/22/2022 08:25	2.43	136.1	6.17	0.15	0.313	9.76	82.5
MW-510	03/22/2022 08:30	2.57	142	6.11	0.15	0.308	9.65	58.1
MW-510	03/22/2022 08:35	3.22	146.4	6.13	0.14	0.299	9.57	50.4
MW-510	03/22/2022 08:40	3.15	148.5	6.13	0.14	0.297	9.53	48.3
MW-510	03/22/2022 08:45	3.09	151.1	6.1	0.14	0.295	9.5	47.7
MW-511	01/27/2016 13:40	7.66	195.5	5.66	0.18	0.366	8.40	31.70
MW-511	01/27/2016 14:05	7.02	214.6	5.58	0.16	0.325	8.69	373.90
MW-511	12/29/2016 10:05	5.04	-8.4	6.12	0.49	0.994	9.39	26.9
MW-511	12/29/2016 10:20	7.2	-3	5.98	0.65	1.296	9.57	575
MW-511	12/04/2018 09:20	0.49	128.00	6.56	0.74	1.483	10.75	27.20
MW-511	12/04/2018 10:00	5.30	127.10	5.81	0.48	0.956	12.66	987.50
MW-511	12/04/2018 10:10	9.04	258.30	5.42	0.44	0.883	7.42	749.90
MW-511	03/18/2019 09:45	6.62	232.1	5.61	NM	0.665	7.32	24.4
MW-511	03/18/2019 10:40	8.31	155.2	6.6	0.35	0.716	7.69	71.6
MW-511	06/04/2019 13:00	1.52	127.7	5.25	NM	0.66	20.78	24.4
MW-511	06/04/2019 13:45	4.5	133.2	5.77	0.34	0.7	21.65	563.1
MW-511	09/10/2019 09:25	3.97	157.8	5.1	NM	0.552	21.76	11.7
MW-511	09/10/2019 09:30	6.13	178	4.98	NM	0.532	22.42	14.9
MW-511	09/10/2019 09:35	6.6	189.7	5.03	NM	0.525	22.48	11
MW-511	09/10/2019 09:40	6.69	195.3	5.1	NM	0.522	22.57	9
MW-511	09/10/2019 09:45	6.7	201.4	5.15	NM	0.526	22.7	7.8
MW-511	09/10/2019 09:50	6.94	205.1	5.19	NM	0.528	22.87	7.2
MW-511	09/10/2019 09:55	7.08	207.2	5.22	NM	0.537	22.61	6.6
MW-511	09/10/2019 10:00	6.16	205.9	5.25	NM	0.542	22.58	7
MW-511	09/10/2019 10:05	6.77	207.1	5.28	NM	0.544	22.66	6.8
MW-511	09/10/2019 10:10	6.46	207.3	5.29	NM	0.55	22.47	7.1
MW-511	09/10/2019 10:40	6.31	197.2	5.39	0.27	0.56	22.27	11.6
MW-511	09/10/2019 11:50	4.87	180.7	5.77	0.32	0.659	22.91	215.2
MW-511	12/10/2019 13:45	9.9	112.9	6.38	NM	0.434	12.73	77.1
MW-511	12/10/2019 13:50	8.06	189.6	5.37	NM	0.453	12.27	89.4
MW-511	12/10/2019 13:55	8.09	215.2	5.24	NM	0.482	12.32	55
MW-511	12/10/2019 14:00	8.03	229.4	5.11	NM	0.491	12.17	36.6

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-511	12/10/2019 14:05	7.94	236.5	5.11	NM	0.495	12.3	39.9
MW-511	12/10/2019 14:10	8.35	240.5	5.17	NM	0.501	12.44	34.6
MW-511	12/10/2019 14:15	8.3	242	5.26	NM	0.516	12.63	38.8
MW-511	12/10/2019 14:20	8.32	239.8	5.29	NM	0.513	12.72	45.1
MW-511	12/10/2019 14:25	7.91	245.7	5.3	NM	0.507	12.95	42.2
MW-511	12/10/2019 14:30	7.93	247.8	5.31	NM	0.515	12.9	47.6
MW-511	12/12/2019 08:15	6.99	111.7	6.05	0.24	0.498	11.75	30.8
MW-511	12/12/2019 08:35	3.54	103.1	5.67	0.21	0.442	11.87	302.8
MW-511	12/12/2019 09:55	0.51	41.9	6.59	NM	1.252	9.41	21.3
MW-511	06/17/2020 11:40	2.74	120.1	6.67	0.875	0.886	21.8	19.7
MW-511	06/17/2020 11:45	1.35	171.4	5.65	0.41	0.838	19.92	15.3
MW-511	06/17/2020 11:50	1.08	191	5.46	0.4	0.83	19.48	10
MW-511	06/17/2020 11:55	0.89	214.5	5.32	0.39	0.802	19.6	5.3
MW-511	06/17/2020 12:00	0.82	230.5	5.29	0.39	0.79	19.6	3
MW-511	06/17/2020 12:05	0.63	239.2	5.3	0.38	0.782	19.41	2.5
MW-511	06/17/2020 12:10	0.58	242.5	5.36	0.39	0.786	19.41	1.2
MW-511	06/17/2020 12:15	0.51	245.5	5.43	0.39	0.8	19.31	1.2
MW-511	06/17/2020 12:20	0.55	247.2	5.49	0.4	0.819	19.31	0.9
MW-511	06/17/2020 12:25	NM	247.7	5.52	NM	0.825	19.31	NM
MW-511	06/17/2020 12:26	0.57	247.7	5.52	0.41	0.825	19.31	0
MW-511	06/17/2020 12:40	1.63	220.1	5.77	0.43	0.875	21.98	5.8
MW-511	06/17/2020 12:50	1.25	234.4	5.8	0.43	0.883	23.6	5.8
MW-511	03/28/2022 12:05	45.8	80.2	6.24	0.23	0.466	8.29	88.2
MW-511	03/28/2022 12:10	4.92	82.4	6.26	0.23	0.465	8.36	79.7
MW-511	03/28/2022 12:15	4.44	98.1	6.15	0.23	0.475	8.59	59
MW-511	03/28/2022 12:20	4.18	107.8	6.13	0.23	0.484	8.54	24.7
MW-511	03/28/2022 12:25	4.21	110.7	6.12	0.23	0.332	8.6	19.7
MW-511	03/28/2022 12:30	3.97	116.1	6.08	0.24	0.488	8.35	9
MW-511	03/28/2022 12:35	3.85	120.8	6.06	0.24	0.494	8.02	8.3
MW-511	03/28/2022 12:40	3.4	126.5	6.03	0.24	0.49	8.28	9.4
MW-511	03/28/2022 12:45	3.24	127.8	6.02	0.24	0.491	8.28	8.3
MW-511	03/28/2022 12:50	3.14	128.6	6	0.24	0.493	8.28	7.4
MW-512	03/13/2017 12:25	2.71	195.80	6.92	1.31	2.521	11.21	48.70
MW-512	03/13/2017 13:35	3.92	60.10	7.19	1.12	2.180	11.7	1267.90
MW-512	03/13/2017 14:15	6.51	59.30	6.78	1.13	2.190	11.66	702.10
MW-512	05/05/2017 10:40	4.32	212.20	7.72	1.27	2.519	18.12	14.80
MW-512	05/05/2017 11:00	3.66	293.10	7.69	1.26	2.661	18.14	26.90
MW-512	05/05/2017 11:55	1.10	216.80	7.69	1.26	2.416	17.94	9.70
MW-512	09/20/2018 15:35	1.67	54.90	8.68	0.08	0.163	26.5	36.10
MW-512	09/20/2018 15:55	1.88	60.10	8.49	0.09	0.149	23.99	22.60
MW-512	09/20/2018 16:05	2.57	40.30	8.55	0.09	0.191	24.03	36.90
MW-512	12/05/2018 12:05	7.75	22.70	8.68	0.14	0.301	10.51	88.60
MW-512	12/05/2018 12:55	11.20	31.30	8.20	0.18	0.363	9.92	72.20
MW-512	12/05/2018 13:05	7.87	22.30	8.05	0.15	0.302	13.11	1299.30
MW-512	03/07/2019 14:10	1.53	-24.90	8.87	0.88	1.739	7.4	25.10
MW-512	03/07/2019 14:35	5.70	-63.50	8.14	0.89	1.755	9.01	569.80
MW-512	03/07/2019 14:45	4.87	-74.80	8.27	0.90	1.747	8.58	616.90
MW-512	06/05/2019 10:05	1.39	84.2	8.25	NM	0.215	21.15	70.5
MW-512	06/05/2019 10:10	1.14	80.4	8.11	NM	0.213	21.56	53.1
MW-512	06/05/2019 10:15	1.04	72.3	7.96	NM	0.212	22.12	21
MW-512	06/05/2019 10:20	0.94	68.1	7.82	NM	0.22	22.81	14.4
MW-512	06/05/2019 10:25	1.08	67.9	7.73	NM	0.241	23.26	11.6
MW-512	06/05/2019 10:30	1	71.6	7.6	NM	0.318	23.91	26.7
MW-512	06/05/2019 10:35	0.85	70.8	7.6	NM	0.371	23.87	15
MW-512	06/05/2019 10:40	0.8	71.5	7.59	NM	0.42	24.03	11.5
MW-512	06/05/2019 10:45	0.88	71.8	7.57	NM	0.509	24.19	7.1
MW-512	06/05/2019 10:50	0.98	71.7	7.56	NM	0.573	24.16	6.4
MW-512	06/05/2019 12:55	0.98	71.7	7.56	NM	0.573	24.16	6.4
MW-512	06/05/2019 13:40	3.2	73.4	8.01	0.21	0.436	21.96	683.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-512	06/05/2019 13:50	4.25	71	7.77	0.3	0.619	21.17	1281.6
MW-512	09/10/2019 13:10	2.18	90.9	6.99	NM	0.132	27.57	57.3
MW-512	09/10/2019 13:15	2.63	56	7.06	NM	0.131	28.44	40.7
MW-512	09/10/2019 13:20	2.48	53.7	7.06	NM	0.137	28.32	29.7
MW-512	09/10/2019 13:25	2.27	11	7.05	NM	0.159	28.19	21.2
MW-512	09/10/2019 13:30	2.97	-56.2	7.07	NM	0.208	28.2	16.2
MW-512	09/10/2019 13:35	3.34	-85.8	7.13	NM	0.263	28.31	13.2
MW-512	09/10/2019 13:40	3.44	-96.4	7.16	NM	0.288	28.49	12.5
MW-512	09/10/2019 13:45	3.03	-107.1	7.2	NM	0.314	28.46	17.3
MW-512	09/10/2019 13:50	2.89	-112.3	7.24	NM	0.337	28.56	13
MW-512	09/10/2019 13:55	2.57	-107.4	7.23	NM	0.349	28.52	12.2
MW-512	09/10/2019 14:25	2.19	-86.4	7.18	0.15	0.322	28.16	63.5
MW-512	09/10/2019 14:41	1.97	-58.6	7.12	0.21	0.441	28.33	103.6
MW-512	12/11/2019 13:40	2.56	96	7.77	NM	0.168	10.85	428.6
MW-512	12/11/2019 13:55	25.79	93.9	8.36	NM	0.084	10.71	199.4
MW-512	12/11/2019 14:00	24.83	93.2	8.24	NM	0.082	10.73	528.6
MW-512	12/11/2019 14:05	16.97	91.3	8.16	NM	0.083	10.71	420.3
MW-512	12/11/2019 14:10	12.82	91.8	8.07	NM	0.09	10.71	306.3
MW-512	12/11/2019 14:15	9.15	92.4	7.99	NM	0.099	10.54	224.3
MW-512	12/11/2019 14:20	6.96	94.1	7.92	NM	0.113	10.48	222.6
MW-512	12/11/2019 14:25	5.1	94.1	7.89	NM	0.128	10.73	221.7
MW-512	12/11/2019 14:30	3.59	95.1	7.85	NM	0.141	10.75	226.8
MW-512	12/11/2019 14:35	3.04	95.1	7.81	NM	0.156	10.8	231.4
MW-512	12/11/2019 14:40	2.56	96	7.77	NM	0.168	10.85	228.6
MW-512	12/11/2019 15:05	6.25	59.8	7.51	0.13	0.265	11.77	425.7
MW-512	12/11/2019 15:20	15.98	49.2	7.43	0.14	0.287	10.74	743.7
MW-512	06/16/2020 12:55	4.19	-110	7.84	0.09	0.198	26.22	31.8
MW-512	06/16/2020 13:00	1.77	-113.9	7.35	0.08	0.177	24.59	46.8
MW-512	06/16/2020 13:05	1.79	-116.6	7.27	0.09	0.183	24.42	31.4
MW-512	06/16/2020 13:10	2.55	-110.3	7.21	0.09	0.199	24.98	13.6
MW-512	06/16/2020 13:15	3.39	-106.6	7.18	0.1	0.212	25.33	4.1
MW-512	06/16/2020 13:20	3.95	-105.6	7.16	0.11	0.226	25.53	1.6
MW-512	06/16/2020 13:25	3.35	-106.6	7.15	0.12	0.256	25.73	0
MW-512	06/16/2020 13:30	3.05	-107.3	7.15	0.12	0.263	25.95	0
MW-512	06/16/2020 13:35	2.88	-106.3	7.14	0.13	0.266	25.99	0
MW-512	06/16/2020 13:40	2.56	-105.5	7.14	0.13	0.268	25.99	0
MW-512	06/16/2020 13:41	2.56	-105.5	7.14	0.13	0.268	25.99	0
MW-512	06/16/2020 14:05	7.85	-58.3	7.3	0.12	0.26	24.59	370.9
MW-512	06/16/2020 14:15	3.72	-60.3	7.16	0.12	0.258	25.11	353.2
MW-512	02/19/2021 10:55	5.01	23.8	7.01	22.47	35.87	7.4	13.2
MW-512	02/19/2021 11:10	3.81	17.6	7.06	19.88	32.13	7.46	388.7
MW-523	03/20/2018 10:40	1.22	151.40	7.27	0.31	0.638	6.58	0.0000
MW-523	05/30/2018 09:20	6.12	130.70	6.55	0.21	0.421	18.19	7.80
MW-524	03/20/2018 13:35	0.94	-13.70	7.20	0.80	1.586	8.7	18.20
MW-524	05/31/2018 10:30	0.14	-137.60	6.87	0.78	1.531	14.37	2.90
MW-524	10/17/2019 09:55	2.1	-57.2	6.86	NM	1.003	18.58	36.3
MW-524	10/17/2019 10:00	1.94	-62.5	6.89	NM	1.005	18.4	32.9
MW-524	10/17/2019 10:05	1.85	-62.5	6.89	NM	1.006	18.18	30
MW-524	10/17/2019 10:10	1.76	-61.3	6.89	NM	1.009	18.02	24.6
MW-524	10/17/2019 10:15	1.77	-59.3	6.9	NM	1.001	17.62	23.6
MW-524	10/17/2019 10:20	1.63	-66.5	6.82	NM	1.008	18.38	20.3
MW-524	10/17/2019 10:25	1.49	-66	6.74	NM	1.002	18.65	15.1
MW-524	10/17/2019 10:30	1.05	-77.8	6.83	NM	1.015	19.82	13.7
MW-524	10/17/2019 10:35	0.55	-82.5	6.82	NM	1.04	20.05	7.4
MW-524	10/17/2019 10:40	0.32	-87	6.84	NM	1.043	20.02	5.2
MW-524	10/17/2019 13:40	3.14	-134.5	7.18	0.52	1.05	19.53	5.9
MW-524	10/17/2019 13:55	2.59	-93.8	6.95	0.53	1.057	19.93	238
MW-524	03/17/2020 13:30	25	-113.9	6.87	NM	0.983	10.92	0.6
MW-524	06/09/2020 09:00	1.92	-121	7.03	0.48	0.973	16.71	78.8

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-524	06/09/2020 09:05	0.45	-125.3	6.98	0.46	0.932	14.89	34.7
MW-524	06/09/2020 09:10	0.42	-122.6	6.99	0.46	0.93	14.91	18.1
MW-524	06/09/2020 09:15	0.47	-125.8	7.03	0.46	0.93	14.87	13.4
MW-524	06/09/2020 09:20	0.72	-126.8	7.02	0.46	0.94	14.41	6.1
MW-524	06/09/2020 09:25	0.9	-117	7.01	0.46	0.93	14.25	3
MW-524	06/09/2020 09:30	0.75	-110.9	7.02	0.46	0.931	14.25	0.8
MW-524	06/09/2020 09:35	0.71	-113.8	7.01	0.46	0.93	14.27	0.3
MW-524	06/09/2020 09:40	0.68	-107.7	7.02	0.46	0.93	14.26	0
MW-524	06/09/2020 09:45	0.66	-110	7.02	0.46	0.931	14.26	0
MW-524	09/11/2020 11:45	4.66	-110	7.09	0.5	1.014	20.47	258.7
MW-524	09/11/2020 11:50	3.94	-117	6.98	0.5	1.01	20.44	174.4
MW-524	09/11/2020 11:55	3.9	-119.2	6.94	0.5	1.01	20.43	147.3
MW-524	09/11/2020 12:00	3.78	-123.5	6.87	0.5	1.008	20.7	119.8
MW-524	09/11/2020 12:05	4.26	-130.5	6.86	0.5	1.004	20.51	8.2
MW-524	09/11/2020 12:10	4.26	-132.5	6.87	0.5	1.002	20.36	4.4
MW-524	09/11/2020 12:15	4.27	-132.8	6.86	0.5	1.002	20.38	4.1
MW-524	09/11/2020 12:20	4.21	-134.7	6.89	0.5	1.002	20.34	4.1
MW-525	01/29/2018 13:40	6.82	-69.40	6.91	0.44	0.891	14.44	4.00
MW-525	01/29/2018 14:45	2.39	-76.40	7.20	0.44	0.898	10.1	7.70
MW-525	01/29/2018 15:13	1.40	-78.20	7.24	0.45	0.890	10.07	26.10
MW-525	03/01/2019 13:20	0.65	66.20	6.97	0.10	0.206	11.33	143.50
MW-525	03/01/2019 14:20	0.32	40.80	6.74	0.28	0.551	15.21	315.20
MW-525	03/01/2019 14:30	0.16	56.60	6.71	0.29	0.598	14	125.40
MW-525	05/17/2019 13:45	11.86	169.8	7.09	NM	1.524	16.73	3.8
MW-525	05/20/2019 14:00	2.72	311.2	6.89	0.98	1.925	19.71	1.6
MW-525	08/14/2019 10:05	12.14	70.1	6.74	NM	1.31	21.68	22.1
MW-525	08/14/2019 10:10	12.53	88.1	6.6	NM	1.378	21.74	7.2
MW-525	08/14/2019 10:15	12.82	96.9	6.59	NM	1.409	21.89	5
MW-525	08/14/2019 10:20	13.66	105.6	6.57	NM	1.421	21.38	3.3
MW-525	08/14/2019 10:25	13.55	109.9	6.57	NM	1.423	21.45	3.2
MW-525	08/14/2019 10:30	13.15	111.9	6.57	NM	1.413	21.33	2.7
MW-525	08/14/2019 10:35	12.8	112.6	6.57	NM	1.407	21.71	1.7
MW-525	08/14/2019 10:40	12.49	112.9	6.57	NM	1.406	22.21	0
MW-525	08/14/2019 10:45	11.95	113	6.56	NM	1.402	22.4	4.2
MW-525	08/14/2019 10:50	11.45	11.8	6.55	NM	1.397	22.05	0
MW-525	08/14/2019 14:50	4.79	4.2	7.25	0.59	1.196	20.71	8.7
MW-525	08/14/2019 14:58	5.69	12	7.41	0.19	0.4	22.48	72
MW-525	10/29/2019 12:25	9.46	73.5	6.63	NM	1.154	18.22	140.8
MW-525	10/29/2019 12:30	9.46	76	6.61	NM	1.253	18.11	94.9
MW-525	10/29/2019 12:35	10.21	80	6.61	NM	1.272	18.21	64.5
MW-525	10/29/2019 12:40	11.16	85	6.61	NM	1.282	18.15	47.4
MW-525	10/29/2019 12:45	11.19	85.8	6.61	NM	1.286	18.16	42.5
MW-525	10/29/2019 12:50	11.93	88.2	6.6	NM	1.308	18.24	28
MW-525	10/29/2019 12:55	12.59	73	6.59	NM	1.341	18.18	20
MW-525	10/29/2019 13:00	12.16	48.6	6.59	NM	1.395	18.11	13.3
MW-525	10/29/2019 13:05	11.07	27.1	6.59	NM	1.428	18.17	13
MW-525	10/29/2019 13:10	7.23	20.8	6.58	NM	1.468	18.12	10.7
MW-525	10/29/2019 14:25	2.27	5.6	6.61	0.86	1.699	18	3.1
MW-525	10/29/2019 14:40	7.42	-5.9	8.51	0.18	0.372	18.61	65
MW-525	02/04/2020 13:20	2.48	-12.2	6.5	NM	1.693	16.04	9.2
MW-525	02/04/2020 14:10	5.13	-12.5	6.58	0.88	1.73	16.02	4.1
MW-525	08/11/2020 09:55	0.95	-5.4	6.86	0.35	0.715	24.95	30.3
MW-525	08/11/2020 11:20	0.66	-35.3	6.73	0.6	1.2	21.05	36.4
MW-525	08/11/2020 11:30	0.59	-29.5	6.49	0.6	1.204	21.99	31.3
MW-525	11/19/2020 14:40	2.23	-11.3	6.8	0.73	1.451	15.8	7.8
MW-525	11/19/2020 14:55	8.55	-13.2	7.87	0.13	0.263	15.65	120.9
MW-525	01/27/2021 09:45	1.58	-15.6	6.9	0.67	1.338	14.91	5.6
MW-525	01/27/2021 10:10	3.72	59.8	7.4	0.18	0.376	12.65	81
MW-525	04/26/2021 12:55	5.6	62.2	7.08	0.32	0.651	15.78	48.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-525	04/26/2021 13:00	4.45	74.7	6.83	0.27	0.544	15.6	104.8
MW-525	04/26/2021 13:05	4.2	82.6	6.74	0.26	0.536	15.48	108
MW-525	04/26/2021 13:10	4.02	94.8	6.59	0.27	0.549	15.51	123.7
MW-525	04/26/2021 13:15	3.63	103.9	6.49	0.3	0.615	15.48	114.7
MW-525	04/26/2021 13:20	2.73	100.9	6.52	0.39	0.795	15.6	80.6
MW-525	04/26/2021 13:25	1.8	47.3	6.59	0.53	1.064	15.84	49
MW-525	04/26/2021 13:30	1.4	14.7	6.62	0.61	1.21	15.58	37.4
MW-525	04/26/2021 13:35	1.2	-8.2	6.64	0.66	1.307	15.9	21.9
MW-525	04/26/2021 13:40	1.17	-16.7	6.66	0.68	1.357	15.9	15.8
MW-526	01/29/2018 14:00	2.17	104.20	7.69	1.95	3.621	12.97	0.50
MW-526	01/29/2018 14:40	2.88	100.70	7.55	1.45	2.773	12.11	3.30
MW-526	01/29/2018 15:05	8.64	98.30	7.84	1.11	2.152	12.24	9.90
MW-526	03/05/2019 10:50	0.57	180.20	7.56	1.91	3.604	10.08	5.70
MW-526	03/05/2019 11:45	1.08	131.80	7.15	1.21	2.345	14.26	6.20
MW-526	03/05/2019 11:55	4.43	121.70	7.31	1.14	2.219	11.64	5.20
MW-526	05/16/2019 13:25	0.42	-6	7.44	NM	3.569	15.73	NM
MW-526	05/16/2019 14:10	0.49	-10.9	7.23	1.88	3.878	15.78	0
MW-526	08/15/2019 09:30	0.91	-55.8	7.4	NM	3.996	20.68	NM
MW-526	08/15/2019 10:05	2.54	38.5	7.51	NM	3.367	18.14	11.6
MW-526	08/15/2019 10:10	1.21	-88.3	7.31	NM	3.293	18.17	11.7
MW-526	08/15/2019 10:15	1.23	-77	7.33	NM	3.681	20.02	4.5
MW-526	08/15/2019 10:20	1.1	-74.6	7.38	NM	3.93	20.53	5.1
MW-526	08/15/2019 10:25	0.95	-70.1	7.4	NM	3.99	20.95	5.9
MW-526	08/15/2019 10:30	0.83	-65.6	7.41	NM	4.005	21.23	7
MW-526	08/15/2019 10:35	0.86	-64	7.41	NM	4.014	21.13	0
MW-526	08/15/2019 10:37	3.06	11.6	7.55	1.29	2.497	21.76	0
MW-526	08/15/2019 10:40	0.85	-60.2	7.41	NM	4	20.93	0
MW-526	08/15/2019 10:45	0.91	-55.8	7.4	NM	3.996	20.68	0
MW-526	08/15/2019 10:50	3.06	11.6	7.55	1.29	2.497	21.76	NM
MW-526	08/15/2019 10:51	5.62	44.7	7.34	1.36	2.624	21.01	0
MW-526	10/28/2019 12:20	1.2	-99.1	7.18	NM	2.56	18.02	52
MW-526	10/28/2019 12:25	0.9	-102.1	7.18	NM	2.627	18.06	23.9
MW-526	10/28/2019 12:30	0.72	-117.2	7.22	NM	3.028	18.01	6
MW-526	10/28/2019 12:35	0.5	-121.7	7.27	NM	3.385	17.73	0.3
MW-526	10/28/2019 12:40	0.37	-118.9	7.31	NM	3.809	17.54	0
MW-526	10/28/2019 12:45	0.33	-110.1	7.33	NM	3.911	17.48	0
MW-526	10/28/2019 12:50	0.35	-102.3	7.34	NM	3.933	17.44	0
MW-526	10/28/2019 12:55	0.3	-98.7	7.35	NM	3.955	17.37	0
MW-526	10/28/2019 13:00	0.29	-95.3	7.36	NM	3.964	17.34	0
MW-526	10/28/2019 13:05	0.28	-95.5	7.36	NM	3.973	17.3	0
MW-526	10/28/2019 14:10	2.4	-11.8	7.15	1.32	2.54	16.87	3.1
MW-526	10/28/2019 14:25	4.67	-42.2	7.46	1.21	2.333	17.96	2.8
MW-526	02/04/2020 13:05	1.2	241.7	8.06	NM	2.282	12.61	2.3
MW-526	02/04/2020 14:00	1.17	178.9	7.88	1.35	2.593	14.14	2
MW-526	04/30/2021 11:45	1.67	189.7	6.85	1.61	3.066	14.46	285
MW-526	04/30/2021 11:50	0.8	107.4	6.97	1.61	3.068	14.83	5.9
MW-526	04/30/2021 11:55	0.56	83.6	7.02	1.67	3.135	14.77	4.4
MW-526	04/30/2021 12:00	0.36	50.9	7.12	1.81	3.434	15.06	-3
MW-526	04/30/2021 12:05	0.35	23.4	7.15	2.11	3.945	15.15	-5.1
MW-526	04/30/2021 12:10	0.32	22.3	7.18	2.11	3.965	15.15	-5
MW-526	04/30/2021 12:15	0.32	13.5	7.17	2	3.787	15.08	-5
MW-526	04/30/2021 12:20	0.33	4.4	7.15	1.78	3.382	15.23	-4.9
MW-526	04/30/2021 12:25	0.31	2.9	7.12	1.75	3.332	15.22	-3.4
MW-526	03/21/2022 09:30	2.01	61.5	7.19	1.6	3.05	14.62	49.8
MW-526	03/21/2022 09:35	1.22	48.7	6.99	1.65	3.126	14.57	49.1
MW-526	03/21/2022 09:40	0.94	-52.3	7.02	1.78	3.364	14.33	36.4
MW-526	03/21/2022 09:45	0.83	-57	7.01	1.84	3.484	14.44	32.2
MW-526	03/21/2022 09:50	0.81	-57.4	7	1.86	3.518	14.47	36.4
MW-526	03/21/2022 09:55	0.73	-51.2	7.03	1.93	3.637	14.5	33.1

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-526	03/21/2022 10:00	0.76	-50.2	7.03	1.93	3.647	14.55	36.7
MW-526	03/21/2022 10:05	0.72	-48.6	7.05	1.96	3.689	14.63	23.1
MW-526	03/21/2022 10:10	0.7	-46.9	7.06	1.99	3.739	14.66	34.3
MW-526	03/21/2022 10:15	0.7	-45.5	7.05	2.01	3.776	14.69	22.9
MW-534	02/15/2019 12:55	12.32	92.20	7.85	0.22	0.457	10.86	27.10
MW-534	02/15/2019 14:20	10.68	105.30	7.98	0.21	0.442	12.47	18.80
MW-534	02/15/2019 14:35	10.51	104.20	7.94	0.21	0.431	12.48	62.20
MW-534	08/19/2019 09:25	9.73	102.5	7.79	NM	0.445	19.22	676.5
MW-534	08/19/2019 10:50	7.77	106.2	7.54	0.17	0.352	19.4	127.3
MW-534	08/19/2019 11:10	6.82	56.3	7.39	0.21	0.43	20.83	154.9
MW-534	02/12/2020 11:47	15.1	159.2	7.15	0.3	0.617	11.14	201
MW-534	08/18/2020 08:55	3.72	37	7.66	0.31	0.645	19.49	18.4
MW-534	08/18/2020 10:35	4.44	99.4	7.83	0.28	0.572	18.76	2.8
MW-534	08/18/2020 10:45	1.78	97.3	7.02	0.29	0.59	21.7	1.7
MW-534	02/08/2021 13:20	12.12	-30.9	7.69	0.17	0.349	8.66	72.5
MW-534	02/08/2021 14:55	11.21	47	7.77	0.15	0.306	10.94	660.8
MW-534	02/08/2021 15:15	11.3	65.4	7.62	0.14	0.297	11.13	398.8
MW-534	08/18/2021 12:30	9.55	112.1	6.97	0.11	0.229	20.2	26.37
MW-534	08/18/2021 12:35	9.33	113.8	6.94	0.11	0.229	20	55.5
MW-534	08/18/2021 12:40	9.33	115.6	6.93	0.11	0.229	19.9	86.14
MW-534	08/18/2021 12:45	9.39	116.4	6.94	0.11	0.229	20	86.5
MW-534	08/18/2021 12:50	9.33	117.4	6.95	0.11	0.228	19.9	83.5
MW-534	02/23/2022 11:10	10.92	121.6	7.04	0.17	0.005	13.32	41.8
MW-534	02/23/2022 11:15	12.26	126.8	6.87	0.16	0.339	11.53	59.4
MW-534	02/23/2022 11:20	12.47	129.6	6.82	0.16	0.337	11.53	57.5
MW-534	02/23/2022 11:25	13.72	135.8	6.8	0.16	0.336	11.52	40.3
MW-534	02/23/2022 11:30	13.5	137	6.8	0.16	0.337	11.55	40
MW-534	02/23/2022 11:35	13.55	137.2	6.79	0.16	0.336	11.53	39.2
MW-534	02/23/2022 11:40	13.04	140.1	6.78	0.16	0.334	11.48	39.2
MW-537	02/15/2019 13:15	11.26	95.00	7.79	0.28	0.571	9.55	25.60
MW-537	02/15/2019 14:30	9.77	96.60	7.61	0.27	0.555	9.28	37.00
MW-537	02/15/2019 14:45	13.46	48.60	7.79	0.27	0.562	8.74	202.60
MW-537	08/19/2019 12:45	2.16	-47.3	6.62	NM	0.571	20.18	53.4
MW-537	08/19/2019 14:40	3.44	-45.7	7.01	0.2	0.409	21.69	42.2
MW-537	08/19/2019 14:45	3.44	-45.7	7.01	0.2	0.409	21.69	42.2
MW-537	08/19/2019 15:05	3.69	-37.3	6.29	0.26	0.545	23.02	84.2
MW-537	02/12/2021 11:30	6.13	-6.4	6.9	0.1	0.219	10.11	33.8
MW-537	02/12/2021 11:45	8.52	-20.4	6.88	0.08	0.169	8.8	743.9
MW-537	08/18/2021 14:20	9	137.4	5.59	0.13	0.267	21.58	35.5
MW-537	08/18/2021 14:25	4.7	120.3	5.69	0.13	0.276	18.91	102.6
MW-537	08/18/2021 14:30	1.1	110	5.88	0.13	0.275	19.13	89.1
MW-537	08/18/2021 14:35	0.5	102.5	5.94	0.13	0.275	19.23	76.9
MW-537	08/18/2021 14:40	0.54	79.7	5.99	0.13	0.28	19.35	62.5
MW-537	08/18/2021 14:45	0.64	41.7	6.02	0.15	0.309	19.12	69.2
MW-537	08/18/2021 14:50	0.73	31.1	6.02	0.16	0.324	19.17	68
MW-537	08/18/2021 14:55	0.66	30.5	6.02	0.16	0.332	18.99	71.3
MW-537	08/18/2021 15:00	0.67	28.6	6.06	0.16	0.343	18.93	104.3
MW-537	08/18/2021 15:05	0.67	42.7	5.95	0.16	0.328	18.39	96.1
MW-537	02/23/2022 09:50	7.25	77.9	6.28	0.41	0.838	9.64	148.7
MW-537	02/23/2022 09:55	8	118.1	6.09	0.25	0.512	9.44	81.5
MW-537	02/23/2022 10:00	7.92	129.6	6.09	0.21	0.441	9.31	67.2
MW-537	02/23/2022 10:05	7.79	142.6	6.08	0.19	0.396	9.05	38.7
MW-537	02/23/2022 10:10	7.63	148	6.09	0.19	0.391	9.06	33.6
MW-537	02/23/2022 10:15	7.33	154.4	6.1	0.19	0.39	8.91	25.8
MW-537	02/23/2022 10:20	7.29	155.6	6.08	0.19	0.392	8.93	27
MW-537	02/23/2022 10:25	7.13	155.9	6.12	0.19	0.391	8.95	27.1
MW-537	02/23/2022 10:30	6.98	141	6.15	0.19	0.392	9.06	26.8
MW-537	02/23/2022 10:35	6.97	140.3	6.14	0.19	0.392	9.04	27.2
MW-545	04/13/2018 08:25	3.47	-76.80	6.39	0.43	0.899	13.61	48.90

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-545	04/13/2018 08:35	4.11	-80.10	6.59	0.43	0.914	13.44	112.60
MW-545	04/13/2018 13:15	0.17	-73.60	6.56	0.42	0.852	12.53	19.60
MW-547	02/12/2020 14:10	13.11	39	7.81	0.14	0.238	9.11	667.3
MW-548	10/16/2018 09:20	3.58	109.50	6.47	0.49	0.994	16.94	6.90
MW-548	10/16/2018 10:00	6.04	92.50	6.30	0.28	0.569	14.47	9.40
MW-548	10/16/2018 10:30	5.60	88.00	6.34	0.33	2.979	13.98	28.60
MW-548	12/06/2018 13:40	6.95	110.30	7.14	0.20	0.417	10.79	29.40
MW-548	12/06/2018 14:10	7.16	124.20	7.18	0.17	0.356	10.87	15.20
MW-548	12/06/2018 14:20	6.38	115.00	7.49	0.18	0.364	8.72	31.20
MW-548	09/29/2020 10:55	NM	NM	NM	NM	NM	NM	374.5
MW-548	09/30/2020 10:35	9.89	119	7.02	0.14	0.296	18.93	439.8
MW-548	09/30/2020 10:55	6.54	118.4	6.84	0.16	0.328	19.19	NM
MW-548	03/05/2021 12:30	9.95	62.5	6.9	0.05	0.109	6.79	416.3
MW-548	03/05/2021 12:40	11.21	97.6	6.92	0.05	0.117	6.51	1012.2
MW-548	08/26/2021 12:30	2.13	260.6	4.9	0.1	0.207	27.28	105.9
MW-548	08/26/2021 12:35	2.56	253.3	4.88	0.1	0.212	27.31	97.6
MW-548	08/26/2021 12:40	1.52	260.8	4.89	0.1	0.212	27.44	105.6
MW-548	03/03/2022 12:35	12.66	134.6	7.49	0.07	0.148	9.05	8.8
MW-548	03/03/2022 12:40	12.75	138.7	7.24	0.06	0.137	6.11	128.6
MW-548	03/03/2022 12:45	12.91	139.4	7.25	0.06	0.134	5.98	138.4
MW-548	03/03/2022 12:50	12.98	139.1	7.28	0.06	0.132	5.4	142.7
MW-548	03/03/2022 12:55	13.01	140.1	7.28	0.06	0.133	5.4	139.5
MW-548	03/03/2022 13:00	13.25	140.5	7.29	0.06	0.132	5.6	132.5
MW-548	03/03/2022 13:05	12.9	140.7	7.35	0.06	0.133	5.15	129
MW-548	03/03/2022 13:10	12.7	140.6	7.4	0.06	0.135	5	134.3
MW-548	03/03/2022 13:15	12.81	141.4	7.43	0.06	0.137	5	129.2
MW-548	03/03/2022 13:20	12.49	141.2	7.43	0.06	0.134	5.04	139.9
MW-549	10/17/2018 13:25	5.73	-14.10	6.75	0.18	0.376	19.02	30.60
MW-549	10/17/2018 14:00	6.58	-25.10	6.64	0.18	0.378	18.56	0.20
MW-549	10/17/2018 14:10	7.18	-61.60	6.79	0.19	0.399	18.53	1546.70
MW-549	12/06/2018 09:50	9.93	12.60	8.57	0.44	0.896	5.68	82.20
MW-549	12/06/2018 10:40	9.92	-0.20	8.44	0.07	0.140	5.37	66.80
MW-549	12/06/2018 10:50	7.33	141.40	3.96	0.07	0.158	7.09	809.20
MW-549	03/16/2020 13:05	8.07	148.5	7.05	0.07	0.153	9.05	104.9
MW-549	09/29/2020 13:45	2.66	119.9	6.7	0.14	0.292	20.45	41.5
MW-549	09/29/2020 14:00	3	109.1	6.49	0.14	0.289	19.91	NM
MW-549	10/19/2020 14:00	NM	NM	NM	NM	NM	NM	1436.4
MW-549	03/04/2021 13:05	10	-1.2	6.99	0.06	0.126	6.66	67.5
MW-549	03/04/2021 13:15	9.16	-12.9	7.3	0.06	0.133	7.06	401.7
MW-549	03/03/2022 10:40	7.97	192.2	6.6	0.08	0.16	9.36	7.6
MW-549	03/03/2022 10:45	8.83	183.7	6.56	0.08	0.177	9.52	2.7
MW-549	03/03/2022 10:50	9.08	180.7	6.55	0.08	0.176	9.85	1.1
MW-549	03/03/2022 10:55	8.75	177.8	6.55	0.08	0.172	10.08	0
MW-549	03/03/2022 11:00	7.9	175	6.58	0.08	0.165	10.03	0
MW-549	03/03/2022 11:05	6.97	172.6	6.6	0.08	0.16	9.9	0
MW-549	03/03/2022 11:10	5.87	169.7	6.62	0.07	0.154	10.16	0
MW-549	03/03/2022 11:15	4.95	166.4	6.65	0.07	0.149	10.07	0
MW-549	03/03/2022 11:20	3.88	163.5	6.67	0.07	0.146	10.06	0
MW-549	03/03/2022 11:25	3.52	162.1	6.64	0.07	0.144	10.23	0
MW-559	06/19/2019 09:20	0.52	127.4	6.63	NM	0.422	18.01	6.6
MW-559	06/19/2019 10:05	2.87	224.5	7.09	NM	0.584	16.8	7.7
MW-559	06/19/2019 10:10	1.32	211.1	6.39	NM	0.463	17.07	8.5
MW-559	06/19/2019 10:15	1.11	197.2	6.47	NM	0.428	17.47	9.1
MW-559	06/19/2019 10:20	1.04	189.5	6.53	NM	0.412	17.76	8.1
MW-559	06/19/2019 10:25	0.82	180.4	6.59	NM	0.395	18.01	7.4
MW-559	06/19/2019 10:30	0.72	172.6	6.61	NM	0.387	18.11	6.7
MW-559	06/19/2019 10:35	0.35	-62.5	7.28	NM	1.154	20.23	19.6
MW-559	06/19/2019 10:40	0.59	154.1	6.61	NM	0.394	18.08	6.4
MW-559	06/19/2019 10:45	0.56	142.2	6.62	NM	0.408	18.05	6.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-559	06/19/2019 10:50	0.52	127.4	6.63	NM	0.422	18.01	6.6
MW-559	07/15/2019 09:05	3.74	115.7	7.16	0.24	0.516	24.87	0
MW-559	07/15/2019 09:10	0.6	155.5	6.5	0.21	0.431	24.31	0
MW-559	07/15/2019 09:15	0.78	154.3	6.49	0.2	0.415	25.16	0
MW-559	07/15/2019 09:20	0.64	151.1	6.49	0.2	0.417	25.52	0
MW-559	07/15/2019 09:25	0.63	136.6	6.5	0.21	0.43	25.72	0
MW-559	07/15/2019 09:30	0.61	126.1	6.5	0.21	0.433	25.5	0
MW-559	07/15/2019 09:35	0.6	99	6.51	0.21	0.477	25.25	0
MW-559	07/15/2019 09:40	0.58	60.9	6.53	0.23	0.47	25.1	0
MW-559	07/15/2019 09:45	0.57	31.3	6.55	0.24	0.492	24.89	0
MW-559	07/15/2019 09:50	0.54	27.2	6.56	0.24	0.493	24.7	0
MW-559	07/15/2019 10:05	3.74	115.7	7.16	NM	0.516	24.87	0
MW-559	07/15/2019 10:10	0.6	155.5	6.5	NM	0.431	24.31	0
MW-559	07/15/2019 10:15	0.78	154.3	6.49	NM	0.415	25.16	0
MW-559	07/15/2019 10:20	0.64	151.1	6.49	NM	0.417	25.52	0
MW-559	07/15/2019 10:25	0.63	136.6	6.5	NM	0.43	25.72	0
MW-559	07/15/2019 10:30	0.61	126.1	6.5	NM	0.433	25.5	0
MW-559	07/15/2019 10:35	0.6	99	6.51	NM	0.477	25.25	0
MW-559	07/15/2019 10:40	0.58	60.9	6.53	NM	0.47	25.1	0
MW-559	07/15/2019 10:45	0.57	31.3	6.55	NM	0.492	24.89	0
MW-559	07/15/2019 10:50	0.54	27.2	6.56	NM	0.493	24.7	0
MW-559	08/21/2019 12:00	3.28	64.7	9.22	NM	0.475	26.1	0
MW-559	08/21/2019 12:05	2.17	78.5	7.23	NM	0.41	26.2	2
MW-559	08/21/2019 12:10	1.64	79	6.82	NM	0.41	26.01	0.5
MW-559	08/21/2019 12:15	1.11	75.6	6.73	NM	0.412	25.74	2
MW-559	08/21/2019 12:20	0.97	66.7	6.72	NM	0.419	25.75	7.8
MW-559	08/21/2019 12:25	0.79	27.8	6.74	NM	0.43	25.66	0.3
MW-559	08/21/2019 12:30	0.66	-12.8	6.79	NM	0.448	25.88	2.7
MW-559	08/21/2019 12:35	0.64	-20.9	6.8	NM	0.452	26	0
MW-559	08/21/2019 12:40	0.58	-27.6	6.79	NM	0.473	25.99	3.7
MW-559	08/21/2019 12:45	0.57	-28.9	6.76	NM	0.477	26.02	3.6
MW-559	04/03/2020 09:55	5.46	83.2	6.58	NM	0.349	10.74	10.2
MW-559	05/27/2020 08:50	0.74	58.5	6.52	NM	0.546	14.67	NM
MW-559	12/01/2020 08:50	4.98	31	7.48	0.05	0.103	14.5	17.3
MW-559	12/01/2020 08:55	4.88	51.6	7.13	0.04	0.094	14.46	16.5
MW-559	12/01/2020 09:00	4.85	59.8	6.97	0.04	0.094	14.33	16.4
MW-559	12/01/2020 09:05	4.71	69.3	6.75	0.04	0.096	14.24	14.7
MW-559	12/01/2020 09:10	4.58	72.4	6.67	0.05	0.098	14.29	13.9
MW-559	12/01/2020 09:15	4.49	70.9	6.68	0.05	0.101	14.31	13.4
MW-559	12/01/2020 09:20	4.46	69.4	6.66	0.05	0.103	14.45	12.6
MW-559	12/01/2020 09:25	4.48	69	6.65	0.05	0.105	14.47	11.8
MW-559	12/01/2020 09:30	4.61	72.9	6.58	0.05	0.109	14.59	6.4
MW-559	12/01/2020 09:35	4.64	75.3	6.53	0.05	0.113	14.62	7.2
MW-560	06/19/2019 10:05	1.12	89.4	7.2	NM	1.167	18.7	12.7
MW-560	06/19/2019 10:10	0.68	2.4	7.23	NM	1.182	18.75	12.3
MW-560	06/19/2019 10:15	0.58	-21.8	7.26	NM	1.189	18.91	12.5
MW-560	06/19/2019 10:20	0.61	-33.5	7.31	NM	1.188	19.9	14.5
MW-560	06/19/2019 10:25	0.69	-45.5	7.34	NM	1.115	20.21	17.2
MW-560	06/19/2019 10:30	0.5	-53.8	7.33	NM	1.087	20.63	16.9
MW-560	06/19/2019 10:35	0.35	-62.5	7.28	NM	1.154	20.23	19.6
MW-560	06/19/2019 10:40	0.41	-60.9	7.31	NM	1.121	20.45	18.5
MW-560	06/19/2019 10:45	0.37	-62.4	7.28	NM	1.142	20.31	19.7
MW-560	06/19/2019 10:50	0.35	-62.5	7.28	NM	1.154	20.23	19.6
MW-560	07/15/2019 10:05	3.48	-103.4	7.78	NM	1.157	26.08	0
MW-560	07/15/2019 10:10	3.41	-119.6	7.08	NM	1.413	24.5	0
MW-560	07/15/2019 10:15	3.33	-122.9	7.09	NM	1.406	25.09	0
MW-560	07/15/2019 10:20	3.13	-126	7.1	NM	1.375	25.41	0
MW-560	07/15/2019 10:25	3.08	-123.9	7.11	NM	1.342	25.77	0
MW-560	07/15/2019 10:30	2.97	-119.8	7.11	NM	1.294	25.83	0

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-560	07/15/2019 10:35	2.87	-120.9	7.11	NM	1.292	25.79	0
MW-560	07/15/2019 10:40	2.76	-121.9	7.11	NM	1.311	25.6	0
MW-560	07/15/2019 10:50	2.76	-121.9	7.11	NM	1.311	25.6	NM
MW-560	08/21/2019 13:15	2.3	-140.2	7.16	0.93	1.844	26.53	0
MW-560	08/21/2019 13:20	0.92	-137.6	6.93	0.95	1.88	24.87	3.7
MW-560	08/21/2019 13:25	0.6	-139.1	6.94	0.87	1.727	24.67	2.2
MW-560	08/21/2019 13:30	0.5	-136.6	6.99	0.74	1.487	25.28	0
MW-560	08/21/2019 13:35	0.49	-137.7	7.03	0.72	1.445	25.74	0
MW-560	08/21/2019 13:40	0.48	-135.7	7.05	0.72	1.438	25.67	0
MW-560	08/21/2019 13:45	0.48	-126.8	7.04	0.73	1.452	25.75	0
MW-560	08/21/2019 13:50	0.48	-133.8	7.04	0.74	1.47	25.61	0
MW-560	08/21/2019 13:55	0.45	-126.2	6.99	0.78	1.562	25.39	0
MW-560	08/21/2019 14:00	0.46	-117.2	6.97	0.8	1.587	25.45	0
MW-560	04/03/2020 11:55	0.43	-132.9	7.22	NM	1.22	10.56	8.3
MW-560	05/26/2020 12:50	3.21	-117.8	7.25	NM	1.203	16.54	24.2
MW-560	12/03/2020 12:35	4.23	-132.3	7.16	0.49	0.99	13.15	7.5
MW-560	12/03/2020 12:40	3.86	-134.1	7.13	0.49	0.983	13.17	7
MW-560	12/03/2020 12:45	2	-144.9	7.03	0.47	0.945	13.72	6.6
MW-560	12/03/2020 12:50	2.02	-145.4	7.03	0.47	0.944	13.73	6.5
MW-560	12/03/2020 12:55	1.81	-151.8	7.03	0.46	0.92	13.67	6.7
MW-560	12/03/2020 13:00	1.7	-151.9	7.03	0.46	0.919	13.68	6.7
MW-560	12/03/2020 13:05	1.66	-150.1	7	0.45	0.907	13.93	6.5
MW-560	12/03/2020 13:10	1.71	-149.5	7	0.45	0.908	13.94	6.7
MW-560	12/03/2020 13:15	13.97	-139.1	6.96	0.46	0.929	13.95	6.7
MW-560	12/03/2020 13:20	1.64	-139.4	6.96	0.46	0.93	13.97	6.6
MW-561	06/19/2019 10:05	5.63	54.9	7.88	NM	0.304	20.29	10.9
MW-561	06/19/2019 10:10	5.17	71.2	7.7	NM	0.279	19.79	10.6
MW-561	06/19/2019 10:15	4.83	85	7.59	NM	0.276	19.73	11.2
MW-561	06/19/2019 10:20	4.44	92.1	7.62	NM	0.275	19.69	12.3
MW-561	06/19/2019 10:25	4.05	97.6	7.66	NM	0.273	19.68	12.6
MW-561	06/19/2019 10:30	3.66	101.5	7.66	NM	0.274	19.65	12.7
MW-561	06/19/2019 10:35	3.32	106.2	7.65	NM	0.276	19.6	12.6
MW-561	06/19/2019 10:40	3.16	111.1	7.63	NM	0.279	19.56	12.3
MW-561	06/19/2019 10:45	3.12	114.9	7.61	NM	0.278	19.52	12
MW-561	06/19/2019 11:35	3.12	114.9	7.61	NM	0.278	19.52	12
MW-561	07/16/2019 10:05	3.82	-32.4	6.39	NM	4.038	25.11	0
MW-561	07/16/2019 10:10	0.83	-45.1	6.04	NM	4.048	26.13	0
MW-561	07/16/2019 10:15	0.63	-43	6.04	NM	3.838	26.1	0
MW-561	07/16/2019 10:20	0.57	-44.1	6.04	NM	3.825	26.3	0
MW-561	07/16/2019 10:25	1.18	-45.8	6.27	NM	2.241	26.54	0
MW-561	07/16/2019 10:30	1.51	-56.2	6.39	NM	1.414	26.12	0
MW-561	07/16/2019 10:35	1.6	-64.3	6.49	NM	1.095	25.73	0
MW-561	07/16/2019 10:40	1.6	-64.3	6.49	NM	1.085	25.71	0
MW-561	07/16/2019 10:45	1.4	-67.8	6.52	NM	1.007	25.61	0
MW-561	07/16/2019 10:50	1.38	-69.3	6.52	NM	0.989	25.56	0
MW-561	07/16/2019 12:55	1.38	-69.3	6.52	NM	0.989	25.56	NM
MW-561	08/22/2019 13:05	2.84	-56.4	6.41	NM	4.639	27.05	0
MW-561	08/22/2019 13:10	1.05	-47	6.25	NM	4.636	26.67	0
MW-561	08/22/2019 13:15	0.83	-44.1	6.27	NM	4.46	26.4	0
MW-561	08/22/2019 13:20	0.77	-48.9	6.31	NM	3.565	26.55	0
MW-561	08/22/2019 13:25	0.7	-53.1	6.45	NM	2.048	26.82	0
MW-561	08/22/2019 13:30	0.69	-53.4	6.49	NM	1.875	26.82	0
MW-561	08/22/2019 13:35	0.63	-40.9	6.54	NM	1.404	26.66	0
MW-561	08/22/2019 13:40	0.58	-44.1	6.57	NM	1.289	26.82	0
MW-561	08/22/2019 13:45	0.55	-40.4	6.6	NM	1.253	26.72	0
MW-561	08/22/2019 13:50	0.53	-43.2	6.61	NM	1.243	26.69	0
MW-561	04/02/2020 11:00	4.43	-23	8.36	NM	0.249	11.14	11.7
MW-561	05/27/2020 13:00	0.15	-28	6.65	NM	0.757	16.78	NM
MW-561	12/04/2020 12:20	7.27	-225.3	7.92	1.12	1.491	15.18	42.3

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-561	12/04/2020 12:25	4.52	-205.2	7.36	1.52	2.893	15.23	42.6
MW-561	12/04/2020 12:30	1.61	-82.7	6.14	1.2	2.344	15.84	117.5
MW-561	12/04/2020 12:35	1.75	-81.1	6.15	1.11	2.157	15.77	124.9
MW-561	12/04/2020 12:40	3.6	-52.7	6.25	0.47	0.953	15.4	29.3
MW-561	12/04/2020 12:45	3.63	-51.9	6.25	0.45	0.923	15.39	28.3
MW-561	12/04/2020 12:50	3.76	-43	6.3	0.3	0.623	15.15	17.2
MW-561	12/04/2020 12:55	3.75	-42.3	6.3	0.3	0.613	15.15	16.8
MW-561	12/04/2020 13:00	3.75	-42.5	6.3	0.3	0.611	15.11	16.7
MW-561	12/04/2020 13:05	3.74	-42.3	6.3	0.3	0.607	15.15	16.5
MW-590	03/16/2020 10:35	0.14	-350.9	8.66	NM	0.965	11.59	2.4
MW-590	06/12/2020 09:30	0.86	-272	10.04	0.21	1.433	21.95	1.7
MW-590	06/12/2020 09:35	0.3	-314.1	10.21	0.22	0.463	21.11	0
MW-590	06/12/2020 09:40	0.22	-321.1	10.19	0.24	0.24	20.39	0
MW-590	06/12/2020 09:45	0.18	-330.4	10.15	0.25	0.508	20.35	0
MW-590	06/12/2020 09:50	0.16	-314.9	10.12	0.26	0.534	20.11	0
MW-590	06/12/2020 09:55	0.14	-315.7	10.12	0.26	0.538	20.05	0
MW-590	06/12/2020 10:00	0.2	-315.5	10.12	0.26	0.543	19.8	0
MW-590	06/12/2020 10:05	0.13	-313.3	10.13	0.26	0.542	19.63	0
MW-590	06/12/2020 10:10	0.13	-322.7	10.15	0.26	0.54	19.68	0
MW-590	06/12/2020 10:15	0.13	-318.5	10.15	0.26	0.54	19.42	0
MW-590	09/11/2020 11:50	6.03	-70.3	8.42	0.28	0.609	23.23	10.9
MW-590	09/11/2020 11:55	2.8	-151.8	9.78	0.21	0.442	22.69	6.2
MW-590	09/11/2020 12:00	2.58	-160.3	10.14	0.2	0.413	22.9	5.4
MW-590	09/11/2020 12:05	2.59	-162.4	10.25	0.2	0.409	22.92	4.4
MW-590	09/11/2020 12:10	2.74	-158.5	10.27	0.19	0.407	22.79	4.5
MW-590	09/11/2020 12:15	2.57	-156	10.26	0.19	0.403	22.54	5.3
MW-590	09/11/2020 12:20	2.58	-156.1	10.24	0.19	0.398	22.28	5.7
MW-590	09/11/2020 12:25	2.46	-151.5	10.21	0.19	0.391	22.1	6
MW-590	09/11/2020 12:30	2.64	-148.5	10.19	0.19	0.387	22.01	6.1
Mw-591	03/16/2020 11:30	0.13	-233	9.69	NM	0.528	10.75	2.2
MW-591	06/11/2020 10:25	6.83	-67.5	8.01	0.13	0.282	21.73	5.8
MW-591	06/11/2020 10:30	0.54	-264.4	10.07	0.23	0.471	19.8	2.3
MW-591	06/11/2020 10:35	0.37	-278	10.17	0.23	0.474	19.57	2
MW-591	06/11/2020 10:40	0.23	-281.5	10.21	0.23	0.474	19.46	1.8
MW-591	06/11/2020 10:45	0.2	-288.6	10.25	0.23	0.476	19.04	1.7
MW-591	06/11/2020 10:50	0.15	-277.5	10.26	0.23	0.472	18.95	0
MW-591	06/11/2020 10:55	0.12	-272.8	10.25	0.22	0.459	18.78	1.6
MW-591	06/11/2020 11:00	0.13	-273.5	10.23	0.22	0.452	18.68	1.6
MW-591	06/11/2020 11:05	0.1	-248.8	10.17	0.21	0.433	18.85	0
MW-591	06/11/2020 11:10	0.11	-245.6	10.17	0.21	0.433	18.77	0
Mw-592	03/17/2020 12:40	0.22	-250.6	9.58	NM	0.59	11.75	3.1
MW-592	06/10/2020 12:35	0.65	-285.2	10.06	0.49	0.991	18.92	0
MW-592	06/10/2020 12:40	0.37	-309.7	10.15	0.48	0.962	18.14	0.5
MW-592	06/10/2020 12:45	0.24	-318.9	10.2	0.46	0.933	18.29	0.4
MW-592	06/10/2020 12:50	0.18	-320.1	10.25	0.46	0.922	18.16	0
MW-592	06/10/2020 12:55	0.16	-336.1	10.29	0.46	0.93	18.3	0
MW-592	06/10/2020 13:00	0.16	-338.9	10.34	0.46	0.933	18.25	0
MW-592	06/10/2020 13:05	0.14	-338.7	10.37	0.46	0.937	18.28	0
MW-592	06/10/2020 13:10	0.14	-353.7	10.39	0.45	0.919	18.19	0
MW-592	06/10/2020 13:15	0.13	-341	10.39	0.45	0.918	18.18	0
MW-592	06/10/2020 13:20	0.12	-342	10.42	0.46	0.928	18.17	0
MW-592	09/09/2020 12:40	4.7	-244.2	9.8	0.55	1.115	24.54	3.4
MW-592	09/09/2020 12:45	2.62	-296.9	9.87	0.55	1.114	24.27	1
MW-592	09/09/2020 12:50	2.37	-256.1	9.74	0.55	1.113	24.41	1.2
MW-592	09/09/2020 12:55	2.48	-235.7	9.74	0.55	1.112	24.53	1.5
MW-592	09/09/2020 13:00	2.43	-245.2	9.78	0.55	1.111	24.5	2.2
MW-592	09/09/2020 13:05	2.76	-256.2	9.81	0.55	1.103	24.35	2.8
MW-592	09/09/2020 13:10	2.55	-244.5	9.81	0.54	1.099	24.35	2.9
MW-592	09/09/2020 13:15	2.83	-252.3	9.81	0.54	1.098	24.3	3.1

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Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-592	09/09/2020 13:20	2.83	-239.9	9.81	0.54	1.098	24.22	3.1
MW-592	09/09/2020 13:25	2.89	-242.2	9.82	0.54	1.098	24.17	3.1
Mw-593	03/20/2020 10:00	0.43	-309.4	10.13	NM	0.348	11.2	3.2
MW-593	06/09/2020 12:40	2.29	-248.5	9.66	0.37	0.759	22.96	0
MW-593	06/09/2020 12:45	0.3	-350.9	10.72	0.36	0.726	18.82	0
MW-593	06/09/2020 12:50	0.15	-376.4	10.77	0.35	0.724	18.09	0
MW-593	06/09/2020 12:55	0.09	-383.3	10.7	0.35	0.709	17.74	0
MW-593	06/09/2020 13:00	0.07	-385.6	10.61	0.34	0.7	17.59	0
MW-593	06/09/2020 13:05	0.06	-385.4	10.52	0.34	0.691	17.59	0
MW-593	06/09/2020 13:10	0.06	-385.5	10.41	0.33	0.68	17.2	0
MW-593	06/09/2020 13:15	0.05	-387.4	10.42	0.33	0.68	17.15	0
MW-593	06/09/2020 13:20	0.05	-383.6	10.38	0.34	0.676	17.12	0
MW-593	06/09/2020 13:25	0.06	-384.8	10.36	0.33	0.675	17.2	0
MW-595	03/16/2020 11:45	0.17	-83.6	6.88	NM	1.236	11.11	5.3
MW-595	06/12/2020 08:35	1.88	-121.1	6.98	0.79	1.571	20.26	17.2
MW-595	06/12/2020 08:40	0.55	-126.8	6.99	0.79	1.562	18.54	14.8
MW-595	06/12/2020 08:45	0.36	-124.1	6.98	0.76	1.515	18.34	12.6
MW-595	06/12/2020 08:50	0.34	-115.5	6.93	0.73	1.448	18.14	11.2
MW-595	06/12/2020 08:55	0.31	-106.1	6.89	0.71	1.407	18.08	5.9
MW-595	06/12/2020 09:00	0.3	-105.7	6.88	0.71	1.402	18.24	3.2
MW-595	06/12/2020 09:05	0.29	-108	6.88	0.7	1.395	18.09	2.2
MW-595	06/12/2020 09:10	0.29	-113.7	6.9	0.7	1.398	17.98	2.2
MW-595	06/12/2020 09:15	0.29	-114.3	6.9	0.71	1.405	18.05	2.2
MW-596	06/11/2020 09:20	2.54	-107.2	7.1	0.55	1.104	17.62	3.5
MW-596	06/11/2020 09:25	0.41	-108.7	7.06	0.6	1.199	16.72	2.1
MW-596	06/11/2020 09:30	0.3	-109.7	7.06	0.61	1.217	16.46	1.6
MW-596	06/11/2020 09:35	0.29	-110.7	7.06	0.61	1.218	16.34	1.8
MW-596	06/11/2020 09:40	0.31	-112.2	7.06	0.61	1.218	16.52	2.2
MW-596	06/11/2020 09:45	0.27	-113.8	7.06	0.61	1.22	16.56	1.5
MW-596	06/11/2020 09:50	0.26	-115	7.06	0.61	1.219	16.44	1.5
MW-596	06/11/2020 09:55	0.27	-116	7.06	0.61	1.214	16.65	1.2
MW-596	06/11/2020 10:00	0.26	-116.5	7.06	0.61	1.218	16.42	1.5
MW-596	06/11/2020 10:05	0.25	-113.4	7.06	0.61	1.215	16.53	1
MW-596	09/11/2020 10:25	2.4	-97.4	7.07	0.62	1.247	22.21	5.4
MW-596	09/11/2020 10:30	1.33	-106.9	6.88	0.72	1.421	21.17	2.9
MW-596	09/11/2020 10:35	1.24	-94.2	6.89	0.75	1.486	21.01	2.1
MW-596	09/11/2020 10:40	1.26	-93.3	6.91	0.75	1.49	20.95	1.9
MW-596	09/11/2020 10:45	1.32	-89.6	6.92	0.75	1.491	20.89	1.8
MW-596	09/11/2020 10:50	1.36	-92.6	6.92	0.75	1.489	20.7	1.8
MW-596	09/11/2020 10:55	1.36	-90.8	6.92	0.75	1.489	20.69	1.7
MW-597	03/17/2020 10:00	0.22	-123.6	6.92	NM	0.863	10.75	3.1
MW-597	06/09/2020 10:05	2.46	-79.3	6.89	0.37	0.765	18.87	8.7
MW-597	06/09/2020 10:10	0.88	-85.1	6.73	0.37	0.751	17.75	6.3
MW-597	06/09/2020 10:15	0.34	-87.5	6.72	0.37	0.749	17.01	1
MW-597	06/09/2020 10:20	0.24	-88	6.71	0.37	0.749	16.88	0
MW-597	06/09/2020 10:25	0.19	-88.8	6.71	0.37	0.749	16.55	0
MW-597	06/09/2020 10:30	0.13	-89	6.71	0.37	0.751	16.31	0
MW-597	06/09/2020 10:35	0.11	-89	6.71	0.37	0.752	16.08	0
MW-597	06/09/2020 10:40	0.08	-88.8	6.71	0.37	0.751	15.94	0
MW-597	06/09/2020 10:45	0.07	-88.1	6.71	0.37	0.749	16.06	0
MW-597	06/09/2020 10:50	0.06	-88	6.7	0.37	0.751	15.95	0
MW-599	05/29/2020 09:20	0.3	-275.1	9.69	NM	0.8	16.96	NM
MW-599	12/02/2020 08:45	3.03	-150.9	11.59	0.25	0.523	13.34	5.9
MW-599	12/02/2020 08:50	1.18	-250	11.91	0.23	0.483	13.64	5.8
MW-599	12/02/2020 08:55	0.88	-269.3	11.93	0.23	0.472	14.38	5.7
MW-599	12/02/2020 09:00	0.71	-262.6	11.94	0.23	0.475	14.79	5.6
MW-599	12/02/2020 09:05	0.58	-269	11.92	0.23	0.478	15.13	5.7
MW-599	12/02/2020 09:10	0.44	-284.3	11.91	0.23	0.471	15.48	5.6
MW-599	12/02/2020 09:15	0.31	-303.9	11.9	0.23	0.471	15.71	5.6

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-599	12/02/2020 09:20	0.32	-298.3	11.89	0.24	0.466	15.81	5.8
MW-599	12/02/2020 09:25	0.25	-290.4	11.87	0.22	0.464	16.05	5.7
MW-599	12/02/2020 09:30	0.26	-297	11.87	0.22	0.465	16.08	5.8
MW-6	05/01/2012 10:13	3.33	239	4.64	0.05	0.95911	15.44	3.9
MW-6	05/01/2012 10:15	2.76	291	4.25	0.05	0.97021	15.13	0.1
MW-6	05/01/2012 10:18	2.35	317	4.19	0.05	0.97128	15.11	0.3
MW-6	05/01/2012 10:20	2.15	330	4.18	0.05	0.96951	15.15	0.5
MW-6	05/01/2012 10:23	2.04	341	4.16	0.05	0.97037	15.14	0.3
MW-6	05/01/2012 10:26	1.98	348	4.16	0.05	0.97038	15.18	0.5
MW-6	05/01/2012 10:28	1.92	353	4.15	0.05	0.96842	15.25	0.7
MW-6	05/01/2012 10:31	1.91	355	4.14	0.05	0.96972	15.29	0.7
MW-6	05/01/2012 10:34	1.86	360	4.13	0.05	0.96854	15.26	2.3
MW-6	05/01/2012 10:36	1.84	364	4.13	0.05	0.96603	15.35	1
MW-6	05/01/2012 10:39	1.79	367	4.12	0.05	0.96868	15.41	1.1
MW-6	05/01/2012 10:42	1.73	368	4.12	0.05	0.96864	15.4	1.2
MW-6	05/01/2012 10:44	1.74	371	4.11	0.05	0.96828	15.39	1.6
MW-6	05/01/2012 10:47	1.76	374	4.11	0.05	0.96938	15.35	1.7
MW-6	05/01/2012 10:50	1.75	374	4.11	0.05	0.96691	15.36	1.4
MW-6	05/01/2012 10:52	1.76	376	4.11	0.05	0.96921	15.32	1.7
MW-6	05/01/2012 10:55	1.75	380	4.1	0.05	0.96926	15.33	1.5
MW-6	05/01/2012 10:58	1.78	380	4.11	0.05	0.967	15.38	2.3
MW-6	05/01/2012 11:00	1.78	381	4.11	0.05	0.96698	15.46	2.3
MW-6	05/01/2012 11:01	1.78	381	4.11	0.05	0.967	15.46	2.33
MW-6	05/01/2012 11:32	5.13	333	4.17	0.05	0.977	15.91	43.20
MW-6	05/02/2012 09:38	7.00	307	4.46	0.0000	0.534	14.60	1.40
MW-6	07/09/2013 13:45	1.40	-9	4.42	0.12	2.284	21.22	3.93
MW-6	07/09/2013 14:27	2.11	-47	4.60	0.16	2.964	16.46	78.00
MW-6	07/10/2013 11:49	5.03	-19.00	4.66	0.05	1.032	18.52	16.10
MW-6	09/29/2014 09:24	0.63	236	4.01	0.04	0.883	20.87	6.53
MW-6	09/29/2014 10:07	1.70	224	6.28	0.05	0.925	18.56	185.00
MW-6	09/30/2014 09:43	5.46	266	4.36	0.04	0.824	19.73	4.80
MW-6	01/07/2016 10:49	9.14	390	4.48	0.04	0.887	17.09	7.7
MW-6	01/07/2016 12:18	2.44	19	6.61	0.03	0.531	17.2	21.3
MW-6	02/22/2017 09:35	5.18	329	5.72	0.08	1.632	14.56	9.20
MW-6	02/22/2017 09:54	7.21	240	6.11	0.06	1.149	15.85	146.10
MW-6	02/20/2018 09:31	5.45	366.00	4.05	0.07	1.380	13	4.07
MW-6	02/20/2018 10:11	5.54	340.00	6.18	0.07	1.308	15.01	20.10
MW-6	02/20/2018 10:12	5.33	339.00	4.76	0.05	1.053	14.35	8.80
MW-6	02/20/2019 09:40	5.47	261.40	4.63	0.55	1.109	8.13	6.30
MW-6	02/20/2019 11:10	9.60	273.20	4.66	0.50	1.002	9.69	6.50
MW-6	02/20/2019 11:25	6.13	287.40	4.46	0.53	1.060	12.46	51.80
MW-6	03/30/2020 10:05	3.91	414.8	4.49	NM	0.656	12.67	1.7
MW-6	03/30/2020 11:25	3.16	366.3	4.46	0.3	0.611	14	24.4
MW-600	05/28/2020 13:40	0.11	-294.3	8.94	NM	1.077	18.31	1.7
MW-600	12/04/2020 10:05	0.8	-153.4	10.76	0.11	0.234	15.32	6.7
MW-600	12/04/2020 10:10	0.55	-228.9	10.84	0.11	0.237	16	6.1
MW-600	12/04/2020 10:15	0.47	-242.1	10.87	0.11	0.239	16.01	5.8
MW-600	12/04/2020 10:20	0.46	-243.7	10.86	0.12	0.243	15.93	5.8
MW-600	12/04/2020 10:25	0.44	-248.9	10.85	0.12	0.245	16.03	5.7
MW-600	12/04/2020 10:30	0.42	-254.3	10.89	0.12	0.246	16	5.6
MW-600	12/04/2020 10:35	0.42	-253.4	10.85	0.12	0.246	15.9	5.6
MW-600	12/04/2020 10:40	0.41	-256.7	10.87	0.12	0.247	15.93	5.6
MW-600	12/04/2020 10:45	0.4	-258	10.89	0.12	0.247	15.99	5.6
MW-600	12/04/2020 10:50	0.4	-257.7	10.89	0.12	0.247	16.03	5.6
MW-601	05/28/2020 10:40	0.23	-199	7.77	NM	1.643	17.19	NM
MW-601	12/04/2020 09:00	4.63	-61.4	9.51	0.03	0.058	12.22	50.9
MW-601	12/04/2020 09:05	0.54	-115.4	9.75	0.02	0.052	12.57	23.7
MW-601	12/04/2020 09:10	0.42	-129	9.93	0.02	0.051	12.8	16.4
MW-601	12/04/2020 09:15	0.36	-159.4	10.03	0.02	0.051	12.89	13.6

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-601	12/04/2020 09:20	0.33	-192	10.08	0.02	0.051	12.95	12.8
MW-601	12/04/2020 09:25	0.33	-199.8	10.13	0.02	0.051	12.99	10.5
MW-601	12/04/2020 09:30	0.32	-202	10.17	0.02	0.052	13.05	9.7
MW-601	12/04/2020 09:35	0.34	-210.5	10.21	0.02	0.052	13.02	8.9
MW-601	12/04/2020 09:40	0.33	-211.2	10.21	0.02	0.052	13.02	8.9
MW-601	12/04/2020 09:45	0.33	-182.9	10.2	0.02	0.052	13.06	7.7
MW-602	05/28/2020 09:40	0.27	-306.1	9.81	NM	2.56	16.33	NM
MW-602	12/01/2020 12:25	0.52	-204.7	11.12	4.48	8.046	17.42	6.3
MW-602	12/01/2020 12:30	0.34	-288.7	11.28	3.86	7.027	17.65	5.9
MW-602	12/01/2020 12:35	0.27	-314.2	11.39	3.02	5.573	17.33	5.6
MW-602	12/01/2020 12:40	0.27	-309.4	11.46	2.78	5.151	17.03	5.5
MW-602	12/01/2020 12:45	0.27	-302.4	11.54	2.47	4.611	16.97	5.6
MW-602	12/01/2020 12:50	0.36	-306.2	11.59	2.27	4.262	16.82	5.8
MW-602	12/01/2020 12:55	0.43	-301.6	11.62	2.22	4.166	16.78	5.7
MW-602	12/01/2020 13:00	0.47	-300.8	11.63	2.15	4.03	16.81	5.7
MW-602	12/01/2020 13:05	0.45	-295.4	11.65	2.12	3.981	16.83	5.8
MW-602	12/01/2020 13:10	0.46	-301.2	11.65	2.1	3.952	16.86	5.8
MW-7	05/01/2012 12:52	1.83	63	6.34	0.06	1.281	17.57	60.5
MW-7	05/01/2012 12:54	0.71	48	6.39	0.07	1.29433	14.96	16.8
MW-7	05/01/2012 12:56	0.47	41	6.39	0.06	1.25425	14.97	19.3
MW-7	05/01/2012 12:59	0.46	37	6.39	0.06	1.20294	15.02	14.6
MW-7	05/01/2012 13:01	0.41	38	6.4	0.06	1.13802	15.06	13.6
MW-7	05/01/2012 13:03	0.34	41	6.39	0.05	1.08282	15.07	18
MW-7	05/01/2012 13:06	0.3	45	6.38	0.05	1.02415	15.31	12.7
MW-7	05/01/2012 13:08	0.29	46	6.38	0.05	0.9714	15.47	12.7
MW-7	05/01/2012 13:10	0.28	52	6.36	0.05	0.91794	15.61	29.1
MW-7	05/01/2012 13:13	0.28	59	6.35	0.04	0.88348	15.6	10.4
MW-7	05/01/2012 13:15	0.28	66	6.34	0.04	0.85206	15.73	8.3
MW-7	05/01/2012 13:17	0.27	70	6.34	0.04	0.83516	15.73	7.8
MW-7	05/01/2012 13:20	0.28	74	6.34	0.04	0.8171	15.49	8
MW-7	05/01/2012 13:22	0.29	73	6.34	0.04	0.7861	15.49	6.4
MW-7	05/01/2012 13:25	0.32	72	6.33	0.04	0.75364	15.37	6
MW-7	05/01/2012 13:27	0.37	78	6.33	0.04	0.71885	15.51	6.1
MW-7	05/01/2012 13:29	0.41	85	6.32	0.03	0.69918	15.52	6
MW-7	05/01/2012 13:32	0.44	93	6.31	0.03	0.68703	15.39	5.5
MW-7	05/01/2012 13:34	0.46	99	6.31	0.03	0.67989	15.59	6.2
MW-7	05/01/2012 13:36	0.46	102	6.31	0.03	0.67257	15.4	5.8
MW-7	05/01/2012 13:39	0.45	102	6.31	0.03	0.65675	15.59	8.8
MW-7	05/01/2012 13:40	0.48	103	6.31	0.03	0.646	15.78	5.20
MW-7	05/01/2012 13:41	0.48	103	6.31	0.03	0.64602	15.78	5.2
MW-7	05/01/2012 14:11	3.65	139	6.34	0.02	0.494	14.21	13.00
MW-7	05/02/2012 10:20	1.64	140	6.22	0.0000	0.318	13.21	1.40
MW-7	07/09/2013 10:59	0.92	-105	6.42	0.12	2.385	23.55	13.00
MW-7	07/09/2013 11:33	1.34	-97	6.65	0.12	2.279	20.54	29.70
MW-7	07/10/2013 11:01	0.16	-185.00	6.33	0.05	0.980	19.87	145.20
MW-7	06/18/2014 10:51	0.44	137	6.25	0.04	0.842	21.68	6.13
MW-7	06/18/2014 11:47	1.01	254	6.19	0.04	0.863	18.03	8.40
MW-7	06/19/2014 10:50	0.40	47	6.32	0.09	1.754	17.10	2.70
MW-7	03/06/2015 14:30	0.63	5.7	6.84	0.57	1.197	6.29	46.50
MW-7	03/06/2015 15:15	0.50	61.1	6.63	0.31	0.635	6.10	3.10
MW-7	03/06/2015 15:30	0.59	63.6	6.72	0.32	0.732	6.93	5.70
MW-7	10/02/2015 11:10	1.23	140	6.32	0.11	2.188	18.60	3.80
MW-7	10/02/2015 14:54	5.52	-67	7.18	0.09	1.838	19.67	6.40
MW-7	02/22/2017 10:25	0.11	2.81	7.82	0.10	2.013	8.66	3.30
MW-7	02/22/2017 11:36	4.07	95	6.79	0.04	0.890	7.37	8.50
MW-7	02/20/2018 10:46	2.74	339.00	6.30	0.05	0.945	8.51	3.25
MW-7	02/20/2018 11:03	3.65	326.00	6.08	0.04	0.919	8.06	10.10
MW-7	02/20/2018 11:22	5.25	320.00	7.09	0.05	0.974	7.01	7.10
MW-7	02/20/2019 09:35	1.15	76.2	6.62	NM	1.658	6.86	12.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-7	02/20/2019 10:45	1.08	83.6	6.59	0.77	1.53	6.9	0
MW-7	03/30/2020 12:45	1.26	90	6.56	NM	0.712	10.36	0.6
MW-7	03/30/2020 13:40	3.19	102.3	6.56	0.36	0.724	9.97	0.3
MW-7	01/07/2016 10:01	1.62	239	7.27	0.03	0.617	13.22	2.5
MW-7	01/07/2016 10:12	5.04	4	7.51	0.02	0.506	12.12	5
MW-8	07/09/2013 15:20	2.40	-90	7.05	0.20	3.674	24.46	159.90
MW-8	07/10/2013 12:32	0.11	-281.00	6.80	0.13	2.121	20.81	7.30
MW-8	10/30/2013 09:20	1.76	-110.5	6.92	1.00	1.757	19.60	5.40
MW-8	10/30/2013 13:30	1.60	-68	7.18	0.94	1.840	20.07	326.00
MW-8	10/30/2013 13:35	1.64	-67	7.15	0.94	1.839	20.25	575.00
MW-8	10/31/2013 13:35	1.64	-67	7.15	0.94	1.839	20.25	575.00
MW-9	06/19/2013 10:30	2.16	-60	6.65	0.24	4.475	22.85	1351.3
MW-9	06/19/2013 10:33	1.7	-71	6.56	0.25	4.6064	19.35	216.1
MW-9	06/19/2013 10:35	1.23	-82	6.55	0.24	4.5255	18.72	96.3
MW-9	06/19/2013 10:37	1.02	-92	6.6	0.24	4.41446	19.12	96.6
MW-9	06/19/2013 10:40	0.92	-99	6.68	0.23	4.30725	20.03	63.6
MW-9	06/19/2013 10:42	0.95	-103	6.71	0.23	4.32922	20.15	59.2
MW-9	06/19/2013 10:44	0.93	-104	6.66	0.23	4.32859	20.19	96.9
MW-9	06/19/2013 10:47	0.91	-105	6.63	0.23	4.35766	19.78	85.8
MW-9	06/19/2013 10:49	0.87	-106	6.59	0.23	4.33814	19.75	90.2
MW-9	06/19/2013 10:51	0.86	-108	6.59	0.23	4.32984	19.67	52.4
MW-9	06/19/2013 10:54	0.83	-110	6.59	0.23	4.30845	19.73	69.8
MW-9	06/19/2013 10:56	0.83	-112	6.61	0.23	4.30079	19.78	50
MW-9	06/19/2013 10:58	0.83	-114	6.62	0.23	4.27769	19.99	80
MW-9	06/19/2013 11:01	0.83	-115	6.62	0.23	4.27882	20.04	49.7
MW-9	06/19/2013 11:03	0.81	-115	6.61	0.23	4.27979	20.04	54
MW-9	06/19/2013 11:05	0.81	-115	6.59	0.23	4.28895	19.9	49.6
MW-9	06/19/2013 11:37	2.64	-82	6.86	0.22	4.160	16.84	318.10
MW-9	06/20/2013 11:00	-0.17	-229.00	7.24	0.23	4.197	17.53	9.40
MW-9	06/19/2014 11:12	2.05	122.00	6.69	NM	5.629	22.36	347.10
MW-9	06/19/2014 11:14	1.52	104	6.70	NM	5.456	20.73	61.10
MW-9	06/19/2014 11:16	1.28	91	6.70	NM	5.438	20.58	48.70
MW-9	06/19/2014 11:18	1.17	82	6.70	NM	5.394	20.42	58.70
MW-9	06/19/2014 11:20	1.14	77	6.71	NM	5.384	20.38	54.70
MW-9	06/19/2014 11:22	1.13	73	6.72	NM	5.398	20.45	56.10
MW-9	06/19/2014 11:24	1.11	70	6.73	NM	5.371	20.23	67.20
MW-9	06/19/2014 11:26	1.11	69	6.73	NM	5.388	20.42	53.10
MW-9	06/19/2014 11:28	1.14	68	6.74	NM	5.377	20.36	71.50
MW-9	06/19/2014 11:30	1.14	68	6.73	NM	5.393	20.62	64.80
MW-9	06/19/2014 11:32	1.15	66	6.74	NM	5.447	20.85	66.70
MW-9	06/19/2014 11:33	1.15	66	6.74	0.33	5.916	20.85	66.69
MW-9	06/19/2014 12:02	1.12	131	7.08	0.22	4.077	14.62	-0.80
MW-9	06/20/2014 10:05	-0.08	0	6.94	0.17	3.279	13.92	12.50
MW-9	03/10/2016 09:34	3.110	50.000	6.680	0.494	8.815	13.940	90.800
MW-9	03/10/2016 09:37	1.720	22.000	6.650	0.552	9.785	13.030	43.700
MW-9	03/10/2016 09:39	1.390	4.000	6.640	0.573	10.152	12.740	29.100
MW-9	03/10/2016 09:41	1.260	-6.000	6.630	0.581	10.267	12.810	26.900
MW-9	03/10/2016 09:43	1.230	-13.000	6.630	0.582	10.288	12.960	23.900
MW-9	03/10/2016 09:45	1.200	-19.000	6.640	0.589	10.413	12.750	17.800
MW-9	03/10/2016 09:47	1.210	-22.000	6.640	0.591	10.437	12.700	16.500
MW-9	03/10/2016 09:50	1.190	-25.000	6.640	0.591	10.438	12.640	19.300
MW-9	03/10/2016 09:52	1.130	-26.000	6.630	0.578	10.219	13.270	15.700
MW-9	03/10/2016 09:54	1.120	-30.000	6.640	0.583	10.302	13.060	17.800
MW-9	03/10/2016 09:56	1.100	-31.000	6.640	0.580	10.253	13.190	13.600
MW-9	03/10/2016 09:58	1.080	-32.000	6.640	0.577	10.194	13.280	15.800
MW-9	03/10/2016 10:00	1.080	-35.000	6.640	0.579	10.226	13.300	16.200
MW-9	03/10/2016 10:03	1.050	-40.000	6.640	0.577	10.201	13.400	14.600
MW-9	03/10/2016 10:05	1.010	-45.000	6.650	0.578	10.205	13.450	16.100
MW-9	03/11/2016 09:14	0.26	-120	6.53	0.12	2.328	9.37	19.10

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
MW-9	03/11/2016 10:41	3.44	-103	6.84	0.59	10.529	10.08	155.60
MW-9	03/29/2017 08:48	4.56	326	6.88	0.2173	0.0411	10.25	NM
MW-9	03/29/2017 08:50	1.7	313	6.83	0.2137	0.0405	9.78	NM
MW-9	03/29/2017 08:52	0.97	261	6.78	0.2112	0.0400	9.7	NM
MW-9	03/29/2017 08:55	0.56	178	6.75	0.2097	0.0398	9.68	NM
MW-9	03/29/2017 08:57	0.4	138	6.72	0.2090	0.0396	9.67	NM
MW-9	03/29/2017 08:59	0.25	125	6.7	0.2086	0.0396	9.65	NM
MW-9	03/29/2017 09:01	0.19	91	6.69	0.2082	0.0395	9.61	NM
MW-9	03/29/2017 09:03	0.14	78	6.68	0.2079	0.0395	9.64	NM
MW-9	03/29/2017 09:05	0.1	84	6.68	0.2082	0.0395	9.62	NM
MW-9	03/29/2017 09:08	0.08	81	6.67	0.2082	0.0395	9.6	NM
MW-9	03/29/2017 09:10	0.07	80	6.67	0.2082	0.0395	9.57	NM
MW-9	03/29/2017 09:12	0.05	59	6.67	0.2076	0.0394	9.57	NM
MW-9	03/29/2017 09:14	0.03	41	6.67	0.2068	0.0393	9.56	NM
MW-9	03/29/2017 09:16	0.01	21	6.67	0.2050	0.0389	9.56	NM
MW-9	03/29/2017 09:18	-0.01	10	6.67	0.2031	0.0386	9.52	NM
MW-9	03/29/2017 09:21	-0.03	1	6.67	0.2013	0.0383	9.54	NM
MW-9	03/29/2017 09:23	-0.02	-6	6.68	0.1999	0.0380	9.51	NM
MW-9	03/29/2017 09:25	-0.03	-12	6.68	0.1983	0.0377	9.51	NM
MW-9	03/29/2017 09:27	-0.02	-17	6.69	0.1969	0.0375	9.54	NM
MW-9	03/29/2017 09:29	-0.04	-21	6.69	0.1958	0.0373	9.52	NM
MW-9	03/29/2017 09:31	-0.06	-25	6.7	0.1943	0.0370	9.53	NM
MW-9	03/29/2017 09:34	-0.06	-29	6.7	0.1934	0.0369	9.53	NM
MW-9	03/29/2017 09:36	-0.07	-32	6.71	0.1923	0.0367	9.54	NM
MW-9	03/29/2017 09:38	-0.1	-35	6.71	0.1910	0.0364	9.55	NM
MW-9	03/30/2017 09:26	2.31	-48	6.66	0.16	3.142	9.51	36.90
MW-9	03/30/2017 10:03	6.62	-49	6.94	0.17	3.234	9.70	105.60
MW-9	03/28/2018 09:57	4.62	137.00	6.59	0.10	1.916	8.51	56.47
MW-9	03/28/2018 10:50	4.06	9.00	7.01	0.11	2.096	9.28	474.10
MW-9	03/28/2018 10:57	2.86	2.00	6.83	0.11	2.231	8.98	33.20
MW-9	03/26/2019 13:00	1.09	35.3	7.04	NM	2.006	9.41	79.9
MW-9	03/26/2019 14:05	0.28	-51.6	7.1	0.88	1.733	9.59	17.5
MW-9	06/29/2021 11:35	1.18	150	6.63	1.69	3.229	24.78	12.5
MW-9	06/29/2021 11:40	0.96	139.7	6.6	1.69	3.239	26.26	8.7
MW-9	06/29/2021 11:45	0.78	132.9	6.6	1.7	3.256	26.78	7.3
MW-9	06/29/2021 11:50	0.71	120.1	6.59	1.7	3.259	27.24	4.8
MW-9	06/29/2021 11:55	0.62	92.8	6.58	1.7	3.266	26.84	3.5
MW-9	06/29/2021 12:00	0.58	72.7	6.57	1.7	3.254	26.39	4.1
MW-9	06/29/2021 12:05	0.55	49.7	6.57	1.69	3.241	26.56	2.5
MW-9	06/29/2021 12:10	0.53	37.5	6.57	1.68	3.226	26.61	2.7
MW-9	06/29/2021 12:15	0.53	30.4	6.57	1.68	3.224	26.82	2.5
MW-9	06/29/2021 12:20	0.51	29.6	6.57	1.67	3.219	26.94	0.6
P14TP1	12/17/2015 12:12	2.51	-99	6.84	0.09	1.787	16.01	105.1
P14TP1R	06/17/2016 10:32	4.55	-183	6.43	0.12	2.350	16.22	85.60
P14TP1R	06/07/2017 11:38	1.82	-26.00	7.06	0.29	5.344	12.82	69.40
P14TP1R	06/05/2018 11:35	2.54	-85.00	6.56	0.10	2.029	14.04	41.30
P14TP1R	06/11/2019 13:00	4.25	-51.6	6.8	NM	1.606	18.72	214.1
P14TP1R	06/11/2019 13:08	3.88	-56.1	6.71	0.81	1.599	15.77	59.5
P14TP1R	06/11/2019 13:20	2.69	-52.1	6.58	1.63	3.098	15.68	40.2
P14TP1R	06/10/2020 13:25	6.44	-11.5	6.67	0.74	1.463	17.73	9.8
P14TP1R	06/23/2021 13:40	1.65	-104.6	6.72	0.96	1.901	25.3	11.1
P14TP1R	06/23/2021 13:45	1.09	-97.3	6.48	0.95	1.865	24.35	10.1
P14TP1R	06/23/2021 13:50	1.07	-96.5	6.51	0.95	1.869	24.58	9.3
P14TP1R	06/23/2021 13:55	1.09	-94.5	6.54	0.95	1.866	23.68	9.5
P14TP1R	06/23/2021 14:00	1.11	-91.3	6.55	0.96	1.879	23.27	7.4
P14TP1R	06/23/2021 14:05	1.09	-90.4	6.58	0.96	1.885	23.22	7.3
P14TP1R	06/23/2021 14:10	1.1	-88.4	6.57	0.96	1.887	23.18	7
P15TP1	09/05/2012 10:47	7.58	83	5.72	16.00	26.000	25.12	9.40
P15TP1	09/05/2012 11:07	3.60	13	6.64	18.40	29.700	24.82	0.0000

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
P15TP1	09/06/2012 11:16	6.25	7	6.78	16.30	26.700	25.91	17.30
P15TP1	12/14/2012 10:18	6.63	281	5.36	13.50	22.400	13.31	6.20
P15TP1	12/14/2012 10:40	7.63	137	6.73	13.60	22.700	13.85	0.50
P15TP1	06/13/2014 09:40	4.64	-174	7.18	2.66	41.220	19.20	4.50
P15TP1	12/18/2014 10:39	2.14	-208	6.70	0.19	3.556	14.40	65.20
P15TP1	06/18/2015 09:37	5	205	6.45	1.68	27.15	19.49	56.9
P15TP1	06/17/2016 09:29	3.55	-123	6.61	1.24	20.550	17.01	238.20
P15TP1	11/23/2016 09:55	3.54	-107	6.78	0.02	0.374	15.28	125.8
P15TP1	06/07/2017 09:31	4.59	233.00	6.68	1.51	24.760	15.16	19.70
P15TP1	06/05/2018 09:44	4.63	-18.00	6.56	0.40	7.274	15.44	19.20
P15TP1	12/06/2018 09:30	7.28	225.30	6.65	0.36	0.763	9.4	6.40
P15TP1	12/06/2018 09:36	7.20	69.80	6.91	2.43	4.536	12.61	-2.50
P15TP1	12/06/2018 09:45	4.47	-9.00	6.85	2.42	4.515	12	1.00
P15TP1	06/11/2019 09:35	4.18	174.5	5.94	NM	9.072	17.19	1510.3
P15TP1	06/11/2019 09:43	5.09	66.8	5.4	5.62	9.916	16.55	63.5
P15TP1	06/11/2019 09:55	4.24	4.9	5.39	5.66	10.01	17.02	45.5
P15TP1	12/03/2019 11:35	1.94	-75.1	7.64	NM	15.66	10.45	1219.8
P15TP1	12/03/2019 12:00	5.48	3.8	7.55	9.56	16.33	8.65	125.3
P15TP1	12/03/2019 12:05	7.07	19.3	7.39	9.25	15.82	8.47	44.8
P15TP1	06/11/2020 10:20	3.6	154.8	6.2	12.8	21.1	19.72	105.2
P15TP1	06/11/2020 10:45	5.01	120.2	6.91	14.84	24.33	19.18	26.4
P15TP1	06/11/2020 11:00	2.66	132.7	7.22	15.25	24.95	19.16	1630.3
P15TP1	12/11/2020 12:20	1.84	-124.1	7.02	14.08	23.2	16.04	4
P15TP1	12/11/2020 12:30	0.89	-178.9	7.07	14.14	23.3	15.89	0
P15TP1	06/23/2021 15:10	6.63	-26.8	7.4	0	0.004	28.76	10.7
P15TP1	06/23/2021 15:15	1.04	-64.6	6.93	10.81	18.27	24.42	4.5
P15TP1	06/23/2021 15:20	0.73	-85.2	6.92	10.75	18.17	23.74	1.5
P15TP1	06/23/2021 15:25	0.55	-101.3	6.92	10.75	18.16	23.16	0.2
P15TP1	06/23/2021 15:30	0.46	-123.2	6.92	10.68	18.04	23.01	0
P15TP1	06/23/2021 15:35	0.43	-132.1	6.92	23.05	18.03	10.67	0
P15TP1	06/23/2021 15:40	0.43	-134.6	6.92	10.66	18.02	23.07	0
P15TP1	06/23/2021 15:45	0.42	-137.6	6.92	10.66	18.01	23.11	0
P15TP1	06/23/2021 15:50	0.42	-138.2	6.92	10.66	18	23.1	0
P15TP3	06/13/2014 12:41	2.94	-185	6.47	0.12	2.363	21.65	15.50
P15TP3	06/18/2015 10:32	7.02	-115	6.18	0.13	2.411	16.83	571.1
P15TP3	06/17/2016 09:01	3.14	-137	6.38	0.07	1.301	17.96	154.60
P15TP3	06/07/2017 10:05	1.65	171.00	7.16	0.14	2.626	15.26	203.20
P15TP3	06/05/2018 10:37	4.43	-40.00	6.40	0.04	0.740	17.3	272.60
P15TP3	06/12/2019 10:10	6.83	-22.5	6.63	NM	0.96	17.15	103
P15TP3	06/12/2019 10:22	6.42	-24.3	5.51	0.41	0.837	16.59	3.9
P15TP3	06/12/2019 10:35	3.37	-21.3	5.16	0.41	0.831	17.19	1.8
P15TP3	06/11/2020 09:20	3.75	58.3	7.05	0.77	1.523	19.7	32.2
P15TP3	06/11/2020 09:50	4.74	71.1	7.06	0.66	1.314	17.93	1.8
P15TP3	06/11/2020 10:05	4.82	75.7	6.8	0.79	1.569	20.91	59.6
P15TP3	06/24/2021 12:35	2.33	-46.3	6.46	0.32	0.665	29.83	0.9
P15TP3	06/24/2021 12:40	1.35	-38.1	6.33	0.32	0.661	29.39	0
P15TP3	06/24/2021 12:45	1.05	-32.6	6.29	0.32	0.659	29.06	0
P15TP3	06/24/2021 12:50	0.82	-33.3	6.26	0.32	0.658	28.89	0
P15TP3	06/24/2021 12:55	0.69	-40.9	6.27	0.33	0.666	28.84	0
P15TP3	06/24/2021 13:00	0.67	-43.8	6.29	0.32	0.656	28.83	0
P15TP3	06/24/2021 13:05	0.66	-45.3	6.29	0.32	0.654	28.8	0
P15TP4	09/06/2012 10:52	7.82	-43	5.77	0.60	1.140	21.31	21.90
P15TP4	09/06/2012 11:17	7.38	-101	6.21	0.50	1.070	20.72	0.0000
P15TP4	09/07/2012 11:20	7.24	-61	6.23	0.70	1.380	21.48	48.90
P15TP4	12/14/2012 10:08	4.14	13	5.99	0.70	1.430	15.01	138.00
P15TP4	12/14/2012 10:35	2.50	-84	6.55	0.70	1.310	16.26	2.10
P15TP4	06/13/2014 11:21	23.64	-196	6.57	0.67	11.580	18.59	21.90
P15TP4	12/18/2014 13:56	1.27	-122	6.55	0.14	2.642	14.46	70.30
P15TP4	06/18/2015 11:36	6.74	-107	6.28	0.18	3.382	16.53	52.2

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
P15TP4	06/17/2016 11:00	5.53	-142	6.44	0.15	2.920	17.19	96.60
P15TP4	11/23/2016 09:13	2.86	-76	6.56	0.2	3.758	15.34	20.2
P15TP4	06/07/2017 10:39	3.85	52.00	7.37	0.13	2.447	15.09	27.50
P15TP4	06/05/2018 09:27	3.09	-7.00	6.05	0.07	1.306	15.32	9.00
P15TP4	12/06/2018 11:10	6.17	-96.40	7.00	0.32	0.656	10.47	6.30
P15TP4	12/06/2018 11:16	6.06	-96.50	6.81	0.30	0.622	13.61	0.40
P15TP4	12/06/2018 11:25	3.01	-83.50	6.84	0.31	0.626	12.43	1.40
P15TP4	06/11/2019 09:30	4.6	-58.1	6.71	NM	1.02	16.71	3.1
P15TP4	06/11/2019 09:42	3.17	-65.9	6.6	1.04	2.024	16.68	0.9
P15TP4	06/11/2019 09:55	4.54	-74.6	6.67	0.8	1.577	17.3	1.2
P15TP4	12/03/2019 10:30	2.3	-138.7	6.64	NM	0.66	12.6	8.7
P15TP4	12/03/2019 10:50	2.91	-83.9	6.66	0.19	0.387	8.65	8.3
P15TP4	12/03/2019 10:55	3.19	-87.6	6.69	0.15	0.318	12.8	28.4
P15TP4	06/10/2020 10:25	4.68	-42.2	6.6	0.43	0.866	18.63	1.4
P15TP4	12/11/2020 13:00	11.62	-87.3	6.98	0.51	1.022	16.75	0
P15TP4	12/11/2020 13:10	12.12	-75.5	6.87	0.51	1.022	17	0
P15TP4	06/23/2021 15:00	1.26	-64.8	6.35	0.55	1.118	23.75	6.3
P15TP4	06/23/2021 15:05	1.13	-63.2	6.36	0.55	1.116	24.08	4.1
P15TP4	06/23/2021 15:10	1	-61.5	6.37	0.55	1.114	24.76	3.6
P15TP4	06/23/2021 15:15	0.99	-63.5	6.42	0.55	1.115	25.45	3.9
P15TP4	06/23/2021 15:20	0.98	-64.7	6.43	0.55	1.12	25.91	3.9
P15TP4	06/23/2021 15:25	0.97	-64.7	6.44	0.55	1.124	26.58	4.2
P15TP4	06/23/2021 15:30	0.95	-66.5	6.47	0.56	1.128	26.9	3.5
P15TP4	06/23/2021 15:35	0.96	-68.6	6.47	0.56	1.137	26.61	3.4
P15TP4	06/23/2021 15:40	0.8	-71	6.38	0.57	1.146	25.52	1.7
P15TP4	06/23/2021 15:45	0.7	-73.7	6.44	0.57	1.143	25.32	1
P15TP5	06/13/2014 12:15	2.59	-245	6.65	0.61	10.670	21.98	23.60
P15TP5	06/18/2015 11:01	2.34	-99	6.36	0.14	2.751	15.7	204.2
P15TP5	06/17/2016 10:02	5.02	-142	6.46	0.08	1.572	15.89	36.10
P15TP5	06/07/2017 11:06	4.99	-21.00	NM	0.12	2.390	14.23	20.10
P15TP5	06/05/2018 11:07	3.02	-61.00	6.39	0.05	0.980	14.65	9.20
P15TP5	06/11/2019 10:40	3.74	-66.5	6.79	NM	0.042	17.04	38
P15TP5	06/11/2019 10:55	4.56	69.6	6.9	0.83	0.062	16.41	3.6
P15TP5	06/11/2019 11:10	2.38	-58.2	6.66	0.84	1.65	17.73	0.1
P15TP5	06/10/2020 09:20	8.96	-41.3	6.62	0.49	0.987	18.91	3.5
P15TP5	06/23/2021 13:30	0.45	-62.4	6.38	0.68	1.375	28.06	0.9
P15TP5	06/23/2021 13:35	0.74	-57.2	6.21	0.67	1.346	27.34	0.8
P15TP5	06/23/2021 13:40	0.52	-60.1	6.17	0.66	1.323	26.22	0
P15TP5	06/23/2021 13:45	0.42	-64.7	6.24	0.65	1.316	26.04	0
P15TP5	06/23/2021 13:50	0.38	-63.5	6.28	0.65	1.311	26.07	0
P15TP5	06/23/2021 13:55	0.33	-61.2	6.32	0.65	1.307	25.96	0
P15TP5	06/23/2021 14:00	0.32	-60.2	6.33	0.65	1.302	25.84	0
P15TP5	06/23/2021 14:05	0.32	-59.9	6.34	0.65	1.298	25.78	0
P-7	10/01/2018 12:40	2.91	-117.10	6.92	5.39	9.599	23.57	28.50
P-7	10/01/2018 13:15	5.59	-101.80	6.69	5.99	10.590	23.12	11.60
P-7	10/01/2018 13:30	4.91	-106.30	6.73	6.00	10.320	23.14	48.60
RW-61	05/07/2012 08:34	2.55	128	6.77	0.01	0.24258	17.1	82.7
RW-61	05/07/2012 08:36	2.06	120	6.83	0.01	0.24325	15.96	51.2
RW-61	05/07/2012 08:38	1.79	113	6.86	0.01	0.24199	15.77	54.1
RW-61	05/07/2012 08:40	1.72	106	6.89	0.01	0.24132	15.79	55.4
RW-61	05/07/2012 08:42	1.71	101	6.92	0.01	0.24129	15.8	55.5
RW-61	05/07/2012 08:44	1.72	96	6.94	0.01	0.24133	15.82	53.5
RW-61	05/07/2012 08:46	1.76	93	6.95	0.01	0.24118	15.84	58.4
RW-61	05/07/2012 09:41	7.25	11	7.06	0.01	0.283	15.61	168.50
RW-61	05/08/2012 09:01	0.20	110	6.88	0.01	0.284	15.67	229.30
RW-61	05/08/2012 12:22	1.5	-3	6.01	0.07	1.36864	21.28	30.3
RW-61	05/08/2012 12:24	1.11	-9	6.1	0.08	1.48593	16.43	4.6
RW-61	05/08/2012 12:27	0.73	-14	6.11	0.08	1.48727	15.83	4.2
RW-61	05/08/2012 12:29	0.59	-17	6.12	0.08	1.49018	15.79	1.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
RW-61	05/08/2012 12:31	0.54	-20	6.12	0.08	1.49301	15.92	1.7
RW-61	05/08/2012 12:33	0.45	-22	6.12	0.08	1.48876	16.04	5.1
RW-61	05/08/2012 12:36	0.45	-24	6.12	0.08	1.49617	16.16	9.5
RW-61	05/08/2012 12:38	0.42	-26	6.14	0.08	1.50559	15.87	1
RW-61	05/08/2012 12:40	0.42	-27	6.14	0.08	1.50581	15.95	2.5
RW-61	05/08/2012 12:42	0.35	-29	6.16	0.08	1.50704	15.74	0.8
RW-61	05/08/2012 12:45	0.35	-30	6.17	0.08	1.50844	15.62	2
RW-61	05/08/2012 12:47	0.32	-31	6.18	0.08	1.51433	15.46	2.1
RW-61	05/08/2012 12:49	0.34	-33	6.19	0.08	1.51488	15.63	1.1
RW-61	05/08/2012 12:51	0.31	-34	6.2	0.08	1.52169	15.61	0.9
RW-61	05/08/2012 12:54	0.3	-35	6.21	0.08	1.52362	15.65	0.9
RW-61	05/08/2012 12:56	0.33	-37	6.23	0.08	1.53306	15.51	1
RW-61R	09/27/2016 10:49	0.58	-161	6.38	0.05	0.976	22.72	165.40
RW-61R	09/27/2016 13:14	1.63	-6	6.96	0.07	1.452	22.26	1795.10
RW-61R	03/07/2017 09:39	0.54	-54	6.57	0.05	1.013	6.87	73.00
RW-61R	03/07/2017 10:18	6.85	-147	7.67	0.04	0.820	7.78	404.30
RW-61R	03/28/2018 10:20	3.79	-6.00	6.50	0.04	0.830	6.49	133.20
RW-61R	03/28/2018 14:13	1.63	12.00	6.56	0.04	0.897	7.58	18.44
RW-61R	03/28/2018 14:43	6.19	0.0000	6.88	0.04	0.873	7.98	391.70
RW-61R	03/20/2019 13:40	0.85	-16.5	6.67	NM	0.861	9.34	1.9
RW-61R	03/20/2019 14:05	0.38	-45.9	6.67	0.41	0.839	7.61	3.1
RW-61R	06/09/2020 10:35	1.31	-125.9	6.92	NM	1.044	16.82	12.5
RW-61R	06/09/2020 10:50	1.18	-103.4	6.95	0.5	1.005	15.86	16.8
RW-61R	06/24/2021 14:10	2.21	-28.1	7.36	0.69	1.373	22.83	210.6
RW-61R	06/24/2021 14:15	0.65	-15.4	6.44	0.55	1.109	22.59	229.9
RW-61R	06/24/2021 14:20	0.77	-39.5	6.61	0.52	1.051	21.63	156.5
RW-61R	06/24/2021 14:25	0.66	-28.5	6.58	0.52	1.044	21.27	139.5
RW-61R	06/24/2021 14:30	0.56	-51.2	6.6	0.49	0.996	21.43	98.4
RW-61R	06/24/2021 14:35	0.52	-68.7	6.62	0.48	0.965	20.94	101.4
RW-61R	06/24/2021 14:40	0.51	-75	6.63	0.47	0.958	20.39	53.9
RW-61R	06/24/2021 14:45	0.49	-83.2	6.65	0.47	0.949	20.75	56.2
RW-61R	06/24/2021 14:50	0.48	-87.7	6.67	0.48	0.961	20.18	26.9
RW-61R	06/24/2021 14:55	0.47	-94.7	6.69	0.47	0.958	20.23	44.2
RW-61R	04/01/2022 09:00	5.88	196.8	7.67	0.49	0.99	12.03	85.2
RW-61R	04/01/2022 09:05	1.17	137.4	6.57	0.48	0.976	12.25	71.2
RW-61R	04/01/2022 09:10	0.79	50.5	6.48	0.48	0.972	11.3	60.8
RW-61R	04/01/2022 09:15	0.74	0.5	6.42	0.48	0.962	10.36	46.4
RW-61R	04/01/2022 09:20	0.72	3.1	6.41	0.48	0.958	10.09	44.2
RW-61R	04/01/2022 09:25	0.72	-1.6	6.45	0.47	0.954	10.33	44.8
RW-61R	04/01/2022 09:30	0.7	-5.5	6.47	0.47	0.956	10.35	43.6
RW-61R	04/01/2022 09:35	0.68	-7.3	6.49	0.47	0.95	10.34	42
RW-81	07/10/2013 15:35	0.98	-161	7.07	0.06	1.126	25.05	58.93
RW-81	09/24/2014 11:01	0.07	173	7.03	0.03	0.527	21.37	12.39
RW-81	09/19/2016 12:26	1.09	-39.9	6.54	0.53	1.079	20.91	2.50
RW-81	09/19/2016 12:35	0.45	-51.7	6.39	0.54	1.088	21.64	6.70
RW-81	06/08/2017 10:32	-0.11	-117.00	6.79	0.02	0.344	18.08	10.00
RW-81	06/08/2017 11:02	0.21	24.00	7.02	0.05	0.915	18.88	17.88
RW-81	06/08/2017 11:36	3.69	39.00	7.18	0.06	1.289	14.73	17.60
RW-81	02/04/2020 10:40	0.4	-104.2	6.87	NM	0.256	11	2.2
RW-81	02/04/2020 11:20	0.48	-113.1	6.82	0.13	0.267	11.71	28.2
RW-81	09/10/2020 08:40	1.17	-124.6	6.8	0.35	0.71	21.06	22.1
RW-81	09/10/2020 08:45	1.35	-132.7	6.85	0.34	0.704	21.12	19
RW-81	09/10/2020 08:50	1.51	-139.2	6.87	0.34	0.701	21.09	14.1
RW-81	09/10/2020 08:55	1.56	-144.2	6.86	0.34	0.697	21.07	17.8
RW-81	09/10/2020 09:00	1.5	-144.2	6.86	0.34	0.695	21.07	29.2
RW-81	09/10/2020 09:05	1.53	-147.4	6.86	0.34	0.695	21.08	12.2
RW-81	09/10/2020 09:10	1.59	-148.3	6.85	0.34	0.693	21.1	33.9
RW-81	09/10/2020 09:15	1.54	-146.1	6.85	0.34	0.692	21.07	6.1
RW-81	09/10/2020 09:20	1.61	-144.1	6.83	0.34	0.691	20.94	5.1

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
RW-81	09/10/2020 09:25	1.47	-144	6.82	0.34	0.691	20.92	7.5
RW-81	09/10/2020 09:26	1.47	-144	6.82	0.34	0.691	20.92	7.5
RW-81	09/10/2020 10:10	1.35	-107.9	6.73	0.34	0.689	20.1	29.6
RW-81	09/10/2020 10:25	1.27	-114.8	6.71	0.34	0.609	19.93	11.8
RW-81	02/07/2022 10:05	6.36	-31.9	6.75	0.34	0.7	9.44	10.7
RW-81	02/07/2022 10:10	6.44	-38.7	6.73	0.34	0.699	9.28	10
RW-81	02/07/2022 10:15	7.01	-73.3	6.87	0.34	0.69	8.68	10.6
RW-81	02/07/2022 10:20	5.83	-74	6.91	0.34	0.692	8.84	13.2
RW-81	02/07/2022 10:25	6.7	-86.4	6.95	0.34	0.689	9.33	8.3
RW-81	02/07/2022 10:30	5.99	-86	6.93	0.34	0.689	9.31	7
RW-81	02/07/2022 10:35	6.48	-86	6.91	0.34	0.687	9.37	6.5
RW-81	02/07/2022 10:40	1.7	-84.1	6.86	0.34	0.685	9.42	5.2
RW-81	02/07/2022 10:45	6.63	-83.1	6.87	0.34	0.684	9.41	3.7
RW-81	02/07/2022 10:50	6.92	-82.6	6.85	0.34	0.685	9.38	4.6
RW-82	06/03/2016 10:19	-0.28	-180	7.37	0.06	1.216	17.07	41.60
RW-82	09/21/2016 15:31	1.12	-33.6	6.97	0.31	0.646	24.22	2.10
RW-82	09/21/2016 15:40	0.96	-58.2	6.86	0.30	0.643	24.11	19.80
RW-82	06/08/2017 13:26	3.41	49.00	7.02	0.07	1.331	15.74	9.20
RW-82	05/25/2018 14:20	3.46	-112.00	7.38	0.02	0.475	15.85	15.30
RW-82	05/28/2019 12:01	2.51	-153.2	7.79	0.17	0.347	15.2	6.7
RW-82	05/12/2020 12:35	0.72	-174.6	8.98	0.12	0.254	12.83	5.2
RW-83	06/13/2012 08:34	5.09	29	7.21	0.01	0.11377	21.45	44.3
RW-83	06/13/2012 08:36	5.61	30	7.24	0.01	0.10797	20.7	32.7
RW-83	06/13/2012 08:39	5.43	33	7.23	0.01	0.10794	20.58	46.4
RW-83	06/13/2012 08:41	5.41	34	7.22	0.01	0.10777	20.64	37.4
RW-83	06/13/2012 08:43	5.35	34	7.23	0.01	0.10782	20.62	189.3
RW-83	06/13/2012 08:46	5.4	35	7.24	0.01	0.10771	20.68	124.2
RW-83	06/13/2012 08:48	5.43	35	7.24	0.01	0.10777	20.71	43.5
RW-83	06/13/2012 08:50	5.42	34	7.26	0.01	0.10761	20.73	60.8
RW-83	06/13/2012 08:53	5.51	34	7.26	0.01	0.10758	20.77	48.6
RW-83	06/13/2012 08:55	5.49	35	7.26	0.01	0.10762	20.79	99.1
RW-83	06/13/2012 08:57	5.49	36	7.26	0.01	0.10929	20.73	22.6
RW-83	06/13/2012 09:00	5.48	36	7.28	0.01	0.11228	20.7	46.5
RW-83	06/13/2012 09:02	5.36	34	7.3	0.01	0.11378	20.85	30.3
RW-83	06/13/2012 09:04	5.39	33	7.32	0.01	0.11766	20.98	36.7
RW-83	06/13/2012 09:07	5.29	31	7.35	0.01	0.12013	20.91	27.8
RW-83	06/13/2012 09:09	5.3	31	7.38	0.01	0.1238	20.86	71.4
RW-83	06/13/2012 09:11	5.27	30	7.41	0.01	0.12587	20.82	30.4
RW-83	06/13/2012 09:14	5.32	30	7.43	0.01	0.12711	20.8	71.7
RW-83	06/13/2012 09:16	5.37	29	7.44	0.01	0.12851	20.78	39.1
RW-83	06/13/2012 09:19	5.37	29	7.47	0.01	0.13195	20.71	31.6
RW-83	06/13/2012 09:21	5.35	29	7.49	0.01	0.13343	20.66	39
RW-83	06/13/2012 09:23	5.38	28	7.51	0.01	0.13452	20.69	37.7
RW-83	06/14/2012 11:31	3.55	-28	7.37	0.0000	0.411	21.40	63.40
RW-83	05/28/2013 09:44	0.88	-125	6.75	0.03	0.696	17.28	23.94
RW-83	05/28/2013 10:35	0.95	-102	6.77	0.03	0.696	14.69	312.1
RW-83	05/29/2013 09:47	4.94	-92	7.01	0.03	0.533	17.24	29.3
RW-83	09/23/2014 09:49	0.57	170	6.66	0.03	0.558	23.41	27.11
RW-83	09/23/2014 10:25	1.88	204	7.18	0.03	0.589	20.54	1045.90
RW-83	09/24/2014 10:05	1.21	46	6.68	0.03	0.519	19.94	16.30
RW-83	06/03/2016 10:02	2.22	214	7.01	0.05	1.011	14.26	22.00
RW-83	06/03/2016 11:51	5.32	992	7.12	0.05	1.013	15.34	475.80
RW-83	09/20/2016 11:26	3.88	101.1	7.33	0.15	0.316	24.26	24.70
RW-83	09/20/2016 11:34	3.94	110.2	7.03	0.15	0.316	24.28	102.10
RW-83	12/20/2016 13:45	10.61	-23.1	7.83	0.8	1.578	9.57	20.6
RW-83	12/20/2016 14:00	10.53	-0.7	7.51	0.76	1.51	9.87	73.8
RW-83	06/08/2017 09:05	5.01	133.00	7.49	0.04	0.789	16.53	21.58
RW-83	06/08/2017 09:44	10.17	213.00	6.88	0.02	0.408	18.17	16.80
RW-83	06/08/2017 09:50	NM	120.00	7.40	0.09	1.719	15.59	1347.10

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
RW-83R	05/25/2018 10:01	0.67	-104.00	6.40	0.06	1.289	13.61	24.50
RW-83R	05/25/2018 11:47	0.60	-108.00	6.38	0.07	1.289	18.71	59.90
RW-83R	05/25/2018 12:16	3.28	-68.00	6.75	0.06	1.209	14.77	211.30
RW-83R	08/23/2018 08:57	0.69	-64.00	6.51	0.10	1.907	21.8	11.20
RW-83R	08/23/2018 09:05	0.75	-56.00	6.40	0.10	1.918	18.87	5.10
RW-83R	11/20/2018 10:40	0.75	-72.50	5.89	0.20	0.408	15.33	10.80
RW-83R	11/20/2018 11:55	3.87	-64.50	6.34	0.19	0.403	15.98	104.00
RW-83R	11/20/2018 12:05	2.83	-75.80	5.80	0.19	0.399	15.64	17.40
RW-83R	03/25/2019 10:22	2.68	-53.5	6.53	0	0.006	11.88	3.1
RW-83R	05/30/2019 09:40	0.29	-25.5	6.83	NM	0.789	14.88	3.4
RW-83R	05/30/2019 10:40	0.19	-49.3	6.78	0.37	0.745	14.01	4
RW-83R	08/30/2019 12:36	1.95	-52.4	6.21	NM	0.816	24.79	57
RW-83R	08/30/2019 13:47	1.45	-16.1	5.94	0.43	0.877	25.48	1.9
RW-83R	08/30/2019 14:04	2.63	-60.5	6.1	0.37	0.768	25.71	51.5
RW-83R	11/13/2019 13:17	5.3	-37.2	6.53	NM	0.351	15.53	4.7
RW-83R	11/13/2019 14:02	1.67	-70.2	6.29	0.14	0.288	17.91	2.1
RW-83R	11/13/2019 14:10	1.62	-73	6.29	0.14	0.29	17.83	4
RW-83R	11/13/2019 14:15	1.62	-73	6.29	0.14	0.29	17.83	4
RW-83R	02/11/2020 13:20	0.96	-105.8	6.37	0.22	0.46	11.97	3.4
RW-83R	04/02/2020 10:50	0.48	-93.2	6.43	NM	0.473	12.15	2.8
RW-83R	05/26/2020 10:50	2.48	-85.4	6.52	0.38	0.781	16.72	3.3
RW-83R	05/29/2020 10:10	0.43	-57.3	6.43	NM	0.644	17.09	NM
RW-83R	11/18/2020 09:55	9.89	-46.2	6.44	0.27	0.542	11.37	10.5
RW-83R	11/18/2020 10:05	4.01	-30	6.54	0.27	0.553	11.87	9.9
RW-83R	12/02/2020 12:40	0.55	-28.1	6.66	0.15	0.316	10.89	6.7
RW-83R	12/02/2020 12:45	0.5	-30.2	6.64	0.15	0.318	10.48	6.3
RW-83R	12/02/2020 12:50	0.2	-43.1	6.53	0.15	0.305	12.47	6.3
RW-83R	12/02/2020 12:55	0.18	-44.7	6.51	0.15	0.308	12.62	6.4
RW-83R	12/02/2020 13:00	0.15	-48.8	6.48	0.15	0.308	13.09	6.3
RW-83R	12/02/2020 13:05	0.16	-51.1	6.49	0.15	0.308	13.22	6.4
RW-83R	12/02/2020 13:10	0.12	-52.4	6.49	0.15	0.307	13.55	6.9
RW-83R	12/02/2020 13:15	0.08	-59	6.47	0.15	0.31	13.47	6.8
RW-83R	12/02/2020 13:20	0.08	-59.3	6.44	0.15	0.311	13.23	6.4
RW-83R	12/02/2020 13:25	0.23	-49.5	6.23	0.15	0.306	12.58	6.8
RW-83R	02/26/2021 13:00	4.52	-77.8	6.59	0.68	1.351	10.19	24.6
RW-83R	02/26/2021 13:36	4.7	-63.3	6.44	0.28	0.565	11.85	5.4
RW-83R	02/26/2021 13:50	6.74	-56.7	6.36	0.47	0.954	10.78	22.7
RW-83R	04/15/2022 08:55	1.25	-84.5	6.29	0.36	0.732	12.68	0
RW-83R	04/15/2022 09:00	1.68	-88	6.31	0.36	0.732	12.65	0
RW-83R	04/15/2022 09:05	1.88	-89.6	6.32	0.36	0.731	12.62	0
RW-83R	04/15/2022 09:10	1.77	-90.7	6.33	0.36	0.731	12.63	0
RW-83R	04/15/2022 09:15	1.83	-95.5	6.37	0.36	0.732	12.66	0
RW-83R	04/15/2022 09:20	1.89	-97.7	6.36	0.36	0.732	12.96	0
RW-83R	04/15/2022 09:25	1.85	-98.2	6.37	0.36	0.733	12.86	0
RW-91	06/18/2013 13:29	0.80	-142	6.78	0.12	2.301	20.61	16.66
RW-91	06/18/2013 14:34	0.80	-122	6.73	0.16	3.036	16.25	426.10
RW-91	06/19/2013 11:40	0.09	-244.00	6.73	0.11	2.131	19.88	32.60
RW-91	11/04/2013 09:00	7.30	-63	7.65	0.46	0.933	17.58	527.00
RW-91	11/04/2013 09:50	0.49	-18.6	6.74	0.25	0.523	16.13	216.30
RW-91	11/04/2013 11:30	2.84	-45.4	7.14	0.33	0.686	17.69	417.20
RW-91	11/05/2013 09:00	7.30	-63	7.65	0.46	0.933	17.58	527.00
RW-91	11/30/2015 12:37	0.86	-101	6.85	0.10	1.920	17.23	1680.50
RW-91	12/15/2015 13:29	5.08	-213	7.24	0.09	1.784	14.7	246.9
RW-91	12/15/2015 13:45	0.26	-75	6.95	0.08	1.496	17.85	232.5
RW-91	03/01/2017 09:26	11.06	280	7.04	0.11	2.198	11.06	15.40
RW-91	03/01/2017 10:36	11.33	-163	7.00	0.06	1.246	12.66	2.10
RW-91	06/29/2021 13:15	1.48	-119.8	6.33	0.12	0.253	25.53	1.8
RW-91	06/29/2021 13:20	0.68	-128.7	6.21	0.11	0.232	26.51	0.2
RW-91	06/29/2021 13:25	0.46	-142.4	6.26	0.1	0.224	27.01	0

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
RW-91	06/29/2021 13:30	0.44	-145.5	6.26	0.1	0.22	27.08	0
RW-91	06/29/2021 13:35	0.36	-154.5	6.26	0.1	0.218	27.15	0
RW-91	06/29/2021 13:40	0.34	-160.7	6.26	0.1	0.217	27.32	0
RW-91	06/29/2021 13:45	0.32	-162.6	6.26	0.1	0.217	27.32	0
RW-91	06/29/2021 13:50	0.31	-169.2	6.26	0.1	0.217	27.09	0
RW-92	10/30/2013 14:30	0.22	-59.5	6.97	0.21	0.437	18.04	12.70
RW-92	10/30/2013 15:05	0.03	-78.9	6.93	0.21	0.425	18.16	14.40
RW-92	10/30/2013 15:10	0.03	-79.6	6.94	0.21	0.425	18.18	14.10
RW-92	10/31/2013 15:10	0.03	-79.6	6.94	0.21	0.425	18.18	14.10
RW-92	01/13/2014 10:05	5.78	-49.4	7.71	0.40	0.807	7.05	216.50
RW-92	01/13/2014 10:52	7.31	-14.6	6.70	0.30	0.620	6.10	136.20
RW-92	01/13/2014 11:07	3.95	-4.5	6.64	0.37	0.738	9.34	156.50
RW-92	03/04/2016 12:26	2.35	-109	6.86	0.07	1.392	9.94	276.40
RW-92	03/01/2017 11:03	6.50	-134	7.00	0.05	1.036	10.40	67.00
RW-92	02/16/2018 10:22	2.18	120.00	6.87	0.05	0.973	10.95	322.00
RW-92	02/08/2019 08:30	8.44	155.50	6.46	0.01	0.950	9.08	121.70
RW-92	02/08/2019 09:12	8.92	20.70	6.78	0.08	0.177	7.33	85.60
RW-92	02/08/2019 09:25	3.62	-2.50	6.67	0.12	0.252	7.34	90.30
RW-92	06/26/2020 11:55	3.33	-105.2	7.43	0.48	0.979	19.79	90.7
RW-92	06/26/2020 12:40	5.78	-106.6	7.5	0.47	0.942	19.67	1.9
RW-92	06/26/2020 12:50	1.95	-102.8	6.79	0.46	0.941	19.11	1.3
RW-93	06/03/2013 10:15	6.84	-67	6.89	0.01	0.282	24.19	639.00
RW-93	06/04/2013 09:47	5.24	-75	7.03	0.03	0.541	21.34	214.30
RW-93	12/01/2015 09:55	0.53	440	6.57	0.03	0.61	16.54	188.4
RW-93	12/01/2015 10:51	0.9	-29	7.29	0.05	1.044	16.81	3012
RW-93	03/01/2017 10:08	6.18	316	8.33	0.03	0.661	8.50	183.50
RW-93	03/01/2017 12:51	11.83	67	7.56	0.03	0.520	9.70	1043.40
RW-93	03/26/2019 10:20	7.37	145.3	7.23	NM	0.402	8.92	23
RW-93	03/26/2019 11:25	6.04	157.3	7.32	0.2	0.412	7.36	19.7
RW-93	02/19/2021 12:25	13.85	9	7.54	0.5	1.056	2.64	15.2
RW-93	02/19/2021 12:30	13.8	108.2	7.58	0.52	1.064	2.26	12.2
RW-93	02/19/2021 12:35	13.74	111.5	7.59	0.52	1.061	2.31	11.7
RW-93	02/19/2021 12:40	13.74	115.9	7.6	0.52	1.062	2.25	11.6
RW-93	02/19/2021 12:45	13.76	18	7.6	0.53	1.077	2.2	11.56
RW-93	02/19/2021 12:50	13.74	122.9	7.6	0.54	1.096	2.14	13.84
RW-93	02/19/2021 12:55	13.68	129.6	7.62	0.53	1.077	2.27	13.44
RW-93	02/19/2021 13:00	13.66	133.3	7.63	0.52	1.064	2.26	16.68
RW-93	02/19/2021 13:05	13.62	135.4	7.64	0.52	1.052	2.32	17.6
RW-93	02/19/2021 13:10	13.67	137.5	7.64	0.52	1.056	2.26	19.2
RW-93	02/19/2021 14:00	13.65	113.4	7.64	0.58	1.18	3.41	19.2
RW-93	02/19/2021 15:05	14.31	104.3	7.66	0.78	1.575	2.42	19.06
RW-93	02/19/2021 15:27	14.5	115.1	7.63	0.86	1.713	1.97	19.12
RW-94	05/29/2012 12:36	2.65	-17	6.73	0.08	1.54644	25.11	143.1
RW-94	05/29/2012 12:38	1.64	-55	6.88	0.09	1.71384	20.83	6.3
RW-94	05/29/2012 12:40	1.89	-67	6.96	0.09	1.70906	20.64	6
RW-94	05/29/2012 12:42	2.14	-73	6.61	0.09	1.70007	21.1	5.9
RW-94	05/29/2012 12:44	2.1	-78	6.59	0.09	1.70224	21.08	5.9
RW-94	05/29/2012 12:46	1.97	-80	6.6	0.09	1.70672	20.9	6.4
RW-94	05/29/2012 12:48	1.78	-83	6.62	0.09	1.71456	21.32	8.1
RW-94	05/29/2012 12:50	1.58	-85	6.63	0.09	1.73009	21.39	7.4
RW-94	05/29/2012 12:52	1.33	-86	6.62	0.09	1.75031	21.02	7.8
RW-94	05/29/2012 12:54	1.08	-88	6.65	0.09	1.76939	21.07	9.1
RW-94	05/29/2012 12:57	0.93	-89	6.66	0.09	1.79218	20.84	12.1
RW-94	05/29/2012 12:59	0.8	-90	6.64	0.09	1.81172	21.31	8.9
RW-94	05/29/2012 13:01	0.72	-91	6.71	0.09	1.83813	21.2	10.3
RW-94	05/29/2012 13:03	0.64	-92	6.78	0.09	1.84794	21.31	9.9
RW-94	05/29/2012 13:05	0.59	-93	6.81	0.1	1.86911	21.35	9.7
RW-94	05/29/2012 13:07	0.53	-94	6.81	0.1	1.8665	21.38	12.3
RW-94	05/29/2012 13:09	0.49	-94	6.8	0.1	1.87724	21.36	15.4

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
RW-94	05/29/2012 13:11	0.45	-95	6.83	0.1	1.87824	21.68	12.2
RW-94	05/29/2012 13:13	0.43	-95	6.8	0.1	1.88893	21.4	12.8
RW-94	05/29/2012 13:15	0.38	-95	6.82	0.1	1.8913	21.88	15.7
RW-94	05/29/2012 13:17	0.36	-96	6.8	0.1	1.8943	22.32	14.7
RW-94	05/29/2012 13:19	0.35	-96	6.77	0.1	1.90932	22.34	10.5
RW-94	05/29/2012 13:21	0.34	-97	6.77	0.1	1.9146	22.09	10.9
RW-94	05/29/2012 13:23	0.31	-97	6.77	0.1	1.92061	21.99	8.1
RW-94	05/29/2012 13:26	0.31	-97	6.77	0.1	1.921	21.99	8.055
RW-94	05/29/2012 16:04	6.08	-26	6.58	0.11	2.092	16.08	360.8
RW-94	05/30/2012 09:45	0.18	10	6.53	0.03	0.5805	18.72	657.4
RW-94	06/18/2013 10:58	0.60	-136	6.75	0.04	0.831	20.70	120.70
RW-94	06/18/2013 11:40	0.85	-105	6.50	0.09	0.929	19.25	258.30
RW-94	06/19/2013 10:43	1.75	-154.00	6.28	0.01	0.204	19.88	476.70
RW-94	08/16/2013 10:19	4.22	-63.2	6.80	0.72	1.448	23.30	238.70
RW-94	08/16/2013 10:52	0.33	-90.3	6.68	0.87	1.709	20.24	143.80
RW-94	08/16/2013 11:15	0.34	-81.8	6.70	1.00	1.934	21.50	261.80
RW-94	08/17/2013 11:15	0.34	-81.8	6.70	1.00	1.934	21.50	261.80
RW-94	06/26/2014 08:54	0.33	-20	6.43	0.03	0.639	21.27	199.40
RW-94	06/26/2014 09:31	0.75	-30	6.37	0.11	2.112	16.87	530.80
RW-94	06/27/2014 09:08	0.22	-55	6.48	0.09	1.699	17.28	49.10
RW-94	09/07/2016 12:18	1.25	-74	6.59	0.13	2.458	25.86	93.90
RW-94	09/07/2016 14:30	1.28	-65	6.87	0.30	5.532	23.29	537.20
RW-94	03/01/2017 10:50	0.22	275	7.72	0.20	3.883	9.95	14.20
RW-94	03/01/2017 14:01	5.37	-126	6.70	0.14	2.653	11.61	176.10
RW-94	02/16/2018 09:10	6.07	289.00	6.82	0.02	0.369	8.13	294.80
RW-94	02/16/2018 09:17	0.97	225.00	7.04	0.04	0.724	7.95	85.60
RW-94	02/16/2018 09:52	7.87	231.00	7.53	0.02	0.468	8.15	289.10
RW-94	01/30/2020 11:35	1.35	-24.9	6.68	NM	0.122	9.01	143.3
RW-94	01/30/2020 12:45	0.29	-126.2	6.88	0.2	0.406	11.45	109.6
RW-94	03/20/2020 11:30	0.42	-97.4	6.64	NM	0.379	11.06	37.7
RW-94	06/11/2020 12:35	0.92	-84.7	6.69	0.57	1.144	20.17	24.3
RW-94	06/11/2020 12:40	0.4	-79.5	6.59	0.57	1.145	19.65	16.1
RW-94	06/11/2020 12:45	0.35	-78.5	6.58	0.57	1.149	19.71	15.3
RW-94	06/11/2020 12:50	0.32	-77.5	6.58	0.58	1.156	19.52	13.1
RW-94	06/11/2020 12:55	0.29	-77.4	6.57	0.58	1.172	19.71	11.4
RW-94	06/11/2020 13:00	0.29	-76.4	6.57	0.59	1.176	19.41	10.5
RW-94	06/11/2020 13:05	0.28	-76.2	6.58	0.59	1.186	19.06	8.1
RW-94	06/11/2020 13:10	0.28	-76.1	6.58	0.6	1.195	19.07	5.9
RW-94	06/11/2020 13:15	0.27	-74.8	6.58	0.6	1.206	18.73	5.7
RW-94	06/11/2020 13:20	0.27	-74.1	6.59	0.61	1.212	18.61	5.4
RW-94	02/04/2021 12:15	0.69	27.9	6.88	0.88	1.741	8.71	88.9
RW-94	02/04/2021 12:20	0.62	23.6	6.83	0.88	1.736	8.78	83.7
RW-94	02/04/2021 12:25	0.41	6.5	6.58	0.87	1.713	8.9	53.6
RW-94	02/04/2021 12:30	0.4	2.4	6.54	0.86	1.698	9.1	52.8
RW-94	02/04/2021 12:35	0.38	-1	6.5	0.86	1.695	9.33	48.3
RW-94	02/04/2021 12:40	0.4	-0.3	6.48	0.86	1.685	9.28	51.7
RW-94	02/04/2021 12:45	0.37	-0.8	6.47	0.85	1.682	9.35	50.5
RW-94	02/04/2021 12:50	0.4	-0.7	6.48	0.85	1.68	9.36	50.2
RW-94	02/04/2021 14:10	0.36	-11.8	6.33	0.87	1.698	9.4	30.8
RW-94	02/04/2021 14:20	4.23	-23.1	6.54	0.79	1.648	9.55	55.6
RW-94	02/07/2022 11:45	3.71	23.5	6.6	2.98	5.498	8.85	477.9
RW-94	02/07/2022 11:50	3.7	22.1	6.55	2.99	5.514	8.89	465.9
RW-94	02/07/2022 11:55	6.06	43.5	6	3.06	5.639	8.46	228.9
RW-94	02/07/2022 12:00	4.77	43.8	5.99	3.05	5.627	8.69	216.1
RW-94	02/07/2022 12:05	5.01	44.5	5.97	3.05	5.62	8.86	201.3
RW-94	02/07/2022 12:10	6.08	45.9	5.99	2.95	5.45	9.11	181.5
RW-94	02/07/2022 12:15	6.71	45.6	5.99	2.94	5.437	9.11	152.9
RW-94	02/07/2022 12:20	7.02	45.2	5.99	2.94	5.423	9.14	145.6
RW-94	02/07/2022 12:25	7.5	33.5	6.1	2.79	5.176	9.31	123.5

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
RW-94	02/07/2022 12:30	8.04	32.8	6.11	2.78	5.159	9.31	110.2
SB-10	04/12/2012 08:20	2.51	-51	7.42	1.37	22.74599	12.74	5.4
SB-10	04/12/2012 08:23	0.71	-88	7.52	1.36	22.57261	12.88	5.1
SB-10	04/12/2012 08:26	0.46	-103	7.53	1.36	22.53473	12.97	5.4
SB-10	04/12/2012 08:28	0.37	-114	7.52	1.36	22.51734	13	5.3
SB-10	04/12/2012 08:31	0.33	-121	7.52	1.36	22.52342	13	5.4
SB-10	04/12/2012 08:34	0.3	-126	7.52	1.36	22.52134	12.98	6.3
SB-10	04/12/2012 08:36	0.28	-131	7.52	1.36	22.58164	12.79	5.5
SB-10	04/12/2012 08:39	0.26	-135	7.52	1.36	22.50886	13.06	6.4
SB-10	04/12/2012 08:42	0.26	-139	7.52	1.36	22.4915	13.24	5.3
SB-10	04/12/2012 08:44	0.25	-142	7.52	1.35	22.47741	13.12	5.2
SB-10	04/12/2012 08:47	0.24	-145	7.52	1.35	22.47471	13.13	5.3
SB-10	04/12/2012 11:14	2.4	-118	7.18	1.29	21.51	13.17	19.2
SB-10	04/13/2012 09:00	0.01	-113	7.07	1.05	17.84	12.87	79
SB-10	10/01/2012 08:32	0.93	-300	6.6	1.58	25.67626	19.17	2
SB-10	10/01/2012 08:34	0.62	-316	6.59	1.59	25.82332	19.57	2.7
SB-10	10/01/2012 08:37	0.59	-321	6.59	1.59	25.73899	19.73	5.8
SB-10	10/01/2012 08:40	0.64	-318	6.59	1.58	25.56407	20.21	11.5
SB-10	10/01/2012 08:43	0.68	-321	6.6	1.57	25.44495	20.04	11.2
SB-10	10/01/2012 08:46	0.7	-324	6.6	1.56	25.39011	20.09	9.1
SB-10	10/01/2012 08:49	0.71	-327	6.6	1.55	25.19279	20.22	6.5
SB-10	10/01/2012 08:52	0.73	-327	6.61	1.55	25.19706	20.29	4.8
SB-10	10/01/2012 08:55	0.73	-327	6.61	1.53	24.86027	20.48	3.3
SB-10	10/01/2012 08:58	0.74	-330	6.61	1.52	24.78857	20.3	1.8
SB-10	10/01/2012 09:01	0.76	-332	6.61	1.52	24.71413	20.35	1.3
SB-10	10/01/2012 09:04	0.75	-322	6.62	1.51	24.56232	20.46	1.2
SB-10	10/01/2012 09:07	0.76	-329	6.62	1.52	24.760	20.50	1.16
SB-10	10/01/2012 11:33	0.84	-302	6.94	1.44	23.470	19.67	13.40
SB-10	10/02/2012 09:07	5.18	-337	7.12	1.20	25.000	17.66	29.10
SB-10	05/15/2014 09:34	1.55	-377	7.18	0.13	2.493	13.79	60.82
SB-10	05/15/2014 11:25	1.79	-270	6.77	2.40	37.810	15.33	79.60
SB-10	05/16/2014 10:39	-0.42	-369	7.04	0.83	14.280	17.41	230.70
SB-10	10/02/2014 09:19	1.26	-193	6.70	0.31	5.686	19.32	21.42
SB-10	10/02/2014 10:10	1.43	-308	6.66	0.37	27.480	16.63	135.70
SB-10	10/03/2014 08:52	0.64	-371	6.79	0.37	57.840	14.79	91.30
SB-10	05/01/2015 11:17	-2.86	-375	6.75	2.32	36.72	13.64	54.8
SB-10	05/01/2015 15:59	0.28	-219	6.76	2.01	32.32	12.37	87.1
SB-10	10/06/2015 10:13	-0.36	50	6.71	2.66	41.42	14.67	69
SB-10	10/06/2015 10:26	8.53	-259	6.54	3.24	49.15	18.15	7.2
SB-13B	01/19/2012 13:25	91.33	14	6.94	0.3	3.91274	9.16	9.9
SB-13B	01/19/2012 13:29	7.07	-8	6.86	0.42	5.34496	8.99	1.7
SB-13B	01/19/2012 13:32	2.81	-22	6.89	0.42	5.31232	9.41	0.8
SB-13B	01/19/2012 13:35	1.76	-32	6.94	0.39	5.05768	9.94	1.5
SB-13B	01/19/2012 13:38	1.37	-39	6.99	0.36	4.72806	9.77	2.7
SB-13B	01/19/2012 13:41	1.16	-43	7.03	0.34	4.48163	9.95	2.9
SB-13B	01/19/2012 13:45	1.01	-45	7.06	0.32	4.28928	10.19	2.5
SB-13B	01/19/2012 13:46	1.01	-45	7.06	0.32	4.289	10.19	2.45
SB-13B	01/19/2012 14:58	25.55	17	7.18	0.30	4.264	11.80	27.10
SB-13B	01/20/2012 09:29	0.98	53	6.75	0.26	3.850	14.43	44.20
SB-13B	04/12/2012 13:28	2.14	-25	6.95	0.29	5.40969	15.58	20.9
SB-13B	04/12/2012 13:31	0.92	-51	7.01	0.3	5.45432	13.71	7.9
SB-13B	04/12/2012 13:35	0.54	-63	7.03	0.3	5.44236	13.79	8.7
SB-13B	04/12/2012 13:38	0.47	-71	7.04	0.3	5.44936	13.73	21.2
SB-13B	04/12/2012 13:41	0.37	-77	7.04	0.29	5.43881	13.79	9.2
SB-13B	04/12/2012 13:44	0.33	-83	7.05	0.3	5.44384	13.49	36.4
SB-13B	04/12/2012 13:48	0.31	-87	7.05	0.3	5.44121	13.83	7.4
SB-13B	04/12/2012 13:51	0.29	-91	7.06	0.29	5.43366	13.66	7.5
SB-13B	04/12/2012 13:54	0.28	-95	7.06	0.29	5.43339	13.92	13.7
SB-13B	04/12/2012 13:57	0.26	-98	7.06	0.3	5.44274	13.68	7.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-13B	04/12/2012 14:00	0.26	-101	7.06	0.29	5.41375	13.93	9.6
SB-13B	04/12/2012 14:04	0.25	-103	7.06	0.29	5.41929	14.5	7.9
SB-13B	04/12/2012 14:07	0.25	-105	7.07	0.29	5.43234	14.05	20.5
SB-13B	04/12/2012 14:10	0.25	-106	7.06	0.29	5.43567	13.66	8.2
SB-13B	04/12/2012 14:13	0.26	-107	7.07	0.29	5.43434	13.7	9.1
SB-13B	04/12/2012 14:17	0.18	-108	7.07	0.29	5.43523	13.52	8.6
SB-13B	04/12/2012 14:28	0.18	-108	7.07	0.29	5.435	13.52	8.564
SB-13B	04/12/2012 15:35	4.4	-92	7.08	0.37	6.808	13.73	13.7
SB-13B	04/13/2012 10:33	0.53	1	6.64	0.27	4.942	12.45	14.5
SB-13B	07/16/2012 10:11	1.08	-116	6.67	0.25	4.69756	30.68	50.1
SB-13B	07/16/2012 10:14	0.8	-165	6.8	0.26	4.73385	26.18	4.2
SB-13B	07/16/2012 10:17	0.51	-185	6.8	0.26	4.71403	26.35	5.2
SB-13B	07/16/2012 10:21	0.39	-197	6.79	0.26	4.72335	27.02	7.2
SB-13B	07/16/2012 10:24	0.34	-205	6.8	0.26	4.74028	27.48	7.7
SB-13B	07/16/2012 10:27	0.3	-212	6.82	0.26	4.74561	27.69	6.2
SB-13B	07/16/2012 10:30	0.26	-216	6.82	0.26	4.77429	27.7	7.2
SB-13B	07/16/2012 10:33	0.19	-222	6.84	0.26	4.76551	27.54	17.1
SB-13B	07/16/2012 10:36	0.17	-226	6.86	0.26	4.75854	27.17	7.4
SB-13B	07/16/2012 10:39	0.18	-230	6.86	0.26	4.76792	27.01	7.7
SB-13B	07/16/2012 10:42	0.19	-234	6.88	0.26	4.74094	27.06	8.6
SB-13B	07/16/2012 10:46	0.17	-237	6.88	0.26	4.74405	27.34	9.3
SB-13B	07/16/2012 10:49	0.15	-239	6.87	0.26	4.77517	27.72	7.3
SB-13B	07/16/2012 10:52	0.13	-242	6.87	0.26	4.79169	27.41	7.6
SB-13B	07/16/2012 10:55	0.1	-245	6.89	0.26	4.76973	27.52	7.3
SB-13B	07/16/2012 10:58	0.09	-246	6.9	0.26	4.7929	27.62	7.2
SB-13B	07/16/2012 11:01	0.08	-249	6.91	0.26	4.77699	28.13	7.8
SB-13B	07/16/2012 11:02	0.08	-249	6.91	0.26	4.777	28.13	7.82
SB-13B	07/16/2012 12:26	6.13	-68	7.11	0.33	5.924	21.96	12.40
SB-13B	07/17/2012 10:00	3.18	-62	6.48	3.10	4.850	17.00	17.80
SB-13B	10/03/2012 08:53	1.81	-97	11.72	0.28	5.18333	20.53	5.7
SB-13B	10/03/2012 08:56	1.14	-87	11.43	0.36	6.46134	19.91	3.6
SB-13B	10/03/2012 08:59	0.82	-89	11.02	0.35	6.3637	19.82	2.9
SB-13B	10/03/2012 09:03	0.78	-93	10.94	0.34	6.21226	19.81	4.1
SB-13B	10/03/2012 09:06	0.77	-98	10.93	0.33	6.06776	19.77	11.4
SB-13B	10/03/2012 09:09	0.74	-103	10.91	0.33	5.96858	19.87	12.4
SB-13B	10/03/2012 09:12	0.74	-107	10.9	0.33	6.08252	19.92	11
SB-13B	10/03/2012 09:15	0.71	-114	10.9	0.33	5.92504	19.97	13.8
SB-13B	10/03/2012 09:19	0.69	-121	10.9	0.32	5.78174	19.96	16.3
SB-13B	10/03/2012 09:22	0.69	-133	10.9	0.31	5.70267	19.95	15.2
SB-13B	10/03/2012 09:25	0.68	-149	10.91	0.31	5.65841	19.92	13.3
SB-13B	10/03/2012 09:28	0.68	-165	10.92	0.31	5.59185	19.94	16.3
SB-13B	10/03/2012 09:32	0.68	-178	10.9	0.3	5.52799	20	42.9
SB-13B	10/03/2012 09:35	0.65	-188	10.89	0.3	5.52095	19.97	17.5
SB-13B	10/03/2012 09:38	0.64	-199	10.89	0.29	5.38703	19.96	16
SB-13B	10/03/2012 09:41	0.65	-208	10.89	0.29	5.268	20.07	19.19
SB-13B	10/03/2012 10:58	2.98	-90	6.68	0.32	5.815	19.39	10.90
SB-13B	10/04/2012 09:15	0.46	18	10.83	0.26	4.762	19.09	23.10
SB-13B	01/14/2013 09:03	2.54	-137	6.91	0.34	6.193	12.74	29.7
SB-13B	01/14/2013 09:06	0.99	-187	6.93	0.34	6.23	12.54	10.1
SB-13B	01/14/2013 09:09	0.74	-209	6.94	0.34	6.213	12.56	4.5
SB-13B	01/14/2013 09:12	0.64	-221	6.95	0.34	6.21	12.55	5.9
SB-13B	01/14/2013 09:15	0.55	-229	6.96	0.34	6.212	12.45	5.7
SB-13B	01/14/2013 09:19	0.45	-233	6.96	0.34	6.205	12.56	4.5
SB-13B	01/14/2013 09:22	0.4	-234	6.97	0.34	6.207	12.48	4.5
SB-13B	01/14/2013 09:25	0.36	-236	6.97	0.34	6.207	12.48	4.6
SB-13B	01/14/2013 09:28	0.33	-237	6.97	0.34	6.213	12.52	4.7
SB-13B	01/14/2013 09:31	0.32	-239	6.97	0.34	6.212	12.5	4.5
SB-13B	01/14/2013 09:34	0.31	-240	6.97	0.34	6.213	12.63	4.58
SB-13B	01/14/2013 11:02	5.49	-91	6.78	0.34	6.275	14.20	6.30

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-13B	01/15/2013 09:31	0.81	-80	6.58	0.26	4.773	14.21	7.90
SB-13B	05/01/2013 09:56	0.34	-314	6.81	0.63	11.11	14.32	3.58
SB-13B	05/01/2013 11:32	2.52	-124	6.63	0.37	6.727	12.2	16.4
SB-13B	05/02/2013 09:29	-0.39	-276	6.68	0.7	12.29	12.05	6.1
SB-13B	07/15/2013 09:05	0.79	-168	6.65	0.43	7.603	22.80	12.01
SB-13B	07/15/2013 10:42	3.04	-106	6.76	0.58	10.150	20.81	14.80
SB-13B	07/16/2013 09:11	0.88	-147.00	6.46	1.78	28.710	15.18	3.80
SB-13B	02/17/2014 11:24	0.45	-113	6.97	0.28	5.244	8.20	2.23
SB-13B	02/17/2014 13:30	3.97	-87	6.69	0.27	5.114	8.79	27.80
SB-13B	02/18/2014 10:12	0.61	-121	6.41	0.22	4.071	12.31	6.50
SB-13B	04/28/2014 09:06	1.49	-356	6.57	0.52	9.204	11.80	3.83
SB-13B	04/28/2014 12:03	5.76	-198	6.61	0.53	9.458	14.47	112.80
SB-13B	04/29/2014 09:38	4.24	-195	6.55	0.09	1.862	10.20	12.10
SB-13B	10/02/2014 13:04	0.80	-248	6.72	0.18	3.349	20.26	4.87
SB-13B	10/02/2014 14:28	3.62	-104	6.51	0.31	5.691	18.86	13.00
SB-13B	10/03/2014 10:19	0.67	-78	6.49	0.50	8.869	17.22	6.10
SB-13B	01/15/2015 14:45	-0.28	-178	6.99	0.26	4.974	9.14	9.01
SB-13B	01/15/2015 15:40	2.40	-126	6.83	0.30	5.579	10.21	6.20
SB-13B	01/16/2015 10:50	0.26	-170	6.57	0.27	5.126	14.24	9.60
SB-13B	05/01/2015 10:27	0.36	-51	6.46	0.3	5.564	10.34	3.3
SB-13B	05/01/2015 13:02	1.56	-80	6.64	0.38	6.863	11.03	2.7
SB-13B	07/21/2015 09:48	-0.38	-25	6.58	1.52	24.92	14.28	10.8
SB-13B	07/21/2015 10:49	5.7	-57	6.66	1.49	24.23	19.5	18.7
SB-13B	10/06/2015 11:30	-0.65	29	6.27	0.38	6.863	18.78	7.7
SB-13B	10/06/2015 14:48	5.16	-72	6.49	0.55	9.754	18.69	20.1
SB-15	01/19/2012 10:20	2.39	159	6.81	0.13	1.83559	10.52	71.4
SB-15	01/19/2012 10:22	0.3	130	6.88	0.13	1.70463	7.59	68.5
SB-15	01/19/2012 10:25	1.63	108	6.92	0.13	1.79096	9.32	68.7
SB-15	01/19/2012 10:27	1.07	103	6.94	0.13	1.77509	9.16	66.1
SB-15	01/19/2012 10:30	0.87	95	6.95	0.13	1.787	8.89	84
SB-15	01/19/2012 10:32	0.79	88	6.97	0.13	1.78479	9.21	68.2
SB-15	01/19/2012 10:34	0.74	86	6.98	0.13	1.78026	9.11	68.4
SB-15	01/19/2012 10:37	0.71	83	7	0.13	1.78123	9.24	75
SB-15	01/19/2012 10:38	0.71	83	7.00	0.13	1.781	9.24	74.97
SB-15	01/19/2012 12:00	5.19	-11	6.42	1.43	19.020	14.88	32.30
SB-15	01/20/2012 08:35	7.04	112	7.10	0.05	0.780	11.43	1.80
SB-15	04/12/2012 09:15	1.13	-140	7.21	0.18	3.4503	18.58	32.9
SB-15	04/12/2012 09:17	0.88	-120	6.96	0.26	4.82625	13.49	12.2
SB-15	04/12/2012 09:20	0.55	-117	6.93	0.25	4.66767	13.31	26.2
SB-15	04/12/2012 09:22	0.46	-116	6.91	0.24	4.46588	13.1	4.5
SB-15	04/12/2012 09:25	0.42	-116	6.93	0.22	4.17129	13.07	6.6
SB-15	04/12/2012 09:27	0.39	-116	6.93	0.21	3.95489	13.62	5.5
SB-15	04/12/2012 09:30	0.39	-116	6.94	0.2	3.81969	13.6	5.3
SB-15	04/12/2012 09:32	0.38	-116	6.94	0.2	3.74511	13.64	6.3
SB-15	04/12/2012 09:34	0.37	-115	6.94	0.19	3.67595	13.66	7.3
SB-15	04/12/2012 09:37	0.35	-115	6.95	0.19	3.61014	13.62	6.6
SB-15	04/12/2012 09:39	0.33	-114	6.96	0.19	3.52435	13.68	6.2
SB-15	04/12/2012 09:42	0.34	-114	6.97	0.18	3.44337	13.84	6.6
SB-15	04/12/2012 09:44	0.32	-114	6.98	0.18	3.3718	13.99	7.3
SB-15	04/12/2012 09:47	0.32	-114	6.99	0.18	3.34781	13.7	8.3
SB-15	04/12/2012 09:49	0.32	-113	7	0.17	3.29894	13.57	10.5
SB-15	04/12/2012 09:52	0.32	-113	7	0.17	3.27005	13.65	11.4
SB-15	04/12/2012 09:54	0.32	-112	7.01	0.17	3.22775	13.61	9.9
SB-15	04/12/2012 09:56	0.32	-111	7.01	0.17	3.17778	13.73	12.8
SB-15	04/12/2012 09:59	0.32	-111	7.02	0.16	3.13642	13.65	13.1
SB-15	04/12/2012 10:01	0.32	-110	7.02	0.16	3.09596	13.72	15.1
SB-15	04/12/2012 10:04	0.31	-110	7.04	0.16	3.05012	13.67	14.6
SB-15	04/12/2012 10:05	0.31	-110	7.04	0.16	3.05	13.67	14.6
SB-15	04/12/2012 11:57	1.63	-93	6.77	0.52	9.183	13.04	8.3

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-15	04/13/2012 09:30	3.14	2	6.76	0.47	8.514	12.49	9.1
SB-15	07/16/2012 08:34	0.74	-54	6.5	0.1	1.95519	24.53	20.9
SB-15	07/16/2012 08:36	0.79	-68	6.52	0.1	2.0195	24.57	6.5
SB-15	07/16/2012 08:39	0.5	-76	6.58	0.1	1.98519	23.28	7.2
SB-15	07/16/2012 08:41	0.35	-82	6.62	0.1	1.89885	22.47	8.7
SB-15	07/16/2012 08:43	0.29	-86	6.64	0.09	1.82105	22.4	8.6
SB-15	07/16/2012 08:45	0.26	-89	6.66	0.09	1.77604	22.35	9.7
SB-15	07/16/2012 08:47	0.23	-92	6.68	0.09	1.7414	22.27	11.8
SB-15	07/16/2012 08:49	0.22	-95	6.69	0.09	1.71056	22.39	11.7
SB-15	07/16/2012 08:52	0.22	-96	6.69	0.09	1.80685	22.5	27.2
SB-15	07/16/2012 08:54	0.18	-97	6.71	0.08	1.65088	22.42	15.5
SB-15	07/16/2012 08:56	0.16	-100	6.71	0.08	1.64115	22.48	15
SB-15	07/16/2012 08:58	0.16	-102	6.71	0.08	1.61252	22.49	16
SB-15	07/16/2012 09:00	0.15	-102	6.71	0.08	1.62692	22.61	15.8
SB-15	07/16/2012 09:01	0.15	-102	6.71	0.08	1.627	22.61	15.81
SB-15	07/16/2012 09:46	5.31	-26	6.56	0.69	11.890	20.80	11.00
SB-15	07/17/2012 09:09	2.72	-95	6.26	0.57	0.664	20.96	9.10
SB-15	10/01/2012 13:02	1.49	-62	6.19	0.32	5.76336	25.11	18.2
SB-15	10/01/2012 13:05	1.66	-65	6.17	0.42	7.5825	21.91	6.7
SB-15	10/01/2012 13:07	1.37	-74	6.16	0.41	7.28425	21.5	6.6
SB-15	10/01/2012 13:10	1.25	-77	6.16	0.4	7.09962	21.23	9.5
SB-15	10/01/2012 13:12	1.13	-80	6.17	0.38	6.90176	21.21	11.6
SB-15	10/01/2012 13:15	1.06	-81	6.17	0.37	6.73284	21.39	19.7
SB-15	10/01/2012 13:17	1.02	-82	6.17	0.36	6.51206	21.53	27.7
SB-15	10/01/2012 13:20	0.95	-84	6.18	0.35	6.31819	22.02	32.6
SB-15	10/01/2012 13:22	0.94	-85	6.18	0.35	6.33267	21.81	39.5
SB-15	10/01/2012 13:25	0.94	-85	6.18	0.35	6.41831	21.62	49.9
SB-15	10/01/2012 13:28	0.95	-86	6.19	0.34	6.11791	21.57	63.9
SB-15	10/01/2012 13:30	0.93	-86	6.19	0.32	5.86516	21.6	68.5
SB-15	10/01/2012 13:33	0.93	-86	6.19	0.32	5.77597	21.6	64.1
SB-15	10/01/2012 13:35	0.92	-84	6.21	0.3	5.51688	21.49	42.6
SB-15	10/01/2012 13:38	0.9	-84	6.21	0.31	5.68663	21.73	89.7
SB-15	10/01/2012 13:40	0.9	-84	6.21	0.3	5.40567	21.77	80.4
SB-15	10/01/2012 13:43	0.9	-82	6.22	0.28	5.10248	21.75	94.5
SB-15	10/01/2012 13:45	0.89	-79	6.22	0.27	4.98446	21.76	95
SB-15	10/01/2012 13:48	0.88	-77	6.23	0.27	4.92375	21.75	100.5
SB-15	10/01/2012 13:50	0.87	-77	6.23	NM	4870.000	21.92	121.80
SB-15	10/01/2012 13:51	0.87	-77	6.23	0.26	4.87035	21.92	121.8
SB-15	10/01/2012 15:12	1.21	-61	6.51	NM	6.586	20.62	32.00
SB-15	10/02/2012 09:32	4.11	-280	6.42	0.0000	1.010	20.44	5.20
SB-15	01/17/2013 09:16	1.94	-67	6.68	0.22	4.11	9.32	348
SB-15	01/17/2013 09:18	1.01	-77	6.69	0.21	3.963	8.76	33.9
SB-15	01/17/2013 09:21	0.69	-81	6.69	0.21	4.002	9.24	40.6
SB-15	01/17/2013 09:23	0.64	-82	6.69	0.21	4.015	9.42	33.8
SB-15	01/17/2013 09:25	0.59	-82	6.69	0.21	4.006	9.54	36.8
SB-15	01/17/2013 09:28	0.56	-84	6.7	0.21	4.027	9.37	33.1
SB-15	01/17/2013 09:30	0.57	-84	6.7	0.21	4.009	9.55	34.3
SB-15	01/17/2013 09:32	0.57	-85	6.7	0.21	4.03	9.57	35.7
SB-15	01/17/2013 09:35	0.54	-86	6.71	0.21	4.037	9.33	30.2
SB-15	01/22/2013 09:35	0.57	-85	6.10	0.21	4.030	9.41	35.66
SB-15	01/22/2013 10:55	8.03	-117	6.90	0.26	4.771	11.30	90.50
SB-15	01/23/2013 09:55	0.77	-128	6.54	0.24	4.494	11.90	5.30
SB-15	01/29/2013 13:03	6.31	-15.7	6.54	1.8	3.46	9.8	76.7
SB-15	01/29/2013 13:06	5.37	-12.2	6.55	1.9	3.5	9.6	70.2
SB-15	01/29/2013 13:09	5.22	-11.5	6.55	1.9	3.51	9.5	67.7
SB-15	01/29/2013 13:12	4.4	-10	6.56	1.9	3.56	9.2	58.7
SB-15	01/29/2013 13:15	3.98	-6.5	6.56	1.9	3.57	9.1	57.8
SB-15	01/29/2013 13:18	3.9	-5.1	6.56	1.9	3.57	9	54
SB-15	01/29/2013 13:21	3.74	-4.8	6.56	1.9	3.57	9	54.2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-15	01/29/2013 13:24	3.48	-3.9	6.56	1.9	3.57	8.9	49.8
SB-15	01/29/2013 13:27	3.44	-2.9	6.56	1.9	3.58	8.8	46
SB-15	01/29/2013 13:30	3.37	-3	6.56	1.9	3.58	8.8	44.6
SB-15	01/29/2013 13:33	3.35	-3	6.56	1.9	3.59	8.7	45.3
SB-15	05/09/2013 09:51	2.88	-2.8	6.49	1.06	2.061	14.73	4.6
SB-15	05/10/2013 10:02	2.81	19.1	6.36	1.14	2.212	13.98	5.7
SB-15	07/01/2013 10:00	6.79	-10.5	6.75	0.65	1.202	20.4	13.7
SB-15	07/01/2013 13:50	0.57	-76	6.57	0.2	2.474	20.19	4.9
SB-15	07/02/2013 10:20	2.75	149	6.66	0.44	0.849	22.18	13.3
SB-15	12/09/2013 11:50	0.85	-96.7	6.46	3.19	5.906	10.18	24.50
SB-15	12/09/2013 12:20	6.69	-96.6	6.56	1.46	2.792	13.25	4.00
SB-15	12/09/2013 13:46	3.67	-252.1	7.46	1.65	3.171	7.69	1504.00
SB-15R	03/03/2014 10:12	3.62	-139	12.21	0.27	5.209	4.13	14.86
SB-15R	03/03/2014 10:51	3.00	101	9.02	0.16	3.071	8.06	7.50
SB-15R	03/04/2014 10:26	2.15	-203	9.66	0.13	2.443	9.65	30.10
SB-15R	05/15/2014 10:45	2.89	-277	9.48	0.11	2.174	14.63	17.27
SB-15R	05/15/2014 11:22	2.16	-247	7.29	0.68	11.890	11.79	44.80
SB-15R	05/16/2014 11:16	-0.96	-419	7.31	0.34	6.223	11.29	21.90
SB-15R	07/10/2014 11:15	0.32	-98.3	6.90	1.37	2.653	18.78	4.80
SB-15R	07/10/2014 11:40	0.41	-93.8	6.94	0.99	1.801	16.59	6.70
SB-15R	07/10/2014 12:00	0.35	-84.2	6.47	4.19	9.559	17.99	65.50
SB-15R	07/28/2014 09:25	7.12	101.4	6.74	1.57	2.999	19.97	90.00
SB-15R	07/28/2014 09:35	5.18	-56.4	6.89	1.46	2.818	19.73	9.20
SB-15R	07/28/2014 10:00	5.24	-47.3	6.89	1.49	2.877	20.00	32.10
SB-15R	10/02/2014 11:01	0.67	-137	6.63	0.53	9.424	19.20	9.51
SB-15R	10/02/2014 11:22	1.25	-146	6.58	0.07	1.357	19.48	1032.70
SB-15R	10/03/2014 09:32	0.52	-186	6.95	0.18	3.306	19.26	159.90
SB-15R	02/12/2015 09:20	1.81	-101.9	6.81	3.67	6.757	9.02	0.90
SB-15R	02/12/2015 09:55	4.27	-130.1	6.64	1.52	2.916	10.34	0.0000
SB-15R	02/12/2015 10:19	3.89	-122.3	6.60	1.31	2.560	8.97	31.90
SB-15R	03/30/2015 10:12	2.66	-119	6.72	0.94	16.330	6.75	2.24
SB-15R	03/30/2015 10:37	6.52	-120	6.73	0.20	3.795	8.46	466.10
SB-15R	03/31/2015 09:23	-0.13	-130	6.72	0.35	6.531	9.06	492.00
SB-15R	05/01/2015 11:44	1.51	-257	6.87	0.2	3.825	9.85	80.3
SB-15R	05/01/2015 16:10	5.03	-190	5.32	0.13	2.449	9.68	759.3
SB-15R	07/14/2015 10:15	0.0000	124	6.66	1.50	2.810	17.39	0.0000
SB-15R	07/14/2015 10:20	0.0000	-122	6.48	3.30	6.830	17.42	6.70
SB-15R	07/21/2015 12:00	0.34	-105	6.68	1.27	20.99	16.29	40.2
SB-15R	07/21/2015 14:05	1.96	-99	7.11	1.07	17.96	18.57	289.8
SB-15R	10/06/2015 10:40	-0.63	-45	6.94	0.13	2.518	20.13	13.3
SB-15R	10/06/2015 11:34	3.53	-195	6.87	0.17	3.183	20.29	2.85
SB-15R	03/01/2016 09:51	2.44	-159	7.09	0.55	9.728	12.16	257.70
SB-15R	03/01/2016 09:52	0.11	-175	6.66	0.08	1.650	11.72	4.30
SB-15R	01/31/2017 10:08	4.18	-154	6.71	0.11	2.162	11.92	98.10
SB-15R	01/31/2017 12:15	0.51	-150	6.67	0.10	1.929	11.21	7.30
SB-15R	05/01/2017 12:23	-0.03	-97.00	6.87	0.32	5.953	13.53	12.92
SB-15R	02/06/2018 10:38	6.4	-30	6.87	1.1202	0.0193	6.46	285.7
SB-15R	02/06/2018 10:40	3.25	-34	6.78	1.1046	0.0190	6.49	88
SB-15R	02/06/2018 10:42	2.76	-37	6.77	1.0085	0.0175	5.44	1174
SB-15R	02/06/2018 10:45	1.95	-29	6.79	0.7544	0.0133	7.32	224.2
SB-15R	02/06/2018 10:47	1.68	-21	6.77	0.6639	0.0118	7.95	140.7
SB-15R	02/06/2018 10:49	1.58	-17	6.75	0.6472	0.0115	8.03	99.2
SB-15R	02/06/2018 10:52	1.49	-17	6.74	0.6404	0.0114	8.03	250.5
SB-15R	02/06/2018 10:54	1.49	-16	6.73	0.6313	0.0112	7.89	177.1
SB-15R	02/06/2018 10:56	1.42	-18	6.71	0.6245	0.0111	8.27	64
SB-15R	02/06/2018 10:59	1.38	-19	6.71	0.6210	0.0111	8.21	42.8
SB-15R	02/06/2018 11:01	1.39	-20	6.7	0.6161	0.0110	8.14	20.2
SB-15R	02/06/2018 11:03	1.38	-21	6.7	0.6078	0.0109	7.96	26.8
SB-15R	02/06/2018 11:06	1.35	-21	6.7	0.6034	0.0108	8.07	10.8

Appendix B5 East Yard
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-15R	02/06/2018 11:08	1.32	-21	6.7	0.5938	0.0106	8.18	11.6
SB-15R	02/06/2018 11:10	1.3	-21	6.69	0.5900	0.0105	8.3	9
SB-15R	02/06/2018 11:13	1.26	-21	6.69	0.5854	0.0105	8.4	8.7
SB-15R	02/06/2018 11:15	1.23	-21	6.69	0.5820	0.0104	8.35	4.3
SB-15R	02/06/2018 11:18	1.26	-21	6.7	0.5792	0.0104	8.01	12.7
SB-15R	02/06/2018 11:20	1.19	-22	6.7	0.5746	0.0103	8.45	4
SB-15R	02/06/2018 11:22	1.22	-22	6.71	0.5747	0.0103	8.24	3.8
SB-15R	02/06/2018 11:25	1.2	-21	6.7	0.5678	0.0102	8.4	3.3
SB-15R	02/06/2018 11:27	1.14	-22	6.71	0.5646	0.0101	8.69	4.2
SB-15R	02/07/2018 10:37	0.43	94.00	7.04	0.22	4.102	11.42	87.20
SB-15R	02/07/2018 11:27	1.14	-22.00	6.71	0.56	10.140	8.57	4.19
SB-15R	02/07/2018 11:50	5.32	-41.00	7.10	0.15	2.956	10.08	109.60
SB-15R	02/26/2018 10:38	6.4	-30	6.87	1.1202	19.2553	6.46	285.7
SB-15R	02/26/2018 10:40	3.25	-34	6.78	1.1046	19.0033	6.49	88
SB-15R	02/26/2018 10:42	2.76	-37	6.77	1.0085	17.5475	5.44	1174
SB-15R	02/26/2018 10:45	1.95	-29	6.79	0.7544	13.3010	7.32	224.2
SB-15R	02/26/2018 10:47	1.68	-21	6.77	0.6639	11.7832	7.95	140.7
SB-15R	02/26/2018 10:49	1.58	-17	6.75	0.6472	11.5044	8.03	99.2
SB-15R	02/26/2018 10:52	1.49	-17	6.74	0.6404	11.3910	8.03	250.5
SB-15R	02/26/2018 10:54	1.49	-16	6.73	0.6313	11.2452	7.89	177.1
SB-15R	02/26/2018 10:56	1.42	-18	6.71	0.6245	11.1183	8.27	64
SB-15R	02/26/2018 10:59	1.38	-19	6.71	0.6210	11.0629	8.21	42.8
SB-15R	02/26/2018 11:01	1.39	-20	6.7	0.6161	10.9832	8.14	20.2
SB-15R	02/26/2018 11:03	1.38	-21	6.7	0.6078	10.8530	7.96	26.8
SB-15R	02/26/2018 11:06	1.35	-21	6.7	0.6034	10.7754	8.07	10.8
SB-15R	02/26/2018 11:08	1.32	-21	6.7	0.5938	10.6107	8.18	11.6
SB-15R	02/26/2018 11:10	1.3	-21	6.69	0.5900	10.5433	8.3	9
SB-15R	02/26/2018 11:13	1.26	-21	6.69	0.5854	10.4646	8.4	8.7
SB-15R	02/26/2018 11:15	1.23	-21	6.69	0.5820	10.4091	8.35	4.3
SB-15R	02/26/2018 11:18	1.26	-21	6.7	0.5792	10.3734	8.01	12.7
SB-15R	02/26/2018 11:20	1.19	-22	6.7	0.5746	10.2828	8.45	4
SB-15R	02/26/2018 11:22	1.22	-22	6.71	0.5747	10.2914	8.24	3.8
SB-15R	02/26/2018 11:25	1.2	-21	6.7	0.5678	10.1709	8.4	3.3
SB-15R	02/26/2018 11:27	1.14	-22	6.71	0.5646	10.1067	8.69	4.2
SB-15R	05/09/2018 09:43	4.79	-152	6.82	0.1890	3.5604	17.53	39.1
SB-15R	05/09/2018 09:46	1.96	-138	6.87	0.1886	3.5609	15.31	17.6
SB-15R	05/09/2018 09:48	1.47	-132	6.89	0.1907	3.5986	15.1	9.3
SB-15R	05/09/2018 09:51	1.32	-130	6.92	0.1917	3.6167	15.05	14.3
SB-15R	05/09/2018 09:54	1.19	-128	6.93	0.1926	3.6332	15.17	10.4
SB-15R	05/09/2018 09:56	1.13	-128	6.94	0.1930	3.6417	15	11.1
SB-15R	05/09/2018 09:59	1.15	-128.00	6.96	0.19	3.632	15.03	11.42
SB-15R	07/24/2018 08:52	2.04	-66	6.46	1.1243	18.7290	21.33	35.18
SB-15R	07/24/2018 08:54	0.65	-109	6.58	0.8845	15.0200	20.66	58.77
SB-15R	07/24/2018 08:56	0.5	-118	6.71	0.5825	10.2000	20.43	77.1
SB-15R	07/24/2018 08:58	0.41	-121	6.75	0.4403	7.8590	20.38	43.52
SB-15R	07/24/2018 09:01	0.49	-121	6.73	0.4079	7.3180	20.37	38.72
SB-15R	07/24/2018 09:03	0.59	-122	6.73	0.3763	6.7870	20.35	35.29
SB-15R	07/24/2018 09:05	0.6	-123	6.72	0.3805	6.8580	20.51	27.2
SB-15R	07/24/2018 09:07	0.59	-124	6.72	0.3569	6.4590	20.52	23.7
SB-15R	07/24/2018 09:09	0.64	-124	6.71	0.3591	6.4960	20.49	20.81
SB-15R	07/24/2018 09:12	0.65	-121	6.58	0.4935	8.7420	20.35	23.66
SB-15R	07/24/2018 09:14	0.74	-126	6.68	0.4075	7.3120	20.31	17.55
SB-15R	07/24/2018 09:16	0.83	-134	6.86	0.3053	5.5790	20.52	16.71
SB-15R	07/24/2018 09:18	0.96	-129	6.76	0.2931	5.3700	20.49	12.14
SB-15R	07/24/2018 09:21	1.19	-130	6.74	0.3193	5.8190	20.4	10.98
SB-15R	07/24/2018 09:23	1.46	-129	6.72	0.3160	5.7620	20.44	10.69
SB-15R	07/24/2018 09:25	1.69	-132	6.78	0.2884	5.2890	20.43	10.37
SB-15R	07/24/2018 09:27	1.9	-131	6.76	0.3076	5.6190	20.43	9.486
SB-15R	07/24/2018 09:30	2.08	-133	6.8	0.2917	5.3450	20.57	9.267

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-15R	07/24/2018 09:32	2.31	-132	6.77	0.2914	5.3410	20.39	7.586
SB-15R	07/24/2018 09:34	2.5	-132	6.77	0.2921	5.3530	20.62	7.78
SB-15R	07/24/2018 09:36	2.62	-134	6.8	0.2904	5.3230	20.48	6.851
SB-15R	07/24/2018 09:39	2.75	-133	6.79	0.2845	5.2210	20.49	7.256
SB-15R	07/24/2018 09:41	2.78	-134.00	6.80	0.27	5.001	21.16	7.50
SB-15R	07/24/2018 10:11	2.04	-66	6.46	1.1243	0.0187	21.33	35.18
SB-15R	07/24/2018 10:14	0.65	-109	6.58	0.8845	0.0150	20.66	58.77
SB-15R	07/24/2018 10:16	0.5	-118	6.71	0.5825	0.0102	20.43	77.1
SB-15R	07/24/2018 10:19	0.41	-121	6.75	0.4403	0.0079	20.38	43.52
SB-15R	07/24/2018 10:22	0.49	-121	6.73	0.4079	0.0073	20.37	38.72
SB-15R	07/24/2018 10:24	0.59	-122	6.73	0.3763	0.0068	20.35	35.29
SB-15R	07/24/2018 10:27	0.6	-123	6.72	0.3805	0.0069	20.51	27.2
SB-15R	07/24/2018 10:30	0.59	-124	6.72	0.3569	0.0065	20.52	23.7
SB-15R	07/24/2018 10:32	0.64	-124	6.71	0.3591	0.0065	20.49	20.81
SB-15R	07/24/2018 10:35	0.65	-121	6.58	0.4935	0.0087	20.35	23.66
SB-15R	07/24/2018 10:38	0.74	-126	6.68	0.4075	0.0073	20.31	17.55
SB-15R	07/24/2018 10:40	0.83	-134	6.86	0.3053	0.0056	20.52	16.71
SB-15R	07/24/2018 10:43	0.96	-129	6.76	0.2931	0.0054	20.49	12.14
SB-15R	07/24/2018 10:46	1.19	-130	6.74	0.3193	0.0058	20.4	10.98
SB-15R	07/24/2018 10:48	1.46	-129	6.72	0.3160	0.0058	20.44	10.69
SB-15R	07/24/2018 10:51	1.69	-132	6.78	0.2884	0.0053	20.43	10.37
SB-15R	07/24/2018 10:54	1.9	-131	6.76	0.3076	0.0056	20.43	9.486
SB-15R	07/24/2018 10:56	2.08	-133	6.8	0.2917	0.0053	20.57	9.267
SB-15R	07/24/2018 10:59	2.31	-132	6.77	0.2914	0.0053	20.39	7.586
SB-15R	07/24/2018 11:02	2.5	-132	6.77	0.2921	0.0054	20.62	7.78
SB-15R	07/24/2018 11:04	2.62	-134	6.8	0.2904	0.0053	20.48	6.851
SB-15R	07/24/2018 11:06	2.75	-133	6.79	0.2845	0.0052	20.49	7.256
SB-15R	07/24/2018 11:08	2.78	-134	6.8	0.2718	0.0050	20.98	7.502
SB-15R	11/06/2018 09:05	2.7	-81.8	6.56	17.26	28.04	17.24	44.2
SB-15R	11/06/2018 09:10	1.87	-94	6.58	16.46	26.72	17.52	32.6
SB-15R	11/06/2018 09:15	1.63	-109.1	6.62	12.74	21.57	18.08	30
SB-15R	11/06/2018 09:20	1.8	-96.6	6.72	7.46	13.08	18.12	69.2
SB-15R	11/06/2018 09:25	2.18	-76.4	6.76	4.75	8.486	18	69
SB-15R	11/06/2018 09:30	7.58	-76.9	6.78	4.24	7.627	18.11	34
SB-15R	11/06/2018 09:35	8.92	-79.1	6.78	4.37	7.912	18.12	25.9
SB-15R	11/06/2018 09:40	8.44	-86.2	6.8	3.9	7.046	18.18	15
SB-15R	11/06/2018 09:45	8.14	-88.7	6.8	3.83	6.724	18.21	19.8
SB-15R	11/06/2018 09:50	8.72	-90.90	6.82	3.41	6.301	10.24	7.80
SB-15R	11/06/2018 10:05	8.98	-102.60	6.87	3.68	7.143	18.27	17.40
SB-15R	11/06/2018 10:15	8.84	-101.30	6.88	3.40	7.038	18.24	19.10
SB-15R	02/01/2019 14:25	-0.41	-115.60	6.96	4.64	8.337	9.65	0.0000
SB-15R	02/01/2019 14:45	-3.34	-119.70	7.13	1.67	3.178	10.71	8.60
SB-15R	02/01/2019 15:05	-1.36	-120.90	7.13	1.62	3.093	10.53	0.0000
SB-15R	09/24/2019 09:00	3.19	-97.4	6.49	NM	12.39	19.92	189.4
SB-15R	09/24/2019 09:25	0.74	-114.8	6.72	1.42	2.729	20.35	0.7
SB-15R	09/24/2019 09:45	2.92	-87.2	6.8	0.59	1.15	20.54	47.6
SB-15R	02/17/2020 11:00	0.93	-88.2	6.67	NM	19.96	9.68	34.4
SB-15R	02/17/2020 12:45	5.06	-59.5	6.86	4.42	7.929	12.45	5
SB-15R	02/03/2021 11:45	0.36	-81.4	6.48	15.22	24.86	10.27	28.4
SB-15R	02/03/2021 11:50	0.09	-108.7	6.63	14.1	23.67	10	25.5
SB-15R	02/03/2021 11:55	0.08	-114.8	6.73	9.87	16.95	9.94	21.2
SB-15R	02/03/2021 12:00	0.1	-113.6	6.79	7.09	12.42	9.88	14.7
SB-15R	02/03/2021 12:05	0.19	-106.2	6.8	5.88	10.42	9.76	8.1
SB-15R	02/03/2021 12:10	0.27	-94.6	6.78	5.37	9.551	9.7	3.8
SB-15R	02/03/2021 12:15	0.31	-86.6	6.77	5.27	9.378	9.53	2.3
SB-15R	02/03/2021 12:20	0.32	-80.1	6.76	5.3	9.422	9.77	1.9
SB-15R	02/03/2021 12:25	0.37	-75.6	6.7	6.7	11.2	8.83	4.1
SB-15R	02/03/2021 12:30	0.31	-78.1	6.69	6.83	11.95	9.08	2.3
SB-15R	02/03/2021 13:05	0.74	-58.5	7.16	3.44	6.281	9.41	3.5

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-15R	02/03/2021 13:30	1.8	3.387	7.15	1.78	3.388	8.88	36.1
SB-15R	08/25/2021 11:00	2.63	-102.9	6.55	11.87	19.95	24.83	77.8
SB-15R	08/25/2021 11:05	1.9	-111.8	6.53	13.39	22.19	23.03	55
SB-15R	08/25/2021 11:10	1.39	-119.1	6.55	12.8	21.3	22.04	56.1
SB-15R	08/25/2021 11:15	1.21	-111.3	6.57	10.78	18.18	21.89	47.2
SB-15R	08/25/2021 11:20	1.07	-100.7	6.61	8.17	14.08	21.87	37.7
SB-15R	08/25/2021 11:25	1.17	-93	6.61	6.86	11.96	22.08	39.5
SB-15R	08/25/2021 11:30	1.67	-88.2	6.61	6.08	10.72	22.09	25.2
SB-15R	08/25/2021 11:35	1.08	-100.1	6.51	11.34	19.07	21.64	51.5
SB-15R	08/25/2021 11:40	0.88	-106.7	6.52	12.56	20.93	21.45	38.9
SB-15R	08/25/2021 11:45	0.84	-106.7	6.52	12.28	20.55	21.36	39.1
SB-15R	02/09/2022 10:25	7.37	-40	6.63	14.46	23.84	11.31	87.4
SB-15R	02/09/2022 10:30	7.37	-40	6.63	14.46	23.84	11.31	87.4
SB-15R	02/09/2022 10:35	3.13	79	6.67	15.02	24.74	10.2	72
SB-15R	02/09/2022 10:40	2.94	-80.6	6.65	14.41	23.81	9.87	63.9
SB-15R	02/09/2022 10:45	4.06	-81.6	6.66	13.27	22.09	9.82	46.6
SB-15R	02/09/2022 10:50	3.99	-82	6.67	13.06	21.75	9.81	44.7
SB-15R	02/09/2022 10:55	3.99	-82	6.67	13.06	21.76	9.81	44.7
SB-16	01/23/2012 11:03	0.05	84	6.88	0.06	0.77466	8.34	100.9
SB-16	01/23/2012 11:06	0.05	72	6.94	0.06	0.8026	9.66	8
SB-16	01/23/2012 11:09	0.05	61	6.97	0.06	0.80592	9.98	48
SB-16	01/23/2012 11:12	30.35	54	6.99	0.06	0.81011	9.82	913
SB-16	01/23/2012 11:14	15.79	44	7.01	0.06	0.80801	9.62	532.3
SB-16	01/23/2012 11:17	10.24	36	7.02	0.06	0.81733	9.94	7
SB-16	01/23/2012 11:20	7.36	31	7.03	0.06	0.81285	9.74	388.2
SB-16	01/23/2012 11:23	5.88	24	7.04	0.06	0.80633	9.41	72
SB-16	01/23/2012 11:26	4.87	19	7.05	0.06	0.81179	9.77	20
SB-16	01/23/2012 11:29	4.22	13	7.06	0.06	0.81862	9.77	30.6
SB-16	01/23/2012 11:32	3.66	9	7.06	0.06	0.81583	9.87	246.6
SB-16	01/23/2012 11:35	3.27	4	7.06	0.06	0.81948	10.01	10.7
SB-16	01/23/2012 11:38	2.92	0	7.07	0.06	0.81626	9.73	13.8
SB-16	01/23/2012 11:41	2.67	-3	7.07	0.06	0.81862	9.6	7.7
SB-16	01/23/2012 11:42	2.67	-3	7.07	0.06	0.819	9.60	7.68
SB-16	01/23/2012 12:38	0.04	-13	6.77	0.07	1.029	11.77	10.80
SB-16	01/24/2012 09:46	2.80	-54	6.94	0.07	1.026	12.33	23.40
SB-16	04/18/2012 13:45	1.97	-52	6.76	0.07	1.29078	17.31	113.2
SB-16	04/18/2012 13:48	1.14	-55	6.76	0.07	1.29766	15.23	91.4
SB-16	04/18/2012 13:51	0.86	-56	6.76	0.07	1.29538	14.78	36.8
SB-16	04/18/2012 13:54	0.7	-57	6.76	0.07	1.29441	14.63	48.5
SB-16	04/18/2012 13:57	0.6	-57	6.76	0.06	1.2901	14.73	83.2
SB-16	04/18/2012 14:01	0.56	-58	6.76	0.06	1.28599	14.72	443.8
SB-16	04/18/2012 14:04	0.5	-58	6.76	0.06	1.28451	14.68	153.6
SB-16	04/18/2012 14:07	0.45	-59	6.76	0.06	1.28436	14.69	81.9
SB-16	04/18/2012 14:10	0.42	-59	6.76	0.06	1.28289	14.64	17
SB-16	04/18/2012 14:13	0.4	-60	6.77	0.06	1.28422	14.73	14.2
SB-16	04/18/2012 14:16	0.39	-61	6.77	0.06	1.28233	14.78	65.6
SB-16	04/18/2012 14:19	0.36	-61	6.77	0.06	1.27957	14.87	97.3
SB-16	04/18/2012 14:23	0.36	-62	6.77	0.06	1.28101	14.94	87.6
SB-16	04/18/2012 14:26	0.34	-63	6.77	0.06	1.28118	14.97	10.9
SB-16	04/18/2012 14:29	0.34	-63	6.77	0.06	1.28419	15.01	9.8
SB-16	04/18/2012 14:32	0.33	-64	6.77	0.06	1.28216	15.16	14.7
SB-16	04/18/2012 14:35	0.34	-64	6.78	0.06	1.28135	15.12	14.3
SB-16	04/19/2012 14:36	0.34	-64	6.78	0.06	1.281	15.12	14.35
SB-16	04/19/2012 15:30	1.25	-93	6.66	0.06	1.207	12.59	20.2
SB-16	04/20/2012 11:20	0.35	-61	6.69	0.06	1.138	12.32	13.5
SB-16	07/11/2012 13:58	1.05	-104	6.73	0.06	1.20046	26.59	15.9
SB-16	07/11/2012 14:00	0.67	-116	6.72	0.06	1.20066	26.32	13.7
SB-16	07/11/2012 14:03	0.49	-123	6.69	0.06	1.20186	26.53	15.1
SB-16	07/11/2012 14:06	0.43	-128	6.68	0.06	1.20274	26.88	16

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-16	07/11/2012 14:09	0.37	-131	6.69	0.06	1.21521	26.48	17.4
SB-16	07/11/2012 14:12	0.3	-134	6.69	0.06	1.20622	26.24	17.8
SB-16	07/11/2012 14:15	0.27	-137	6.67	0.06	1.20982	26.31	17.5
SB-16	07/11/2012 14:17	0.25	-139	6.68	0.06	1.20917	26.26	18.2
SB-16	07/11/2012 14:20	0.24	-141	6.68	0.06	1.20865	26.3	18.1
SB-16	07/11/2012 14:23	0.24	-142	7.5	0.06	1.21698	26.10	18.2
SB-16	07/11/2012 15:16	0.89	-91	6.97	0.07	1.347	19.88	5.90
SB-16	07/12/2012 11:41	0.05	-94	6.44	0.06	1.133	22.02	5.60
SB-16	10/03/2012 13:02	1.22	-105	6.44	0.09	1.78041	21.44	3.8
SB-16	10/03/2012 13:05	1.09	-106	6.44	0.09	1.77672	21.27	2.6
SB-16	10/03/2012 13:08	0.83	-109	6.45	0.09	1.77045	21.16	3.7
SB-16	10/03/2012 13:11	0.8	-110	6.45	0.09	1.77093	21.02	1.7
SB-16	10/03/2012 13:14	0.79	-111	6.45	0.09	1.7632	21.06	1.9
SB-16	10/03/2012 13:17	0.79	-111	6.45	0.09	1.75916	21.03	1.8
SB-16	10/03/2012 13:20	0.79	-111	6.46	0.09	1.75005	21.01	1.9
SB-16	10/03/2012 13:21	0.79	-111	6.46	0.09	1.750	21.01	1.93
SB-16	10/03/2012 14:06	1.13	-109	6.42	0.09	1.684	20.52	4.30
SB-16	10/04/2012 09:51	0.50	-104	13.02	0.07	1.352	21.85	7.90
SB-16	01/14/2013 13:00	3.54	-53	6.56	0.12	2.267	13.37	145.6
SB-16	01/14/2013 13:03	1.01	-71	6.65	0.12	2.313	12.86	97.3
SB-16	01/14/2013 13:06	0.77	-74	6.68	0.12	2.309	12.86	54
SB-16	01/14/2013 13:08	0.62	-72	6.68	0.12	2.317	12.73	46.9
SB-16	01/14/2013 13:11	0.53	-69	6.69	0.12	2.308	12.75	40.1
SB-16	01/14/2013 13:14	0.48	-65	6.7	0.12	2.302	12.7	45.8
SB-16	01/14/2013 13:17	0.44	-62	6.7	0.12	2.3	12.73	40.9
SB-16	01/14/2013 13:19	0.4	-58	6.7	0.12	2.299	12.76	33.8
SB-16	01/14/2013 13:22	0.38	-58	6.7	0.12	2.296	12.76	38
SB-16	01/14/2013 13:25	0.36	-59	6.71	0.12	2.288	12.75	33.4
SB-16	01/14/2013 13:27	0.35	-59	6.71	0.12	2.282	12.74	30.9
SB-16	01/14/2013 13:30	0.34	-59	6.71	0.12	2.278	12.78	31.89
SB-16	01/14/2013 14:21	2.10	-117	6.56	0.08	1.491	12.20	8.60
SB-16	01/15/2013 10:15	0.42	-118	6.01	0.10	1.946	12.58	35.50
SB-16	05/01/2013 14:17	0.45	-281	6.69	0.14	2.711	14.05	13.6
SB-16	05/01/2013 14:58	3.76	-141	6.41	0.15	2.897	11.74	20.9
SB-16	05/02/2013 10:13	0.31	-264	6.54	0.13	2.608	11.35	49.1
SB-16	07/16/2013 13:59	1.27	-176	6.59	0.17	3.137	27.27	7.24
SB-16	07/16/2013 14:58	1.14	-183	6.80	0.23	4.216	20.22	6.60
SB-16	07/17/2013 11:08	1.76	-186.00	6.61	0.13	2.499	21.97	39.10
SB-16	02/18/2014 13:28	0.57	-147	6.50	0.07	1.352	6.66	8.45
SB-16	02/18/2014 14:17	1.38	-125	6.33	0.07	1.382	8.30	3.90
SB-16	02/18/2014 14:50	0.53	-149	6.46	0.07	1.450	9.46	5.40
SB-16	04/28/2014 14:20	1.69	-300	6.76	0.08	1.615	14.31	7.00
SB-16	04/28/2014 15:17	3.43	-199	6.62	0.06	1.237	13.78	51.40
SB-16	04/29/2014 10:28	3.97	-183	6.88	0.05	0.926	9.18	24.70
SB-16	07/23/2014 13:55	0.39	-188	11.03	0.03	1.032	24.71	8.20
SB-16	07/23/2014 15:06	2.17	61	6.34	0.08	1.619	18.49	19.90
SB-16	07/24/2014 11:25	0.34	-413	7.56	0.05	1.086	20.38	12.20
SB-16	10/08/2014 08:53	1.02	-231	11.49	0.05	12.080	19.32	11.34
SB-16	10/08/2014 10:53	1.78	-142	6.47	0.09	1.819	18.73	11.70
SB-16	01/15/2015 10:08	0.22	-177	6.85	0.09	1.877	5.74	15.32
SB-16	01/15/2015 11:10	1.56	-135	6.56	0.09	1.724	10.25	13.60
SB-16	01/16/2015 10:03	0.74	-173	6.54	0.09	1.735	11.04	46.30
SB-16	05/01/2015 09:45	8.44	-110	6.51	0.09	1.722	9.56	28.6
SB-16	05/01/2015 10:35	2.5	-118	6.38	0.1	2.052	10	25.5
SB-16	07/21/2015 11:18	0.22	-105	6.4	0.62	10.84	17.6	8.2
SB-16	07/21/2015 14:50	1.89	-84	6.53	0.99	16.62	18.88	8.1
SB-16	10/06/2015 12:20	-0.92	-190	10.73	0.09	1.688	21.75	13.40
SB-16	10/06/2015 16:15	4.33	-36	7.14	0.13	2.559	17.56	12.20
SB-16	12/09/2015 14:00	13.16	106	6.24	0.80	1.560	14.85	187.00

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-16	12/09/2015 15:00	9.71	37	6.31	0.70	1.450	15.55	272.00
SB-16	03/17/2016 10:52	1.05	-80	6.41	0.05	0.932	8.63	16.50
SB-16	03/17/2016 12:11	4.95	-117	6.44	0.38	6.972	9.73	34.80
SB-16	07/06/2016 16:07	0.0000	-98.1	6.50	1.00	1.954	18.33	3.10
SB-16	07/06/2016 16:25	0.0000	-95.6	6.54	0.93	1.826	18.90	4.90
SB-16	01/12/2018 10:35	0.67	-97.00	6.23	0.78	1.498	12.16	40.40
SB-16	01/12/2018 11:55	3.32	-97.10	6.42	0.94	1.834	12.34	3.70
SB-16	01/12/2018 12:10	2.30	-83.90	6.50	0.67	1.340	11.06	133.50
SB-16	03/29/2018 09:49	2.49	15.00	6.65	0.05	1.038	9.15	14.07
SB-16	03/29/2018 09:52	0.79	-67.00	7.61	0.07	1.459	9.32	9.00
SB-16	03/29/2018 11:05	8.04	9.00	7.08	0.07	1.426	8.71	18.00
SB-16	04/27/2018 10:47	6.62	-75.00	6.72	0.05	1.003	9.75	11.50
SB-16	04/27/2018 12:50	0.51	-45.00	6.68	0.06	1.286	13.08	71.57
SB-16	04/27/2018 13:37	2.62	-58.00	6.91	0.07	1.439	9.98	11.50
SB-16	07/24/2018 09:29	3.13	NM	7.66	0.046	0.915	26.38	89.67
SB-16	07/24/2018 09:31	0.97	-73	7.29	0.047	0.938	20.55	24.28
SB-16	07/24/2018 09:34	0.81	-122	7.23	0.046	0.927	20.63	34.13
SB-16	07/24/2018 09:37	0.75	-129	7.2	0.046	0.918	20.55	37.94
SB-16	07/24/2018 09:39	0.64	-134	7.19	0.045	0.908	20.72	27.28
SB-16	07/24/2018 09:42	0.61	-138	7.19	0.045	0.899	20.83	25.37
SB-16	07/24/2018 09:45	0.56	-142	7.2	0.044	0.892	20.76	26.19
SB-16	07/24/2018 09:47	0.64	-148	7.2	0.044	0.893	20.6	27.19
SB-16	07/24/2018 09:50	0.64	-151	7.19	0.044	0.894	20.65	28.04
SB-16	07/24/2018 09:53	0.64	-153	7.19	0.044	0.895	20.72	26.92
SB-16	07/25/2018 13:08	0.64	-153.00	7.19	0.04	0.895	20.9	26.92
SB-16	07/25/2018 13:17	0.14	-160.00	7.07	0.05	0.924	22.22	10.40
SB-16	07/25/2018 13:58	2.82	-91.00	7.25	0.03	0.699	20.38	21.70
SB-16	10/15/2018 11:40	0.88	-86.90	6.51	0.65	1.286	18.82	12.90
SB-16	10/15/2018 12:40	1.02	-108.00	6.47	0.64	1.271	19.23	4.60
SB-16	10/15/2018 12:50	1.03	-108.60	6.46	0.64	1.275	19.23	4.60
SB-16	12/13/2018 11:10	0.46	-88.90	6.85	0.54	1.075	12.27	33.80
SB-16	12/13/2018 12:10	0.36	-112.60	6.72	0.57	1.134	12.79	6.40
SB-16	12/13/2018 12:20	0.73	-103.90	6.73	0.53	1.062	12.47	0.80
SB-16	04/29/2019 11:00	0.61	60.7	7.5	NM	0.742	12.98	96.1
SB-16	04/29/2019 13:00	0.22	-69	6.87	0.61	1.222	11.58	2.2
SB-16	08/22/2019 08:40	1.14	-66.7	7.46	NM	0.889	20.57	136
SB-16	08/22/2019 08:45	1.02	-58	7.16	NM	0.907	21.02	64
SB-16	08/22/2019 08:50	1.11	-46.6	7.15	NM	0.911	21.58	67.6
SB-16	08/22/2019 08:55	1.44	-57.8	7.13	NM	0.901	22.32	61.3
SB-16	08/22/2019 09:00	0.63	-61.4	7.13	NM	0.89	21.52	20.6
SB-16	08/22/2019 09:05	0.45	-70.2	7.14	NM	0.892	21.56	14.2
SB-16	08/22/2019 09:10	0.43	-78	7.15	NM	0.877	21.49	11.1
SB-16	08/22/2019 09:15	0.39	-88.6	7.16	NM	0.874	21.43	8.7
SB-16	08/22/2019 09:20	0.38	-101.2	7.15	NM	0.875	21.59	8.7
SB-16	08/22/2019 09:25	0.35	-108.3	7.14	NM	0.879	21.65	9.4
SB-16	08/22/2019 11:30	3.06	-127.6	6.92	0.65	1.297	22.41	4.6
SB-16	08/22/2019 11:40	7.02	-86	6.98	0.5	1.004	21.93	12.8
SB-16	10/21/2019 09:40	1.26	173.9	6.99	NM	0.481	17.56	57.7
SB-16	10/21/2019 09:45	0.75	123.1	6.96	NM	0.453	18.53	54.9
SB-16	10/21/2019 09:50	0.53	-5.7	6.99	NM	0.45	18.66	46.2
SB-16	10/21/2019 09:55	0.48	-62.4	7.01	NM	0.45	18.55	42.1
SB-16	10/21/2019 10:00	0.38	-100.6	7.02	NM	0.452	18.49	35.5
SB-16	10/21/2019 10:05	0.3	-123.8	6.99	NM	0.458	18.5	31.9
SB-16	10/21/2019 10:10	0.3	-131	6.86	NM	0.47	18.46	15.7
SB-16	10/21/2019 10:15	0.25	-127.9	6.59	NM	0.506	18.29	4.7
SB-16	10/21/2019 10:20	0.24	-125.1	6.53	NM	0.546	18.25	3.1
SB-16	10/21/2019 10:25	0.27	-124.6	6.5	NM	0.57	18.29	2.7
SB-16	10/21/2019 11:40	0.56	-89.4	6.31	0.41	0.836	19.42	5.4
SB-16	10/21/2019 12:20	0.49	-104.8	6.34	0.41	0.82	18.6	2

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-16	01/24/2020 09:35	0.17	-81.9	6.63	NM	0.51	11.69	4.6
SB-16	01/24/2020 11:30	0.12	-115	6.67	0.28	0.574	11.64	0.3
SB-16	04/28/2020 11:50	0.62	-108.3	6.45	NM	0.602	12.29	7.9
SB-16	04/28/2020 13:30	0.24	-121.8	6.25	0.4	0.82	11.8	11.7
SB-16	11/13/2020 09:20	1.49	-75.2	8.37	0.17	0.352	15.64	18
SB-16	11/13/2020 09:25	0.6	-138.4	8.35	0.17	0.346	15.56	9.3
SB-16	11/13/2020 09:30	0.5	-186.4	8.33	0.16	0.343	15.18	11.8
SB-16	11/13/2020 09:35	0.33	-161.4	8.42	0.16	0.34	15.21	15.1
SB-16	11/13/2020 09:40	0.26	-158.8	8.45	0.16	0.338	15.36	11
SB-16	11/13/2020 09:45	0.18	-123.4	8.46	0.16	0.339	15.5	10.1
SB-16	11/13/2020 09:50	0.13	-162.2	8.41	0.16	0.34	15.52	10.7
SB-16	11/13/2020 09:55	0.1	-174.8	8.32	0.16	0.343	15.58	8.9
SB-16	11/13/2020 10:00	0.12	-185.7	8.17	0.17	0.349	15.64	9.7
SB-16	11/13/2020 10:05	0.06	-178.7	8.11	0.17	0.343	15.71	9.1
SB-16	11/13/2020 11:40	0.06	-132.4	6.69	0.27	0.56	17.04	2.7
SB-16	11/13/2020 12:00	0.78	-133.3	6.89	0.25	0.517	15.81	20.7
SB-16	01/26/2021 08:20	4.68	28.4	8.18	0.31	0.64	8.02	42.2
SB-16	01/26/2021 08:25	5.87	44.9	7.62	0.3	0.613	8.33	20.4
SB-16	01/26/2021 08:30	6.39	41.8	7.54	0.3	0.607	8.38	16.4
SB-16	01/26/2021 08:35	7.13	35.8	7.47	0.29	0.604	8.28	14
SB-16	01/26/2021 08:40	7.34	17.5	7.44	0.29	0.603	8.33	12
SB-16	01/26/2021 08:45	8.25	-39.2	7.4	0.3	0.605	8.45	11.4
SB-16	01/26/2021 08:50	8.95	-69.4	7.35	0.3	0.607	8.43	10.7
SB-16	01/26/2021 08:55	8.96	-79.3	7.3	0.3	0.608	8.52	11.3
SB-16	01/26/2021 09:00	9.26	-90.1	7.25	0.3	0.613	8.49	10.8
SB-16	01/26/2021 09:05	10.13	-93.8	7.22	0.3	0.614	8.53	10.4
SB-16	01/26/2021 10:45	8.33	-100.8	7.04	0.29	0.73	8.6	3.5
SB-16	01/26/2021 10:55	8.32	-99.4	7.4	0.31	0.668	9.51	12.3
SB-17	01/23/2012 12:54	0.09	130	5.23	0.03	0.43204	8.27	10.8
SB-17	01/23/2012 12:57	0.09	163	5.15	0.03	0.42162	8.59	6.4
SB-17	01/23/2012 12:59	0.08	183	5.08	0.03	0.44072	9.59	6.4
SB-17	01/23/2012 13:02	0.08	196	5.05	0.03	0.44078	9.91	4.4
SB-17	01/23/2012 13:04	31.77	207	5.02	0.03	0.44576	9.93	4.2
SB-17	01/23/2012 13:07	18.79	216	5.01	0.03	0.44304	10	2.9
SB-17	01/23/2012 13:09	13.28	224	5	0.03	0.43947	9.74	2.5
SB-17	01/23/2012 13:12	10.56	230	4.99	0.03	0.4356	9.73	2.3
SB-17	01/23/2012 13:14	9.15	237	4.97	0.03	0.43923	9.87	2.5
SB-17	01/23/2012 13:16	8.4	242	4.97	0.03	0.43774	9.66	2.6
SB-17	01/23/2012 13:19	7.77	248	4.96	0.03	0.43366	9.72	5.2
SB-17	01/23/2012 13:21	7.37	253	4.96	0.03	0.43305	9.85	2.3
SB-17	01/23/2012 13:24	6.99	257	4.95	0.03	0.43414	9.87	2.4
SB-17	01/23/2012 13:26	6.82	262	4.95	0.03	0.42823	9.75	5.2
SB-17	01/23/2012 13:29	6.55	266	4.94	0.03	0.42782	9.85	3.3
SB-17	01/23/2012 13:31	6.48	270	4.94	0.03	0.42971	9.68	1.7
SB-17	01/23/2012 13:34	6.32	274	4.93	0.03	0.42606	9.7	2.8
SB-17	01/23/2012 13:36	6.2	277	4.93	0.03	0.42606	9.68	1
SB-17	01/23/2012 13:39	6.04	281	4.92	0.03	0.42941	9.97	0.5
SB-17	01/23/2012 13:41	5.88	284	4.92	0.03	0.423	9.98	1.45
SB-17	01/23/2012 14:09	10.02	294	4.91	0.91	0.364	11.56	87.90
SB-17	01/24/2012 10:45	4.98	179	5.17	1.00	0.226	11.23	31.60
SB-17	04/02/2012 13:08	12.55	168	5.37	0.01	0.26467	12.97	19.5
SB-17	04/02/2012 13:10	8.21	220	4.96	0.01	0.25963	12.39	13.1
SB-17	04/02/2012 13:13	7.74	247	4.89	0.01	0.26042	12.43	15.1
SB-17	04/02/2012 13:15	7.54	267	4.86	0.01	0.26093	12.47	11.5
SB-17	04/02/2012 13:17	7.52	284	4.85	0.01	0.26059	12.18	13.7
SB-17	04/02/2012 13:20	7.38	297	4.83	0.01	0.26076	12.33	13.8
SB-17	04/02/2012 13:22	7.6	307	4.83	0.01	0.26037	12.46	11.8
SB-17	04/02/2012 13:24	7.57	316	4.83	0.01	0.26115	12.34	12
SB-17	04/02/2012 13:27	7.38	322	4.83	0.01	0.25859	12.26	11.5

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-17	04/02/2012 13:29	7.06	328	4.83	0.01	0.26091	12.31	12.3
SB-17	04/02/2012 13:31	6.9	335	4.82	0.01	0.25768	12.31	11.3
SB-17	04/02/2012 13:34	7.05	340	4.82	0.01	0.25801	12.35	11.3
SB-17	04/02/2012 13:36	6.92	343	4.82	0.01	0.2556	12.49	11.3
SB-17	04/02/2012 13:38	6.92	343	4.82	0.01	0.2556	12.49	11.32
SB-17	04/02/2012 14:15	8.42	233	5.15	0.01	0.2488	12.11	35.6
SB-17	04/03/2012 11:18	2.02	207	4.42	0	0.143	11.5	7.9
SB-17	07/11/2012 12:44	2.46	292	4.92	0.04	0.71268	30.24	29.6
SB-17	07/11/2012 12:46	2.92	312	4.75	0.03	0.69692	26.15	20.9
SB-17	07/11/2012 12:49	2.76	323	4.69	0.03	0.68005	24.8	19.2
SB-17	07/11/2012 12:51	2.64	331	5.12	0.03	0.68205	24.73	16.1
SB-17	07/11/2012 12:54	2.56	336	6.17	0.03	0.68417	24.97	17.1
SB-17	07/11/2012 12:56	2.47	341	6.35	0.03	0.6861	24.85	16
SB-17	07/11/2012 12:58	2.38	345	6.16	0.03	0.68088	24.91	15.7
SB-17	07/11/2012 13:38	2.30	237	5.52	0.20	0.319	18.38	29.80
SB-17	07/12/2012 09:55	1.00	215	4.71	0.20	0.314	22.53	40.20
SB-17	10/03/2012 14:26	5.27	261	10.57	0.01	0.21914	22.79	7.8
SB-17	10/03/2012 14:29	5.07	267	9.95	0.01	0.22402	22.36	7
SB-17	10/03/2012 14:31	5.08	269	10.09	0.01	0.2253	22.12	7.4
SB-17	10/03/2012 14:34	5.01	272	10.11	0.01	0.22564	22.15	5.5
SB-17	10/03/2012 14:36	4.9	275	10.11	0.01	0.22646	22.24	7.2
SB-17	10/03/2012 14:38	4.87	279	10.11	0.01	0.22726	22.37	5.3
SB-17	10/03/2012 14:41	4.93	283	10.13	0.01	0.22831	22.38	6.2
SB-17	10/03/2012 14:43	4.84	287	10.17	0.01	0.2276	22.36	5.5
SB-17	10/03/2012 14:45	4.8	292	10.22	0.01	0.22873	22.42	5.2
SB-17	10/03/2012 14:48	4.77	296	10.31	0.01	0.2287	22.44	5.5
SB-17	10/03/2012 14:50	4.71	300	10.36	0.01	0.2292	22.56	4.9
SB-17	10/03/2012 14:52	4.61	304	10.4	0.01	0.23063	22.6	4.6
SB-17	10/03/2012 14:55	4.53	307	10.45	0.01	0.232	22.57	4.85
SB-17	10/03/2012 15:32	2.87	232	10.78	0.01	0.234	21.18	28.00
SB-17	10/04/2012 10:44	1.20	217	9.67	0.01	0.231	21.59	57.10
SB-17	01/17/2013 11:22	8.84	21	6	0.02	0.42	8.54	121.4
SB-17	01/17/2013 11:24	9.42	16	5.89	0.02	0.324	7.89	126.2
SB-17	01/17/2013 11:26	9.19	20	5.83	0.01	0.273	8.04	125.2
SB-17	01/17/2013 11:29	9.16	23	5.79	0.01	0.257	7.87	121.5
SB-17	01/17/2013 11:31	9.09	25	5.79	0.01	0.248	7.96	127
SB-17	01/17/2013 11:33	9.01	29	5.79	0.01	0.244	7.99	123.1
SB-17	01/17/2013 11:35	9.01	29	5.79	NM	0.244	8.08	123.10
SB-17	01/17/2013 12:10	9.36	17	6.01	NM	0.451	11.17	145.80
SB-17	01/18/2013 10:55	3.26	122	4.11	NM	2.306	11.29	14.10
SB-17	04/24/2013 14:50	3.46	113	4.05	0.13	2.503	15.11	9.51
SB-17	04/24/2013 15:18	4.28	21	3.97	0.16	3.115	11.87	19
SB-17	04/25/2013 11:09	0.12	57	4.32	0.21	3.941	10.75	5.2
SB-17	07/16/2013 10:57	2.27	17	3.97	0.21	3.897	24.23	21.89
SB-17	07/16/2013 11:30	3.34	-2	4.51	0.20	3.714	21.31	82.80
SB-17	07/17/2013 10:35	1.89	9.00	4.30	0.12	2.350	22.71	10.50
SB-17	03/26/2014 08:50	7.85	31	4.26	0.15	2.919	4.33	2.05
SB-17	03/26/2014 09:21	7.54	51	4.08	0.10	1.925	8.11	131.40
SB-17	03/27/2014 12:40	5.17	-60	3.85	0.11	2.196	8.27	12.10
SB-17	05/14/2014 14:36	8.15	9	4.12	0.11	2.145	16.09	10.79
SB-17	05/14/2014 15:06	8.58	6	4.36	0.10	1.929	15.07	56.50
SB-17	05/15/2014 13:00	5.40	-116	4.29	0.10	2.011	13.09	30.60
SB-17	07/23/2014 11:46	5.75	216	3.75	0.05	0.709	28.07	11.48
SB-17	07/23/2014 12:12	6.56	282	4.60	0.04	0.805	20.44	415.00
SB-17	07/24/2014 10:55	4.10	24	4.10	0.04	0.788	21.61	5.90
SB-17	10/08/2014 10:29	6.13	199	4.46	0.02	0.312	20.57	11.00
SB-17	10/08/2014 11:01	1.15	109	4.28	0.04	0.833	18.55	15.20
SB-17	03/30/2015 11:39	14.14	268	4.43	0.03	0.523	7.83	3.89
SB-17	03/30/2015 12:00	14.94	263	4.18	0.02	0.496	8.48	44.90

Appendix B5 East Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		%	mS/cm	Deg C	NTU
Location ID	Date							
SB-17	03/31/2015 10:01	6.03	277	4.27	0.03	0.538	8.33	77.70
SB-17	05/05/2015 09:36	2.08	376	4.18	NM	0.927	10.2	185
SB-17	05/05/2015 09:37	4.24	320	4.26	NM	0.431	10.46	37.6
SB-17	07/21/2015 11:17	0.36	332	4.82	0.06	1.165	17.32	5.2
SB-17	07/21/2015 15:59	2.34	227	5.26	0.1	1.905	16.33	13.6
SB-17	03/17/2016 11:37	3.50	103	3.91	0.02	0.341	10.43	17.70
SB-17	03/17/2016 14:59	4.47	76	4.13	0.04	0.748	10.81	38.40
SB-17	10/08/2016 09:36	5.4	333	4.04	0.03	0.616	20.99	9
SB-17	10/08/2016 09:51	6.21	251	6.34	0.03	0.589	20.83	28.4
SB-17	03/30/2017 11:35	5.99	286	4.54	0.04	0.748	9.48	57.30
SB-17	03/30/2017 14:50	6.17	213	5.55	0.04	0.846	10.99	169.30
SB-17	04/27/2018 10:06	10.70	106.00	3.90	0.02	0.434	10.83	12.90
SB-17	04/27/2018 10:38	10.17	201.00	4.16	0.02	0.475	13.03	7.49
SB-17	04/27/2018 11:12	9.33	186.00	6.12	0.02	0.430	11.13	21.30
SB-17	03/28/2019 10:15	10.55	243.5	5.31	NM	0.084	9.69	100.5
SB-17	03/28/2019 11:40	6.43	280.3	4.48	0.08	0.169	10.54	8.5
SB-17	02/07/2020 10:25	9.79	129.6	5.3	NM	0.025	11.37	31.9
SB-17	02/07/2020 11:25	5.86	186	4.35	0.021	0.053	11.92	13.7
SB-17	01/21/2021 08:50	9.9	240.2	5.47	0.04	0.085	7.58	105.5
SB-17	01/21/2021 08:55	8.67	265.8	5.49	0.04	0.08	7.76	91.8
SB-17	01/21/2021 09:00	8.65	278.9	5.52	0.04	0.08	7.54	79.7
SB-17	01/21/2021 09:05	8.48	298.1	5.57	0.04	0.081	7.83	70.2
SB-17	01/21/2021 09:10	8.49	306.3	5.56	0.04	0.082	7.49	63.6
SB-17	01/21/2021 09:15	8.31	320.3	5.57	0.04	0.085	7.38	55.8
SB-17	01/21/2021 09:20	8.31	321.1	5.55	0.04	0.085	7.33	53.1
SB-17	01/21/2021 09:25	8.12	330.9	5.55	0.04	0.089	7.33	50.5
SB-17	01/21/2021 09:30	8.1	333	5.53	0.04	0.09	7.2	46.4
SB-17	01/21/2021 09:35	7.96	334.8	5.51	0.04	0.092	7.58	48.7
SB-17	01/21/2021 10:30	6.65	329.8	5.58	0.06	0.099	8.02	39.4
SB-17	01/21/2021 10:40	4.58	304	5.67	0.05	0.088	8.34	44.8
SB-17	02/03/2022 09:40	8.92	115.9	8.06	0.08	0.176	10.92	201.7
SB-17	02/03/2022 09:45	8.66	201	5.93	0.08	0.178	10.51	153.9
SB-17	02/03/2022 09:50	8.61	208.9	5.66	0.08	0.174	10.45	113.9
SB-17	02/03/2022 09:55	8.58	221.8	5.5	0.08	0.169	10.38	80.6
SB-17	02/03/2022 10:00	8.52	236.8	5.4	0.08	0.165	10.46	64.3
SB-17	02/03/2022 10:05	8.45	238.9	5.38	0.08	0.163	10.41	62.9
SB-17	02/03/2022 10:10	8.41	244.6	5.35	0.08	0.163	10.4	59.3

Notes:
1. mg/L - milligrams per liter
2. ppt - parts per trillion
3. mS/cm - milliSiemens per centimeter
4.NTU - nephelometric turbidity unit
5. NM - No Measured

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
A21TP1	06/06/2012 14:40	1.16	0	7.34	0.05	1.02108	21.39	145.9
A21TP1	06/06/2012 14:42	0.66	-5	6.99	0.06	1.10233	18.25	56.1
A21TP1	06/06/2012 14:45	0.53	-7	6.93	0.05	1.09324	17.55	56.6
A21TP1	06/06/2012 14:48	0.42	-9	6.87	0.06	1.10063	17.45	54.9
A21TP1	06/06/2012 14:51	0.37	-10	6.8	0.06	1.11375	17.42	44
A21TP1	06/06/2012 14:53	0.34	-12	6.86	0.06	1.13758	17.42	49
A21TP1	06/06/2012 14:56	0.31	-16	6.94	0.06	1.18301	17.41	50.1
A21TP1	06/06/2012 14:59	0.29	-21	6.97	0.06	1.21678	17.37	55.7
A21TP1	06/06/2012 15:01	0.28	-24	6.94	0.06	1.23112	17.38	54.5
A21TP1	06/06/2012 15:02	0.28	-24	6.94	0.06	1.231	17.38	54.47
A21TP1	06/06/2012 15:35	4.03	-7	7.23	0.09	1.714	15.60	16.20
A21TP1	06/07/2012 11:27	1.77	-95	6.64	0.00	0.648	16.62	51.50
A21TP1	05/22/2013 09:31	0.3	-190	6.48	0.16	2.974	14.72	18.57
A21TP1	05/22/2013 10:07	1.44	-137	6.67	0.15	2.88	13.43	368.3
A21TP1	05/23/2013 09:19	0.21	-136	6.53	0.17	3.245	14.41	107.3
A21TP1	09/22/2014 13:56	0.56	171	6.24	0.08	1.562	20.42	11.99
A21TP1	09/22/2014 14:38	0.81	176	6.90	0.11	2.014	20.08	48.60
A21TP1	09/23/2014 12:28	0.14	108	6.66	0.32	3.848	19.58	48.60
A21TP1	09/13/2016 12:13	1.07	-91	8.37	0.08	1.494	21.72	34.20
A21TP1	09/13/2016 13:45	3.66	18	6.91	0.13	1.077	24.20	5308.70
A21TP1	02/24/2017 09:03	9.25	66	6.48	0.11	2.187	9.83	68.70
A21TP1	02/24/2017 10:14	5.09	-30	6.69	0.11	2.070	10.26	613.00
A21TP1	02/23/2018 10:53	0.00	214	6.42	1.40	23.600	7.61	13.00
A21TP1	02/23/2018 13:16	0.31	195	6.50	1.17	19.970	7.6	6.56
A21TP1	02/23/2018 13:35	10.30	39	6.51	0.24	4.574	9.05	344.50
A21TP1	05/10/2018 09:03	4.68	-33	6.55	0.0562	1.1250	15.27	9.7
A21TP1	05/10/2018 09:06	2.54	-66	6.5	0.0577	1.1542	14.37	6.7
A21TP1	05/10/2018 09:08	1.81	-72	6.49	0.0624	1.2452	13.35	5.6
A21TP1	05/10/2018 09:11	1.46	-76	6.48	0.0674	1.3423	13.12	5
A21TP1	05/10/2018 09:14	1.33	-81	6.48	0.0722	1.4324	13.07	4.8
A21TP1	05/10/2018 09:17	1.28	-86	6.47	0.0773	1.5301	13.17	5
A21TP1	05/10/2018 09:19	1.21	-90	6.47	0.0790	1.5609	13.25	4.9
A21TP1	05/10/2018 09:22	1.14	-96	6.48	0.0802	1.5835	13.38	5.4
A21TP1	05/10/2018 09:25	1.12	-101	6.48	0.0799	1.5787	13.37	6.4
A21TP1	05/10/2018 09:28	1.08	-105	6.49	0.0816	1.6096	13.68	5.3
A21TP1	05/10/2018 09:30	1.06	-110	6.49	0.0815	1.6093	13.37	5.4
A21TP1	05/10/2018 09:33	1.05	-115	6.49	0.0827	1.6317	13.56	4.8
A21TP1	05/10/2018 09:36	1	-120	6.49	0.0861	1.6934	13.89	5.2
A21TP1	05/10/2018 09:38	0.97	-125	6.48	0.0896	1.7597	13.96	5.2
A21TP1	05/10/2018 09:41	0.96	-129	6.48	0.0895	1.7569	13.9	4.3
A21TP1	05/10/2018 09:44	0.92	-133	6.48	0.0890	1.7470	14.2	5.3
A21TP1	05/10/2018 09:47	0.97	-138	6.49	0.0871	1.7123	14.24	4.3
A21TP1	05/10/2018 09:49	0.95	-142	6.5	0.0872	1.7134	14.32	4.3
A21TP1	05/10/2018 09:52	0.91	-145	6.49	0.0883	1.7348	14.49	4.9
A21TP1	05/11/2018 09:52	0.91	-145.00	6.49	0.09	1.727	14.67	4.93
A21TP1	05/11/2018 10:13	2.31	-86.00	6.51	0.13	2.453	12.64	375.20
A21TP1	05/11/2018 10:29	1.01	-103.00	6.52	0.10	1.978	13.06	44.20
A21TP1	08/02/2018 09:33	5.87	-108	7.61	0.05	1.016	25.52	21.8
A21TP1	08/02/2018 09:36	1.77	-127	7.17	0.6	1.098	22.85	17.85
A21TP1	08/02/2018 09:39	1.31	-133	6.93	0.6	1.141	23.01	22.54
A21TP1	08/02/2018 09:41	1.18	-137	6.79	0.6	1.18	23.19	16.59
A21TP1	08/02/2018 09:44	1.11	-139	6.69	0.06	1.204	23	20.19
A21TP1	08/02/2018 09:47	1.1	-141	6.63	0.06	1.231	22.99	12.56
A21TP1	08/02/2018 09:50	1.08	-143	6.58	0.06	1.262	22.62	11.06
A21TP1	08/02/2018 09:52	1.04	-144	6.55	0.06	1.272	22.65	11.94
A21TP1	08/02/2018 09:55	1.01	-145	6.53	0.07	1.293	22.84	10.53
A21TP1	08/02/2018 09:58	0.99	-147	6.51	0.07	1.315	23.2	11.56
A21TP1	08/02/2018 10:01	0.98	-147	6.49	0.07	1.331	23.64	9.641
A21TP1	08/02/2018 10:03	0.97	-149	6.49	0.07	1.344	23.52	10.08
A21TP1	08/02/2018 10:06	0.95	-150.00	6.48	0.07	1.360	23.43	9.74
A21TP1	08/02/2018 10:22	2.20	-126.00	7.25	0.08	1.610	22.2	183.90
A21TP1	08/02/2018 10:54	0.53	-152.00	6.61	0.09	1.766	21.82	111.60

Appendix B6 Main Yard
Historical Groundwater Parameter Data
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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
A21TP1	11/28/2018 10:25	4.62	159.3	6.56	0.39	0.799	11.86	108.5
A21TP1	11/28/2018 10:30	3.29	117.3	6.61	0.41	0.823	12.36	62
A21TP1	11/28/2018 10:35	3.54	85.3	6.63	0.41	0.824	12.39	54.3
A21TP1	11/28/2018 10:40	3.85	70.3	6.6	0.41	0.821	12.54	43.3
A21TP1	11/28/2018 10:45	3.89	65.7	6.61	0.41	0.824	12.44	39.6
A21TP1	11/28/2018 10:50	3.78	59.5	6.61	0.41	0.823	12.67	31.9
A21TP1	11/28/2018 10:55	3.98	58.8	6.61	0.41	0.824	12.63	30
A21TP1	11/28/2018 11:25	4.32	38.40	6.60	0.43	0.860	13.43	9.60
A21TP1	11/28/2018 11:35	4.30	38.40	6.61	0.43	0.861	13.43	9.70
A21TP1	02/13/2019 14:00	2.91	-36.9	7.28	NM	0.949	8.35	176.3
A21TP1	02/13/2019 14:05	2.91	-36.90	7.28	0.47	0.949	8.35	176.30
A21TP1	02/13/2019 14:25	2.39	-29.80	7.19	0.54	1.091	8.86	12.70
A21TP1	02/13/2019 14:50	2.34	-26.10	7.17	0.55	1.095	8.67	8.10
A21TP1	05/23/2019 13:50	0.55	70.7	6.67	NM	1.064	12.56	2.1
A21TP1	05/23/2019 14:10	0.37	64.7	6.67	0.6	1.2	11.51	2.9
A21TP1	08/29/2019 09:15	2.97	-68.7	6.84	NM	1.359	18.22	757.1
A21TP1	08/29/2019 09:20	2.73	-50.3	6.5	NM	1.313	17.72	344.2
A21TP1	08/29/2019 09:25	1.98	-28.1	6.35	NM	1.239	17.7	280.6
A21TP1	08/29/2019 09:30	2.01	-9.1	6.36	NM	1.238	17.4	89.4
A21TP1	08/29/2019 09:35	3.21	-2.8	6.38	NM	1.353	17.62	43.1
A21TP1	08/29/2019 09:40	1.39	-4.8	6.43	NM	1.42	17.86	28.9
A21TP1	08/29/2019 09:45	1.54	-5.3	6.44	NM	1.47	17.8	21.8
A21TP1	08/29/2019 09:50	1.97	-5.7	6.46	NM	1.499	17.74	21.5
A21TP1	08/29/2019 09:55	1.6	-5.9	6.47	NM	1.522	17.63	22.7
A21TP1	08/29/2019 10:00	1.92	-6.5	6.47	NM	1.512	17.72	28.9
A21TP1	08/29/2019 10:20	2.74	70.7	6.62	0.8	1.573	19.34	7.5
A21TP1	08/29/2019 10:35	5.48	-10.3	6.57	0.59	1.189	18.73	17.2
A21TP1	11/04/2019 09:25	3.65	166.9	6.65	NM	0.472	14.19	21.7
A21TP1	11/04/2019 09:30	1.57	157	6.54	NM	0.35	15.54	20.3
A21TP1	11/04/2019 09:35	0.83	123.4	6.47	NM	0.372	16.46	20
A21TP1	11/04/2019 09:40	0.74	97.4	6.46	NM	0.391	16.7	14.6
A21TP1	11/04/2019 09:45	0.72	58.6	6.47	NM	0.429	16.65	10.3
A21TP1	11/04/2019 09:50	0.72	19.4	6.48	NM	0.456	16.82	7.1
A21TP1	11/04/2019 09:55	0.73	15.5	6.48	NM	0.477	16.78	5.7
A21TP1	11/04/2019 10:00	0.69	-3.6	6.49	NM	0.497	16.79	4.5
A21TP1	11/04/2019 10:05	0.72	-28.7	6.5	NM	0.518	16.81	2.7
A21TP1	11/04/2019 10:10	0.66	-44.5	6.52	NM	0.543	16.59	1.8
A21TP1	11/04/2019 10:25	0.62	-69.7	6.54	0.28	0.575	16.81	1
A21TP1	11/04/2019 10:35	0.92	-86.4	6.54	0.28	0.58	15.72	20.1
A21TP1	05/20/2020 10:05	0.4	5.1	6.53	NM	0.382	13.82	12.6
A21TP1	05/20/2020 10:30	2.74	54.5	7.05	0.23	0.482	13.86	2.1
MW-0024	02/27/2012 07:57	0.07	87	7.32	0.02	0.39912	9.81	5.8
MW-0024	02/27/2012 07:59	-0.03	93	7.36	0.02	0.40746	7.93	1
MW-0024	02/27/2012 08:02	-0.05	96	7.36	0.02	0.40308	8.84	0.7
MW-0024	02/27/2012 08:04	-0.05	99	7.35	0.02	0.40122	8.94	0.49
MW-0024	02/27/2012 08:07	-0.06	101	7.34	0.02	0.40163	9.01	0.49
MW-0024	02/27/2012 08:09	-0.06	103	7.34	0.02	0.40271	9	1.14
MW-0024	02/27/2012 08:11	-0.07	103	7.34	0.02	0.40194	8.93	0.69
MW-0024	02/27/2012 08:14	-0.07	104	7.33	0.02	0.40105	9	0.82
MW-0024	02/27/2012 08:16	-0.08	104	7.34	0.02	0.40157	9.1	0.49
MW-0024	02/27/2012 08:17	-0.08	104	7.34	0.02	0.402	9.10	0.49
MW-0024	02/27/2012 08:57	-0.12	137	7.50	0.02	0.413	9.95	6.30
MW-0024	02/28/2012 08:40	1.89	289	6.49	0.0000	0.450	10.60	10.40
MW-0024	04/04/2013 09:16	1.71	-181	6.96	0.31	5.813	7.35	18.85
MW-0024	04/04/2013 09:44	5.99	-49	7.39	0.32	5.983	8.65	30.1
MW-0024	04/05/2013 09:11	1.08	-172	6.97	0.32	5.903	9.2	7.3
MW-0024	05/29/2014 13:33	1.36	-429	6.70	0.07	1.400	18.10	10.09
MW-0024	05/29/2014 14:07	1.85	-459	6.89	0.06	1.131	16.56	12.90
MW-0024	05/30/2014 10:44	1.30	-505	6.76	0.08	1.621	16.06	3.80
MW-0024	02/18/2015 14:19	2.04	-54	6.69	0.02	0.327	7.76	4.40
MW-0024	02/18/2015 14:46	3.41	-22	7.16	0.02	0.359	7.60	10.00
MW-0024	02/19/2015 13:05	1.72	-286	7.08	0.05	1.018	8.84	216.20

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0024	06/16/2016 09:46	1.08	35	6.56	0.03	0.607	18.44	2.50
MW-0024	06/16/2016 10:12	1.58	-58	6.57	0.10	1.865	19.56	7.10
MW-0024	05/03/2017 10:03	0.34	128.00	6.64	0.02	0.374	14.31	4.90
MW-0024	05/03/2017 11:02	0.18	46.00	6.90	0.05	0.982	20.33	5.23
MW-0024	05/03/2017 11:35	5.50	183.00	7.68	0.06	1.108	14.93	19.30
MW-0024	05/15/2018 12:21	2.91	48	6.77	0.0208	0.4286	23.76	18.5
MW-0024	05/15/2018 12:23	1.78	-2	6.61	0.0206	0.4250	20.69	17.9
MW-0024	05/15/2018 12:26	1.56	-13	6.58	0.0209	0.4317	20.68	233.3
MW-0024	05/15/2018 12:29	1.47	-19	6.58	0.0207	0.4278	20.42	9.8
MW-0024	05/15/2018 12:31	1.41	-23	6.59	0.0208	0.4297	20.45	10.9
MW-0024	05/15/2018 12:34	1.35	-24	6.6	0.0210	0.4336	20.78	11.7
MW-0024	05/15/2018 12:37	1.34	-27	6.61	0.0211	0.4350	20.62	10.9
MW-0024	05/16/2018 10:51	NM	71.00	7.05	0.02	0.497	15.72	3.60
MW-0024	05/16/2018 12:37	1.34	-27.00	6.61	0.02	0.433	20.8	10.89
MW-0024	05/16/2018 13:12	2.63	0.0000	6.78	0.02	0.419	16.19	10.70
MW-0024	05/08/2019 13:30	1.36	46.4	6.86	NM	0.384	15.91	4.3
MW-0024	05/08/2019 14:38	1.88	69.9	6.8	0.17	0.361	14.45	3.5
MW-0029	05/12/2017 12:12	0.37	-46.00	6.36	0.40	7.302	13.79	20.60
MW-0029	02/16/2018 12:00	7.21	-47.40	6.33	12.02	20.070	13	113.70
MW-0029	02/16/2018 13:55	8.77	-46.20	7.03	5.97	10.530	11.32	3.60
MW-0029	02/16/2018 14:05	8.61	-45.30	7.06	5.96	10.100	11.27	59.70
MW-0029	05/21/2018 13:05	3.9	-75	6.42	1.1167	18.5848	23.88	10.5
MW-0029	05/21/2018 13:08	2.37	-76	6.31	1.1393	18.9662	20.81	8.9
MW-0029	05/21/2018 13:10	1.33	-76	6.28	1.1442	19.0715	19.04	8.1
MW-0029	05/21/2018 13:13	0.78	-77	6.27	1.1546	19.2273	19.17	12.7
MW-0029	05/21/2018 13:15	0.67	-77	6.27	1.1667	19.4075	19.46	12.2
MW-0029	05/21/2018 13:18	0.52	-78	6.28	1.1511	19.1710	19.31	14.7
MW-0029	05/21/2018 13:20	0.3	-78	6.27	1.1644	19.3759	19.28	16.5
MW-0029	05/21/2018 13:23	0.05	-79	6.27	1.1742	19.5284	19.13	24
MW-0029	05/21/2018 13:25	-0.06	-79	6.27	1.1752	19.5405	19.3	28.5
MW-0029	05/21/2018 13:28	-0.09	-79	6.27	1.1854	19.6984	19.25	24.9
MW-0029	05/21/2018 13:30	-0.22	-79	6.27	1.1944	19.8324	19.37	24.2
MW-0029	05/21/2018 13:33	-0.3	-79	6.26	1.2074	20.0272	19.6	24.7
MW-0029	05/21/2018 13:36	-0.32	-79	6.27	1.2096	20.0646	19.36	27.3
MW-0029	05/21/2018 13:38	-0.42	-79	6.27	1.2145	20.1407	19.3	28.9
MW-0029	05/21/2018 13:41	-0.45	-79	6.26	1.2200	20.2301	19.03	26.4
MW-0029	05/21/2018 13:43	-0.52	-79	6.26	1.2269	20.3337	19.09	26.7
MW-0029	05/21/2018 13:46	-0.49	-79	6.26	1.2254	20.3051	19.39	29.5
MW-0029	05/21/2018 13:48	-0.52	-78	6.25	1.2446	20.5976	19.34	24.5
MW-0029	05/21/2018 13:51	-0.56	-79	6.25	1.2420	20.5637	19.1	27.3
MW-0029	05/21/2018 13:53	-0.57	-79	6.25	1.2490	20.6673	19.21	23.9
MW-0029	05/22/2018 13:53	-0.57	-79.00	6.25	1.25	20.590	19.39	23.91
MW-0029	05/22/2018 14:40	1.44	-58.00	6.23	1.33	22.050	16.13	33.80
MW-0029	08/29/2018 13:35	0.78	-39.20	5.87	11.23	19.150	27.27	2.30
MW-0029	08/29/2018 14:45	1.62	-34.40	5.90	11.43	19.270	27.34	4.00
MW-0029	08/29/2018 14:50	3.02	-15.50	5.85	11.42	19.120	24.14	4.40
MW-0029	11/14/2018 09:00	0.07	-66.20	6.12	12.57	20.920	13.39	9.80
MW-0029	11/14/2018 11:20	0.16	-31.10	6.06	12.05	20.120	14.58	6.20
MW-0029	11/14/2018 11:30	2.57	-30.80	6.06	11.93	19.990	15.69	6.10
MW-0029	02/22/2019 09:05	0.1	-39.5	6.18	NM	16.34	8.68	3.9
MW-0029	02/22/2019 10:40	0.8	-32.6	5.89	0.05	0.114	8.25	4.1
MW-0029R	10/07/2020 12:15	0.46	-136.3	6.13	5.81	10.28	23.46	17.4
MW-0029R	10/07/2020 12:20	0.32	-130.3	6.26	5.82	10.3	23.49	16.2
MW-0029R	10/07/2020 12:25	1.06	-184.6	5.66	5.89	10.41	23.28	14.6
MW-0029R	10/07/2020 12:30	1.05	-187.3	5.64	5.89	10.41	23.31	14.5
MW-0029R	10/07/2020 12:35	1.01	-229	5.66	5.92	10.46	23.17	13.4
MW-0029R	10/07/2020 12:40	1.01	-231.7	5.67	5.94	10.47	23.18	13.5
MW-0029R	10/07/2020 12:45	1.01	-254.3	5.67	5.95	10.51	23.34	12.9
MW-0029R	10/07/2020 12:50	1.01	-255.6	5.69	5.95	10.53	23.36	13
MW-0029R	10/07/2020 12:55	1	-258.6	5.71	5.96	10.53	23.58	12.8
MW-0029R	10/07/2020 13:00	1	-259.9	5.73	NM	10.53	23.56	12.9
MW-0029R	10/07/2020 13:30	2.32	-171.7	7.88	5.93	10.49	23.83	15.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0029R	10/07/2020 13:40	0.2	-189.4	8.12	5.93	10.52	22.29	NM
MW-0029R	10/12/2020 13:40	NM	NM	NM	NM	NM	NM	18.3
MW-0029R	02/16/2021 10:25	3.38	-67.2	6.31	4.98	8.867	10.82	4.8
MW-0029R	02/16/2021 11:00	2.86	-46.3	6.47	4.85	8.664	10.77	47.3
MW-0029R	05/21/2021 12:40	3.5	-6.2	6.31	9.8	16.67	19.03	32.7
MW-0029R	05/21/2021 12:45	2.16	-17.7	6.26	9.93	16.85	16.8	25.4
MW-0029R	05/21/2021 12:50	0.25	-20.7	6.05	9.5	16.15	16.98	19
MW-0029R	05/21/2021 12:55	0.25	-18.1	6.02	9.44	16.08	16.74	19
MW-0029R	05/21/2021 13:00	0.2	-17.1	5.98	9.36	15.95	16.97	17.9
MW-0029R	05/21/2021 13:05	0.19	-12.5	5.94	9.47	16.15	16.9	16.2
MW-0029R	05/21/2021 13:10	0.19	-15.5	5.94	9.46	16.1	16.64	15.1
MW-0029R	05/21/2021 13:15	0.2	-17	5.94	9.52	16.2	16.89	14.9
MW-0029R	02/24/2022 09:30	4.1	98.2	6.3	10.56	17.87	9.14	18.9
MW-0029R	02/24/2022 09:35	3.92	-53.4	6.13	10.6	17.98	8.58	18.4
MW-0029R	02/24/2022 09:40	3.61	-52.4	6.12	10.62	10.61	8.04	17.9
MW-0029R	02/24/2022 09:45	3.1	-62.9	6.17	10.62	18.04	7.47	16
MW-0029R	02/24/2022 09:50	2.49	-56.1	6.19	10.7	18.14	7.14	14.7
MW-0029R	02/24/2022 09:55	2.18	-63.4	6.19	10.73	18.21	7.36	15
MW-0029R	02/24/2022 10:00	1.99	-71.7	6.17	10.79	18.3	7.71	15.2
MW-0029R	02/24/2022 10:05	1.93	-69.5	6.19	10.81	18.33	7.77	14
MW-0029R	02/24/2022 10:10	1.49	-40.8	6.16	10.82	18.37	7.68	14.6
MW-0029R	02/24/2022 10:15	1.57	-53.4	6.18	10.81	18.32	7.96	14.3
MW-0030	02/13/2012 08:16	5.82	229	6.18	1.38	23.32851	6.93	11.3
MW-0030	02/13/2012 08:18	2.91	220	6.37	1.38	23.50419	4.64	8.6
MW-0030	02/13/2012 08:20	0.06	213	6.44	1.38	23.56073	5	8.3
MW-0030	02/13/2012 08:23	0.04	208	6.46	1.38	23.55291	4.84	8.2
MW-0030	02/13/2012 08:25	0.01	204	6.46	1.39	23.61728	4.76	7.7
MW-0030	02/13/2012 08:27	-0.01	200	6.46	1.38	23.55674	4.75	8
MW-0030	02/13/2012 08:29	0	196	6.46	1.38	23.49512	4.82	6.1
MW-0030	02/13/2012 08:31	-0.02	193	6.47	1.37	23.42202	4.64	6.1
MW-0030	02/13/2012 08:33	-0.03	189	6.46	1.37	23.43508	5.68	5.7
MW-0030	02/13/2012 10:08	0.0000	-72	6.68	1.43	24.104	6.55	10.00
MW-0030	02/14/2012 08:53	2.65	-15	6.44	1.51	25.116	9.75	7.20
MW-0030	08/06/2012 08:21	2.57	-39	8.63	1.41	23.06	26.96	46.9
MW-0030	08/06/2012 08:23	1.77	-50	8.67	1.42	23.192	26.63	16.8
MW-0030	08/06/2012 08:25	1.6	-54	8.69	1.43	23.316	26.34	14.9
MW-0030	08/06/2012 08:27	1.63	-56	8.7	1.43	23.313	26.33	15.1
MW-0030	08/06/2012 08:29	1.68	-58	8.7	1.43	23.294	26.36	17.1
MW-0030	08/06/2012 08:31	1.77	-58	8.71	1.43	23.289	26.37	18.7
MW-0030	08/06/2012 08:33	1.87	-59	8.71	1.43	23.270	26.40	18.23
MW-0030	08/06/2012 09:18	7.91	-55	10.87	1.40	22.920	25.55	29.10
MW-0030	08/07/2012 09:15	3.65	-126	6.72	2.00	32.400	22.92	18.80
MW-0030	03/04/2013 08:38	7.16	39	6.64	2.18	35.91114	4.65	5.1
MW-0030	03/04/2013 08:40	5.2	-57	6.76	2.14	35.26183	4.71	4.7
MW-0030	03/04/2013 08:42	5.36	-79	6.82	2.13	35.13762	4.37	3.6
MW-0030	03/04/2013 08:44	5.77	-82	6.86	2.12	34.98275	4.3	3.5
MW-0030	03/04/2013 08:46	5.94	-79	6.89	2.11	34.86828	4.19	5
MW-0030	03/04/2013 08:48	5.95	-76	6.91	2.22	36.49524	4.15	3.7
MW-0030	03/04/2013 08:49	5.8	-75	6.92	2.21	36.33852	4.15	3.2
MW-0030	03/04/2013 08:51	5.69	-77	6.92	2.21	36.37194	3.94	2.5
MW-0030	03/04/2013 08:53	5.64	-80	6.93	2.21	36.45417	4.11	2.3
MW-0030	03/04/2013 08:55	5.58	-83	6.93	2.12	35.08386	3.99	2.2
MW-0030	03/04/2013 08:57	5.52	-86	6.94	2.13	35.10673	4.17	1.9
MW-0030	03/04/2013 08:59	5.35	-90	6.94	2.14	35.37303	4.22	1.5
MW-0030	03/04/2013 09:01	5.15	-92	6.95	2.13	35.22155	4.28	1.4
MW-0030	03/04/2013 09:02	4.75	-100	6.95	2.17	35.81252	4.16	1.7
MW-0030	03/04/2013 09:04	4.33	-95	6.95	2.24	36.83461	4.48	6.4
MW-0030	03/04/2013 09:06	5.23	-89	7	2.25	36.82737	4.91	9.6
MW-0030	03/04/2013 09:08	5.91	-94	7.04	2.39	38.94048	4.99	5.7
MW-0030	03/04/2013 09:10	6.86	-90	7.09	2.25	36.83197	5.32	4.3
MW-0030	03/04/2013 09:12	7.67	-87	7.15	2.25	36.70566	5.76	3.6
MW-0030	03/04/2013 09:14	8.31	-86	7.2	2.24	36.46524	6.23	2.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0030	03/04/2013 09:15	8.91	-87	7.24	2.3	37.41758	5.6	2.9
MW-0030	03/04/2013 09:17	8.16	-87	7.22	2.27	36.87192	6.17	2.9
MW-0030	03/04/2013 09:19	8.57	-88	7.25	2.27	36.78878	6.59	2.7
MW-0030	03/04/2013 09:21	8.98	-88	7.3	2.26	36.61082	6.99	3.1
MW-0030	03/04/2013 09:23	9.36	-89	7.34	2.26	36.66079	6.95	3.6
MW-0030	03/04/2013 09:25	9.66	-90	7.39	2.27	36.80331	6.87	2.6
MW-0030	03/04/2013 09:27	9.88	-89	7.42	2.31	37.315	6.96	3.68
MW-0030	03/04/2013 10:24	-0.54	-222	6.64	3.06	48.050	7.78	4.00
MW-0030	03/05/2013 09:09	-0.54	-279	6.56	3.07	48.220	7.97	8.00
MW-0030	09/23/2013 12:28	2.77	-243	6.43	2.51	38.9322	22.22	19
MW-0030	09/23/2013 12:30	1.52	-280	6.44	2.44	37.9355	22.21	6.5
MW-0030	09/23/2013 12:32	1.1	-304	6.44	2.4	37.4384	22.24	4.2
MW-0030	09/23/2013 12:34	0.98	-317	6.45	2.38	37.1577	22.22	4.5
MW-0030	09/23/2013 12:36	0.89	-327	6.45	2.36	36.794	22.28	5.3
MW-0030	09/23/2013 12:38	0.85	-334	6.45	2.35	36.6881	22.27	4.6
MW-0030	09/23/2013 12:40	0.82	-339	6.46	2.34	36.601	22.22	5.8
MW-0030	09/23/2013 12:42	0.79	-343	6.46	2.33	36.4211	22.38	6.8
MW-0030	09/23/2013 12:44	0.77	-346	6.47	2.32	36.2256	22.46	6.3
MW-0030	09/23/2013 12:46	0.77	-348	6.47	2.31	36.132	22.47	6.6
MW-0030	06/02/2014 08:23	4.36	-230	6.45	NM	44.683	19.56	8.70
MW-0030	06/02/2014 08:25	2.89	-263	6.48	NM	43.977	18.74	5.90
MW-0030	06/02/2014 08:28	2.08	-279	6.51	NM	42.725	18.54	5.60
MW-0030	06/02/2014 08:30	1.80	-286	6.52	NM	43.086	18.64	5.90
MW-0030	06/02/2014 08:32	1.77	-300	6.54	NM	42.936	18.44	6.20
MW-0030	06/02/2014 08:34	1.71	-305	6.55	NM	43.060	18.43	6.00
MW-0030	06/02/2014 08:36	1.64	-308	6.57	NM	42.349	18.59	6.00
MW-0030	06/02/2014 08:38	1.64	-308	6.57	3.18	48.260	18.59	6.03
MW-0030	06/02/2014 09:11	2.77	-251	6.61	4.25	62.710	17.91	19.80
MW-0030	06/03/2014 09:08	1.67	-470	6.61	3.45	52.310	15.03	6.90
MW-0030	11/06/2014 02:59	3.56	-0.06	6.56	NM	28.480	13.83	98.70
MW-0030	11/06/2014 03:01	-0.88	-0.06	6.63	NM	25.519	14.84	14.70
MW-0030	11/06/2014 03:04	-0.86	-0.06	6.64	NM	22.389	15.15	15.30
MW-0030	11/06/2014 03:06	-0.85	-0.06	6.64	NM	32.726	15.54	10.90
MW-0030	11/06/2014 03:08	-0.84	-0.06	6.65	NM	34.185	15.70	11.10
MW-0030	11/06/2014 03:10	-0.84	-0.05	6.65	NM	34.562	15.70	11.70
MW-0030	11/06/2014 03:12	-0.84	-0.05	6.65	NM	34.687	15.65	13.60
MW-0030	11/06/2014 14:40	4.63	-51	6.63	2.81	43.386	16.64	39.30
MW-0030	11/06/2014 15:12	-0.84	-50	6.65	2.70	42.230	15.65	13.57
MW-0030	11/07/2014 11:45	0.57	-76	6.35	2.74	42.286	17.79	61.10
MW-0030	06/29/2015 08:47	2.56	-63	6.31	1.5314	0.0248	23.8	13.6
MW-0030	06/29/2015 08:49	1.68	-80	6.38	1.5504	0.0251	23.17	7.5
MW-0030	06/29/2015 08:51	1.15	-87	6.42	1.5529	0.0251	23.49	6.9
MW-0030	06/29/2015 08:53	0.94	-91	6.46	1.5711	0.0254	23.41	3.4
MW-0030	06/29/2015 08:55	0.82	-95	6.48	1.5714	0.0254	23.26	5.7
MW-0030	06/29/2015 08:57	0.7	-99	6.5	1.5666	0.0254	23.11	6.7
MW-0030	06/29/2015 08:59	0.59	-104	6.53	1.5462	0.0251	23.2	10.6
MW-0030	06/29/2015 09:01	0.53	-107	6.56	1.5395	0.0250	23.29	3.7
MW-0030	06/29/2015 09:03	0.51	-111	6.58	1.5333	0.0249	23.31	9.8
MW-0030	06/29/2015 09:04	0.48	-113	6.6	1.5264	0.0248	23.37	3.6
MW-0030	06/29/2015 09:06	0.46	-115	6.62	1.5178	0.0246	23.49	6.9
MW-0030	06/29/2015 09:08	0.45	-117	6.63	1.5161	0.0246	23.53	4.5
MW-0030	06/29/2015 09:10	0.46	-118	6.64	1.5130	0.0246	23.56	6
MW-0030	06/29/2015 09:12	0.44	-120	6.65	1.5017	0.0244	23.63	4.1
MW-0030	06/29/2015 09:14	0.43	-121	6.66	1.5019	0.0244	23.75	7
MW-0030	06/29/2015 09:16	0.43	-121	6.67	1.5019	0.0244	23.74	4.2
MW-0030	06/29/2015 09:18	0.42	-123	6.68	1.4896	0.0242	23.7	7.5
MW-0030	06/29/2015 09:20	0.4	-124	6.7	1.4794	0.0241	23.73	4.7
MW-0030	06/29/2015 09:22	0.41	-124	6.71	1.4651	0.0238	23.68	5.6
MW-0030	06/29/2015 09:24	0.39	-126	6.72	1.4497	0.0236	23.59	6.5
MW-0030	06/29/2015 09:26	0.38	-127	6.73	1.4378	0.0234	23.67	5.5
MW-0030	06/29/2015 09:28	0.37	-128	6.74	1.4392	0.0235	23.75	7.6
MW-0030	06/29/2015 09:30	0.37	-128	6.75	1.4396	0.0235	23.76	7.9

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0030	06/29/2015 09:32	0.36	-128	6.75	1.4298	0.0233	23.82	7.6
MW-0030	06/30/2015 10:05	4.45	-55	6.55	2.13	33.57	21.13	58
MW-0030	06/30/2015 10:35	7.06	-8	6.49	2.09	33.07	19.62	31
MW-0030	09/29/2015 09:28	4.23	267	6.25	1.3196	0.0216	25.45	17.5
MW-0030	09/29/2015 09:31	2.04	240	6.29	1.3241	0.0217	25.3	15.6
MW-0030	09/29/2015 09:33	1.51	208	6.28	1.3224	0.0217	25.38	12.2
MW-0030	09/29/2015 09:35	1.6	171	6.27	1.3164	0.0216	25.62	23.8
MW-0030	09/29/2015 09:37	1.46	134	6.27	1.3125	0.0215	25.78	10.6
MW-0030	09/29/2015 09:39	1.52	112	6.28	1.3125	0.0215	25.79	12.5
MW-0030	09/29/2015 09:41	1.61	86	6.29	1.3195	0.0216	25.54	14.4
MW-0030	09/29/2015 09:43	1.69	66	6.29	1.3181	0.0216	25.6	11.6
MW-0030	09/29/2015 09:45	1.79	50	6.28	1.3143	0.0216	25.75	11.8
MW-0030	09/29/2015 09:47	1.82	38	6.29	1.3157	0.0216	25.71	9.9
MW-0030	09/29/2015 09:49	1.79	29	6.29	1.3122	0.0215	25.85	9.9
MW-0030	09/29/2015 09:52	1.78	21	6.29	1.3171	0.0216	25.67	7.9
MW-0030	09/29/2015 09:54	1.75	15	6.29	1.3185	0.0216	25.62	8.5
MW-0030	09/29/2015 09:56	1.7	10	6.3	1.3169	0.0216	25.68	6.9
MW-0030	09/29/2015 09:58	1.64	5	6.29	1.3148	0.0216	25.76	6.5
MW-0030	09/29/2015 10:00	1.57	1	6.29	1.3117	0.0215	25.88	6.7
MW-0030	09/30/2015 10:05	0.0000	-21	6.04	3.36	50.440	23.85	28.90
MW-0030	09/30/2015 10:27	4.73	70	6.30	1.35	22.100	24.58	25.30
MW-0030	03/09/2016 08:41	2.080	-71.000	6.720	3.732	56.325	13.830	4.900
MW-0030	03/09/2016 08:43	4.620	-73.000	6.710	3.855	58.558	10.460	4.600
MW-0030	03/09/2016 08:45	1.090	-84.000	6.630	4.143	62.647	9.540	6.700
MW-0030	03/09/2016 08:47	0.600	-89.000	6.620	4.180	63.163	9.450	4.100
MW-0030	03/09/2016 08:49	0.360	-92.000	6.630	4.182	63.174	9.520	4.200
MW-0030	03/09/2016 08:51	0.310	-95.000	6.640	4.205	63.523	9.360	4.100
MW-0030	03/09/2016 08:54	0.260	-97.000	6.650	4.216	63.671	9.340	4.100
MW-0030	03/09/2016 08:56	0.220	-98.000	6.650	4.229	63.859	9.290	6.000
MW-0030	03/09/2016 08:58	0.200	-102.000	6.660	4.230	63.870	9.280	6.000
MW-0030	03/09/2016 09:00	0.170	-105.000	6.670	4.240	64.028	9.220	5.000
MW-0030	03/09/2016 09:02	0.130	-107.000	6.670	4.225	63.812	9.270	4.500
MW-0030	03/09/2016 09:04	0.130	-108.000	6.690	4.206	63.570	9.200	4.700
MW-0030	03/09/2016 09:06	0.130	-106.000	6.710	4.188	63.358	9.080	6.000
MW-0030	03/09/2016 09:08	0.130	-100.000	6.720	4.173	63.136	9.150	5.100
MW-0030	03/09/2016 09:10	0.140	-88.000	6.720	4.132	62.568	9.240	4.500
MW-0030	03/09/2016 09:12	0.150	-64.000	6.730	4.099	62.121	9.260	5.600
MW-0030	03/09/2016 09:14	0.180	-52.000	6.730	4.072	61.752	9.230	3.600
MW-0030	03/09/2016 09:16	0.200	-43.000	6.740	4.040	61.328	9.210	3.300
MW-0030	03/09/2016 09:18	0.230	-40.000	6.740	4.020	61.037	9.280	11.800
MW-0030	03/09/2016 09:20	0.320	-39.000	6.750	3.983	60.546	9.270	4.600
MW-0030	03/09/2016 09:22	0.430	-35.000	6.760	3.957	60.201	9.230	3.600
MW-0030	03/09/2016 09:25	0.530	-30.000	6.770	3.970	60.368	9.290	2.700
MW-0030	03/09/2016 09:27	0.660	-22.000	6.770	3.942	59.973	9.340	2.600
MW-0030	03/09/2016 09:29	0.790	-17.000	6.780	3.894	59.306	9.380	2.700
MW-0030	03/09/2016 09:31	0.970	-15.000	6.780	3.866	58.920	9.410	2.700
MW-0030	03/10/2016 09:48	1.46	-108	6.40	1.31	21.990	8.81	20.10
MW-0030	03/10/2016 09:59	7.74	-99	6.71	5.81	84.460	9.04	55.90
MW-0030	08/25/2016 09:22	0.990	-68.380	6.490	NM	42023.970	27.350	28.590
MW-0030	08/25/2016 09:24	0.990	-70.000	6.500	NM	41730.630	27.440	25.090
MW-0030	08/25/2016 09:26	0.990	-71.330	6.500	NM	41477.240	27.580	27.780
MW-0030	08/25/2016 09:28	0.990	-72.700	6.500	NM	41767.190	27.520	28.500
MW-0030	08/25/2016 09:31	0.990	-73.980	6.510	NM	40993.310	27.670	28.450
MW-0030	08/26/2016 09:49	1.34	-225	4.46	3.34	50.210	24.53	17.00
MW-0030	08/26/2016 10:10	2.06	67	6.57	2.54	39.300	26.34	119.20
MW-0030	03/16/2017 09:08	8.75	48	6.59	1.2017	0.2070	4.85	26.4
MW-0030	03/16/2017 09:10	5.52	24	6.59	1.1684	0.2019	4.6	751.6
MW-0030	03/16/2017 09:12	4.29	14	6.57	1.1794	0.2044	3.91	40.5
MW-0030	03/16/2017 09:15	3.78	4	6.56	1.1718	0.2024	4.63	39
MW-0030	03/16/2017 09:17	3.11	-5	6.56	1.1609	0.2007	4.58	39.2
MW-0030	03/16/2017 09:19	2.98	-11	6.56	1.1516	0.1993	4.47	39.4
MW-0030	03/16/2017 09:21	2.99	-15	6.56	1.1354	0.1965	4.71	39.7

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0030	03/16/2017 09:24	2.7	-19	6.57	1.1226	0.1943	4.85	40
MW-0030	03/16/2017 09:26	2.69	-22	6.57	1.1177	0.1938	4.56	39.3
MW-0030	03/16/2017 09:28	2.65	-25	6.58	1.1032	0.1915	4.54	38.1
MW-0030	03/17/2017 09:46	8.27	-96	6.55	1.55	25.790	9.13	84.90
MW-0030	03/17/2017 10:05	9.13	-140	6.40	1.83	30.120	8.24	469.50
MW-0030	04/30/2018 08:23	9.31	34	6.42	2.3813	37.7482	12.06	18.5
MW-0030	04/30/2018 08:25	2.72	-26	6.4	2.3874	37.9392	11.09	19.1
MW-0030	04/30/2018 08:27	1.56	-68	6.41	2.3719	37.7104	11.14	11.5
MW-0030	04/30/2018 08:29	1.05	-94	6.45	2.3606	37.5469	11.13	10.8
MW-0030	04/30/2018 08:31	1.83	-113	6.47	2.3291	37.0880	11.17	9.5
MW-0030	04/30/2018 08:33	1.54	-126	6.5	2.2985	36.6483	11.13	11.7
MW-0030	04/30/2018 08:36	0.69	-136	6.52	2.2691	36.2169	11.18	10.7
MW-0030	04/30/2018 08:38	1.31	-145	6.55	2.2369	35.7496	11.16	9.4
MW-0030	04/30/2018 08:40	1.21	-153	6.56	2.2070	35.3103	11.2	11.2
MW-0030	04/30/2018 08:42	1.14	-159	6.58	2.1600	34.6274	11.17	11.1
MW-0030	04/30/2018 08:44	0.56	-166	6.6	2.1137	33.9582	11.1	12.2
MW-0030	04/30/2018 08:46	0.98	-171	6.61	2.0869	33.5578	11.17	12.3
MW-0030	04/30/2018 08:49	0.92	-175	6.63	2.0660	33.2353	11.34	12
MW-0030	04/30/2018 08:51	0.47	-179	6.63	2.0583	33.1122	11.45	12.8
MW-0030	04/30/2018 08:53	0.46	-184	6.64	2.0386	32.8185	11.5	13.4
MW-0030	04/30/2018 08:55	0.43	-188	6.65	2.0282	32.6591	11.58	13.3
MW-0030	05/01/2018 08:55	0.43	-188.00	6.65	2.03	32.510	11.76	13.32
MW-0030	05/01/2018 09:34	9.98	-199.00	6.48	2.90	45.230	10.93	93.30
MW-0030	05/01/2018 09:47	6.92	-97.00	6.92	2.13	34.100	12.96	12.30
MW-0030	10/05/2018 18:57	NM	NM	7	NM	NM	NM	89
MW-0030	11/26/2018 14:10	0.40	175.90	6.49	13.84	22.910	13.02	12.90
MW-0030	11/26/2018 14:32	2.14	150.10	6.64	13.74	11.660	11.32	23.80
MW-0030	11/26/2018 14:40	1.45	153.60	6.57	15.37	15.960	11.26	15.30
MW-0030	04/30/2019 13:30	0.38	72.4	6.88	NM	27.82	14.3	4.4
MW-0030	04/30/2019 14:10	0.45	83.7	6.79	16.53	26.91	13.22	0.9
MW-0030	11/20/2019 12:15	2.65	35.1	6.68	NM	12.46	13.17	8.8
MW-0030	11/20/2019 12:20	1.1	26.2	6.64	NM	12.46	13.27	7.5
MW-0030	11/20/2019 12:25	0.11	18.2	6.63	NM	12.46	13.34	7.5
MW-0030	11/20/2019 12:30	0.43	-7.8	6.61	NM	12.47	13.27	8
MW-0030	11/20/2019 12:35	0.08	-18.1	6.61	NM	12.47	13.16	6.2
MW-0030	11/20/2019 12:40	0.2	-21.3	6.61	NM	12.48	13.21	5.3
MW-0030	11/20/2019 12:45	0.09	-25.5	6.61	NM	12.47	13.35	4.5
MW-0030	11/20/2019 12:50	0.03	-28	6.6	NM	12.47	13.37	4.4
MW-0030	11/20/2019 12:55	-0.11	-30.6	6.6	NM	12.44	13.51	3.9
MW-0030	11/20/2019 13:00	22	-32	6.63	NM	11.82	13.29	5.4
MW-0030	11/21/2019 09:15	-10.4	-38.2	6.73	8.82	15.09	13.7	22.8
MW-0030	11/21/2019 09:30	-0.73	-40.6	6.63	9.15	15.6	14.41	435.8
MW-0030	05/06/2020 11:05	1.57	-41.4	6.81	NM	3.678	13.02	91.9
MW-0030	05/07/2020 08:35	2.22	-95	6.63	5.08	9.03	12.52	76.2
MW-0030	12/29/2020 13:55	1.77	-51.2	6.9	13.38	22.22	9.66	5.7
MW-0030	12/29/2020 14:00	1.08	-54.5	6.8	13.56	22.5	9.32	3.9
MW-0030	12/29/2020 14:05	0.56	-56.6	6.75	13.58	22.64	7.75	2.3
MW-0030	12/29/2020 14:10	0.56	-58	6.74	13.55	22.59	7.56	2.2
MW-0030	12/29/2020 14:15	0.46	-59.4	6.72	13.53	22.57	7.38	2.8
MW-0030	12/29/2020 14:20	0.39	-59.1	6.71	13.5	22.54	7.22	2.1
MW-0030	12/29/2020 14:25	0.32	-56.6	6.71	13.5	22.53	7.15	2.2
MW-0030	12/29/2020 14:30	0.34	-58.8	6.7	13.47	22.49	7.06	2.6
MW-0030	12/29/2020 14:35	0.32	-61.1	6.71	13.24	22.16	7.13	2.7
MW-0030	12/29/2020 14:40	0.38	-61.1	6.7	12.95	21.7	7.08	2.5
MW-0030	12/30/2020 09:40	1.84	-10.2	6.54	12.85	21.44	9.51	7.3
MW-0030	12/30/2020 10:00	2.35	-49.9	6.82	12.76	21.32	8.74	1150.7
MW-0030	06/25/2021 12:35	3.82	26.9	7.05	6.14	10.87	25.61	0
MW-0030	06/25/2021 12:40	1.47	66.9	6.43	6.28	11.09	24.44	0
MW-0030	06/25/2021 12:45	1.14	80.7	6.23	6.27	11.05	25.17	0
MW-0030	06/25/2021 12:50	1.05	81.8	6.21	6.15	10.87	25.84	0
MW-0030	06/25/2021 12:55	0.98	76.7	6.22	5.94	10.52	26.1	0
MW-0030	06/25/2021 13:00	0.91	68.7	6.25	5.65	10.06	26.32	0

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Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0030	06/25/2021 13:05	0.91	63.5	6.26	5.41	9.664	26.46	0
MW-0030	06/25/2021 13:10	0.86	60.8	6.27	5.06	9.173	26.35	0
MW-0030	06/25/2021 13:15	0.87	64.5	6.26	4.67	8.414	26.16	0
MW-0030	06/25/2021 13:20	0.82	70.8	6.24	4.54	8.203	26.32	0
MW-0030	12/27/2021 11:10	1.32	-265.1	7.14	12.41	20.86	10.03	20.2
MW-0030	12/27/2021 11:15	7.1	-263.3	7.1	12.35	20.71	8.6	16.6
MW-0030	12/27/2021 11:20	0.68	-258.4	7.02	12.19	20.43	9.1	16
MW-0030	12/27/2021 11:25	0.71	-258.3	7	12.21	20.47	8.95	13.3
MW-0030	12/27/2021 11:30	0.92	-249	7.1	12.06	20.36	6.44	13.9
MW-0030	12/27/2021 11:35	0.91	-248.5	7.1	12.03	20.25	6.54	14
MW-0030	12/27/2021 11:40	0.9	-247.8	7.1	12.01	20.27	6.6	14.1
MW-0030	12/27/2021 11:45	0.92	-247.3	7.11	12	20.24	6.71	14.2
MW-0031	02/13/2012 13:17	-0.13	45	6.94	0.22	4.22376	7.03	98.6
MW-0031	02/13/2012 13:19	-0.11	40	6.97	0.23	4.29721	6.87	61.4
MW-0031	02/13/2012 13:21	-0.11	37	6.99	0.23	4.30935	6.96	53.7
MW-0031	02/13/2012 13:22	-0.1	35	6.99	0.23	4.29568	7.08	65.7
MW-0031	02/13/2012 13:24	-0.1	33	7	0.23	4.31383	7.1	51.4
MW-0031	02/13/2012 13:26	-0.09	32	7	0.23	4.29839	7.06	50.9
MW-0031	02/13/2012 13:28	-0.09	32	7	0.23	4.30122	7.15	48.3
MW-0031	02/13/2012 13:29	-0.08	31	7	0.23	4.31488	7.03	49
MW-0031	02/13/2012 13:31	-0.08	30	7	0.23	4.29926	7.11	57.9
MW-0031	02/13/2012 13:33	-0.09	30	7.01	0.23	4.31527	7.1	48.4
MW-0031	02/13/2012 13:35	-0.08	29	7.01	0.23	4.30921	7.2	47.1
MW-0031	02/13/2012 13:37	-0.08	29	7.01	0.23	4.30331	7.17	49.9
MW-0031	02/13/2012 13:38	-0.08	29	7.01	0.23	4.304	7.17	49.87
MW-0031	02/13/2012 15:08	0.04	-133	7.18	0.14	2.821	7.54	29.50
MW-0031	02/14/2012 11:10	-0.09	-91	7.06	0.17	3.035	6.25	7.10
MW-0031	08/06/2012 08:54	2.55	-94	8.89	0.27	4.9982	28.41	59.6
MW-0031	08/06/2012 08:57	2.3	-95	8.87	0.29	5.26998	27.98	10.7
MW-0031	08/06/2012 08:59	2.41	-97	8.86	0.28	5.12543	27.81	9.9
MW-0031	08/06/2012 09:01	2.74	-98	8.84	0.27	4.97248	27.49	9.9
MW-0031	08/06/2012 09:03	2.98	-99	8.77	0.26	4.86516	27.57	9
MW-0031	08/06/2012 09:05	3.1	-99	8.77	0.26	4.83928	27.63	8.6
MW-0031	08/06/2012 09:07	3.11	-98	8.77	0.27	4.881	27.50	8.69
MW-0031	08/06/2012 09:40	3.46	-169	8.67	0.89	15.020	25.61	46.90
MW-0031	08/07/2012 10:00	3.58	-152	6.85	0.20	3.920	28.32	100.00
MW-0031R	04/24/2013 08:41	7.03	2.764	-132	10.14	38.4209	13.07	30.072
MW-0031R	04/24/2013 08:43	7.19	2.764	-143	8.69	18.1342	12.52	30.068
MW-0031R	04/24/2013 08:45	7.27	2.764	-146	7.49	10.1994	12.45	30.071
MW-0031R	04/24/2013 08:47	7.3	2.764	-149	7.13	6.7864	12.3	30.071
MW-0031R	04/24/2013 08:49	7.3	2.764	-152	6.96	4.9437	12.36	30.071
MW-0031R	04/24/2013 08:51	7.3	2.764	-156	6.92	4.3456	12.37	30.071
MW-0031R	04/24/2013 08:54	7.3	2.764	-160	6.8	4.0388	12.4	30.071
MW-0031R	04/24/2013 08:56	7.3	2.764	-167	6.71	3.3399	12.48	30.073
MW-0031R	04/24/2013 08:58	7.29	2.764	-173	6.73	3.1923	12.49	30.069
MW-0031R	04/24/2013 09:00	7.3	2.764	-181	6.73	2.8531	12.45	30.067
MW-0031R	04/24/2013 09:02	7.3	2.764	-189	6.78	3.2914	12.44	30.071
MW-0031R	04/24/2013 09:04	7.3	2.764	-197	6.79	3.0401	12.5	30.067
MW-0031R	04/24/2013 09:07	7.3	2.764	-205	6.84	2.5616	12.36	30.064
MW-0031R	04/24/2013 09:09	7.3	2.764	-213	6.8	2.4026	12.44	30.067
MW-0031R	04/24/2013 09:11	7.3	2.764	-222	6.84	2.54	12.51	30.07
MW-0031R	04/24/2013 09:13	7.3	2.794	-231	6.88	2.3441	12.52	30.067
MW-0031R	04/24/2013 09:15	7.3	2.764	-240	6.87	2.2935	12.54	30.067
MW-0031R	04/24/2013 09:17	7.29	2.764	-248	6.89	2.3395	12.6	30.067
MW-0031R	04/24/2013 09:20	7.3	2.764	-256	6.91	2.1464	12.6	30.067
MW-0031R	04/24/2013 09:22	7.3	2.735	-262	6.92	2.002	12.61	30.065
MW-0031R	04/24/2013 09:24	7.3	2.735	-268	6.96	2.106	12.53	30.061
MW-0031R	04/24/2013 09:26	7.3	2.794	-272	6.88	1.9482	12.7	30.063
MW-0031R	04/24/2013 09:28	0.2	-275	7.3	0.38	6.944	12.6	2.66
MW-0031R	04/24/2013 09:56	2.84	-131	7.35	0.13	6.534	12.56	70.4
MW-0031R	04/25/2013 09:22	0.13	-194	7.23	0.13	6.669	12.34	223.2
MW-0031R	09/23/2013 13:40	1.97	-302	6.8	3.06	5.57942	23.42	175.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0031R	09/23/2013 13:42	1.27	-336	6.81	2.94	5.38154	22.46	143.9
MW-0031R	09/23/2013 13:44	0.99	-348	6.82	3.01	5.50769	22.61	127.7
MW-0031R	09/23/2013 13:46	0.82	-353	6.83	2.93	5.35466	22.53	118
MW-0031R	09/23/2013 13:48	0.82	-355	6.85	3.11	5.67392	22.64	115.4
MW-0031R	09/23/2013 13:51	0.77	-358	6.85	3.07	5.60652	22.55	106.3
MW-0031R	09/23/2013 13:53	0.75	-359	6.86	2.88	5.278575	22.41	106.6
MW-0031R	09/23/2013 13:55	0.72	-363	6.87	2.76	5.06986	22.38	105
MW-0031R	09/23/2013 13:57	0.7	-363	6.88	2.93	5.36662	22.52	93.5
MW-0031R	09/23/2013 13:59	0.68	-362	6.89	2.76	5.0664	22.44	88.3
MW-0031R	09/23/2013 14:01	0.67	-361	6.9	2.64	4.87041	22.44	84.9
MW-0031R	09/23/2013 14:04	0.66	-361	6.9	2.85	5.218	22.47	85.7
MW-0031R	09/23/2013 14:06	0.64	-360	6.91	2.67	4.90693	22.41	83.4
MW-0031R	09/23/2013 14:08	0.64	-360	6.92	2.61	4.81243	22.24	76.6
MW-0031R	09/23/2013 14:10	0.64	-360	6.93	2.47	4.57635	21.87	84.5
MW-0031R	09/23/2013 14:12	0.61	-355	6.93	2.66	4.89138	22.01	75.1
MW-0031R	09/23/2013 14:14	0.61	-352	6.93	2.57	4.74111	21.97	73.3
MW-0031R	09/23/2013 14:17	0.6	-358	6.94	2.48	4.58863	21.93	74.5
MW-0031R	09/23/2013 14:19	0.59	-352	6.95	2.51	4.63405	22.03	72.7
MW-0031R	06/04/2014 08:07	5.56	-268	6.82	NM	10.921	-5.63	94.60
MW-0031R	06/04/2014 08:09	3.69	-300	6.84	NM	11.023	-5.63	88.50
MW-0031R	06/04/2014 08:11	2.81	-325	6.87	NM	11.028	-5.63	80.60
MW-0031R	06/04/2014 08:13	2.47	-333	6.89	NM	11.440	-5.62	74.60
MW-0031R	06/04/2014 08:15	2.38	-340	6.92	NM	11.274	-5.62	57.70
MW-0031R	06/04/2014 08:17	2.34	-343	6.94	NM	11.659	-5.62	55.90
MW-0031R	06/04/2014 08:19	2.29	-344	6.96	NM	11.678	-5.62	45.30
MW-0031R	06/04/2014 08:21	2.27	-343	6.98	NM	11.933	-5.61	52.70
MW-0031R	06/04/2014 08:23	2.27	-344	7.00	NM	11.702	-5.61	39.30
MW-0031R	06/04/2014 08:25	2.24	-343	7.01	NM	11.723	-5.61	39.30
MW-0031R	06/04/2014 08:27	2.21	-344	7.02	NM	11.884	-5.61	37.60
MW-0031R	06/04/2014 08:28	2.21	-344	7.02	1.79	28.618	21.55	37.60
MW-0031R	06/04/2014 08:54	2.19	-205	6.91	0.77	13.170	20.98	536.50
MW-0031R	06/05/2014 13:37	1.42	-353	7.06	0.85	14.410	21.78	0
MW-0031R	11/06/2014 02:06	2.15	-0.02	6.94	NM	8.437	13.23	212.70
MW-0031R	11/06/2014 02:08	-0.97	-0.04	6.87	NM	8.382	13.16	153.50
MW-0031R	11/06/2014 02:10	-0.96	-0.05	6.86	NM	8.291	13.19	127.10
MW-0031R	11/06/2014 02:11	-0.94	-0.06	6.86	NM	8.104	13.63	111.70
MW-0031R	11/06/2014 02:13	-0.93	-0.06	6.86	NM	7.851	13.91	98.10
MW-0031R	11/06/2014 02:15	-0.92	-0.07	6.86	NM	7.743	14.08	95.00
MW-0031R	11/06/2014 02:17	-0.92	-0.07	6.86	NM	7.628	14.13	90.40
MW-0031R	11/06/2014 02:19	-0.91	-0.07	6.86	NM	7.490	14.26	78.60
MW-0031R	11/06/2014 02:21	-0.92	-0.07	6.87	NM	7.412	14.23	75.40
MW-0031R	11/06/2014 02:23	-0.91	-0.07	6.87	NM	7.294	14.32	66.30
MW-0031R	11/06/2014 02:25	-0.91	-0.08	6.88	NM	7.201	14.41	62.10
MW-0031R	11/06/2014 02:27	-0.91	-0.08	6.88	NM	7.116	14.37	60.60
MW-0031R	11/06/2014 14:27	-0.91	-78	6.84	0.50	3.929	14.37	60.58
MW-0031R	11/06/2014 14:47	3.57	-100	7.15	0.37	6.771	16.40	1764.40
MW-0031R	11/07/2014 10:45	-0.74	-155	7.03	0.43	7.728	15.87	156.00
MW-0031R	02/12/2015 08:53	6.04	-3	6.93	0.1535	0.0030	2.97	2.97
MW-0031R	02/12/2015 08:55	2.33	-50	6.96	0.1175	0.0024	2.96	2.96
MW-0031R	02/12/2015 08:57	1.49	-85	7.07	0.1671	0.0033	1.88	1.88
MW-0031R	02/12/2015 08:59	1.04	-96	7.11	0.1615	0.0032	1.72	1.72
MW-0031R	02/12/2015 09:02	0.74	-104	7.13	0.1585	0.0031	1.97	1.97
MW-0031R	02/12/2015 09:04	0.64	-111	7.15	0.1608	0.0032	1.88	1.88
MW-0031R	02/12/2015 09:06	0.58	-118	7.17	0.1601	0.0032	1.97	1.97
MW-0031R	02/12/2015 09:08	0.57	-126	7.19	0.1623	0.0032	1.86	1.86
MW-0031R	02/12/2015 09:10	0.52	-132	7.22	0.1652	0.0033	1.78	1.78
MW-0031R	02/12/2015 09:12	0.49	-137	7.24	0.1629	0.0032	2.07	2.07
MW-0031R	02/12/2015 09:15	0.47	-142	7.26	0.3518	0.0067	2.2	2.2
MW-0031R	02/12/2015 09:17	0.48	-146	7.28	0.3417	0.0065	2.24	2.24
MW-0031R	02/12/2015 09:19	0.47	-149	7.29	0.3509	0.0067	2.38	2.38
MW-0031R	02/12/2015 09:21	0.5	-151	7.31	0.3516	0.0067	2.5	2.5
MW-0031R	02/12/2015 09:23	0.55	-153	7.32	0.3578	0.0068	2.56	2.56

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0031R	02/12/2015 09:25	0.56	-155	7.33	0.3595	0.0068	2.63	2.63
MW-0031R	02/12/2015 09:28	0.57	-156	7.33	0.3593	0.0068	2.82	2.82
MW-0031R	02/12/2015 09:30	0.54	-157	7.34	0.3802	0.0071	2.98	2.98
MW-0031R	02/12/2015 09:32	0.54	-159	7.35	0.3597	0.0068	2.93	2.93
MW-0031R	02/12/2015 09:34	0.54	-159	7.36	0.3577	0.0068	2.87	2.87
MW-0031R	02/12/2015 09:36	0.56	-160	7.37	0.3618	0.0068	2.82	2.82
MW-0031R	02/12/2015 09:38	0.58	-161	7.37	0.3645	0.0069	2.93	2.93
MW-0031R	02/12/2015 09:41	0.58	-161	7.38	0.3599	0.0068	2.98	2.98
MW-0031R	02/12/2015 09:43	0.59	-161	7.38	0.3774	0.0071	2.98	2.98
MW-0031R	02/12/2015 09:43	0.59	-161	7.38	0.38	7.114	2.92	16.43
MW-0031R	02/12/2015 10:04	3.51	-120	7.38	0.40	7.534	3.54	1723.00
MW-0031R	02/13/2015 09:49	1.51	-120	7.27	0.26	5.056	1.33	338.10
MW-0031R	09/29/2015 10:39	3.5	48	6.86	0.2368	0.0044	27.33	123
MW-0031R	09/29/2015 10:41	1.81	45	6.77	0.2359	0.0044	26.27	136.3
MW-0031R	09/29/2015 10:43	1.07	42	6.72	0.2355	0.0044	26.01	125.8
MW-0031R	09/29/2015 10:45	0.88	38	6.7	0.2348	0.0044	25.99	89.6
MW-0031R	09/29/2015 10:47	0.78	28	6.7	0.2342	0.0043	26.07	104
MW-0031R	09/29/2015 10:49	0.71	16	6.7	0.2340	0.0043	26.08	107.8
MW-0031R	09/29/2015 10:51	0.64	4	6.71	0.2325	0.0043	25.9	96.9
MW-0031R	09/29/2015 10:52	0.63	-9	6.7	0.2295	0.0043	26.02	78.1
MW-0031R	09/29/2015 10:54	0.6	-20	6.71	0.2297	0.0043	25.91	92.2
MW-0031R	09/29/2015 10:56	0.6	-29	6.72	0.2277	0.0042	25.81	91.5
MW-0031R	09/29/2015 10:58	0.57	-36	6.72	0.2237	0.0042	25.79	74.8
MW-0031R	09/29/2015 11:00	0.59	-43	6.73	0.2201	0.0041	25.8	63.7
MW-0031R	09/29/2015 11:02	0.62	-50	6.74	0.2199	0.0041	25.68	77.3
MW-0031R	09/29/2015 11:04	0.65	-55	6.74	0.2181	0.0041	25.65	74.9
MW-0031R	09/29/2015 11:06	0.63	-60	6.75	0.2145	0.0040	25.7	59.6
MW-0031R	09/29/2015 11:08	0.62	-65	6.76	0.2137	0.0040	25.68	66.3
MW-0031R	09/29/2015 11:10	0.62	-69	6.76	0.2122	0.0040	25.75	67.1
MW-0031R	09/29/2015 11:12	0.62	-72	6.77	0.2087	0.0039	25.85	58.1
MW-0031R	09/29/2015 11:14	0.62	-76	6.79	0.2064	0.0039	26.03	57.7
MW-0031R	09/29/2015 11:15	0.63	-79	6.79	0.2056	0.0038	26.09	54.8
MW-0031R	09/30/2015 11:05	-11.31	-105	6.87	0.44	7.900	24.53	177.70
MW-0031R	09/30/2015 11:37	4.17	-42	6.86	0.17	3.170	25.36	1475.20
MW-0031R	03/09/2016 12:27	2.110	-135.000	6.810	0.680	11.803	18.320	142.100
MW-0031R	03/09/2016 12:30	1.580	-140.000	6.980	0.737	12.783	14.460	125.700
MW-0031R	03/09/2016 12:32	1.230	-143.000	7.060	0.727	12.619	14.690	123.200
MW-0031R	03/09/2016 12:34	0.710	-152.000	7.200	0.719	12.504	13.740	103.500
MW-0031R	03/09/2016 12:37	0.520	-158.000	7.280	0.692	12.067	13.600	94.100
MW-0031R	03/09/2016 12:39	0.450	-161.000	7.310	0.663	11.590	13.740	101.600
MW-0031R	03/09/2016 12:41	0.380	-163.000	7.330	0.632	11.086	13.830	99.700
MW-0031R	03/09/2016 12:44	0.330	-164.000	7.340	0.605	10.634	14.200	95.100
MW-0031R	03/09/2016 12:46	0.330	-165.000	7.340	0.589	10.376	14.270	97.500
MW-0031R	03/09/2016 12:48	0.300	-167.000	7.360	0.596	10.500	13.930	75.400
MW-0031R	03/09/2016 12:51	0.240	-168.000	7.350	0.576	10.157	14.830	79.000
MW-0031R	03/09/2016 12:53	0.260	-168.000	7.360	0.587	10.340	14.310	78.600
MW-0031R	03/09/2016 12:55	0.250	-169.000	7.370	0.586	10.333	14.390	74.000
MW-0031R	03/10/2016 10:33	0.76	-184	6.81	0.08	1.610	9.23	169.20
MW-0031R	03/10/2016 13:21	6.73	-113	7.14	0.59	10.500	11.57	439.40
MW-0031R	08/25/2016 11:11	0.630	-122.750	6.950	NM	8898.970	29.760	23.620
MW-0031R	08/25/2016 11:13	0.630	-125.150	6.960	NM	8733.530	29.620	18.240
MW-0031R	08/25/2016 11:15	0.610	-126.600	6.960	NM	8706.680	29.630	21.550
MW-0031R	08/25/2016 11:17	0.590	-128.610	6.970	NM	8589.310	29.810	43.870
MW-0031R	08/25/2016 11:19	0.580	-130.280	6.970	NM	8486.750	29.900	20.910
MW-0031R	08/26/2016 10:42	0.76	-29	5.23	0.74	12.650	28.12	105.00
MW-0031R	08/26/2016 11:46	0.84	-114	7.26	0.49	8.612	29.30	63.80
MW-0031R	03/16/2017 13:22	11.49	-154	6.99	0.1151	0.0228	6.07	180.4
MW-0031R	03/16/2017 13:24	5.29	-166	7.14	0.1137	0.0225	5.69	131.4
MW-0031R	03/16/2017 13:27	4.05	-173	7.16	0.1132	0.0224	5.78	102.2
MW-0031R	03/16/2017 13:29	3.43	-177	7.17	0.1134	0.0225	5.71	86.6
MW-0031R	03/16/2017 13:31	3.15	-180	7.18	0.1134	0.0225	5.87	86.2
MW-0031R	03/16/2017 13:33	2.98	-182	7.19	0.1130	0.0224	5.87	84.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0031R	03/16/2017 13:36	2.8	-185	7.19	0.1131	0.0224	6.02	85.7
MW-0031R	03/16/2017 13:38	2.7	-188	7.19	0.1130	0.0224	6.03	67.9
MW-0031R	03/16/2017 13:40	2.74	-190	7.2	0.1129	0.0223	6.22	65.8
MW-0031R	03/16/2017 13:42	2.58	-191	7.21	0.1129	0.0224	6.06	61.9
MW-0031R	03/17/2017 11:20	4.19	-287	7.47	0.23	4.307	5.84	59.90
MW-0031R	03/17/2017 14:13	5.85	-177	7.20	0.11	2.188	6.30	39.30
MW-0031R	04/30/2018 09:49	7.48	-149	6.96	0.2505	4.6780	12.21	11.6
MW-0031R	04/30/2018 09:51	3.68	-159	7.16	0.2505	4.6772	12.18	7.4
MW-0031R	04/30/2018 09:54	2.28	-156	7.24	0.2498	4.6674	12.03	4.6
MW-0031R	04/30/2018 09:56	1.74	-154	7.29	0.2497	4.6643	12.18	4.1
MW-0031R	04/30/2018 09:59	1.47	-154	7.32	0.2502	4.6710	12.34	3.5
MW-0031R	04/30/2018 10:01	1.36	-154	7.33	0.2505	4.6765	12.28	3.6
MW-0031R	04/30/2018 10:04	0.87	-155	7.34	0.2508	4.6795	12.53	4.3
MW-0031R	04/30/2018 10:06	0.81	-155	7.35	0.2517	4.6959	12.47	3.4
MW-0031R	04/30/2018 10:09	1.1	-156	7.36	0.2523	4.7073	12.34	2.6
MW-0031R	04/30/2018 10:12	1	-157	7.36	0.2526	4.7135	12.22	2.6
MW-0031R	04/30/2018 10:14	0.68	-158	7.37	0.2525	4.7116	12.23	3
MW-0031R	04/30/2018 10:17	0.64	-159	7.37	0.2529	4.7207	11.99	2.9
MW-0031R	04/30/2018 10:19	0.8	-159	7.38	0.2528	4.7200	11.92	2.4
MW-0031R	04/30/2018 10:22	0.75	-160	7.38	0.2529	4.7226	11.93	5.5
MW-0031R	04/30/2018 10:24	0.52	-160	7.38	0.2528	4.7225	11.75	2.5
MW-0031R	04/30/2018 10:27	0.65	-161	7.39	0.2531	4.7294	11.55	2.1
MW-0031R	04/30/2018 10:29	0.6	-161	7.39	0.2532	4.7305	11.6	2
MW-0031R	04/30/2018 10:32	0.42	-161	7.39	0.2535	4.7355	11.65	2.9
MW-0031R	04/30/2018 10:34	0.4	-162	7.4	0.2536	4.7380	11.59	2.5
MW-0031R	04/30/2018 10:37	0.51	-162	7.4	0.2532	4.7314	11.52	2
MW-0031R	05/01/2018 10:32	7.31	-182.00	7.31	0.25	4.712	13.3	90.00
MW-0031R	05/01/2018 10:37	0.51	-162.00	7.40	0.25	4.710	11.7	2.03
MW-0031R	05/01/2018 11:12	7.64	-118.00	7.00	0.24	4.509	12.28	90.60
MW-0031R	11/26/2018 13:45	0.98	-75.50	6.88	1.67	3.198	11.37	27.40
MW-0031R	11/26/2018 14:40	2.50	-158.58	7.21	1.24	2.403	11.59	5.40
MW-0031R	11/26/2018 14:50	2.52	-159.10	7.24	1.24	2.408	11.58	5.70
MW-0031R	04/30/2019 10:10	0.32	-50.7	7.52	NM	4.81	12.83	6
MW-0031R	04/30/2019 10:26	0.14	-76.5	7.66	2.23	4.179	13	1.9
MW-0031R	11/20/2019 08:50	3.24	26.9	6.82	NM	3.057	11.56	110.8
MW-0031R	11/20/2019 08:55	-2.02	-6	6.84	NM	2.839	11.44	95.8
MW-0031R	11/20/2019 09:00	-0.63	-74.6	6.88	NM	1.858	11.55	18.1
MW-0031R	11/20/2019 09:05	1.28	-83.4	6.93	NM	1.715	11.53	12.7
MW-0031R	11/20/2019 09:10	1.26	-96.1	7.07	NM	1.498	11.75	5.6
MW-0031R	11/20/2019 09:15	0.6	-102.3	7.1	NM	1.409	11.83	3.4
MW-0031R	11/20/2019 09:20	0.36	-108.5	7.14	NM	1.364	11.92	2.5
MW-0031R	11/20/2019 09:25	0.67	-114.4	7.19	NM	1.323	12.01	1.3
MW-0031R	11/20/2019 09:30	0.14	-117.2	7.21	NM	1.309	12.1	1.1
MW-0031R	11/20/2019 09:35	0.25	-120.9	7.24	NM	1.294	12.07	0.7
MW-0031R	11/20/2019 10:00	2.52	-94.8	7.46	0.64	1.279	10.01	3.8
MW-0031R	11/20/2019 10:20	2.14	-113.9	7.37	0.62	1.227	11.59	72.4
MW-0031R	05/06/2020 09:15	0.86	-149.9	7.38	NM	1.744	12.62	10.9
MW-0031R	05/06/2020 09:30	0.68	-152.9	7.42	0.87	1.706	12.68	7.9
MW-0031R	12/29/2020 12:05	4.25	-149	7.8	1.92	3.649	8.59	20.6
MW-0031R	12/29/2020 12:10	4.13	-147.1	7.82	1.9	3.607	8.59	27.6
MW-0031R	12/29/2020 12:15	4.06	-145.7	7.74	1.89	3.584	8.6	25.3
MW-0031R	12/29/2020 12:20	4.31	-138.6	7.54	1.87	3.539	8.65	21.6
MW-0031R	12/29/2020 12:25	4.37	-136.2	7.47	1.86	3.53	8.54	23.4
MW-0031R	12/29/2020 12:30	3.77	-132.1	7.45	1.87	3.538	8.41	22.1
MW-0031R	12/29/2020 12:35	4.55	-127.8	7.44	1.88	3.561	8.24	21.7
MW-0031R	12/29/2020 12:40	5.43	-119.7	7.42	1.88	3.563	8.09	21.3
MW-0031R	12/29/2020 12:45	5.55	-115.6	7.41	1.88	3.568	7.98	21.6
MW-0031R	12/29/2020 12:50	5.64	-111	7.41	1.88	3.568	7.94	22.9
MW-0031R	12/29/2020 13:30	9.16	-121.9	7.65	1.2	2.329	7.88	3.5
MW-0031R	12/29/2020 13:45	8.86	-107.9	7.55	0.6	1.195	8.42	94.2
MW-0031R	06/25/2021 14:00	1.42	-116	6.67	1.44	2.779	25.8	8.1
MW-0031R	06/25/2021 14:05	1.15	-92.6	6.41	1.39	2.69	26.36	7.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0031R	06/25/2021 14:10	1.09	-70.6	6.13	1.33	2.592	25.95	4.9
MW-0031R	06/25/2021 14:15	1.14	-60	5.97	1.29	2.507	25.63	1.2
MW-0031R	06/25/2021 14:20	1.14	-52.6	5.91	1.25	2.431	25.58	4.7
MW-0031R	06/25/2021 14:25	1.08	-49.2	5.87	1.2	2.332	25.35	0
MW-0031R	06/25/2021 14:30	0.96	0	5.87	1.17	2.295	25.48	5.87
MW-0031R	06/25/2021 14:35	1.18	-44.5	5.86	1.15	2.254	25.67	0
MW-0031R	06/25/2021 14:40	1.14	-43.5	5.86	1.13	2.217	25.7	0
MW-0031R	06/25/2021 14:45	1.16	-41.9	5.85	1.13	2.193	25.8	0
MW-0031R	11/23/2021 11:50	5.3	-20.9	6.84	1.65	3.143	12.45	45.6
MW-0031R	11/23/2021 11:55	0.61	-40.5	6.84	1.77	3.367	12.7	40.7
MW-0031R	11/23/2021 12:00	0.43	-55.3	6.88	1.69	3.204	12.53	31
MW-0031R	11/23/2021 12:05	0.37	-66.2	6.95	1.56	2.975	12.82	20.8
MW-0031R	11/23/2021 12:10	0.37	-75.4	7	1.48	2.83	13.46	19.6
MW-0031R	11/23/2021 12:15	0.34	-83.9	7.06	1.41	2.701	13.13	13.5
MW-0031R	11/23/2021 12:20	0.33	-91.2	7.1	1.36	2.632	13.41	10
MW-0031R	11/23/2021 12:25	0.31	-99.2	7.14	1.33	2.555	13.19	7.4
MW-0031R	11/23/2021 12:30	0.3	-104	7.17	1.3	2.503	12.97	5.5
MW-0031R	11/23/2021 12:35	0.28	-108.9	7.19	1.29	2.488	13.666	4.3
MW-0032	03/08/2012 13:03	0.43	-104	7.09	0.10	2.260	10.80	52.00
MW-0032	03/08/2012 13:33	3.32	-137	7.09	0.10	2.280	8.90	185.00
MW-0032	03/09/2012 10:55	1.03	-30	6.93	0.10	2.030	8.10	36.90
MW-0032	08/06/2012 09:52	3.25	-120	8.94	0.12	2.3296	28.3	14.7
MW-0032	08/06/2012 09:54	2.22	-119	8.87	0.12	2.34487	28.1	5.8
MW-0032	08/06/2012 09:56	1.88	-118	8.9	0.12	2.34167	27.84	38.2
MW-0032	08/06/2012 09:58	1.7	-118	8.95	0.12	2.33562	28.01	7
MW-0032	08/06/2012 10:00	1.59	-119	8.91	0.12	2.3349	28.09	4.8
MW-0032	08/06/2012 10:02	1.42	-119	8.9	0.12	2.3449	27.93	5.4
MW-0032	08/06/2012 10:04	1.36	-119	8.88	0.12	2.34802	27.9	4.8
MW-0032	08/06/2012 10:06	1.27	-119	8.86	0.12	2.34802	27.95	4.8
MW-0032	08/06/2012 10:08	1.21	-119	8.86	0.12	2.34912	27.9	4.5
MW-0032	08/06/2012 10:10	1.15	-119	8.83	0.12	2.349	27.90	4.48
MW-0032	08/06/2012 10:33	9.21	-177	10.57	1.26	20.790	26.14	51.00
MW-0032	08/07/2012 10:45	3.31	-49	7.10	0.10	2.280	27.95	15.80
MW-0032	03/14/2013 14:14	0.56	-263	7.54	0.24	4.611	6.6	1.91
MW-0032	03/14/2013 14:41	7.17	-188	7.15	0.21	4.078	6.7	55.6
MW-0032	03/15/2013 10:38	1.88	-203	7.21	0.21	4.012	6.6	20
MW-0032	09/24/2013 08:52	2.95	-305	6.98	0.16	3.0219	19.94	79.2
MW-0032	09/24/2013 08:54	1.46	-340	7.04	0.15	2.7715	19.76	46.2
MW-0032	09/24/2013 08:56	1.04	-358	7.06	0.16	3.02379	20.3	47
MW-0032	09/24/2013 08:58	0.88	-372	7.07	0.15	2.94105	20.36	47
MW-0032	09/24/2013 09:00	0.81	-379	7.08	0.14	2.72544	20.39	48.2
MW-0032	09/24/2013 09:02	0.83	-389	7.09	0.15	2.88188	20.33	44.4
MW-0032	09/24/2013 09:04	0.76	-390	7.09	0.15	2.77473	20.55	48
MW-0032	09/24/2013 09:06	0.73	-395	7.1	0.15	2.86624	20.65	43.2
MW-0032	09/24/2013 09:08	0.64	-400	7.1	0.15	2.83512	20.48	45.6
MW-0032	09/24/2013 09:10	0.62	-402	7.09	0.14	2.71387	20.46	43.3
MW-0032	09/24/2013 09:12	0.57	-404	7.1	0.15	2.8776	20.42	44.8
MW-0032	09/24/2013 09:14	0.59	-403	7.1	0.15	2.937729	20.67	43.3
MW-0032	09/24/2013 09:16	0.54	-403	7.1	0.14	2.7224771	20.86	43.2
MW-0032	09/24/2013 09:18	0.53	-403	7.1	0.15	2.8469	20.96	42.8
MW-0032	09/24/2013 09:20	0.52	-403	7.1	0.16	2.98055	21.05	43.4
MW-0032	09/24/2013 09:22	0.52	-402	7.1	0.15	2.88135	21.06	44.4
MW-0032	09/24/2013 09:24	0.5	-402	7.1	0.14	2.7553	21.07	39.7
MW-0032	09/24/2013 09:26	0.5	-402	7.1	0.15	2.86295	21.04	41.7
MW-0032	09/24/2013 09:28	0.5	-403	7.1	0.15	2.9062	21.06	41.7
MW-0032	09/24/2013 09:30	0.48	-404	7.11	0.16	3.00117	20.99	46.5
MW-0032	09/24/2013 09:32	0.48	-408	7.11	0.15	2.9427	21.01	40.4
MW-0032	09/24/2013 09:33	0.49	-409	7.1	0.14	2.72163	20.97	38.3
MW-0032	09/24/2013 09:35	0.51	-403	7.09	0.16	3.006649	21.02	42.9
MW-0032	09/24/2013 09:37	0.55	-399	7.09	0.15	2.7974	20.86	41.7
MW-0032	09/24/2013 09:39	0.52	-397	7.09	0.16	2.95789	20.89	44.5
MW-0032	09/24/2013 09:41	0.52	-395	7.08	0.14	2.75596	20.94	39.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0032	06/04/2014 09:08	4.87	-207	6.77	NM	15.428	-5.65	10.10
MW-0032	06/04/2014 09:10	2.77	-244	6.76	NM	16.210	-5.64	12.70
MW-0032	06/04/2014 09:12	2.32	-327	6.79	NM	15.084	-5.64	69.50
MW-0032	06/04/2014 09:14	2.27	-360	6.82	NM	14.405	-5.64	50.30
MW-0032	06/04/2014 09:16	2.25	-369	6.84	NM	14.031	-5.64	25.40
MW-0032	06/04/2014 09:18	2.19	-374	6.85	NM	13.676	-5.64	25.50
MW-0032	06/04/2014 09:20	2.09	-378	6.87	1.85	33.710	-5.64	24.78
MW-0032	06/04/2014 10:09	0.97	-210	6.83	1.12	18.760	17.39	4.80
MW-0032	06/05/2014 13:15	1.66	-334	7.08	0.64	11.200	20.95	19.80
MW-0032	11/06/2014 11:14	-0.96	0.15	7.13	NM	6.300	13.30	63.90
MW-0032	11/06/2014 11:16	-0.96	0.15	7.14	NM	6.209	13.21	96.00
MW-0032	11/06/2014 11:18	-0.94	0.15	7.13	NM	5.905	13.76	51.80
MW-0032	11/06/2014 11:20	-0.93	0.15	7.12	NM	5.810	13.84	46.40
MW-0032	11/06/2014 11:22	-0.93	0.14	7.12	NM	5.724	13.96	48.90
MW-0032	11/06/2014 11:24	-0.93	0.14	7.13	NM	5.645	14.07	53.90
MW-0032	11/06/2014 11:25	-0.93	0.14	7.12	NM	5.603	14.09	45.20
MW-0032	11/06/2014 11:27	-0.92	0.13	7.13	NM	5.537	14.15	62.30
MW-0032	11/06/2014 11:29	-0.92	0.12	7.12	NM	5.489	14.23	47.20
MW-0032	11/06/2014 11:31	-0.90	0.12	7.13	NM	5.377	14.54	50.10
MW-0032	11/06/2014 11:33	-0.91	0.11	7.13	NM	5.340	14.53	53.10
MW-0032	11/06/2014 11:35	-0.90	0.11	7.13	NM	5.293	14.59	64.30
MW-0032	11/06/2014 11:37	-0.90	0.1	7.13	NM	5.233	14.62	46.90
MW-0032	11/06/2014 11:39	-0.90	0.09	7.13	NM	5.200	14.57	43.50
MW-0032	11/06/2014 11:41	-0.91	0.08	7.12	NM	5.177	14.54	48.80
MW-0032	11/06/2014 11:43	-0.90	0.07	7.12	NM	5.133	14.63	43.50
MW-0032	11/06/2014 11:45	-0.90	0.06	7.13	NM	5.076	14.67	45.70
MW-0032	11/06/2014 11:46	-0.90	0.06	7.13	NM	5.041	14.68	45.40
MW-0032	11/06/2014 11:48	-0.91	0.05	7.13	NM	5.041	14.53	46.90
MW-0032	11/06/2014 11:50	-0.91	0.04	7.13	NM	5.050	14.44	46.40
MW-0032	11/06/2014 11:52	-0.90	0.03	7.13	NM	4.991	14.57	49.90
MW-0032	11/06/2014 11:54	-0.90	0.02	7.12	NM	4.951	14.69	42.50
MW-0032	11/06/2014 11:56	-0.89	0.01	7.13	NM	4.873	14.81	43.50
MW-0032	11/06/2014 11:58	-0.89	0	7.12	NM	4.824	14.88	58.40
MW-0032	11/06/2014 12:00	-0.89	-0.01	7.12	NM	4.779	14.92	43.20
MW-0032	11/06/2014 12:02	-0.89	-14	7.12	0.32	5.879	14.92	41.31
MW-0032	11/06/2014 12:37	0.05	-64	6.68	0.52	9.161	17.57	195.40
MW-0032	11/07/2014 09:54	-0.72	-113	6.85	0.30	5.589	16.19	23.30
MW-0032	02/12/2015 10:18	5.87	-101	7.18	0.2398	0.0046	3.83	229
MW-0032	02/12/2015 10:20	2.77	-112	7.14	0.2869	0.0055	3.59	41.3
MW-0032	02/12/2015 10:22	1.77	-118	7.12	0.2880	0.0055	3.7	32.2
MW-0032	02/12/2015 10:24	1.32	-121	7.11	0.2887	0.0055	3.78	44
MW-0032	02/12/2015 10:26	1.12	-123	7.1	0.2822	0.0054	3.76	30.6
MW-0032	02/12/2015 10:28	0.75	-124	7.09	0.2719	0.0052	3.89	44.6
MW-0032	02/12/2015 10:30	0.6	-124	7.09	0.2723	0.0052	3.82	45.2
MW-0032	02/12/2015 10:32	0.51	-125	7.08	0.27	5.146	3.75	47.68
MW-0032	02/12/2015 11:05	3.34	-94	6.86	0.51	9.212	5.68	252.40
MW-0032	02/13/2015 10:36	1.32	-123	6.91	0.31	5.892	4.28	17.10
MW-0032	09/30/2015 13:27	3.51	-16	6.98	0.2619	0.0048	25.22	174.7
MW-0032	09/30/2015 13:29	1.84	-13	6.95	0.2607	0.0048	24.87	346.7
MW-0032	09/30/2015 13:31	1.09	-14	6.95	0.2606	0.0048	24.8	54.2
MW-0032	09/30/2015 13:33	0.48	-16	6.96	0.2595	0.0048	24.77	54.3
MW-0032	09/30/2015 13:35	0.47	-18	6.97	0.2591	0.0048	24.73	52.7
MW-0032	09/30/2015 13:37	0.32	-20	6.98	0.2592	0.0048	24.73	56.2
MW-0032	09/30/2015 13:39	0.28	-23	6.99	0.2593	0.0048	24.68	51.4
MW-0032	09/30/2015 13:41	0.17	-27	7	0.2587	0.0048	24.65	51.8
MW-0032	09/30/2015 13:43	0.13	-29	7.01	0.2605	0.0048	24.63	51
MW-0032	09/30/2015 13:45	0.1	-33	7.01	0.2599	0.0048	24.65	50.9
MW-0032	09/30/2015 13:47	0.1	-36	7.02	0.2605	0.0048	24.65	51.9
MW-0032	09/30/2015 13:48	0.07	-39	7.03	0.2605	0.0048	24.67	49.9
MW-0032	09/30/2015 13:50	0.1	-41	7.03	0.2613	0.0048	24.68	49.3
MW-0032	09/30/2015 13:52	0.09	-44	7.03	0.2627	0.0048	24.68	46
MW-0032	09/30/2015 13:54	0.12	-47	7.03	0.2619	0.0048	24.7	50.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0032	09/30/2015 13:56	0.13	-49	7.03	0.2624	0.0048	24.71	48.8
MW-0032	09/30/2015 13:58	0.16	-52	7.03	0.2619	0.0048	24.69	48.6
MW-0032	09/30/2015 14:00	0.17	-53	7.02	0.2658	0.0049	24.69	48.3
MW-0032	09/30/2015 14:02	0.18	-55	7.03	0.2628	0.0048	24.7	48.4
MW-0032	09/30/2015 14:04	0.23	-57	7.02	0.2653	0.0049	24.7	48
MW-0032	09/30/2015 14:06	0.19	-59	7.02	0.2645	0.0049	24.7	46.6
MW-0032	09/30/2015 14:08	0.16	-61	7.02	0.2648	0.0049	24.71	44.2
MW-0032	09/30/2015 14:10	0.24	-62	7.02	0.2661	0.0049	24.72	43.5
MW-0032	09/30/2015 14:11	0.22	-64	7.02	0.2671	0.0049	24.68	42.3
MW-0032	09/30/2015 14:13	0.23	-65	7.01	0.2677	0.0049	24.61	41.8
MW-0032	10/01/2015 11:51	-0.72	-89	6.46	0.59	10.300	23.60	12.50
MW-0032	10/01/2015 14:42	3.73	-46	6.56	0.68	111.800	23.89	180.20
MW-0032	03/09/2016 10:18	1.560	-177.000	7.350	0.556	9.843	13.540	37.100
MW-0032	03/09/2016 10:20	1.380	-184.000	7.560	0.635	11.226	10.260	24.400
MW-0032	03/09/2016 10:22	0.730	-186.000	7.590	0.672	11.853	9.610	20.500
MW-0032	03/09/2016 10:24	0.470	-185.000	7.600	0.667	11.762	10.080	19.300
MW-0032	03/09/2016 10:25	0.370	-186.000	7.610	0.660	11.642	10.280	19.700
MW-0032	03/09/2016 10:27	0.310	-187.000	7.630	0.671	11.836	9.900	22.800
MW-0032	03/09/2016 10:29	0.250	-187.000	7.630	0.667	11.753	9.990	18.600
MW-0032	03/09/2016 10:31	0.250	-187.000	7.640	0.660	11.650	10.090	24.100
MW-0032	03/09/2016 10:33	0.230	-188.000	7.650	0.660	11.648	10.020	21.500
MW-0032	03/09/2016 10:35	0.200	-188.000	7.650	0.657	11.596	10.110	17.900
MW-0032	03/09/2016 10:37	0.190	-188.000	7.640	0.650	11.471	10.470	21.900
MW-0032	03/09/2016 10:38	0.160	-188.000	7.630	0.001	0.014	11.520	29.000
MW-0032	03/09/2016 10:40	0.570	-184.000	7.650	0.631	11.145	10.830	49.700
MW-0032	03/09/2016 10:42	0.560	-179.000	7.630	0.633	11.197	10.270	25.600
MW-0032	03/09/2016 10:44	0.490	-179.000	7.630	0.632	11.188	10.150	22.300
MW-0032	03/09/2016 10:46	0.370	-180.000	7.630	0.631	11.156	10.210	22.900
MW-0032	03/09/2016 10:48	0.250	-181.000	7.640	0.629	11.119	10.340	24.600
MW-0032	03/09/2016 10:50	0.200	-182.000	7.630	0.622	11.003	10.580	20.600
MW-0032	03/09/2016 10:51	0.160	-183.000	7.640	0.624	11.032	10.510	20.600
MW-0032	03/09/2016 10:53	0.110	-184.000	7.640	0.625	11.060	10.490	22.300
MW-0032	03/09/2016 10:55	0.110	-185.000	7.640	0.622	11.002	10.700	18.800
MW-0032	03/09/2016 10:57	0.090	-186.000	7.630	0.624	11.026	10.760	19.000
MW-0032	03/09/2016 10:59	0.080	-188.000	7.640	0.633	11.175	10.650	13.900
MW-0032	03/09/2016 11:01	0.070	-190.000	7.640	0.638	11.264	10.730	12.500
MW-0032	03/09/2016 11:03	0.060	-192.000	7.650	0.654	11.530	10.500	12.000
MW-0032	03/09/2016 11:05	0.050	-193.000	7.640	0.654	11.530	10.790	13.100
MW-0032	03/09/2016 11:06	0.040	-194.000	7.650	0.655	11.536	10.740	14.500
MW-0032	03/10/2016 11:40	3.89	-131	7.01	0.92	15.940	8.48	55.10
MW-0032	03/10/2016 11:43	2.34	-110	6.81	0.09	1.882	7.60	21.30
MW-0032	08/25/2016 12:54	0.490	-120.270	7.190	NM	7474.710	29.010	18.780
MW-0032	08/25/2016 12:56	0.450	-124.160	7.200	NM	7472.860	29.210	18.900
MW-0032	08/25/2016 12:58	0.440	-128.060	7.200	NM	7434.400	29.270	17.910
MW-0032	08/25/2016 13:00	0.430	-131.690	7.200	NM	7439.570	29.240	16.530
MW-0032	08/25/2016 13:03	0.420	-134.940	7.200	NM	7475.010	29.100	16.280
MW-0032	08/26/2016 11:30	0.68	-27	5.06	2.45	38.040	26.54	21.80
MW-0032	08/26/2016 13:35	1.01	-87	6.50	0.97	16.290	25.66	18.60
MW-0032	03/21/2017 08:40	9.33	54	6.87	0.0734	0.0147	7.48	66.1
MW-0032	03/21/2017 08:43	3.73	13	6.87	0.0737	0.0148	6.95	80.7
MW-0032	03/21/2017 08:45	2.82	1	6.89	0.0730	0.0147	7.1	168.2
MW-0032	03/21/2017 08:47	2.58	-7	6.91	0.0731	0.0147	6.96	60.5
MW-0032	03/21/2017 08:49	2.48	-12	6.93	0.0731	0.0147	6.85	41.8
MW-0032	03/21/2017 08:51	2.34	-23	6.95	0.0731	0.0147	6.82	82.1
MW-0032	03/21/2017 08:53	2.49	-35	6.96	0.0730	0.0147	6.8	52.6
MW-0032	03/21/2017 08:56	2.03	-42	6.98	0.0729	0.0147	6.79	69.3
MW-0032	03/21/2017 08:58	2.12	-49	7.01	0.0729	0.0147	6.73	81.7
MW-0032	03/21/2017 09:00	2.05	-60	7.03	0.0729	0.0147	6.73	42.2
MW-0032	03/21/2017 09:02	1.82	-67	7.05	0.0730	0.0147	6.73	47.7
MW-0032	03/21/2017 09:04	1.88	-68	7.06	0.0730	0.0147	6.74	48.2
MW-0032	03/21/2017 09:06	1.71	-68	7.08	0.0729	0.0147	6.76	52.1
MW-0032	03/21/2017 09:09	1.66	-69	7.1	0.0729	0.0147	6.76	41.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0032	03/21/2017 09:11	1.63	-70	7.11	0.0729	0.0147	6.76	35.8
MW-0032	03/21/2017 09:13	1.7	-72	7.13	0.0729	0.0147	6.76	31.4
MW-0032	03/21/2017 09:15	1.61	-76	7.14	0.0729	0.0147	6.76	41.2
MW-0032	03/21/2017 09:17	1.67	-78	7.16	0.0729	0.0147	6.78	33.8
MW-0032	03/21/2017 09:19	1.58	-81	7.17	0.0729	0.0147	6.77	36.6
MW-0032	03/21/2017 09:22	1.66	-87	7.18	0.0728	0.0147	6.75	29.8
MW-0032	03/21/2017 09:24	1.57	-91	7.19	0.0728	0.0147	6.77	31.4
MW-0032	03/21/2017 09:26	1.58	-95	7.2	0.0727	0.0146	6.81	28.6
MW-0032	03/22/2017 09:23	0.88	1	7.12	0.11	2.247	7.47	111.30
MW-0032	03/22/2017 10:02	10.98	-60	7.09	0.10	1.927	7.50	42.40
MW-0032	04/30/2018 13:38	5.13	-195	8.08	0.1815	3.4404	13.85	7.4
MW-0032	04/30/2018 13:41	2.82	-187	7.88	0.1953	3.6887	13.65	6
MW-0032	04/30/2018 13:43	2.93	-187	7.83	0.2003	3.7836	12.75	7.9
MW-0032	04/30/2018 13:45	2.24	-190	7.8	0.1714	3.2665	12.55	4.7
MW-0032	04/30/2018 13:48	0.91	-197	7.8	0.1677	3.2027	12.08	8
MW-0032	04/30/2018 13:50	1.21	-200	7.79	0.1680	3.2086	11.87	2.6
MW-0032	04/30/2018 13:52	1.08	-200	7.78	0.1680	3.2095	11.73	5.5
MW-0032	04/30/2018 13:55	1.01	-201	7.77	0.1683	3.2164	11.69	3
MW-0032	04/30/2018 13:57	0.94	-202	7.76	0.1688	3.2253	11.66	2.5
MW-0032	04/30/2018 14:00	0.87	-202	7.75	0.1689	3.2270	11.6	2.7
MW-0032	04/30/2018 14:02	0.49	-203	7.75	0.1691	3.2310	11.64	3.3
MW-0032	04/30/2018 14:04	0.79	-203	7.74	0.1695	3.2387	11.63	3.8
MW-0032	04/30/2018 14:07	0.76	-203	7.73	0.1704	3.2548	11.53	2.7
MW-0032	04/30/2018 14:09	0.71	-203	7.71	0.1712	3.2682	11.57	6.8
MW-0032	04/30/2018 14:11	0.42	-202	7.7	0.1727	3.2956	11.61	3.1
MW-0032	04/30/2018 14:14	0.67	-202	7.69	0.1738	3.3167	11.52	5.7
MW-0032	04/30/2018 14:16	0.67	-202	7.68	0.1748	3.3350	11.45	7.2
MW-0032	04/30/2018 14:18	0.39	-202	7.67	0.1758	3.3533	11.45	10
MW-0032	04/30/2018 14:21	0.62	-202	7.66	0.1763	3.3643	11.24	2.6
MW-0032	04/30/2018 14:23	0.37	-202	7.66	0.1770	3.3766	11.29	4.5
MW-0032	04/30/2018 14:25	0.35	-202	7.65	0.1778	3.3906	11.27	2.8
MW-0032	04/30/2018 14:28	0.58	-202	7.64	0.1787	3.4074	11.2	3.1
MW-0032	05/01/2018 11:59	0.36	-190.00	7.18	0.18	3.474	11.9	11.00
MW-0032	05/01/2018 14:28	0.58	-202.00	7.64	0.18	3.391	11.38	3.11
MW-0032	05/01/2018 14:55	11.79	-103.00	7.48	0.19	3.597	10.7	59.40
MW-0032	11/27/2018 13:00	2.12	70.10	7.02	1.32	2.540	10.98	71.90
MW-0032	11/27/2018 14:35	1.55	-118.30	6.94	2.09	3.925	12.15	6.30
MW-0032	11/27/2018 14:55	0.83	-115.50	6.81	3.06	5.644	12.83	15.90
MW-0032	03/26/2019 13:40	0.51	-126.1	7.2	NM	3.097	8.44	57.4
MW-0032	03/26/2019 14:34	0.33	-114.4	7.13	1.62	3.08	7.67	2.5
MW-0032	11/01/2019 08:20	2.2	-29.7	6.95	NM	2.2	17.09	85.8
MW-0032	11/01/2019 08:25	1.5	-69.6	6.87	NM	2.23	16.89	72
MW-0032	11/01/2019 08:30	1.52	-85.7	6.8	NM	2.543	16.8	55.8
MW-0032	11/01/2019 08:35	1.43	-89.2	6.75	NM	2.663	16.92	50.2
MW-0032	11/01/2019 08:40	1.18	-92.3	6.75	NM	2.812	16.9	43.7
MW-0032	11/01/2019 08:45	1.29	-94.8	6.77	NM	2.938	16.77	38
MW-0032	11/01/2019 08:50	1.11	-97.3	6.76	NM	2.981	16.84	36.2
MW-0032	11/01/2019 08:55	1.31	-99.9	6.74	NM	3.14	16.82	32.3
MW-0032	11/01/2019 09:00	1.23	-102.2	6.76	NM	3.214	16.9	32.4
MW-0032	11/01/2019 09:05	1.23	-105.6	6.74	NM	3.209	17.14	-105.4
MW-0032	11/01/2019 09:47	2.25	-120.8	6.75	2.32	4.437	18.09	2.2
MW-0032	11/01/2019 10:06	3.58	-124.8	7.23	0.94	1.848	16.36	19.1
MW-0032	03/24/2020 13:00	0.79	-71.1	7.16	NM	2.788	11.26	12.1
MW-0032	03/24/2020 14:00	0.66	-35.9	7.09	1.44	2.895	11.01	7.3
MW-0032	12/22/2020 10:00	7.32	-14.8	6.13	2.39	4.5	8.6	26.9
MW-0032	12/22/2020 10:10	4.57	-21.1	6.15	1.03	2.007	7.54	46.5
MW-0032	03/09/2021 11:55	11.33	-131.1	6.85	4.74	8.556	9.3	82.2
MW-0032	03/09/2021 12:00	6.54	-145.2	7.01	4.26	7.856	8.68	71.4
MW-0032	03/09/2021 12:05	2.75	-130.4	7.1	2.74	5.074	8.89	66.5
MW-0032	03/09/2021 12:10	2.74	-119.4	7.05	2.8	5.187	8.64	46.7
MW-0032	03/09/2021 12:15	2.74	-115.1	7.02	2.77	5.141	8.23	22.9
MW-0032	03/09/2021 12:20	2.81	-117.4	7.04	2.71	5.032	8.24	19.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0032	03/09/2021 12:25	2.91	-118.3	7.01	2.65	4.928	8.3	13.3
MW-0032	03/09/2021 12:30	2.74	-119.2	7.01	2.63	4.892	8.34	11
MW-0032	03/09/2021 12:35	2.94	-110.9	6.98	2.74	5.078	8.92	8.2
MW-0032	03/09/2021 12:40	2.92	-106.3	6.96	2.76	5.112	8.88	7.5
MW-0032	03/09/2021 13:18	5.62	-145.2	7.47	3.16	5.829	9.24	3.9
MW-0032	03/09/2021 13:33	4.79	-124.6	7.65	1.1	2.144	8.55	13.8
MW-0032	06/01/2021 09:25	1.8	19	7.45	1.07	2.095	22.3	69.7
MW-0032	06/01/2021 09:30	1.11	2.1	7.23	1.08	2.101	21.47	68.5
MW-0032	06/01/2021 09:35	0.9	6.8	7.14	1.08	2.105	22.06	67.3
MW-0032	06/01/2021 09:40	0.79	-9.3	7.12	1.08	2.11	22.45	67.7
MW-0032	06/01/2021 09:45	0.78	-37.4	7.09	1.08	2.115	22.65	66.6
MW-0032	06/01/2021 09:50	0.7	-57.5	7.09	1.08	2.119	22.93	62.6
MW-0032	06/01/2021 09:55	0.71	-64.3	7.07	1.09	2.132	23.4	57.5
MW-0032	06/01/2021 10:00	0.72	-88.8	7.04	1.09	2.142	23.47	49.6
MW-0032	06/01/2021 10:05	0.69	-85.8	7.01	1.1	2.146	23.16	45.5
MW-0032	06/01/2021 10:10	0.65	-90.7	6.97	1.1	2.157	23.04	43.6
MW-0032	06/01/2021 10:15	0.66	-92.1	6.96	1.11	2.162	23.04	41.8
MW-0032	06/01/2021 10:20	0.64	-87.9	6.96	1.11	2.164	23.1	40.4
MW-0032	08/26/2021 10:30	-0.32	152.7	7.51	1.08	0.044	35.85	0
MW-0032	08/26/2021 10:35	-0.03	-99.2	6.61	2.28	4.32	26.98	2.5
MW-0032	08/26/2021 10:40	-0.14	-110.9	6.58	1.98	3.773	26.28	1.2
MW-0032	08/26/2021 10:45	-0.22	-113.7	6.57	1.93	3.659	26.07	1.2
MW-0032	08/26/2021 10:50	-0.27	-113.4	6.49	3.85	6.543	25.85	5.4
MW-0032	08/26/2021 10:55	-0.33	-128.5	6.49	4.32	8.215	25.74	5.9
MW-0032	08/26/2021 11:00	-0.29	-129.2	6.49	3.68	6.743	25.78	2.1
MW-0032	08/26/2021 11:05	-0.23	-128.6	6.5	2.93	5.523	25.85	0.9
MW-0032	08/26/2021 11:10	-0.24	-128.4	6.51	2.59	4.869	25.81	1.2
MW-0032	08/26/2021 11:15	-0.23	-127.3	6.5	2.48	4.66	25.99	1.6
MW-0032	12/09/2021 09:30	9.84	60.5	7.37	1.75	3.331	11.13	7.5
MW-0032	12/09/2021 09:35	3.99	25.1	7.4	1.77	3.352	11.11	1.1
MW-0032	12/09/2021 09:40	2.51	-13.8	7.35	1.89	3.545	11.05	-3.6
MW-0032	12/09/2021 09:45	1.35	-51	7.19	2.37	4.419	11.21	-6.1
MW-0032	12/09/2021 09:50	8.77	-53.6	7.18	2.41	4.492	11.24	-5.2
MW-0032	12/09/2021 09:55	2.88	-58.9	7.14	2.63	4.868	11.28	-6.1
MW-0032	12/09/2021 10:00	1.98	-60.1	7.14	2.64	4.895	11.27	-5.7
MW-0032	12/09/2021 10:05	1.76	-61.7	7.12	2.75	5.085	11.23	-7.2
MW-0032	12/09/2021 10:10	7.49	-61.6	7.13	2.76	5.088	11.31	-8
MW-0032	12/09/2021 10:15	3.87	-65.1	7.12	2.85	5.256	11.24	-6.7
MW-0032	03/11/2022 11:10	1.77	-187.1	7.5	1.13	2.194	8.29	24.5
MW-0032	03/11/2022 11:15	1.75	-191.7	7.49	1.13	2.201	8.11	20.5
MW-0032	03/11/2022 11:20	1.84	-185.2	7.49	1.15	2.241	8.21	4.9
MW-0032	03/11/2022 11:25	1.87	-180.4	7.48	1.15	2.242	8.22	4.6
MW-0032	03/11/2022 11:30	1.89	-185.9	7.51	1.16	2.247	8.16	4.6
MW-0032	03/11/2022 11:35	1.9	-185.9	7.48	1.16	2.247	8.15	5.3
MW-0032	03/11/2022 11:40	1.89	-185.9	7.48	1.16	2.247	8.08	4.9
MW-0032	03/11/2022 11:45	1.83	-186.2	7.47	1.16	2.246	8.16	5.3
MW-0033	02/15/2012 14:27	-0.12	-162	7.07	0.15	2.95389	9.74	7.7
MW-0033	02/15/2012 14:30	-0.07	-159	6.98	0.15	2.92463	9.88	11.43
MW-0033	02/15/2012 14:32	-0.07	-156	6.93	0.15	2.92666	9.64	10.88
MW-0033	02/15/2012 14:34	-0.06	-153	6.91	0.2	2.92	9.6	9.3
MW-0033	02/15/2012 14:35	-0.06	-153	6.91	0.15	2.91601	9.56	9.26
MW-0033	02/15/2012 14:37	-0.06	-151	6.89	0.15	2.91214	9.58	7.15
MW-0033	02/15/2012 14:39	-0.06	-149	6.87	0.2	2.92	9.6	6.7
MW-0033	02/15/2012 14:40	-0.06	-149	6.87	0.15	2.91642	9.57	6.67
MW-0033	02/15/2012 14:42	-0.06	-147	6.86	0.15	2.9131	9.55	6.68
MW-0033	03/18/2013 08:58	1.74	-236	6.7	0.65	11.66	6.2	7.95
MW-0033	04/10/2013 12:01	1.3	-192	6.41	NM	3.607	14.8	11.23
MW-0033	06/04/2014 13:16	0.75	-184	6.44	NM	1.710	28.07	30.40
MW-0033	06/04/2014 13:18	1.00	-174	6.41	NM	1.716	24.66	29.30
MW-0033	06/04/2014 13:21	1.10	-190	6.27	NM	2.119	19.70	32.30
MW-0033	06/04/2014 13:23	0.99	-202	6.32	NM	2.228	19.63	37.00
MW-0033	06/04/2014 13:26	0.90	-209	6.35	NM	2.234	19.67	38.20

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0033	06/04/2014 13:28	0.87	-211	6.37	NM	2.201	19.79	38.10
MW-0033	06/04/2014 13:31	0.84	-214	6.37	0.13	2.465	19.79	41.99
MW-0033	02/12/2015 14:03	5.51	-92	6.72	0.7488	0.0132	7.16	17.6
MW-0033	02/12/2015 14:06	1.57	-120	6.6	1.3192	0.0223	7.09	15.2
MW-0033	02/12/2015 14:08	0.92	-129	6.6	1.3987	0.0236	7.03	14.7
MW-0033	02/12/2015 14:10	0.76	-133	6.6	1.4277	0.0240	7.02	14.7
MW-0033	02/12/2015 14:13	0.75	-135	6.6	1.4041	0.0237	6.97	14.4
MW-0033	02/12/2015 14:15	0.77	-137	6.6	1.2329	0.0210	7.4	21.6
MW-0033	02/12/2015 14:18	0.76	-138	6.59	1.1031	0.0189	7.64	14.3
MW-0033	02/12/2015 14:20	0.77	-139	6.6	0.4639	0.0085	7.37	14.6
MW-0033	02/12/2015 14:22	0.78	-140	6.6	0.4316	0.0079	7.47	14.5
MW-0033	02/12/2015 14:25	0.77	-141	6.6	0.4124	0.0076	7.46	14.1
MW-0033	02/12/2015 14:27	0.78	-141	6.6	0.3956	0.0073	7.74	14.2
MW-0033	02/12/2015 14:30	0.82	-142	6.61	0.3820	0.0070	7.67	13.8
MW-0033	02/12/2015 14:32	0.89	-142	6.62	0.3612	0.0067	7.74	16.4
MW-0033	02/12/2015 14:34	1.71	-141	6.62	0.3499	0.0065	7.73	15
MW-0033	02/12/2015 14:37	2.62	-139	6.63	0.3427	0.0064	7.73	16.7
MW-0033	02/12/2015 14:39	3.3	-136	6.64	0.3357	0.0062	7.73	14.9
MW-0033	02/12/2015 14:42	3.82	-133	6.65	0.3312	0.0062	7.67	15.1
MW-0033	02/12/2015 14:44	4.21	-130	6.66	0.33	6.076	7.49	15.27
MW-0033	02/13/2015 13:39	1.370	-125.000	6.200	0.055	1.093	20.630	63.300
MW-0033	02/13/2015 13:41	0.920	-126.000	6.220	0.072	1.434	14.900	73.500
MW-0033	02/13/2015 13:44	0.380	-120.000	6.180	0.077	1.513	14.050	55.600
MW-0033	02/13/2015 13:47	0.330	-119.000	6.170	0.072	1.428	14.980	65.800
MW-0033	02/13/2015 13:49	0.320	-118.000	6.180	0.071	1.403	15.130	53.100
MW-0033	02/13/2015 13:51	0.290	-116.000	6.190	0.070	1.387	15.760	51.700
MW-0033	02/13/2015 13:54	0.270	-115.000	6.210	0.069	1.377	15.520	48.400
MW-0033	02/13/2015 13:56	0.250	-115.000	6.200	0.069	1.374	15.290	53.200
MW-0033	02/13/2015 13:58	0.220	-115.000	6.190	0.066	1.318	16.180	50.400
MW-0033	02/13/2015 14:01	0.190	-115.000	6.200	0.066	1.305	16.310	53.900
MW-0033	02/13/2015 14:03	0.180	-115.000	6.180	0.063	1.255	17.380	51.000
MW-0033	02/13/2015 14:06	0.190	-115.000	6.180	0.062	1.229	17.930	54.000
MW-0033	02/13/2015 14:08	0.190	-116.000	6.180	0.061	1.220	18.280	48.700
MW-0033	02/13/2015 14:10	0.200	-119.000	6.190	0.063	1.259	17.690	50.300
MW-0033	02/13/2015 14:13	0.190	-121.000	6.200	0.065	1.290	17.140	47.900
MW-0033	02/13/2015 14:15	0.180	-123.000	6.210	0.066	1.319	16.540	47.700
MW-0033	02/13/2015 14:17	0.160	-124.000	6.200	0.065	1.286	17.490	42.400
MW-0033	02/13/2015 14:20	0.160	-125.000	6.210	0.063	1.253	18.160	41.200
MW-0033	02/13/2015 14:22	0.150	-126.000	6.230	0.066	1.304	17.070	42.400
MW-0033	02/13/2015 14:24	0.140	-128.000	6.240	0.067	1.337	16.640	46.900
MW-0033	02/13/2015 14:27	0.130	-129.000	6.240	0.068	1.346	16.610	43.200
MW-0033	03/09/2016 14:17	0.160	-123.890	6.200	NM	1289.040	17.380	42.410
MW-0033	03/09/2016 14:20	0.160	-125.130	6.210	NM	1256.460	18.050	41.220
MW-0033	03/09/2016 14:22	0.150	-126.070	6.230	NM	1307.490	16.960	42.420
MW-0033	03/09/2016 14:24	0.140	-127.910	6.240	NM	1340.390	16.530	46.890
MW-0033	03/09/2016 14:27	0.130	-129.200	6.240	NM	1349.800	16.500	43.190
MW-0033	03/10/2016 14:59	2.79	-124	6.56	0.10	1.933	14.16	139.80
MW-0033	03/23/2017 14:06	9.69	-245	6.82	0.3032	0.0563	9.61	27.5
MW-0033	03/23/2017 14:09	4.35	-233	6.66	0.2996	0.0557	9.76	29
MW-0033	03/23/2017 14:12	3.84	-225	6.64	0.2992	0.0556	9.67	27.9
MW-0033	03/23/2017 14:14	3.61	-218	6.64	0.2983	0.0555	9.61	28.4
MW-0033	03/23/2017 14:17	3.4	-214	6.64	0.2987	0.0555	9.62	25.8
MW-0033	03/23/2017 14:20	3.44	-220	6.64	0.2975	0.0553	9.62	26.2
MW-0033	03/24/2017 14:52	11.46	-177	6.96	0.36	6.622	10.04	35.70
MW-0033	03/30/2018 14:22	3.12	10.00	6.53	0.04	0.856	9.64	38.23
MW-0033	03/30/2018 14:49	7.83	27.00	7.12	0.22	4.164	10.3	72.90
MW-0033	10/11/2018 08:13	NM	5	5	NM	12	12	5
MW-0033	10/17/2018 13:15	3.42	-129.4	7.89	0.35	0.71	20.98	12.3
MW-0033	10/17/2018 13:20	3.17	-174.6	6.89	0.21	0.439	21.38	7.6
MW-0033	10/17/2018 13:25	3.02	-185.9	6.58	0.21	0.44	21.34	3.6
MW-0033	10/17/2018 13:30	2.91	-189.2	6.57	0.21	0.441	21.36	3.2
MW-0033	10/17/2018 13:35	2.87	-190.1	6.55	0.21	0.443	21.32	3.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0033	10/17/2018 13:40	4.21	-113.10	6.38	0.21	0.444	20.98	5.30
MW-0033	10/17/2018 14:05	4.17	-98.30	6.33	0.21	0.447	20.78	6.40
MW-0033	10/17/2018 14:07	4.14	-93.70	6.31	0.22	0.448	20.67	5.00
MW-0033	03/28/2019 09:40	0.94	9	6.28	NM	0.218	8.38	49.6
MW-0033	03/28/2019 10:34	4.91	-4.2	6.3	0.1	0.218	8.72	51.8
MW-0033	03/13/2020 13:20	0.82	-111.5	6.33	NM	0.71	11.86	533.3
MW-0033	11/19/2020 09:42	2.73	-38.3	6.35	2.97	5.451	15.67	20.6
MW-0033	11/19/2020 10:00	2.17	-32.2	6.4	1.3	2.498	15.45	27.8
MW-0033	02/24/2021 11:55	0.4	-46.7	6.71	0.86	1.699	9.94	18.6
MW-0033	02/24/2021 12:00	0.13	-64.5	6.58	0.89	1.755	9.71	17.6
MW-0033	02/24/2021 12:05	0.11	-75.8	6.62	0.89	1.737	9.75	17.5
MW-0033	02/24/2021 12:10	0.1	-79	6.64	0.84	1.661	9.64	18.2
MW-0033	02/24/2021 12:15	0.09	-80.4	6.65	0.82	1.609	9.8	18.8
MW-0033	02/24/2021 12:20	0.09	-78.1	6.64	0.77	1.512	10.23	19.5
MW-0033	02/24/2021 12:25	0.09	-76.6	6.62	0.72	1.428	10.02	25.2
MW-0033	02/24/2021 12:30	0.08	-72.2	6.62	0.64	1.278	9.87	19.1
MW-0033	02/24/2021 12:35	0.08	-68.9	6.6	0.59	1.171	9.8	19.1
MW-0033	02/24/2021 12:40	0.08	-63.9	6.58	0.55	1.091	9.83	18.9
MW-0033	02/25/2021 08:40	3.82	-104.5	6.62	0.96	1.874	8.82	15.9
MW-0033	02/25/2021 08:55	4.58	-84.9	6.64	1.24	2.401	9.79	4.53
MW-0033	02/25/2021 12:40	0.08	-63.9	6.58	0.55	1.091	9.83	18.9
MW-0033	05/10/2021 09:15	9.47	-90.8	7.39	0.02	0.047	13.19	24.9
MW-0033	05/10/2021 09:20	4.9	-75.8	6.49	0.38	0.81	13.18	23.2
MW-0033	05/10/2021 09:25	3.02	-72.8	6.22	0.33	0.702	12.94	17
MW-0033	05/10/2021 09:30	1.19	-72.3	6.16	0.28	0.578	12.8	18.1
MW-0033	05/10/2021 09:35	0.94	-72.7	6.2	0.28	0.566	12.98	21.1
MW-0033	05/10/2021 09:40	1.25	-70.4	6.22	0.32	0.645	13.05	20.7
MW-0033	05/10/2021 09:45	1.27	-70.7	6.21	0.32	0.649	13.07	21.2
MW-0033	05/10/2021 09:50	1.41	-62.8	6.24	0.33	0.673	13.15	19
MW-0033	05/10/2021 09:55	1.71	-60.7	6.26	0.36	0.702	12.89	17.9
MW-0033	05/10/2021 10:00	1.95	-61.7	6.26	0.37	0.746	12.77	17.8
MW-0033	08/05/2021 08:55	2.63	-28.6	6.56	1.04	2.051	21.98	14.7
MW-0033	08/05/2021 09:00	0.87	-62.4	6.41	0.98	1.917	22.02	11.6
MW-0033	08/05/2021 09:05	0.61	-70.3	6.43	0.96	1.891	22.07	11.7
MW-0033	08/05/2021 09:10	0.52	-75	6.45	0.94	1.858	22.17	11.1
MW-0033	08/05/2021 09:15	0.44	-77.3	6.47	0.91	1.803	22.27	11
MW-0033	08/05/2021 09:20	0.44	-82.8	6.47	0.9	1.766	22.46	11
MW-0033	08/05/2021 09:25	0.42	-80.9	6.48	0.89	1.754	22.52	10.9
MW-0033	11/12/2021 14:15	1.65	-51.3	6.56	1.59	3.041	18.61	31.3
MW-0033	11/12/2021 14:20	1.58	-54.7	6.52	1.42	2.737	18.58	20.6
MW-0033	11/12/2021 14:25	1.82	-58.3	6.52	1.37	2.634	18.53	19.3
MW-0033	11/12/2021 14:30	1.74	-62.3	6.52	1.33	2.571	18.6	16.9
MW-0033	11/12/2021 14:35	2.42	-68.8	6.52	1.31	2.535	18.34	16.6
MW-0033	11/12/2021 14:40	2.59	-71.8	6.52	1.31	2.524	18.29	16
MW-0033	11/12/2021 14:45	2.12	-74.2	6.53	1.3	2.516	18.23	15.3
MW-0033	11/12/2021 14:50	2.29	-76.8	6.53	1.3	2.511	18.3	15.4
MW-0033	11/12/2021 14:55	2.44	-79.5	6.53	1.3	2.506	18.3	15.5
MW-0033	11/12/2021 15:00	2.3	-82.3	6.54	1.3	2.5	18.33	15.4
MW-0033	02/11/2022 12:10	1.14	-210.9	7.08	1.61	3.059	11.87	21.7
MW-0033	02/11/2022 12:15	6.19	-209.6	6.92	1.57	2.992	12.37	21.9
MW-0033	02/11/2022 12:20	5.72	-201.2	6.82	1.57	2.994	12.9	21.2
MW-0033	02/11/2022 12:25	5.72	-201.2	6.82	1.57	2.994	12.9	21.2
MW-0033	02/11/2022 12:30	1.24	-219.3	6.82	1.49	2.84	12.68	18.6
MW-0033	02/11/2022 12:35	1.5	-221	6.69	1.44	2.766	12.59	22.6
MW-0033	02/11/2022 12:40	1.5	-221	6.69	1.44	2.766	12.59	22.6
MW-0033	02/11/2022 12:45	1.5	-221	6.69	1.44	2.766	12.59	22.6
MW-0033	02/11/2022 12:50	4.91	-204.7	6.81	0.84	1.656	11.45	43.6
MW-0033	02/11/2022 12:55	4.65	-202.1	6.72	0.83	1.641	11.37	49.1
MW-0034	02/15/2012 12:45	-0.12	-104	7.01	1.65	27.21893	9.43	7.9
MW-0034	02/15/2012 12:47	-0.09	-144	7.08	1.65	27.23198	9.14	9.88
MW-0034	02/15/2012 12:50	-0.09	-167	7.1	1.64	27.0547	9.72	14.64
MW-0034	02/15/2012 12:52	-0.08	-182	7.12	1.65	27.15752	9.8	10.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0034	02/15/2012 12:54	-0.08	-192	7.13	1.65	27.19415	9.85	7.942
MW-0034	02/15/2012 12:57	-0.08	-201	7.13	1.66	27.31636	9.88	12.36
MW-0034	02/15/2012 12:59	-0.08	-209	7.14	1.66	27.32424	9.85	6.78
MW-0034	02/15/2012 13:02	-0.07	-216	7.14	1.66	27.36451	9.96	7.14
MW-0034	02/15/2012 13:04	-0.07	-223	7.15	1.66	27.36135	9.82	10.75
MW-0034	02/15/2012 13:06	-0.07	-229	7.16	1.66	27.36588	9.89	6.64
MW-0034	02/15/2012 13:09	-0.07	-235	7.17	1.66	27.36683	9.93	6.22
MW-0034	02/15/2012 13:11	-0.07	-241	7.17	1.66	27.37056	9.91	6.71
MW-0034	02/15/2012 13:13	61.16	-247	7.18	1.67	27.40126	9.89	6.49
MW-0034	02/15/2012 13:16	24.09	-252	7.18	1.66	27.37034	9.93	6.17
MW-0034	02/15/2012 13:18	17.15	-256	7.18	1.67	27.43668	9.96	6.62
MW-0034	02/15/2012 13:20	13.4	-259	7.18	1.67	27.43163	9.78	6.79
MW-0034	02/15/2012 13:23	10.9	-262	7.18	1.67	27.41546	9.92	7.61
MW-0034	02/15/2012 13:25	9.11	-264	7.17	1.67	27.4127	10	5.44
MW-0034	02/15/2012 13:27	7.85	-265	7.16	1.66	27.38032	10.08	4.41
MW-0034	02/15/2012 13:30	6.69	-268	7.16	1.67	27.42203	10.1	7.32
MW-0034	02/15/2012 13:32	5.84	-269	7.15	1.67	27.41864	10.06	7.1
MW-0034	02/15/2012 13:34	5.14	-271	7.15	1.67	27.41496	10.13	6.86
MW-0034	02/15/2012 14:14	-0.04	-182	7.37	1.57	25.850	10.62	3.60
MW-0034	02/16/2012 10:35	3.17	-143	7.00	1.65	27.003	11.15	2.80
MW-0034	08/06/2012 10:54	1.89	-71	11.4	1.34	21.86856	29.71	173.6
MW-0034	08/06/2012 10:56	1.84	-94	11.39	1.43	23.2533	26.31	24
MW-0034	08/06/2012 10:59	1.55	-120	11.27	1.42	23.18487	26.46	19.8
MW-0034	08/06/2012 11:01	1.4	-139	11.37	1.42	23.08633	26.69	18.8
MW-0034	08/06/2012 11:03	1.26	-156	11.46	1.41	23.00282	26.88	16.6
MW-0034	08/06/2012 11:05	1.18	-174	11.53	1.41	23.00486	26.87	13.1
MW-0034	08/06/2012 11:08	1.11	-196	11.58	1.42	23.1335	26.57	9.7
MW-0034	08/06/2012 11:10	1.05	-219	11.58	1.42	23.11899	26.6	7.9
MW-0034	08/06/2012 11:12	1.01	-239	11.62	1.4	22.86158	27.21	6.9
MW-0034	08/06/2012 11:14	0.97	-250	11.65	1.39	22.69237	27.62	6.4
MW-0034	08/06/2012 11:17	0.94	-257	11.68	1.38	22.59966	27.84	5.7
MW-0034	08/06/2012 11:19	0.92	-264	11.7	1.38	22.55789	27.94	5.2
MW-0034	08/06/2012 11:21	0.91	-269	11.73	1.38	22.50335	28.07	5
MW-0034	08/06/2012 11:23	0.91	-273	11.74	1.39	22.696	27.6	5.3
MW-0034	08/06/2012 11:24	0.91	-273	11.74	1.39	22.700	27.60	5.34
MW-0034	08/06/2012 12:04	6.48	-168	10.87	1.42	23.240	22.05	4.90
MW-0034	08/07/2012 11:40	4.31	-355	7.21	2.10	33.000	22.44	1.20
MW-0034	03/11/2013 10:14	7.48	-226	6.9	2.73	43.02	8.71	1.13
MW-0034	03/11/2013 11:07	6.93	-294	6.95	2.73	45.62	9.96	8.7
MW-0034	03/12/2013 15:22	2.09	-236	6.88	2.72	45.68	9.3	3.5
MW-0034	09/24/2013 10:32	1.04	-228	6.72	3.26	49.371	20.47	22.9
MW-0034	09/24/2013 10:35	0.9	-233	6.75	3.24	48.9936	20.31	23.4
MW-0034	09/24/2013 10:37	0.75	-238	6.78	3.07	46.7121	20.59	22.6
MW-0034	09/24/2013 10:40	0.66	-240	6.79	3.04	46.385	20.66	20
MW-0034	09/24/2013 10:42	0.64	-240	6.82	2.98	45.4635	20.45	20.3
MW-0034	09/24/2013 10:45	0.63	-240	6.83	2.97	45.3727	20.39	15.5
MW-0034	09/24/2013 10:47	0.6	-241	6.84	2.91	44.5348	20.56	13.7
MW-0034	09/24/2013 10:50	0.59	-242	6.86	2.83	43.4349	20.79	12
MW-0034	09/24/2013 10:52	0.53	-245	6.86	2.76	42.4873	20.94	10.1
MW-0034	09/24/2013 10:55	0.51	-249	6.87	2.74	42.183	20.85	9.3
MW-0034	09/24/2013 10:58	0.51	-254	6.88	2.68	41.3704	20.83	7.7
MW-0034	09/24/2013 11:00	0.49	-258	6.88	2.62	40.50352	21.03	6.9
MW-0034	09/24/2013 11:03	0.49	-262	6.89	2.59	40.1417	20.94	6.2
MW-0034	09/24/2013 11:05	0.47	-265	6.89	2.58	40.0015	20.72	5.9
MW-0034	09/24/2013 11:08	0.43	-268	6.89	2.54	39.3238	21.14	5.4
MW-0034	09/24/2013 11:10	0.43	-271	6.9	2.49	38.6735	21.23	5
MW-0034	09/24/2013 11:13	0.43	-274	6.9	2.5	38.8032	20.86	4.5
MW-0034	09/24/2013 11:15	0.41	-278	6.91	2.46	38.2475	21.11	3.9
MW-0034	09/24/2013 11:18	0.42	-280	6.91	2.43	37.812	21.08	3.6
MW-0034	09/24/2013 11:21	0.4	-283	6.91	2.36	36.8519	21.37	3.5
MW-0034	06/05/2014 10:02	1.63	-300	7.17	2.57	39.960	15.94	2.46
MW-0034	06/05/2014 10:52	3.33	-220	6.99	1.58	25.830	15.06	20.40

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0034	06/23/2014 09:44	2.06	-195	7.02	NM	24.039	25.96	10.60
MW-0034	06/23/2014 09:47	1.82	-214	7.04	NM	24.003	21.12	8.30
MW-0034	06/23/2014 09:49	1.51	-225	7.01	NM	23.970	21.50	8.60
MW-0034	06/23/2014 09:51	1.07	-242	7.00	NM	23.945	21.98	5.60
MW-0034	06/23/2014 09:54	0.81	-249	7.00	NM	23.929	21.73	4.50
MW-0034	06/23/2014 09:56	0.82	-249	6.98	NM	23.918	21.44	4.80
MW-0034	06/23/2014 09:59	1.02	-247	6.98	NM	23.909	21.45	5.20
MW-0034	06/23/2014 10:01	1.44	-232	6.90	NM	23.900	21.77	3.30
MW-0034	06/23/2014 10:04	1.59	-227	6.90	NM	23.891	21.78	5.00
MW-0034	06/23/2014 10:06	1.99	-217	6.83	NM	23.884	21.82	3.30
MW-0034	06/23/2014 10:09	2.05	-214	6.84	NM	23.878	21.56	3.10
MW-0034	06/23/2014 10:11	2.05	-214	6.82	NM	23.870	21.46	2.30
MW-0034	06/23/2014 10:14	2.01	-218	6.82	NM	23.863	21.42	2.60
MW-0034	06/23/2014 10:16	1.60	-226	6.85	NM	23.858	22.05	2.40
MW-0034	06/23/2014 10:18	1.80	-224	6.84	NM	23.856	21.21	2.70
MW-0034	06/23/2014 10:21	1.83	-222	6.83	NM	23.852	21.85	2.00
MW-0034	06/23/2014 10:23	1.89	-222	6.84	NM	23.849	21.97	2.10
MW-0034	06/23/2014 10:26	1.81	-224	6.85	NM	23.847	22.26	1.80
MW-0034	06/23/2014 10:28	1.84	-225	6.85	NM	23.847	21.82	1.70
MW-0034	06/23/2014 10:31	1.83	-224	6.84	NM	23.846	21.10	1.90
MW-0034	06/23/2014 10:33	2.03	-219	6.81	NM	23.846	21.77	1.90
MW-0034	06/23/2014 10:34	2.03	-219	6.81	1.57	25.410	21.77	1.67
MW-0034	06/23/2014 11:32	1.45	-10.5	6.87	1.57	25.550	16.94	21.50
MW-0034	06/24/2014 12:37	0.07	-226	6.96	3.72	55.870	16.34	5.30
MW-0034	11/06/2014 09:07	0.86	0.27	6.36	NM	27.444	13.50	7.80
MW-0034	11/06/2014 09:09	3.07	0.26	6.46	NM	27.700	13.62	262.10
MW-0034	11/06/2014 09:12	-0.79	0.25	6.50	NM	23.651	14.40	1.60
MW-0034	11/06/2014 09:15	-0.66	0.24	6.49	NM	22.612	14.49	0.50
MW-0034	11/06/2014 09:18	-0.91	0.23	6.49	NM	22.472	14.17	0.0000
MW-0034	11/06/2014 09:20	-0.70	0.23	6.49	NM	21.632	14.09	0.20
MW-0034	11/06/2014 09:23	-0.84	0.22	6.49	NM	34.143	14.10	0.0000
MW-0034	11/06/2014 09:26	-0.93	0.21	6.49	NM	34.539	13.95	-0.10
MW-0034	11/06/2014 09:29	-0.93	0.21	6.49	NM	35.137	14.10	-0.30
MW-0034	11/06/2014 09:31	-0.95	0.19	6.50	NM	34.749	13.64	-0.30
MW-0034	11/06/2014 09:34	-0.96	0.17	6.50	NM	34.397	13.40	0.40
MW-0034	11/06/2014 09:37	-0.95	0.15	6.50	NM	35.140	13.72	-0.30
MW-0034	11/06/2014 09:39	-0.95	0.15	6.50	NM	35.412	13.76	-0.30
MW-0034	11/06/2014 09:42	-0.93	0.12	6.50	NM	36.002	14.19	-0.50
MW-0034	11/06/2014 09:45	-0.93	0.11	6.50	NM	36.106	14.16	-0.20
MW-0034	11/06/2014 09:48	-0.93	0.1	6.51	NM	36.096	14.01	-0.20
MW-0034	11/06/2014 09:50	-0.93	0.1	6.51	NM	36.262	14.06	-0.20
MW-0034	11/06/2014 09:51	-0.93	101	6.51	2.95	45.840	14.06	-0.23
MW-0034	11/06/2014 10:58	5.04	73	6.46	2.94	45.040	18.50	11.10
MW-0034	11/07/2014 09:05	0.18	72	6.59	3.04	46.360	18.65	17.00
MW-0034	02/18/2015 10:50	9.81	-79	6.71	0.9575	0.0168	5.07	14
MW-0034	02/18/2015 10:52	5.41	-107	6.91	0.9632	0.0167	6.66	4.1
MW-0034	02/18/2015 10:55	4.65	-112	6.98	0.9822	0.0170	6.85	4
MW-0034	02/18/2015 10:57	4.47	-113	7	0.9879	0.0171	6.88	3.7
MW-0034	02/18/2015 11:00	4.87	-110	7.01	0.9897	0.0171	7.05	3.4
MW-0034	02/18/2015 11:02	5.4	-107	7.01	0.9929	0.0172	6.87	2.5
MW-0034	02/18/2015 11:04	6.27	-102	7	0.9990	0.0173	6.53	2.2
MW-0034	02/18/2015 11:07	7.03	-96	6.98	0.9848	0.0171	6.55	1.8
MW-0034	02/18/2015 11:09	7.69	-90	6.97	0.9841	0.0171	5.85	1.9
MW-0034	02/18/2015 11:12	8.14	-86	6.96	0.9639	0.0168	6.04	1.5
MW-0034	02/18/2015 11:14	8.66	-82	6.95	0.9649	0.0168	5.64	3.9
MW-0034	02/18/2015 11:16	8.6	-79	6.94	0.9630	0.0168	5.49	1.4
MW-0034	02/18/2015 11:19	8.7	-76	6.93	0.9563	0.0167	5.45	1.5
MW-0034	02/18/2015 11:21	8.83	-74	6.92	0.95	16.640	5.78	1.36
MW-0034	02/18/2015 12:09	5.42	-50	6.53	0.96	16.630	8.32	10.80
MW-0034	02/19/2015 11:35	1.17	-243	7.10	2.16	34.800	8.97	12.50
MW-0034	09/30/2015 14:56	7.22	-45	6.32	3.3976	0.0510	23.25	3.7
MW-0034	09/30/2015 14:58	6.34	-43	6.27	3.3873	0.0509	23.39	3.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0034	09/30/2015 15:01	5.93	-42	6.25	3.3949	0.0510	23.28	3
MW-0034	09/30/2015 15:03	5.93	-41	6.24	3.3984	0.0510	23.23	2.9
MW-0034	09/30/2015 15:05	5.84	-40	6.23	3.3846	0.0508	23.42	2.9
MW-0034	09/30/2015 15:07	5.84	-40	6.22	3.3703	0.0506	23.62	2.9
MW-0034	09/30/2015 15:09	5.88	-39	6.23	3.3681	0.0506	23.65	2.8
MW-0034	10/01/2015 14:03	1.77	-80	6.36	3.18	48.090	23.95	2.20
MW-0034	10/01/2015 15:28	6.22	-37	6.40	3.35	50.370	23.92	28.60
MW-0034	02/15/2016 13:08	23.417	-303.000	7.120	4.870	73.635	5.560	25.500
MW-0034	02/15/2016 13:11	12.454	-305.000	7.140	4.410	67.309	5.920	12.700
MW-0034	02/15/2016 13:13	9.333	-305.000	7.170	4.387	67.003	5.890	13.300
MW-0034	02/15/2016 13:16	8.558	-305.000	7.190	4.655	70.827	5.370	7.900
MW-0034	02/15/2016 13:18	11.060	-306.000	7.190	10.167	137.959	5.600	9.100
MW-0034	02/15/2016 13:20	7.602	-306.000	7.200	5.431	81.048	5.580	5.300
MW-0034	02/15/2016 13:23	7.187	-307.000	7.210	5.188	77.963	5.330	6.400
MW-0034	02/15/2016 13:25	6.993	-307.000	7.210	5.218	78.348	5.370	5.700
MW-0034	02/15/2016 13:28	6.979	-308.000	7.210	5.343	80.115	5.100	5.500
MW-0034	02/15/2016 13:30	6.552	-308.000	7.210	4.951	74.680	5.640	5.900
MW-0034	02/15/2016 13:32	6.395	-309.000	7.220	4.554	69.656	4.870	4.300
MW-0034	02/15/2016 13:35	6.415	-309.000	7.220	4.536	69.464	4.760	4.000
MW-0034	02/15/2016 13:37	6.274	-310.000	7.210	4.657	71.020	4.960	6.000
MW-0034	02/15/2016 13:40	5.915	-311.000	7.210	4.401	67.332	5.520	4.000
MW-0034	02/15/2016 13:42	5.645	-311.000	7.200	4.226	64.700	6.230	10.700
MW-0034	02/15/2016 13:44	5.482	-312.000	7.200	4.211	64.476	6.260	3.700
MW-0034	02/15/2016 13:47	5.694	-312.000	7.200	4.754	72.038	5.680	9.000
MW-0034	02/15/2016 13:49	5.881	-313.000	7.210	5.255	78.935	5.140	3.000
MW-0034	02/15/2016 13:52	6.086	-313.000	7.210	5.774	86.002	4.610	2.900
MW-0034	02/15/2016 13:54	6.840	-313.000	7.220	6.363	93.997	3.920	6.500
MW-0034	02/15/2016 13:56	6.538	-314.000	7.210	6.549	96.050	4.430	11.900
MW-0034	02/16/2016 11:57	0.91	-249	7.09	2.11	34.070	10.12	1.20
MW-0034	02/16/2016 14:20	2.70	-283	7.02	5.51	80.750	9.08	4.00
MW-0034	08/16/2016 11:02	3.740	-99.060	6.850	NM	24903.880	40.440	842.570
MW-0034	08/16/2016 11:04	3.690	-97.990	6.860	NM	23987.270	41.060	111.250
MW-0034	08/16/2016 11:06	3.440	-96.960	6.880	NM	22237.420	40.640	19.470
MW-0034	08/16/2016 11:09	2.290	-96.660	6.850	NM	35845.100	29.090	4.710
MW-0034	08/16/2016 11:11	1.950	-98.330	6.790	NM	39203.990	27.150	5.360
MW-0034	08/17/2016 09:46	0.22	-340	6.97	3.35	50.470	21.21	0.40
MW-0034	08/17/2016 11:52	4.58	-20	6.58	2.39	37.190	22.76	7.10
MW-0034	03/23/2017 08:54	11.74	-212	6.42	3.7857	0.5826	7.58	13
MW-0034	03/23/2017 08:56	5.43	-260	6.83	3.7604	0.5787	7.74	11.9
MW-0034	03/23/2017 08:59	3.64	-276	6.97	3.7532	0.5784	7.48	8.5
MW-0034	03/23/2017 09:01	4.33	-287	7.06	3.7476	0.5791	6.93	8.1
MW-0034	03/23/2017 09:03	4.34	-301	7.11	3.7004	0.5753	5.94	5.6
MW-0034	03/23/2017 09:06	3.84	-314	7.15	3.6775	0.5721	5.95	5.5
MW-0034	03/23/2017 09:08	2.79	-329	7.18	3.6538	0.5683	6.12	5.1
MW-0034	03/23/2017 09:11	3.5	-334	7.21	3.6441	0.5668	6.17	4.4
MW-0034	03/23/2017 09:13	2.67	-338	7.23	3.6202	0.5641	5.95	5.6
MW-0034	03/23/2017 09:16	3.5	-341	7.24	3.6052	0.5615	6.11	3.9
MW-0034	03/23/2017 09:18	3.51	-344	7.25	3.5848	0.5589	6.02	3.3
MW-0034	03/23/2017 09:21	3.54	-346	7.26	3.5293	0.5514	5.93	3.7
MW-0034	03/23/2017 09:23	3.51	-346	7.25	3.4911	0.5459	5.98	3.2
MW-0034	03/23/2017 09:26	3.49	-346	7.26	3.4791	0.5439	6.08	2.5
MW-0034	03/23/2017 09:28	3.42	-347	7.25	3.5304	0.5504	6.35	2.3
MW-0034	03/23/2017 09:30	3.39	-348	7.25	3.4604	0.5404	6.4	2.3
MW-0034	03/24/2017 09:50	0.13	-314	7.23	1.86	30.330	10.09	1.40
MW-0034	03/24/2017 10:05	11.11	-169	6.76	2.00	32.420	9.31	6.50
MW-0034	03/30/2018 10:19	2.76	-88.00	7.26	0.74	12.970	8.81	2.40
MW-0034	03/30/2018 13:17	2.55	-92.00	7.40	1.95	31.800	10.09	3.31
MW-0034	03/30/2018 13:41	9.82	-33.00	7.04	1.54	25.610	9.32	6.50
MW-0034	10/17/2018 09:00	3.07	-156.1	6.79	14.63	24.02	19.96	3.8
MW-0034	10/17/2018 09:05	-0.25	-235	7.19	14.75	24.24	20.24	0.3
MW-0034	10/17/2018 09:10	-1.12	-255.8	7.26	14.81	24.31	20.27	4.7
MW-0034	10/17/2018 09:15	-0.27	-278.2	7.28	14.76	24.24	20.03	2.3

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0034	10/17/2018 09:20	-0.21	-281.1	7.28	14.69	24.2	20.05	2.2
MW-0034	10/17/2018 09:25	-0.18	-285.3	7.29	14.68	24.16	20.01	2
MW-0034	10/17/2018 09:35	1.25	-299.70	7.24	14.54	23.920	20.2	-1.10
MW-0034	10/17/2018 09:45	3.59	-310.70	7.18	14.27	23.520	20.23	-0.90
MW-0034	10/17/2018 09:55	3.99	-313.60	7.14	14.19	23.400	20.42	-0.50
MW-0034	03/27/2019 09:30	1.37	-126.5	7.19	NM	18.51	8.5	3.7
MW-0034	03/27/2019 09:51	0.84	-153.5	7.09	11.51	19.4	8.75	3.9
MW-0034	08/26/2019 09:15	0.4	-194.9	7.06	NM	28.3	22.12	2.4
MW-0034	08/26/2019 09:20	0.21	-188.6	7.14	NM	28.4	22.37	0.1
MW-0034	08/26/2019 09:25	0.22	-176	7.15	NM	28.14	22.7	1.9
MW-0034	08/26/2019 09:30	0.24	-159.5	7.13	NM	20.01	22.86	2.3
MW-0034	08/26/2019 09:35	0.18	-159.3	7.12	NM	27.83	23.11	1.9
MW-0034	08/26/2019 09:40	0.21	-160	7.11	NM	27.54	22.78	2.5
MW-0034	08/26/2019 09:45	0.22	-146.7	7.09	NM	27.55	22.96	2.5
MW-0034	08/26/2019 09:50	0.22	-144.8	7.09	NM	27.53	22.85	2.5
MW-0034	08/26/2019 09:55	0.21	-145.1	7.08	NM	27.54	22.9	2.6
MW-0034	08/26/2019 10:20	1.71	-107.7	7.34	16.69	27.19	20.13	1.1
MW-0034	08/26/2019 10:35	1.74	-141.8	7.13	16.6	26.9	23.71	2.3
MW-0034	10/11/2019 07:56	1	12	5.1	NM	12	12	54
MW-0034	10/11/2019 08:59	1	5	5	11	12	12	5
MW-0034	03/02/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-0034	03/02/2021 13:05	0.87	-223.1	7.05	10.21	17.44	7.04	42.4
MW-0034	03/02/2021 13:10	0.28	-233.5	7.06	9.87	16.91	7.67	20.8
MW-0034	03/02/2021 13:15	0.23	-229.2	7.05	9.05	15.65	7.49	12
MW-0034	03/02/2021 13:20	0.3	-222.7	7.02	8.11	14.07	7.52	14
MW-0034	03/02/2021 13:25	0.53	-218.4	6.98	7.61	13.28	7.38	7.3
MW-0034	03/02/2021 13:30	0.69	-220.5	6.99	7.44	12.97	7.25	6
MW-0034	03/02/2021 13:35	0.78	-221	6.98	7.39	12.89	7.57	5.8
MW-0034	03/02/2021 13:40	0.83	-224.2	7	7.37	12.87	7.44	5.6
MW-0034	03/02/2021 13:45	0.91	-225.5	7	7.37	12.85	7.39	9.2
MW-0034	03/02/2021 13:50	0.96	-226.5	7.01	7.37	12.86	7.52	8
MW-0034	03/02/2021 14:15	3.41	-200.7	7.16	7.62	13.23	7.58	6.2
MW-0034	03/02/2021 14:40	5.51	-209.9	7.2	7.77	13.51	7.21	14.8
MW-0034	05/28/2021 13:00	5.79	36.4	6.44	13.2	20.25	17.06	2.7
MW-0034	05/28/2021 13:05	4.44	-42.5	6.4	13.73	22.7	17.11	3.8
MW-0034	05/28/2021 13:10	3.67	-36.9	6.05	14.08	23.22	17.37	3.6
MW-0034	05/28/2021 13:15	2.45	0.6	5.79	14.04	23.14	17.61	3.1
MW-0034	05/28/2021 13:20	1.85	15.8	5.68	14	23.08	17.6	2.6
MW-0034	05/28/2021 13:25	1.44	30.6	5.62	13.83	22.83	17.31	2.5
MW-0034	05/28/2021 13:30	1.36	35.4	5.6	13.77	22.78	17.02	2.2
MW-0034	05/28/2021 13:35	1.13	46.8	5.53	13.64	22.56	16.71	2.6
MW-0034	05/28/2021 13:40	1.12	52	5.56	13.59	22.47	16.24	3
MW-0034	05/28/2021 13:45	1.11	54.2	5.53	13.59	22.46	16.09	2.6
MW-0034	07/30/2021 13:05	3.29	-148.8	6.85	14.44	23.82	25.5	0
MW-0034	07/30/2021 13:10	2.34	191.4	6.68	14.24	23.59	26.99	0
MW-0034	07/30/2021 13:15	2.53	208.6	6.63	14.21	23.6	27.89	0
MW-0034	07/30/2021 13:20	3.33	-217.6	6.55	14.05	23.32	28.06	0
MW-0034	07/30/2021 13:25	4.14	-224.9	6.49	13.75	23.82	26.94	2.9
MW-0034	07/30/2021 13:30	4.77	-229	6.48	13.43	22.39	26.27	0
MW-0034	07/30/2021 13:35	5.9	-233	6.46	13.24	22.07	25.66	0
MW-0034	07/30/2021 13:40	7.2	-234.6	6.44	13.08	21.8	25.77	0
MW-0034	07/30/2021 13:45	9.03	-238.1	6.48	12.81	21.39	25.37	0
MW-0034	07/30/2021 13:50	10.51	-236.8	6.44	12.84	21.44	25.8	0
MW-0034	12/27/2021 09:45	1.44	-142.2	6.83	17.26	28.01	13.08	19.8
MW-0034	12/27/2021 09:50	0.32	-194.3	6.93	17.49	28.35	13.16	16.9
MW-0034	12/27/2021 09:55	0.18	-300.4	7.42	17.47	28.33	12.95	5.7
MW-0034	12/27/2021 10:00	0.32	-307.7	7.42	17.47	28.32	13.04	5.2
MW-0034	12/27/2021 10:05	0.33	-310.8	7.41	17.46	28.3	13.04	5.2
MW-0034	12/27/2021 10:10	0.31	-313.8	7.41	17.46	28.3	12.98	4.6
MW-0034	12/27/2021 10:15	0.3	-316	7.44	17.45	28.29	13.03	4.7
MW-0034	12/27/2021 10:20	0.31	-317.4	7.42	17.45	28.28	13.08	4.8
MW-0034	02/01/2022 09:15	2.98	-117	6.88	15.23	25.18	8.82	8.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0034	02/01/2022 09:20	1.19	-145.7	6.76	15.2	25.02	9.28	4
MW-0034	02/01/2022 09:25	1.2	-139.9	6.69	14.54	23.97	9.25	7.1
MW-0034	02/01/2022 09:30	1.57	-130.4	6.61	13.54	22.42	9.31	2.1
MW-0034	02/01/2022 09:35	2.64	-121.5	6.58	12.76	21.56	9.27	1.6
MW-0034	02/01/2022 09:40	3.33	-114.8	6.56	12.25	20.53	9.18	3.5
MW-0034	02/01/2022 09:45	5.14	-107.8	6.53	11.79	19.82	9.2	2.5
MW-0034	02/01/2022 09:50	5.72	-103	6.52	11.48	19.31	9.16	1.8
MW-0034	02/01/2022 09:55	6.3	-98.3	6.51	11.22	18.91	9.16	1.5
MW-0034	02/01/2022 10:00	6.54	-93.9	6.48	11.06	18.67	8.99	3.9
MW-0034	04/27/2022 13:10	0.88	-162.4	6.84	14.36	23.6	17.71	9.3
MW-0034	04/27/2022 13:15	0.7	-201.4	7.05	14.52	23.9	16.3	4.4
MW-0034	04/27/2022 13:20	0.57	-214.5	7.11	14.38	23.68	15.14	3.5
MW-0034	04/27/2022 13:25	0.55	-217.8	7.14	14.22	23.48	14.43	1.9
MW-0034	04/27/2022 13:30	0.53	-214.5	7.15	13.65	22.53	13.18	2.5
MW-0034	04/27/2022 13:35	0.52	-214.2	7.16	13.55	22.42	13.14	2.4
MW-0034	04/27/2022 13:40	0.5	-217	7.15	13.68	22.59	13.09	2.5
MW-0035	06/06/2012 10:30	4.02	10	7.75	0.63	11.060	18.83	16.60
MW-0035	06/07/2012 09:30	2.41	30	7.11	0.60	9.000	19.40	1.40
MW-0035	05/21/2013 09:12	0.95	-178	6.98	0.68	11.8	14.76	320.5
MW-0035	05/21/2013 09:27	0.24	-177	7.79	0.23	4.209	17.45	11.30
MW-0035	05/22/2013 09:27	0.24	-177	7.79	0.23	4.209	17.45	11.3
MW-0035	06/24/2014 15:56	0.82	-91	7.51	0.86	14.660	21.81	15.10
MW-0035	06/25/2014 12:22	0.82	-90	7.39	0.37	6.717	22.57	9.50
MW-0035	12/09/2015 11:11	4.69	130	7.38	0.32	5.976	9.39	13.60
MW-0035	12/09/2015 13:30	5.28	-105	7.10	1.23	20.660	10.77	99.50
MW-0035	09/13/2016 08:57	0.34	-77	6.43	1.96	31.050	24.40	985.50
MW-0035	09/13/2016 10:20	0.81	-83	7.19	0.54	9.551	24.51	6.70
MW-0035	02/24/2017 10:32	3.36	-101	7.30	0.16	3.006	8.96	5.50
MW-0035	02/24/2017 12:30	1.66	-4	7.27	0.16	3.013	7.52	7.00
MW-0035	02/23/2018 10:12	0.39	164.00	7.55	1.30	22.010	7.16	36.40
MW-0035	02/23/2018 12:11	3.18	-105.00	7.34	1.98	32.400	7.27	145.20
MW-0035	02/04/2019 07:52	7.77	138.20	7.52	1.14	2.213	6.97	62.10
MW-0035	02/04/2019 13:28	5.10	-112.60	7.27	1.28	2.474	5.85	299.50
MW-0035	02/04/2019 13:45	2.39	-133.30	7.30	2.00	3.779	8.2	206.00
MW-0035	07/23/2019 08:50	1.87	60.2	9.04	NM	1.304	23.75	104.4
MW-0035	07/23/2019 09:50	2.94	68.6	8.93	0.38	0.773	25.03	20.5
MW-0035	07/23/2019 10:00	4.23	75.9	8.91	0.41	0.839	25.25	30
MW-0035	08/21/2019 10:05	1.46	-60.7	7.44	NM	1.007	28.19	383.2
MW-0035	08/21/2019 10:10	2.6	-86.7	7.3	NM	0.872	27.81	442.2
MW-0035	08/21/2019 10:15	2.75	-100.6	7.42	NM	0.843	28.25	383.6
MW-0035	08/21/2019 10:20	2.49	-106.4	7.46	NM	0.838	27.91	343.2
MW-0035	08/21/2019 10:25	2.79	-110.7	7.54	NM	0.852	27.69	214.5
MW-0035	08/21/2019 10:30	3.19	-118.2	7.67	NM	0.798	27.6	135
MW-0035	08/21/2019 10:35	4.32	-99.2	7.67	NM	0.893	27.65	636.4
MW-0035	08/21/2019 10:40	2.28	-142.6	7.28	NM	2.441	26.67	400.7
MW-0035	08/21/2019 10:45	2.65	-154.1	7.36	NM	2.163	26.85	295.1
MW-0035	08/21/2019 10:50	2.81	-155.1	7.41	NM	1.909	27.68	257.1
MW-0035	08/21/2019 11:40	2.81	-155.1	7.41	NM	1.909	27.68	257.1
MW-0035	08/22/2019 09:15	2.99	26.3	7.86	1.03	2.033	26	25.1
MW-0035	08/22/2019 09:30	2.83	-12	7.78	1.09	2.149	26.41	93.3
MW-0035	11/08/2019 09:45	5.85	75.4	7.04	NM	2.773	13.72	8.8
MW-0035	11/08/2019 09:50	5.4	44.2	7.16	NM	2.099	13.17	11.3
MW-0035	11/08/2019 09:55	8.54	35.3	7.43	NM	1.65	12.78	9.7
MW-0035	11/08/2019 10:00	7.45	-58.9	7.3	NM	2.323	13.06	378.8
MW-0035	11/08/2019 10:05	10.76	-23.3	7.79	NM	1.406	12.07	35
MW-0035	11/08/2019 10:10	11.39	20.6	8.01	NM	1.266	11.73	9
MW-0035	11/08/2019 10:15	11.95	32.8	8.07	NM	1.233	11.57	8.4
MW-0035	11/08/2019 10:20	12.13	41.5	8.12	NM	1.206	11.38	7.8
MW-0035	11/08/2019 10:25	12.57	47	8.14	NM	1.195	11.17	7.8
MW-0035	11/08/2019 10:30	12.71	50.9	8.16	NM	1.19	11	7.7
MW-0035	11/08/2019 11:55	20.48	72.8	8.12	0.59	1.179	11.39	2.7
MW-0035	11/08/2019 12:00	18.61	86.3	8.15	0.58	1.162	11.38	3.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0035	02/13/2020 09:30	3.28	39	9	NM	0.93	5.34	12.6
MW-0035	02/13/2020 10:35	3.33	44.2	8.88	0.47	0.837	5.41	6.3
MW-0035	03/20/2020 10:00	11.15	50.2	8.63	0.34	0.698	10.09	6.5
MW-0035	06/02/2020 09:45	1.54	50.3	7.77	NM	4.874	18.63	6.1
MW-0035	06/03/2020 08:30	8.25	87	8.36	2.62	4.876	17.92	35.2
MW-0035	11/03/2020 11:50	5.22	37.5	8.13	2.54	4.725	14.7	0.8
MW-0035	11/03/2020 11:55	3.56	47.1	7.92	2.52	4.692	14.61	0.9
MW-0035	11/03/2020 12:00	3.3	49.8	7.78	2.47	4.598	14.38	0.8
MW-0035	11/03/2020 12:05	3.2	49	7.73	2.44	4.543	14.15	0.6
MW-0035	11/03/2020 12:10	3.13	43.9	7.7	2.42	4.506	14.12	0.5
MW-0035	11/03/2020 12:15	3.07	40.9	7.69	2.41	4.493	14.26	0.6
MW-0035	11/03/2020 12:20	3.06	36.7	7.68	2.4	4.477	14.24	0.5
MW-0035	11/03/2020 13:20	5.45	19.8	7.92	2.31	4.315	14.12	42.1
MW-0035	11/03/2020 13:35	4.57	-21.7	7.81	2.23	4.167	13.69	85.9
MW-0035	11/23/2020 13:06	0.53	-127	6.88	8.12	13.55	15.06	25.1
MW-0035	11/23/2020 13:20	1.15	-76.5	6.62	8.49	14.58	15.09	25.2
MW-0035	02/12/2021 12:45	8.35	86.8	7.28	3.35	6.208	0.88	90.7
MW-0035	02/12/2021 12:50	7.61	79.8	7.31	3.58	6.586	0.98	74.2
MW-0035	02/12/2021 12:55	4.82	64.9	7.42	4.18	7.709	1.44	52.6
MW-0035	02/12/2021 13:00	4.98	53.9	7.51	4.3	7.905	1.89	40.6
MW-0035	02/12/2021 13:05	5.96	37.9	7.61	4.19	7.716	1.49	43.2
MW-0035	02/12/2021 13:10	6.28	22.6	7.68	4.05	7.471	1.67	56.6
MW-0035	02/12/2021 13:15	6.64	12.1	7.72	4	7.394	1.38	57
MW-0035	02/12/2021 13:20	6.79	5.4	7.75	4	7.398	1.34	44.2
MW-0035	02/12/2021 13:25	6.79	4.9	7.75	4.02	7.419	1.31	43
MW-0035	02/12/2021 13:30	7.26	3.6	7.77	3.84	7.133	1.36	26.5
MW-0035	02/12/2021 14:30	10.11	71.3	7.74	3.93	7.248	2.62	35.6
MW-0035	02/12/2021 14:40	7.28	52.9	7.72	4.32	7.898	3.08	12.1
MW-0035	08/16/2021 13:00	2.69	-7.4	7.62	2.02	3.846	28.86	10.6
MW-0035	08/16/2021 13:05	1.25	1	7.33	1.82	3.482	27.72	7.7
MW-0035	08/16/2021 13:10	1.32	-0.8	7.25	1.71	3.282	27.77	9.5
MW-0035	08/16/2021 13:15	1.41	5.9	7.12	1.66	3.184	27.72	7.5
MW-0035	08/16/2021 13:20	1.55	13.3	7.06	1.6	3.088	27.45	9.2
MW-0035	08/16/2021 13:25	1.63	15.9	7.04	1.6	3.082	27.46	7.4
MW-0035	08/16/2021 13:30	1.43	16.3	7.04	1.6	3.095	27.35	6.6
MW-0035	08/16/2021 13:35	1.21	15.6	7.04	1.62	3.124	27.23	5
MW-0035	08/16/2021 13:40	1.12	17	7.04	1.54	3.16	27.11	4.6
MW-0035	08/16/2021 13:45	1.02	-24.9	7.05	1.66	3.187	27.09	4
MW-0035	03/02/2022 09:10	8.51	168.8	6.94	2.24	4.173	8.44	5.5
MW-0035	03/02/2022 09:15	2.08	141.1	7.59	2.31	4.345	6.57	1.7
MW-0035	03/02/2022 09:20	2.55	130.1	7.63	2.32	4.315	7.04	0
MW-0035	03/02/2022 09:25	3.38	111.1	7.57	2.24	4.159	6.34	0
MW-0035	03/02/2022 09:30	3.92	63.6	7.45	2.13	4.017	6.13	0
MW-0035	03/02/2022 09:35	4.21	40	7.3	2.05	3.913	6.6	0
MW-0035	03/02/2022 09:40	4.48	34.7	7.17	2	3.779	6.44	2.1
MW-0035	03/02/2022 09:45	4.52	33.4	7.1	1.91	3.612	6.54	0
MW-0035	03/02/2022 09:50	4.58	32.5	7.09	1.88	3.571	6.5	0
MW-0035	03/02/2022 09:55	4.68	25.4	4.68	1.83	3.488	6.4	0
MW-0039	03/26/2012 10:41	1.77	16	7.62	0.05	1.04509	14.92	9.7
MW-0039	03/26/2012 10:44	0.19	15	7.55	0.05	1.04957	12.33	8.6
MW-0039	03/26/2012 10:47	-0.15	11	7.57	0.05	1.04518	12.18	8.6
MW-0039	03/26/2012 10:49	0.05	7	7.6	0.05	1.04539	12.24	8.2
MW-0039	03/26/2012 10:52	-0.02	5	7.62	0.05	1.04465	12.19	8.6
MW-0039	03/26/2012 10:54	-0.29	3	7.63	0.05	1.04153	12.24	8.2
MW-0039	03/26/2012 10:57	0.07	2	7.63	0.05	1.04328	12.25	8.2
MW-0039	03/26/2012 10:59	-0.03	2	7.63	0.05	1.04252	12.18	8.1
MW-0039	03/26/2012 11:02	-0.09	2	7.62	0.05	1.04134	12.19	8.3
MW-0039	03/26/2012 11:04	-0.09	1	7.63	0.05	1.04041	12.14	8.1
MW-0039	03/26/2012 11:07	-0.08	1	7.63	0.05	1.04128	12.16	8.1
MW-0039	03/26/2012 11:10	-0.08	1	7.63	0.05	1.04062	12.06	8.1
MW-0039	03/26/2012 11:12	-0.11	1	7.63	0.05	1.03994	12.08	8.4
MW-0039	03/26/2012 11:15	-0.11	1	7.63	0.05	1.0401	12.1	8.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0039	03/26/2012 11:17	-0.12	0	7.64	0.05	1.03995	12.18	8.3
MW-0039	03/26/2012 11:18	-0.12	0	7.64	0.05	1.040	12.18	8.31
MW-0039	03/26/2012 11:58	2.34	70	7.96	0.05	0.964	11.20	15.80
MW-0039	03/27/2012 09:40	3.58	24	7.28	0.0000	0.531	11.33	7.30
MW-0039	04/10/2013 08:59	3.36	-185	7.73	0.03	0.693	11.55	14.53
MW-0039	04/10/2013 11:19	6.49	-60	7.42	0.04	0.783	9.51	12.3
MW-0039	04/11/2013 09:46	7.6	-79	8.22	0.09	1.717	10.77	43.6
MW-0039	03/01/2014 11:15	7.18	74.00	7.87	0.07	1.399	10.54	4.72
MW-0039	03/01/2014 11:57	8.38	220.00	7.34	0.05	1.024	8.61	53.10
MW-0039	03/01/2014 14:32	5.34	25.00	7.72	0.07	1.493	8.27	32.10
MW-0039	09/04/2014 09:22	0.21	166	7.58	0.05	1.056	24.91	7.89
MW-0039	09/04/2014 10:08	0.14	209	7.42	0.07	1.426	22.29	16.40
MW-0039	09/05/2014 09:14	-0.50	174	7.37	0.06	1.104	23.49	13.50
MW-0039	04/15/2015 15:13	-0.56	49	7.99	0.05	0.951	12.05	6.55
MW-0039	04/15/2015 15:59	1.73	212	7.76	0.05	1.110	8.47	12.30
MW-0039	04/16/2015 12:05	-1.19	15	7.83	0.07	1.379	8.71	8.20
MW-0039	02/09/2016 10:46	7.09	10	7.10	0.02	0.352	8.06	82.50
MW-0039	02/15/2017 10:02	9.13	261	8.05	0.01	0.266	6.87	28.90
MW-0039	02/15/2017 11:00	5.79	13	7.49	0.02	0.335	8.52	180.10
MW-0039	03/01/2018 10:45	8.43	65	7.22	0.0350	0.7158	12.23	9.4
MW-0039	03/01/2018 10:48	7.61	41	7.45	0.0455	0.9247	10.68	3.9
MW-0039	03/01/2018 10:50	7.26	35	7.54	0.0526	1.0618	10.64	3.7
MW-0039	03/01/2018 10:53	7.16	36	7.62	0.0566	1.1388	10.77	3.8
MW-0039	03/01/2018 10:56	7.3	39	7.69	0.0609	1.2229	10.49	4.7
MW-0039	03/01/2018 10:58	7.21	43	7.73	0.0630	1.2629	10.54	4.7
MW-0039	03/01/2018 11:01	7.13	48	7.77	0.0637	1.2775	10.73	6.3
MW-0039	03/01/2018 11:04	7.11	53	7.8	0.0654	1.3092	10.7	4.7
MW-0039	03/01/2018 11:07	7.13	59	7.82	0.0663	1.3258	10.85	4.7
MW-0039	03/01/2018 11:09	7.12	64	7.84	0.0677	1.3529	10.76	5
MW-0039	03/01/2018 11:12	7.14	70	7.85	0.0689	1.3771	10.71	4.8
MW-0039	03/01/2018 11:15	7.18	74	7.87	0.0698	1.3938	10.68	4.7
MW-0039	03/08/2019 09:40	12.26	172.8	8.15	NM	0.379	6.25	0.9
MW-0039	03/08/2019 11:25	8.19	109.4	8.41	0.19	0.402	8.46	4.1
MW-0039	02/07/2020 09:25	11.59	62.3	8.16	NM	0.359	6.07	NM
MW-0039	02/07/2020 10:33	9.04	58.3	8.07	0.37	0.37	7.61	4.3
MW-0039	01/27/2021 08:55	4.28	-99.8	6.83	0.25	0.55	7.18	18.4
MW-0039	01/27/2021 09:00	1.68	-120.5	7.98	0.19	0.387	8.1	10.8
MW-0039	01/27/2021 09:05	1.79	-124.5	7.92	0.19	0.385	8.12	10.2
MW-0039	01/27/2021 09:10	1.76	-126.5	7.89	0.19	0.386	8.2	9.2
MW-0039	01/27/2021 09:15	1.68	-123.3	7.86	0.19	0.387	8.04	6.6
MW-0039	01/27/2021 09:20	1.73	-122.6	7.85	0.19	0.382	0.387	0.8
MW-0039	01/27/2021 09:25	1.67	-117.7	7.85	0.19	0.393	8.08	0.9
MW-0039	01/27/2021 09:30	1.72	-129.1	7.85	0.19	0.39	8.14	0.9
MW-0039	01/27/2021 09:35	1.6	-131.2	7.8	0.19	0.397	8.11	3.2
MW-0039	01/27/2021 09:40	3.08	-84.3	7.81	0.19	0.397	17.98	3.2
MW-0039	01/27/2021 11:05	1.65	-91	7.98	0.22	0.461	8.16	0.9
MW-0039	01/27/2021 11:15	1.62	-86.8	8.02	0.23	0.481	8.71	11
MW-0057	03/12/2012 10:23	1.92	3	6.97	0.18	3.39825	13.15	194
MW-0057	03/12/2012 10:26	1.52	7	6.98	0.18	3.39469	13.21	130.3
MW-0057	03/12/2012 10:29	1.28	9	6.98	0.18	3.39394	13.26	127.9
MW-0057	03/12/2012 10:32	1.16	12	6.99	0.18	3.3945	13.26	115.6
MW-0057	03/12/2012 10:35	1.12	14	6.99	0.18	3.39284	13.28	223.9
MW-0057	03/12/2012 10:38	1	16	6.99	0.18	3.39253	13.41	93.6
MW-0057	03/12/2012 10:40	0.99	19	6.99	0.18	3.38977	13.4	83.4
MW-0057	03/12/2012 10:43	0.97	21	6.99	0.18	3.39215	13.46	75.9
MW-0057	03/12/2012 10:46	0.93	23	6.99	0.18	3.39247	13.64	101.7
MW-0057	03/12/2012 10:49	0.95	25	6.99	0.18	3.39563	13.61	91.8
MW-0057	03/12/2012 10:52	0.92	27	6.99	0.18	3.39188	13.61	92.3
MW-0057	03/12/2012 10:55	0.9	28	6.99	0.18	3.39149	13.68	98.5
MW-0057	03/12/2012 11:39	5.07	-22	6.27	0.30	5.508	15.29	787.00
MW-0057	03/13/2012 10:11	0.68	-37	6.49	0.20	4.250	12.15	33.00
MW-0057	04/23/2012 08:43	4.32	-136	6.86	0.20	3.050	16.80	93.10

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0057	05/23/2012 10:27	2.07	-8	6.63	0.14	2.60477	25.4	51.2
MW-0057	05/23/2012 10:29	1.45	-37	6.73	0.16	3.10572	20.94	48.5
MW-0057	05/23/2012 10:30	1	-52	6.8	0.17	3.14679	19.42	33.3
MW-0057	05/23/2012 10:31	0.77	-59	6.85	0.17	3.14373	18.7	35.1
MW-0057	05/23/2012 10:32	0.68	-64	6.9	0.17	3.14321	18.72	31.1
MW-0057	05/23/2012 10:34	0.67	-67	6.91	0.17	3.13531	18.55	37.4
MW-0057	05/23/2012 10:35	0.65	-70	6.91	0.16	3.09627	18.62	34.4
MW-0057	05/23/2012 10:36	0.63	-71	6.94	0.16	3.054	18.49	42
MW-0057	05/23/2012 10:38	0.62	-72	6.97	0.16	2.97088	18.27	48.9
MW-0057	05/23/2012 10:39	0.64	-71	7.02	0.15	2.84722	18.3	62.8
MW-0057	05/23/2012 10:40	0.69	-70	7.02	0.15	2.79773	18.35	69.8
MW-0057	05/23/2012 10:42	0.77	-69	7.04	0.14	2.72199	18.3	94.6
MW-0057	05/23/2012 10:43	0.84	-68	7.04	0.14	2.65975	18.44	89
MW-0057	05/23/2012 10:44	0.92	-66	7.05	0.14	2.6304	18.53	99.4
MW-0057	05/23/2012 10:46	1.06	-65	7.03	0.13	2.57079	18.73	115.3
MW-0057	05/23/2012 10:47	1.23	-63	7.03	0.13	2.52618	18.59	117
MW-0057	05/23/2012 10:48	1.45	-61	7.04	0.13	2.46393	18.61	135.8
MW-0057	05/23/2012 10:49	1.69	-60	7.04	0.12	2.4007	18.52	135.6
MW-0057	05/23/2012 10:51	1.92	-58	7.05	0.12	2.33405	18.57	152.1
MW-0057	05/23/2012 10:52	2.15	-55	7.05	0.12	2.28015	18.36	157.8
MW-0057	05/23/2012 10:53	2.35	-53	7.04	0.12	2.22656	18.29	173.7
MW-0057	05/23/2012 10:55	2.53	-51	7.04	0.11	2.19048	18.31	173.9
MW-0057	05/23/2012 10:56	2.62	-49	7.05	0.11	2.16737	18.45	175.2
MW-0057	05/23/2012 10:57	2.62	-49	7.05	0.11	2.167	18.45	175.2
MW-0057	05/23/2012 12:40	3.28	-17	6.52	0.18	3.462	14.8	2430.6
MW-0057	05/24/2012 09:45	3.7	-51	6.75	0.2	3.41	14.47	24.8
MW-0057	07/25/2012 13:28	5.69	-45	7.25	0.15	2.842	27.38	304.9
MW-0057	07/25/2012 13:29	4.33	-41	7.59	0.15	2.86	23.84	313.5
MW-0057	07/25/2012 13:30	3.94	-37	11	0.15	2.852	23.24	304.7
MW-0057	07/25/2012 13:32	3.73	-35	11.56	0.15	2.859	22.94	339.5
MW-0057	07/25/2012 13:33	3.72	-31	11.57	0.16	2.947	22.95	326.5
MW-0057	07/25/2012 13:34	3.7	-30	11.58	0.15	2.84	22.89	330.7
MW-0057	07/25/2012 13:35	3.78	-26	11.6	0.15	2.834	22.77	329.9
MW-0057	07/25/2012 13:37	3.75	-26	11.6	0.15	2.843	22.65	322.2
MW-0057	07/25/2012 13:38	3.79	-23	11.58	0.15	2.831	22.79	300.8
MW-0057	07/25/2012 13:39	3.77	-23	11.58	0.15	2.832	22.69	313.6
MW-0057	07/25/2012 13:40	3.9	-18	11.57	0.15	2.828	22.55	286.7
MW-0057	07/25/2012 13:42	4	-14	11.55	0.15	2.828	22.68	267.5
MW-0057	11/20/2012 08:31	5.11	-130	6.77	0.2	3.04	16.7	106.0
MW-0057	11/20/2012 08:33	4.88	-132	6.80	0.2	3.06	16.7	107.0
MW-0057	11/20/2012 08:35	4.67	-133	6.82	0.2	3.06	16.7	106.0
MW-0057	11/20/2012 08:37	4.53	-134	6.84	0.2	3.04	16.8	95.0
MW-0057	11/20/2012 08:39	4.44	-135	6.85	0.2	3.05	16.6	95.5
MW-0057	11/20/2012 08:41	4.34	-135	6.85	0.2	3.05	16.7	90.9
MW-0057	11/20/2012 08:43	4.32	-136	6.86	0.2	3.05	16.8	93.1
MW-0057	02/20/2013 10:32	2.61	-96	7.04	0.21	4.03057	9.23	70.8
MW-0057	02/20/2013 10:33	2.61	-101	7.06	0.21	4.04198	9.42	69.5
MW-0057	02/20/2013 10:35	2.75	-104	7.06	0.21	3.9631	9.4	70
MW-0057	02/20/2013 10:36	2.85	-107	7.07	0.2	3.81935	9.26	68.3
MW-0057	02/20/2013 10:38	2.92	-112	7.07	0.21	3.94167	9.3	66.1
MW-0057	02/20/2013 10:39	3.02	-114	7.07	0.21	3.94465	9.37	67.1
MW-0057	02/20/2013 10:40	2.97	-117	7.07	0.21	3.96458	9.42	66.5
MW-0057	02/20/2013 10:42	3.14	-119	7.08	0.21	3.94494	9.31	65
MW-0057	02/20/2013 10:43	3.22	-121	7.08	0.21	3.95569	9.58	63.8
MW-0057	02/20/2013 10:45	3.12	-125	7.08	0.21	3.978	9.70	64.13
MW-0057	06/12/2013 14:23	0.82	-113	7.08	0.11	2.112	20.60	165.20
MW-0057	06/12/2013 14:52	2.49	-25	7.03	0.11	2.194	16.19	97.70
MW-0057	09/09/2013 13:43	0.64	-207	7.27	0.19	3.521	23.34	130.50
MW-0057	11/06/2013 09:18	0.84	-289	6.74	0.15	2.881	18.09	104.80
MW-0057	03/05/2014 13:04	0.88	-239	7.01	0.10	1.929	9.40	89.83
MW-0057	03/05/2014 13:50	3.19	-64	7.04	0.10	1.958	9.08	135.40
MW-0057	05/20/2014 08:53	1.25	-270	7.46	0.04	8.787	16.92	34.60

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0057	08/05/2014 11:26	1.79	-293	6.99	0.15	2.907	25.07	37.58
MW-0057	08/05/2014 12:26	1.85	-412	7.07	0.13	2.576	23.43	67.90
MW-0057	10/23/2014 14:03	12.44	-142	7.67	0.13	2.455	15.70	3015.00
MW-0057	10/23/2014 14:36	1.60	-133	6.63	0.12	2.354	-18.75	137.20
MW-0057	03/03/2015 09:33	6.54	51	7.06	0.16	3.080	8.43	172.60
MW-0057	03/03/2015 10:04	5.54	94	7.24	0.16	3.109	9.28	78.50
MW-0057	09/16/2015 09:35	4.74	-99	6.52	0.4	7.101	21.09	51.6
MW-0057	11/13/2015 11:34	3.15	-90	6.68	0.1413	2702.9358	17.26	136.9
MW-0057	11/13/2015 11:36	0.78	-102	6.59	0.1366	2618.3252	17.49	137.6
MW-0057	11/13/2015 11:39	0.46	-100	6.57	0.1359	2605.9516	17.54	138
MW-0057	11/13/2015 11:41	0.38	-99	6.57	0.1354	2594.7955	17.73	136
MW-0057	11/13/2015 11:44	0.4	-98	6.58	0.1347	2582.2681	17.63	132.1
MW-0057	11/13/2015 11:46	0.39	-97	6.58	0.1343	2574.9403	17.72	136.7
MW-0057	11/13/2015 12:14	0.22	-107	6.63	0.13	2.746	18.12	89.80
MW-0057	01/08/2016 11:29	5.48	-90	6.88	0.3026	5588.8986	12.02	112.3
MW-0057	01/08/2016 11:32	1.33	-90	6.83	0.2606	4842.0676	13.65	109.9
MW-0057	01/08/2016 11:34	0.64	-90	6.83	0.2381	4445.9637	13.96	108.3
MW-0057	01/08/2016 11:37	0.46	-92	6.83	0.2232	4180.6607	14.16	108.6
MW-0057	01/08/2016 11:39	0.4	-93	6.83	0.2269	4247.8381	14.02	106.4
MW-0057	01/08/2016 11:42	0.41	-94	6.84	0.2251	4215.3697	13.96	103.7
MW-0057	01/08/2016 11:45	0.38	-95	6.84	0.2198	4121.8049	14.05	104.2
MW-0057	01/08/2016 12:13	0.47	-101	6.95	0.22	4.078	15.05	91.6
MW-0057	04/12/2016 11:14	2.44	-28	6.82	0.5403	9647.7775	10.7	60.7
MW-0057	04/12/2016 11:17	2.6	-33	6.83	0.5534	9884.7792	9.95	91.1
MW-0057	04/12/2016 11:19	2.32	-37	6.82	0.5515	9848.1794	10.14	81.3
MW-0057	04/12/2016 11:22	2.02	-41	6.81	0.5509	9838.0256	10.12	64.4
MW-0057	04/12/2016 11:25	1.89	-43	6.81	0.5500	9822.0963	10.14	64.3
MW-0057	04/12/2016 11:27	1.85	-45	6.81	0.5493	9813.9981	10.05	55.1
MW-0057	04/12/2016 11:30	1.82	-46	6.82	0.5494	9819.8417	9.88	60.7
MW-0057	04/12/2016 11:32	1.78	-48	6.82	0.5505	9842.9716	9.71	51.7
MW-0057	04/12/2016 11:35	1.8	-49	6.83	0.5597	10006.8130	9.3	51.5
MW-0057	04/12/2016 11:38	1.79	-50	6.83	0.5650	10099.7196	9.16	48.5
MW-0057	04/12/2016 12:02	2.11	-38	6.89	0.49	8.826	11.71	53.30
MW-0057	07/19/2016 10:12	2.52	-73	7.03	NM	6013.22	25.06	44.1
MW-0057	07/19/2016 10:13	1.94	-88	7.05	NM	6167.48	24.32	85.9
MW-0057	07/19/2016 10:15	1.5	-98	7.06	NM	6477.51	23.29	85.5
MW-0057	07/19/2016 10:16	1.03	-105	7.06	NM	6597.55	22.71	97.2
MW-0057	07/19/2016 10:18	0.82	-109	7.06	NM	6639.85	22.63	110
MW-0057	07/19/2016 10:19	0.74	-111	7.06	NM	6666.48	22.51	118.9
MW-0057	07/19/2016 10:21	0.69	-113	7.07	NM	6684.86	22.57	106.5
MW-0057	07/19/2016 10:23	0.67	-114	7.07	NM	6502	22.46	92.2
MW-0057	07/19/2016 10:24	0.68	-115	7.08	NM	6512.61	22.44	85.7
MW-0057	07/19/2016 10:26	0.69	-116	7.08	NM	6517.26	22.4	80.9
MW-0057	07/19/2016 10:27	0.68	-116	7.08	NM	6480.44	22.42	97.4
MW-0057	07/19/2016 10:29	0.66	-117	7.08	NM	6493.49	22.49	70.2
MW-0057	07/19/2016 10:30	0.65	-117	7.08	NM	6442.1	22.5	67
MW-0057	07/19/2016 10:32	0.64	-117	7.08	NM	6391.55	22.58	78.7
MW-0057	07/19/2016 10:34	0.64	-117	7.09	NM	6389.71	22.68	64.2
MW-0057	07/19/2016 10:35	0.65	-117	7.09	NM	6384.99	22.62	57.4
MW-0057	07/19/2016 10:37	0.65	-117	7.09	NM	6340.88	22.62	56.4
MW-0057	07/19/2016 10:38	0.66	-117	7.09	NM	6349.69	22.54	55.8
MW-0057	07/19/2016 11:12	1.13	-79	7.06	0.46	8.230	19.54	34.80
MW-0057	10/17/2016 08:14	3.82	-42	6.6	0.2324	4317.5871	20.22	228.6
MW-0057	10/17/2016 08:17	2.33	-58	6.63	0.2227	4148.7035	20.24	222.1
MW-0057	10/17/2016 08:20	0.4	-53	6.64	0.2229	4150.7171	20.31	220.9
MW-0057	10/17/2016 08:22	0.24	-43	6.64	0.2225	4143.5337	20.38	226.7
MW-0057	10/17/2016 08:25	0.17	-34	6.65	0.2229	4150.1465	20.42	223.4
MW-0057	10/17/2016 08:28	0.15	-27	6.65	0.2230	4152.9598	20.46	219.6
MW-0057	10/17/2016 08:30	0.14	-16	6.66	0.2233	4157.8205	20.51	222.2
MW-0057	10/17/2016 08:33	0.13	-17	6.66	0.2238	4166.4489	20.53	208
MW-0057	10/17/2016 08:36	0.12	-22	6.67	0.2246	4179.8442	20.54	192.9
MW-0057	10/17/2016 08:38	0.12	-31	6.68	0.2248	4184.7780	20.59	176.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0057	10/17/2016 08:41	0.12	-45	6.69	0.2252	4191.2948	20.63	146.6
MW-0057	10/17/2016 08:44	0.13	-55	6.71	0.2256	4197.4375	20.63	124.7
MW-0057	10/17/2016 08:46	0.13	-65	6.71	0.2260	4204.9768	20.63	105.4
MW-0057	10/17/2016 08:49	0.13	-73	6.73	0.2264	4211.4420	20.64	83.4
MW-0057	10/17/2016 08:52	0.14	-79	6.75	0.2264	4211.2779	20.71	68.3
MW-0057	10/17/2016 08:54	0.15	-90	6.76	0.2270	4221.3071	20.73	48.4
MW-0057	10/17/2016 08:57	0.15	-92	6.76	0.2271	4223.6736	20.71	44.3
MW-0057	10/17/2016 09:00	0.15	-91	6.77	0.2273	4228.3055	20.72	49.7
MW-0057	10/17/2016 09:02	0.15	-91	6.77	0.2277	4234.1332	20.73	54.7
MW-0057	10/17/2016 09:05	0.15	-89	6.77	0.2275	4230.9218	20.68	49
MW-0057	10/17/2016 09:21	2.77	-146	6.70	0.23	4.260	20.38	96.60
MW-0057	01/11/2017 11:23	8.11	76	7.06	0.5364	9559.0264	11.74	57.2
MW-0057	01/11/2017 11:26	2.69	17	6.91	0.5342	9509.3819	12.33	53.4
MW-0057	01/11/2017 11:28	0.88	4	6.88	0.5377	9565.8149	12.42	50
MW-0057	01/11/2017 11:31	0.58	1	6.86	0.5384	9578.0283	12.4	49.3
MW-0057	01/11/2017 11:33	0.45	-1	6.85	0.5380	9572.8201	12.37	46.3
MW-0057	01/11/2017 11:36	0.44	-2	6.85	0.5395	9595.6869	12.44	45.9
MW-0057	01/11/2017 11:38	0.43	-3	6.85	0.5398	9601.1173	12.42	46.3
MW-0057	04/26/2017 13:12	5.9	-54	7.13	0.1545	0.0295	14.86	153.7
MW-0057	04/26/2017 13:15	2.49	-50	7	0.2134	0.0401	13.79	63
MW-0057	04/26/2017 13:17	0.45	-51	7.01	0.2221	0.0417	12.79	49.1
MW-0057	04/26/2017 13:20	0.15	-52	7.02	0.2168	0.0408	12.99	44.7
MW-0057	04/26/2017 13:22	0.05	-52	7.02	0.2155	0.0405	12.88	34.1
MW-0057	04/26/2017 13:25	0.03	-51	7.02	0.2140	0.0403	12.86	31.3
MW-0057	04/26/2017 13:27	0.01	-51	7.02	0.2136	0.0402	12.85	25.2
MW-0057	04/26/2017 13:30	0.01	-51	7.02	0.2131	0.0401	12.84	23.9
MW-0057	04/26/2017 13:32	0.05	-50	7.02	0.2116	0.0398	12.86	24.7
MW-0057	04/26/2017 13:35	0.14	-49	7.02	0.2107	0.0397	12.88	22.9
MW-0057	04/26/2017 13:38	0.23	-49	7.02	0.2096	0.0395	12.88	22.7
MW-0057	04/26/2017 13:40	0.37	-48	7.02	0.2082	0.0392	12.87	23
MW-0057	04/26/2017 13:43	0.56	-48	7.03	0.2060	0.0389	12.85	24.4
MW-0057	04/26/2017 13:45	0.89	-47	7.03	0.2039	0.0385	12.85	25.4
MW-0057	04/26/2017 13:48	1.24	-47	7.04	0.2010	0.0380	12.86	28.5
MW-0057	04/26/2017 13:50	1.71	-47	7.05	0.1973	0.0373	12.87	32.8
MW-0057	04/26/2017 13:53	2.32	-47	7.07	0.1929	0.0365	12.88	39.9
MW-0057	04/26/2017 13:55	3.12	-47	7.08	0.1865	0.0354	12.91	51.6
MW-0057	04/26/2017 13:58	4.05	-47	7.11	0.1783	0.0339	12.93	65.8
MW-0057	04/26/2017 14:00	4.98	-47.00	7.14	0.17	3.253	12.57	87.96
MW-0057	04/26/2017 14:01	4.98	-47	7.14	0.1691	0.0322	12.94	88
MW-0057	01/22/2018 11:12	7.27	180	7.56	0.1835	0.0348	12.61	94.9
MW-0057	01/22/2018 11:15	4.12	179	7.44	0.2052	0.0387	12.7	90
MW-0057	01/22/2018 11:18	3.67	178	7.39	0.2180	0.0410	12.35	66.4
MW-0057	01/22/2018 11:20	3.56	176	7.35	0.2202	0.0414	12.46	59.1
MW-0057	01/22/2018 11:23	3.45	174	7.33	0.2216	0.0416	12.43	60.3
MW-0057	01/22/2018 11:26	3.48	173.00	7.32	0.22	4.232	12.04	57.62
MW-0057	04/09/2018 10:36	7.53	182	7.27	0.1325	0.0026	9.45	438.1
MW-0057	04/09/2018 10:39	3.35	175	7.1	0.1345	0.0026	10.56	121.7
MW-0057	04/09/2018 10:42	2.83	168	7.05	0.1331	0.0026	10.57	141
MW-0057	04/09/2018 10:44	2.66	162	7.02	0.1332	0.0026	10.44	135.8
MW-0057	04/09/2018 10:47	2.6	156	7	0.1322	0.0026	10.58	146.9
MW-0057	04/09/2018 10:50	2.53	151	6.99	0.1338	0.0026	10.55	157.7
MW-0057	04/09/2018 10:52	2.52	147	6.99	0.1321	0.0026	10.77	123.2
MW-0057	04/09/2018 10:55	2.46	143	6.98	0.1308	0.0025	10.72	114.8
MW-0057	04/09/2018 10:58	2.61	140	6.98	0.1306	0.0025	10.66	99.1
MW-0057	04/09/2018 11:00	2.55	137	6.98	0.1318	0.0026	10.7	333.6
MW-0057	04/09/2018 11:03	2.4	134	6.97	0.1310	0.0025	10.82	83.2
MW-0057	04/09/2018 11:06	2.41	132	6.98	0.1338	0.0026	10.88	80.7
MW-0057	04/09/2018 11:08	2.43	130	6.98	0.1324	0.0026	10.7	72
MW-0057	04/09/2018 11:11	2.51	129	6.98	0.1348	0.0026	10.84	69.3
MW-0057	04/09/2018 11:13	2.36	126	6.98	0.1315	0.0025	10.9	74
MW-0057	04/09/2018 11:14	2.36	126.00	6.98	0.13	2.558	10.78	73.95
MW-0057	07/12/2018 12:23	4.27	37	7.32	0.0935	1.8218	28.98	65.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0057	07/12/2018 12:26	1.66	-95	7.24	0.0988	1.9200	21.03	46
MW-0057	07/12/2018 12:29	1.11	-127	7.23	0.0979	1.9038	19.92	30.4
MW-0057	07/12/2018 12:32	0.9	-137	7.22	0.0977	1.9000	19.9	26.9
MW-0057	07/12/2018 12:36	0.8	-141	7.21	0.0977	1.9004	20.16	15.6
MW-0057	07/12/2018 12:39	0.74	-143	7.22	0.0975	1.8971	20.73	14.7
MW-0057	07/12/2018 12:42	0.7	-146	7.22	0.0969	1.8855	20.95	13.2
MW-0057	07/12/2018 12:45	0.66	-149	7.22	0.0970	1.8861	21.41	10.4
MW-0057	07/12/2018 12:48	0.66	-151	7.23	0.0967	1.8806	21.31	9.9
MW-0057	07/12/2018 12:51	0.65	-153	7.23	0.0965	1.8780	21.32	7.2
MW-0057	07/12/2018 12:54	0.65	-155	7.24	0.0959	1.8657	21.26	8
MW-0057	07/12/2018 12:57	0.66	-157	7.24	0.0961	1.8709	21	7.5
MW-0057	07/12/2018 12:58	0.66	-157.00	7.24	NM	1.864	21.18	7.53
MW-0057	10/23/2018 14:20	8.19	-68.40	7.30	0.04	0.047	18.89	13.40
MW-0057	04/08/2019 13:20	1.57	-14.4	7.46	NM	1.412	12.76	59.9
MW-0057	07/08/2019 10:05	1	20.2	7.24	NM	1.061	16.74	70.8
MW-0057	07/08/2019 10:10	0.24	-25.4	7.18	NM	1.066	16.09	40.7
MW-0057	07/08/2019 10:15	0.15	-28.6	7.19	NM	1.051	16.26	36.1
MW-0057	07/08/2019 10:20	0.13	-15.9	7.27	NM	1.01	16.56	42.3
MW-0057	07/08/2019 10:25	0.11	4.7	7.31	NM	0.993	16.81	46.7
MW-0057	07/08/2019 10:30	0.12	16.3	7.32	NM	0.99	17.2	42.8
MW-0057	07/08/2019 10:35	0.14	13.1	7.33	NM	0.993	17.48	33.7
MW-0057	07/08/2019 10:40	0.17	9.7	7.32	NM	0.991	17.79	23.6
MW-0057	07/08/2019 10:45	0.2	-0.6	7.31	NM	0.995	18.01	32.1
MW-0057	07/08/2019 10:50	0.21	-8.6	7.31	NM	1.003	18.28	19.4
MW-0057	07/08/2019 13:45	0.21	-8.6	7.31	NM	1.003	18.28	19.4
MW-0057	10/04/2019 13:00	1.24	-33.7	7.48	NM	0.586	24.59	21.6
MW-0057	10/04/2019 13:05	0.93	-39.7	7.42	NM	0.509	24.43	17.6
MW-0057	10/04/2019 13:10	0.87	-45.3	7.4	NM	0.493	24.5	10.2
MW-0057	10/04/2019 13:15	1.02	-50.3	7.4	NM	0.49	25.38	6.3
MW-0057	10/04/2019 13:20	1.57	-54.8	7.4	NM	0.467	25.2	49.5
MW-0057	10/04/2019 13:25	1.89	-54.2	7.4	NM	0.491	24.92	34.6
MW-0057	10/04/2019 13:30	2.25	-44.2	7.4	NM	0.489	25.39	4
MW-0057	10/04/2019 13:35	1.9	-35	7.41	NM	0.489	25.77	1.4
MW-0057	10/04/2019 13:40	2.37	-24.3	7.42	NM	0.49	26.72	0.8
MW-0057	10/04/2019 13:45	1.27	-17	7.41	NM	0.485	27.45	0.4
MW-0057	01/08/2020 08:35	5.71	192.1	7.22	NM	0.355	6.89	115.8
MW-0057	01/08/2020 08:40	4.34	187.8	7.4	NM	0.348	7.3	165.7
MW-0057	01/08/2020 08:45	3.29	32	7.34	NM	0.348	7.35	223.6
MW-0057	01/08/2020 08:50	3.15	-4.6	7.38	NM	0.348	7.21	162.3
MW-0057	01/08/2020 08:55	3.44	-2.8	7.41	NM	0.348	7.03	91.9
MW-0057	01/08/2020 09:00	3.32	2.3	7.41	NM	0.346	8.82	61.2
MW-0057	01/08/2020 09:05	3.32	3.4	7.43	NM	0.346	9.36	53.8
MW-0057	01/08/2020 09:10	3.24	-0.1	7.44	NM	0.347	9.5	56.7
MW-0057	01/08/2020 09:15	3.05	-0.8	7.46	NM	0.347	9.64	52.2
MW-0057	01/08/2020 09:20	2.99	-1.4	7.46	NM	0.347	9.62	53.1
MW-0057	04/08/2020 08:55	3.15	472	7.33	NM	0.915	12.52	30.6
MW-0057	07/13/2020 13:20	0.07	-74.5	7.08	NM	1.53	19.26	18.2
MW-0057	10/07/2020 13:35	NM	NM	NM	NM	NM	NM	7.6
MW-0057	10/12/2020 12:50	0.28	-95.1	6.86	1.38	2.652	17.27	35.8
MW-0057	10/12/2020 12:55	0.25	-102.9	6.85	1.41	2.706	17.12	34.7
MW-0057	10/12/2020 13:00	0.17	-107.6	6.83	1.42	2.717	17.06	25
MW-0057	10/12/2020 13:05	0.13	-112.3	6.83	1.41	2.712	17.07	17.5
MW-0057	10/12/2020 13:10	0.07	-121	6.87	1.38	2.655	17.94	12.5
MW-0057	10/12/2020 13:15	0.07	-126.8	6.91	1.34	2.582	18.17	9.8
MW-0057	10/12/2020 13:20	0.09	-128.1	6.93	1.31	2.553	18.27	8.3
MW-0057	10/12/2020 13:25	0.09	-129	6.95	1.28	2.479	18.27	8.3
MW-0057	10/12/2020 13:30	0.08	-126.2	6.98	1.24	2.394	18.26	7.3
MW-0057	10/12/2020 13:35	0.07	-123.3	7	1.2	2.325	18.35	NM
MW-0057	01/12/2021 12:50	3.11	-42.4	6.95	1.62	3.107	11.65	168.8
MW-0057	01/12/2021 12:55	1.6	-36.7	6.93	1.51	2.889	12.29	65.9
MW-0057	01/12/2021 13:00	2.53	-35.1	6.91	1.48	2.831	12.59	41.9
MW-0057	01/12/2021 13:05	2.2	-33.5	6.95	1.47	2.822	12.58	30.3

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0057	01/12/2021 13:10	1.26	-33.6	6.89	1.48	2.824	12.55	29.9
MW-0057	01/12/2021 13:15	1.4	-34.7	6.9	1.46	2.789	12.48	23.9
MW-0057	01/12/2021 13:20	1.58	-34.3	6.9	1.46	2.791	12.56	21.7
MW-0057	01/12/2021 13:25	2.06	-36.6	6.92	1.44	2.764	12.57	16
MW-0057	01/12/2021 13:30	1.3	-35.1	6.88	1.42	2.724	12.69	14
MW-0057	01/12/2021 13:35	1.3	-34.9	6.91	1.42	2.72	12.69	13.6
MW-0057	04/07/2021 09:15	2.95	-71.8	6.8	1.66	3.156	11.96	148.6
MW-0057	04/07/2021 09:20	0.56	-71.8	6.66	1.65	3.137	11.2	88.4
MW-0057	04/07/2021 09:25	0.48	-74.4	6.68	1.64	3.126	11.12	72.8
MW-0057	04/07/2021 09:30	0.53	-74.6	6.7	1.63	3.104	11.06	63.7
MW-0057	04/07/2021 09:35	0.92	-71.3	6.73	1.59	3.03	10.99	60.8
MW-0057	04/07/2021 09:40	1.43	-66	6.75	1.54	2.944	10.9	46.1
MW-0057	04/07/2021 09:45	1.72	-59.1	6.78	1.5	2.87	10.82	33.3
MW-0057	04/07/2021 09:50	1.72	-54.6	6.81	1.48	2.84	10.78	23.1
MW-0057	04/07/2021 09:55	1.6	-52.4	6.82	1.61	2.828	10.73	18.4
MW-0057	04/07/2021 10:00	1.49	-51.8	6.82	1.49	2.85	10.47	16.5
MW-0057	01/18/2022 10:25	3.67	-61.4	6.92	3.3	6.042	11.27	46.3
MW-0057	01/18/2022 10:30	0.92	-62	6.63	3.45	6.29	12.74	40.4
MW-0057	01/18/2022 10:35	0.64	-63.3	6.61	3.46	6.295	12.45	42
MW-0057	01/18/2022 10:40	0.8	-64.1	6.61	3.45	6.29	12.44	43.7
MW-0057	01/18/2022 10:45	0.82	-64.6	6.61	3.45	6.284	12.3	43.3
MW-0057	01/18/2022 10:50	0.92	-65.1	6.61	3.44	6.284	12.28	48.6
MW-0057	01/18/2022 10:55	0.65	-65.5	6.61	3.44	6.284	12.1	44.4
MW-0057	01/18/2022 11:00	0.66	-65.7	6.61	3.43	6.253	12.12	41.4
MW-0057	01/18/2022 11:05	0.63	-65.8	6.62	3.42	6.237	12.18	41.4
MW-0057	01/18/2022 11:10	0.62	-66	6.62	3.42	6.23	12.23	41.6
MW-0057	04/11/2022 11:00	1.56	-115.3	6.86	0.99	1.933	12.96	-3.9
MW-0057	04/11/2022 11:05	0.74	-117.9	6.81	0.99	1.936	13.12	0
MW-0057	04/11/2022 11:10	0.55	-119.8	6.8	0.99	1.938	13.39	0
MW-0057	04/11/2022 11:15	0.38	-122.8	6.81	1	1.943	13.59	0
MW-0057	04/11/2022 11:20	0.33	-126.7	6.84	1	1.951	13.94	0
MW-0057	04/11/2022 11:25	0.36	-126.8	6.84	1	1.948	13.98	0
MW-0057	04/11/2022 11:30	0.33	-127	6.85	1	1.949	14.02	0
MW-0058	06/14/2016 10:24	0.73	-191	7.05	0.05	1.023	19.83	533.50
MW-0058	05/12/2017 11:45	0.77	-19.00	7.20	0.09	1.693	13.93	106.20
MW-0058	02/18/2018 14:40	2.20	-81.70	7.59	0.25	0.531	5.16	0.0000
MW-0058	02/19/2018 09:00	3.66	46.50	8.71	0.29	0.587	7.73	10.70
MW-0058	02/19/2018 11:00	4.85	47.50	7.73	0.25	0.524	6.97	2.90
MW-0058	02/19/2018 11:10	4.17	56.80	8.62	0.30	0.612	8.11	15.70
MW-0058	05/21/2018 12:06	5.74	-102	7.16	0.0663	1.3127	22.36	13.8
MW-0058	05/21/2018 12:09	0.17	-126	7.24	0.0676	1.3388	18.9	9.6
MW-0058	05/21/2018 12:12	-0.18	-135	7.26	0.0676	1.3389	18.66	8.2
MW-0058	05/21/2018 12:14	-0.41	-140	7.27	0.0677	1.3396	18.25	8
MW-0058	05/21/2018 12:17	-0.59	-144	7.28	0.0677	1.3400	18.47	8
MW-0058	05/21/2018 12:20	-0.49	-147	7.3	0.0681	1.3479	18.4	10.7
MW-0058	05/21/2018 12:22	-0.73	-149	7.3	0.0677	1.3409	18.13	10
MW-0058	05/21/2018 12:25	-0.7	-152	7.31	0.0679	1.3437	18.36	61
MW-0058	05/21/2018 12:27	-0.71	-153	7.31	0.0679	1.3432	18.46	8.5
MW-0058	05/21/2018 12:30	-0.61	-155	7.32	0.0684	1.3538	18.7	10.3
MW-0058	05/21/2018 12:33	-0.74	-156	7.32	0.0678	1.3418	18.44	9.2
MW-0058	05/21/2018 12:35	-0.71	-157	7.32	0.0682	1.3502	18.33	8.3
MW-0058	05/21/2018 12:38	-0.78	-158	7.33	0.0679	1.3437	18.4	8.5
MW-0058	05/22/2018 12:38	-0.78	-158.00	7.33	0.07	1.338	18.58	8.49
MW-0058	08/29/2018 09:55	1.83	-108.70	6.54	2.12	4.009	24.8	4.60
MW-0058	08/29/2018 12:02	6.50	-96.70	6.69	2.27	4.264	23.76	3.50
MW-0058	08/29/2018 12:10	5.92	-85.50	6.69	2.22	4.189	19.31	3.60
MW-0058	11/13/2018 13:20	6.53	-98.70	7.05	1.56	2.975	14.27	19.30
MW-0058	11/13/2018 14:40	3.78	-107.10	7.10	1.27	2.448	13.54	6.50
MW-0058	11/13/2018 14:50	3.55	-107.00	7.22	0.64	1.305	11.99	3.60
MW-0058	02/22/2019 13:00	0.52	-85.5	7.5	NM	0.617	7.77	6.8
MW-0058	02/22/2019 14:45	5.52	-9.1	7.71	0.36	0.741	7.63	7.4
MW-0058	09/05/2019 10:05	2.21	-121.7	6.58	NM	2.549	21.16	6.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0058	09/05/2019 10:10	0.68	-136.4	6.45	NM	2.52	20.45	3
MW-0058	09/05/2019 10:15	0.54	-140	6.43	NM	2.533	21.31	1145.2
MW-0058	09/05/2019 10:20	0.5	-142.3	6.43	NM	2.538	21.42	4.7
MW-0058	09/05/2019 10:25	0.47	-144.5	6.43	NM	2.535	21.32	5.3
MW-0058	09/05/2019 10:30	0.44	-143.4	6.43	NM	2.531	21.8	7.2
MW-0058	09/05/2019 10:35	0.43	-144.5	6.43	NM	2.535	21.75	7.9
MW-0058	09/05/2019 10:40	0.42	-146.6	6.43	NM	2.523	21.75	7.4
MW-0058	09/05/2019 10:45	0.55	-173.6	6.49	1.25	2.422	17.64	NM
MW-0058	09/05/2019 10:50	0.4	-168	6.46	1.3	2.525	NM	31.1
MW-0058	09/05/2019 11:42	0.42	-146.6	6.43	NM	2.523	21.75	7.4
MW-0058	09/05/2019 14:26	0.55	-173.6	6.49	1.25	2.422	17.64	31.1
MW-0058	09/05/2019 14:58	NM	NM	NM	NM	NM	17.21	26.3
MW-0058	10/07/2020 08:25	4.78	39.4	6.28	2.85	5.238	18.64	123.6
MW-0058	10/07/2020 08:30	3.48	32.2	6.11	2.85	5.262	18.64	14
MW-0058	10/07/2020 08:35	1.47	-41.5	5.7	2.91	5.361	18.58	12
MW-0058	10/07/2020 08:40	1.35	-42.3	5.68	2.91	5.363	18.6	12.5
MW-0058	10/07/2020 08:45	0.53	-60.7	5.47	2.95	5.445	18.86	10.8
MW-0058	10/07/2020 08:50	0.52	-62.2	5.47	2.95	5.448	18.86	11
MW-0058	10/07/2020 08:55	0.45	-78.4	5.39	2.98	5.496	19	10.6
MW-0058	10/07/2020 09:00	0.39	-79.5	5.39	2.98	5.499	19.01	10.7
MW-0058	10/07/2020 09:05	0.34	-86.2	5.35	3	5.525	19.12	10.4
MW-0058	10/07/2020 09:10	0.34	-86.5	5.35	3	5.528	19.18	10.3
MW-0058	10/07/2020 10:50	6.27	23.4	7.58	3.04	5.604	20.53	14.1
MW-0058	10/07/2020 11:00	2.21	-99.3	7.79	3.12	5.762	23.29	20.1
MW-0058	02/16/2021 11:20	1.78	-96.3	6.78	2.54	4.725	11.79	8.1
MW-0058	02/16/2021 11:30	0.48	-93.4	6.67	2.52	4.86	12.06	8.7
MW-0058	05/26/2021 12:30	0.43	-65.1	8.04	0.89	1.751	20.4	21.1
MW-0058	05/26/2021 12:35	0.29	-54.5	7.71	0.89	1.736	16.03	16
MW-0058	05/26/2021 12:40	0.24	-56.3	7.69	0.88	1.736	17.77	16.2
MW-0058	05/26/2021 12:45	0.19	-52.9	7.68	0.88	1.728	18.1	16.7
MW-0058	05/26/2021 12:50	0.1	-61.2	7.67	0.88	1.725	17.96	16.7
MW-0058	05/26/2021 12:55	0.04	-55.8	7.67	0.88	1.724	18.06	16.6
MW-0058	05/26/2021 13:00	0.03	-56.2	7.66	0.88	1.731	17.96	16.6
MW-0058	05/26/2021 13:05	0.03	-60.2	7.67	0.88	1.732	18.32	17.3
MW-0058	05/26/2021 13:10	0.01	-60	7.67	0.88	1.728	18.32	18.5
MW-0058	05/26/2021 13:15	0.04	-59.7	7.67	0.88	1.725	18.5	18.6
MW-0058	02/24/2022 10:15	4.64	-154.4	7.47	3.28	6.055	8.92	32.3
MW-0058	02/24/2022 10:20	1.25	-101	6.59	3.01	5.551	9.52	23.2
MW-0058	02/24/2022 10:25	0.74	-100.1	6.59	3.01	5.547	9.5	22.2
MW-0058	02/24/2022 10:30	0.64	-97.7	6.55	2.99	5.511	8.98	13.5
MW-0058	02/24/2022 10:35	0.6	-99.4	6.59	2.97	5.477	8.9	12.4
MW-0058	02/24/2022 10:40	0.74	-99.3	6.56	2.96	5.467	8.97	11.6
MW-0058	02/24/2022 10:45	0.6	-99.3	6.54	2.93	5.419	9.08	9.2
MW-0058	02/24/2022 10:50	0.56	-99.2	6.54	2.94	5.443	8.96	7.9
MW-0058	02/24/2022 10:55	0.55	-99.3	6.53	2.96	5.474	9.19	6.6
MW-0058	02/24/2022 11:00	0.69	-99.2	6.54	2.96	5.459	9.22	7.4
MW-0059	04/23/2020 12:42	0.85	-67	7.4	1.12	2.182	11.21	19.1
MW-0059	03/29/2021 12:30	4.32	-58.7	6.62	3.64	6.697	10.17	24.6
MW-0059	03/29/2021 14:00	0.05	-238.4	6.88	0.55	1.11	9.11	33.5
MW-0059	03/29/2021 14:10	0.13	-227	6.74	0.86	1.697	10.03	15.9
MW-0059	02/03/2022 12:25	2.12	1	6.54	4.14	7.433	8.34	4.3
MW-0059	02/03/2022 12:30	0.94	-5.1	6.55	4.63	8.313	7.74	2.9
MW-0059	02/03/2022 12:35	0.66	-22.6	6.56	4.78	8.57	7.63	2.9
MW-0059	02/03/2022 12:40	0.6	-25.6	6.56	4.84	8.692	7.44	2.8
MW-0059	02/03/2022 12:45	0.57	-29	6.56	4.92	8.814	7.28	2.8
MW-0059	02/03/2022 12:50	0.55	-30.2	6.56	4.93	8.836	7.25	2.5
MW-0059	02/03/2022 12:55	0.52	-31.9	6.56	4.95	8.873	7.29	2.5
MW-0059	02/03/2022 13:00	0.51	-35.6	6.56	5.01	8.975	7.33	2.5
MW-0060	03/28/2012 09:33	2.63	-96	7.28	0.05	0.97488	12.51	35.7
MW-0060	03/28/2012 09:35	0.95	-100	7.26	0.05	1.01131	11.1	7.7
MW-0060	03/28/2012 09:37	0.43	-103	7.26	0.05	1.00635	10.96	5.9
MW-0060	03/28/2012 09:40	0.13	-106	7.28	0.05	1.00559	10.94	6.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0060	03/28/2012 09:42	0.11	-108	7.29	0.05	1.00678	11.06	8.5
MW-0060	03/28/2012 09:44	0.03	-110	7.31	0.05	0.999	11.08	6.5
MW-0060	03/28/2012 09:47	-0.01	-111	7.31	0.05	0.99847	11.06	6.3
MW-0060	03/28/2012 09:49	-0.03	-113	7.32	0.05	0.99564	11.08	5.7
MW-0060	03/28/2012 09:52	-0.07	-114	7.33	0.05	0.98754	11.19	8.8
MW-0060	03/28/2012 09:54	-0.16	-115	7.33	0.05	0.98954	11.18	7.4
MW-0060	03/28/2012 09:56	-0.16	-117	7.34	0.05	0.98093	11.17	7.6
MW-0060	03/28/2012 09:59	-0.21	-117	7.34	0.05	0.98394	11.22	9.9
MW-0060	03/28/2012 10:01	-0.23	-118	7.34	0.05	0.97817	11.27	7
MW-0060	03/28/2012 10:03	-0.24	-119	7.35	0.05	0.9727	11.26	7.9
MW-0060	03/28/2012 10:06	-0.23	-120	7.36	0.05	0.95744	11.34	6.4
MW-0060	03/28/2012 10:08	-0.25	-121	7.37	0.05	0.92429	11.43	6.4
MW-0060	03/28/2012 10:10	-0.24	-121	7.36	0.05	0.94403	11.45	6.7
MW-0060	03/26/2013 13:50	1.06	-269	7.13	0.16	3.072	8.52	10.96
MW-0060	03/26/2013 14:50	2.44	-247	6.9	0.16	6.927	12.19	35.9
MW-0060	02/10/2014 13:51	0.23	-177	7.18	0.06	1.171	5.67	11.25
MW-0060	02/10/2014 13:58	0.67	-187	7.03	0.08	1.679	7.36	-134.50
MW-0060	06/14/2016 09:37	0.30	-164	7.04	0.06	1.112	19.06	15.00
MW-0060	05/12/2017 10:09	-0.11	-76.00	7.18	0.10	2.024	13.85	2.96
MW-0060	05/12/2017 11:04	1.65	-7.00	7.36	0.14	1.806	13.47	11.80
MW-0060	02/14/2018 11:25	0.04	-92.60	7.01	0.26	0.545	7.2	2.90
MW-0060	02/14/2018 14:30	2.20	-64.40	7.04	0.20	0.416	7.23	7.20
MW-0060	02/14/2018 14:55	0.61	-108.10	7.16	0.12	0.816	8.64	26.70
MW-0060	05/21/2018 08:36	2.53	-106	7.03	0.1169	2.2586	17.24	9.7
MW-0060	05/21/2018 08:38	1.81	-119	7.03	0.1151	2.2269	16.48	14.1
MW-0060	05/21/2018 08:41	0.73	-123	7.03	0.1138	2.2037	15.91	8.3
MW-0060	05/21/2018 08:43	0.38	-128	7.05	0.1134	2.1979	15.67	9.6
MW-0060	05/21/2018 08:45	0.23	-131	7.06	0.1131	2.1925	15.75	7.1
MW-0060	05/21/2018 08:48	-0.07	-134	7.07	0.1128	2.1859	15.82	10.3
MW-0060	05/21/2018 08:50	0.1	-137	7.08	0.1133	2.1956	15.87	9.2
MW-0060	05/21/2018 08:52	-0.23	-140	7.1	0.1132	2.1931	15.7	7.9
MW-0060	05/21/2018 08:55	-0.2	-143	7.11	0.1127	2.1849	15.68	7
MW-0060	05/21/2018 08:56	-0.02	-143	7.11	0.1127	2.1851	15.7	6.6
MW-0060	05/21/2018 08:58	-0.44	-145	7.12	0.1128	2.1853	15.78	8.2
MW-0060	05/21/2018 09:00	-0.51	-147	7.12	0.1128	2.1854	15.79	7.3
MW-0060	05/21/2018 09:03	-0.47	-149	7.13	0.1121	2.1737	15.84	6.3
MW-0060	05/21/2018 09:05	-0.58	-150	7.14	0.1127	2.1846	15.94	7.4
MW-0060	05/21/2018 09:07	-0.54	-152	7.14	0.1122	2.1741	15.88	6.5
MW-0060	05/21/2018 09:10	-0.67	-153	7.15	0.1121	2.1728	15.87	7.8
MW-0060	05/21/2018 09:12	-0.61	-155	7.15	0.1119	2.1695	15.97	8.1
MW-0060	05/21/2018 09:15	-0.57	-156	7.15	0.1123	2.1752	16.32	6.5
MW-0060	05/21/2018 09:17	-0.69	-157	7.15	0.1122	2.1748	16.18	10.5
MW-0060	05/21/2018 09:19	-0.62	-158	7.16	0.1120	2.1714	16.2	6.9
MW-0060	05/21/2018 09:22	-0.69	-159	7.16	0.1121	2.1716	16.22	10.3
MW-0060	05/21/2018 09:24	-0.67	-160	7.16	0.1129	2.1866	16.19	8.1
MW-0060	05/22/2018 09:24	-0.67	-160.00	7.16	0.11	2.169	16.55	8.09
MW-0060	05/22/2018 10:03	6.19	-78.00	7.07	0.14	2.782	13.42	295.50
MW-0060	08/30/2018 09:00	6.71	-111.30	7.09	1.05	2.050	22.97	14.70
MW-0060	08/30/2018 10:42	6.06	-79.60	7.10	0.92	1.815	23.44	23.20
MW-0060	08/30/2018 10:50	2.44	-83.30	7.02	1.05	2.058	25.64	187.80
MW-0060	11/12/2018 13:35	1.29	-108.30	7.34	0.99	1.936	15.9	9.80
MW-0060	11/12/2018 14:45	0.33	125.90	7.40	0.80	1.572	14.52	14.80
MW-0060	11/12/2018 14:55	0.76	-110.10	7.43	0.82	1.553	14.79	13.50
MW-0060	02/27/2019 12:55	0.34	-125	7.29	NM	0.958	6.04	7
MW-0060	02/27/2019 14:30	4.51	-21.6	7.77	0.41	0.838	6.22	10.2
MW-0060	05/14/2019 09:50	0.42	-86.8	7.25	NM	0.948	11.35	3.7
MW-0060	05/14/2019 11:26	0.69	-93	7.42	0.4	0.814	12.26	0.1
MW-0060	09/04/2019 09:30	2.64	138	6.3	NM	1.423	22.06	37.3
MW-0060	09/04/2019 09:35	0.63	29.8	6.51	NM	1.42	21.01	12.5
MW-0060	09/04/2019 09:40	0.34	-46.6	6.63	NM	1.418	21.11	16.1
MW-0060	09/04/2019 09:45	0.32	-64.4	6.69	NM	1.41	21.93	27.2
MW-0060	09/04/2019 09:50	0.3	-70.8	6.72	NM	1.41	22.09	37.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0060	09/04/2019 09:55	0.29	-73.2	6.72	NM	1.413	22.31	50.1
MW-0060	09/04/2019 10:00	0.27	-74.1	6.73	NM	1.41	22.39	54.9
MW-0060	09/04/2019 10:05	0.25	-74	6.74	NM	1.401	22.56	59.5
MW-0060	09/04/2019 10:10	0.24	-73.8	6.74	NM	1.408	22.48	62.7
MW-0060	09/04/2019 10:15	0.23	-74.1	6.75	NM	1.394	22.6	64
MW-0060	04/22/2020 13:00	1.16	-282.2	7.2	NM	1.415	10.79	3.5
MW-0060	04/22/2020 13:40	8.33	-262.4	7.8	0.73	1.444	11.09	3.8
MW-0060	10/07/2020 11:30	1.26	-65.7	8.14	2.18	4.097	21.3	7.4
MW-0060	10/07/2020 11:35	0.92	-71.9	7.77	2.18	4.095	21.95	12
MW-0060	10/07/2020 11:40	0.28	-73.6	7.63	2.18	4.103	22.65	14.7
MW-0060	10/07/2020 11:45	0.21	-74.2	7.58	2.19	4.116	22.66	17.2
MW-0060	10/07/2020 11:50	0.09	-75.9	7.56	2.19	4.119	22.75	13.3
MW-0060	10/07/2020 11:55	0.08	-77.2	7.55	2.18	4.116	22.89	12.6
MW-0060	10/07/2020 12:00	0.11	-78.2	7.54	2.18	4.113	22.99	12.1
MW-0060	10/07/2020 12:05	0.06	-79.4	7.54	2.18	4.106	22.98	11.5
MW-0060	10/07/2020 12:10	0.03	-80.3	7.53	2.18	4.103	23.13	11.7
MW-0060	10/07/2020 12:15	0.05	-80.5	7.53	2.17	4.094	23.33	NM
MW-0060	10/08/2020 09:45	0.73	116.6	6.1	1.03	2.007	18.91	34.9
MW-0060	10/08/2020 10:17	1.05	56.9	7.24	0.5	1.015	19.54	27.6
MW-0060	10/08/2020 12:15	NM	NM	NM	NM	NM	NM	12.5
MW-0060	03/02/2021 09:10	4.61	-197.2	7.14	1.41	2.671	7.23	9.3
MW-0060	03/02/2021 09:15	2.11	-204.2	6.79	1.48	2.829	7.79	6.2
MW-0060	03/02/2021 09:20	0.91	-212	7.05	1.54	2.95	7.83	4.1
MW-0060	03/02/2021 09:25	0.71	-216.1	7.02	1.55	2.979	7.43	3.3
MW-0060	03/02/2021 09:30	0.7	-219	6.95	1.55	2.981	7.29	3.1
MW-0060	03/02/2021 09:35	0.4	-235.6	6.95	1.55	2.975	6.88	15.1
MW-0060	03/02/2021 09:40	0.24	-239.8	6.96	1.41	2.75	6.7	12
MW-0060	03/02/2021 09:45	1.19	-240.7	7.24	0.78	1.585	6.25	13.7
MW-0060	03/02/2021 09:50	1.19	-237.1	7.19	0.74	1.485	6.1	17.5
MW-0060	03/02/2021 09:55	0.6	-238.7	7.4	0.55	1.102	5.65	16.5
MW-0060	03/02/2021 10:55	5.6	-86.5	7.92	0.33	0.672	6.22	1.2
MW-0060	03/02/2021 11:10	15.23	-51.5	7.87	0.28	0.576	5.93	3.2
MW-0060	03/23/2022 08:55	1.18	-131	7.25	0.61	1.217	9.82	0
MW-0060	03/23/2022 09:00	0.63	-165.5	7.13	0.62	1.238	9.26	0
MW-0060	03/23/2022 09:05	0.59	166.3	7.13	0.62	1.237	9.25	0
MW-0060	03/23/2022 09:10	0.51	-173.2	7.16	0.61	1.213	8.96	0
MW-0060	03/23/2022 09:15	0.48	-178.7	7.18	0.57	1.147	8.69	0
MW-0060	03/23/2022 09:20	0.42	-181.8	7.22	0.51	1.019	8.71	0
MW-0060	03/23/2022 09:25	0.45	-179.6	7.26	0.5	1.009	8.75	0
MW-0060	03/23/2022 09:30	0.44	-176.2	7.25	0.5	1.001	8.77	0
MW-0061	02/14/2018 11:30	0.92	-85.80	7.30	0.12	0.237	6.72	5.70
MW-0061	02/14/2018 14:20	0.61	-96.80	7.18	0.11	0.236	8.73	8.40
MW-0061	02/14/2018 14:25	0.59	-97.70	7.16	0.11	0.234	8.72	62.80
MW-0061	05/16/2018 10:11	2.98	-102	6.86	0.0248	0.5090	16.24	8.8
MW-0061	05/16/2018 10:14	2.14	-98	6.83	0.0246	0.5070	14.94	6.4
MW-0061	05/16/2018 10:16	1.67	-99	6.84	0.0244	0.5017	14.83	5
MW-0061	05/16/2018 10:19	1.46	-99	6.85	0.0242	0.4977	14.83	5.6
MW-0061	05/16/2018 10:21	1.39	-100	6.86	0.0241	0.4962	14.77	5
MW-0061	05/16/2018 10:23	1.29	-101	6.87	0.0240	0.4954	14.87	5.8
MW-0061	05/16/2018 10:26	1.27	-102	6.88	0.0240	0.4950	14.91	4.9
MW-0061	05/16/2018 10:28	1.13	-102	6.89	0.0240	0.4937	14.85	5.4
MW-0061	05/16/2018 10:31	1.08	-104	6.9	0.0239	0.4929	14.95	5.8
MW-0061	05/16/2018 10:33	1.1	-105	6.9	0.0239	0.4925	14.98	4.9
MW-0061	05/16/2018 10:36	1	-105	6.91	0.0237	0.4891	14.77	5.6
MW-0061	05/16/2018 10:38	0.98	-106	6.91	0.0236	0.4869	14.92	5
MW-0061	05/16/2018 10:40	0.96	-108	6.92	0.0237	0.4888	14.76	6.2
MW-0061	05/16/2018 10:43	0.93	-109	6.93	0.0236	0.4857	14.77	6.4
MW-0061	05/16/2018 10:45	0.92	-111	6.94	0.0235	0.4837	14.9	6.1
MW-0061	05/17/2018 10:45	0.92	-111.00	6.94	0.02	0.482	15.08	6.12
MW-0061	05/17/2018 11:51	3.57	-89.00	9.82	0.03	0.603	14.41	44.80
MW-0061	08/30/2018 08:50	0.63	-60.70	7.57	1.24	2.399	22.92	13.80
MW-0061	08/30/2018 11:00	6.10	-18.90	7.50	0.20	1.107	26.12	3.80

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0061	08/30/2018 11:05	5.90	-15.40	7.51	0.20	0.419	26.08	6.10
MW-0061	11/12/2018 10:00	0.27	-150.30	7.60	0.46	0.917	19.14	7.70
MW-0061	11/12/2018 12:00	2.25	-120.20	7.56	0.12	0.248	12.19	5.60
MW-0061	11/12/2018 12:10	1.19	-90.60	7.38	0.04	0.114	12.43	0.20
MW-0061	02/21/2019 09:10	0.3	-8.9	7.12	NM	0.195	7.53	2.7
MW-0061	02/21/2019 10:30	1.76	-2.8	7.1	0.02	0.104	6.09	0
MW-0061	09/09/2019 10:05	5.31	142.4	6.81	NM	1.193	22.48	2.5
MW-0061	09/09/2019 10:10	3.53	127.8	6.66	NM	1.205	22.26	1.4
MW-0061	09/09/2019 10:15	2.96	84.8	6.67	NM	1.135	22.55	1.1
MW-0061	09/09/2019 10:20	2.69	55.4	6.71	NM	0.928	22.5	1.4
MW-0061	09/09/2019 10:25	2.53	31.3	6.71	NM	0.838	23.33	1.7
MW-0061	09/09/2019 10:30	2.46	12.7	6.75	NM	0.808	22.41	1.6
MW-0061	09/09/2019 10:35	1.82	1.8	6.73	NM	0.802	22.34	1.6
MW-0061	09/09/2019 10:40	1.8	-5.8	6.73	NM	0.791	22.4	1.7
MW-0061	09/09/2019 10:45	1.77	-13.2	6.74	NM	0.799	22.45	1.9
MW-0061	09/09/2019 10:50	1.77	-13.2	6.74	NM	0.799	22.45	1.9
MW-0061	09/09/2019 12:20	1.46	97	6.88	0.41	0.846	23.8	22.8
MW-0061	09/09/2019 12:50	2.76	37.6	6.93	0.26	0.544	23.45	22.6
MW-0061	04/22/2020 09:35	5.29	-287.7	7.22	NM	1.407	8.09	8.3
MW-0061	04/22/2020 10:25	5.76	-259.9	7.02	1.18	2.279	11.3	3.5
MW-0061	10/09/2020 09:35	0.94	-81.1	6.34	2.7	5.147	19.67	0.8
MW-0061	10/09/2020 09:40	0.96	-97	6.4	2.76	5.113	19.91	0.5
MW-0061	10/09/2020 09:45	1.08	-101.9	6.42	2.81	5.201	20.17	0.3
MW-0061	10/09/2020 09:50	0.92	-103.1	6.43	2.84	5.254	20.31	0.2
MW-0061	10/09/2020 09:55	0.96	-103.6	6.43	2.84	5.261	20.36	0.1
MW-0061	10/09/2020 10:00	1.1	-104	6.42	2.86	5.285	20.37	0
MW-0061	10/09/2020 10:05	1.09	-103.5	6.43	2.86	5.296	20.52	0
MW-0061	10/09/2020 10:10	1.09	-103.1	6.42	2.86	5.29	20.55	0
MW-0061	10/09/2020 11:45	3.56	-79.2	6.42	3.62	6.609	22.27	26.2
MW-0061	10/09/2020 12:05	1.85	-78.6	6.44	4.19	7.54	20.72	NM
MW-0061	10/13/2020 12:05	NM	NM	NM	NM	NM	NM	19.8
MW-0061	02/17/2021 13:25	1.92	-246.8	9.47	0.46	0.912	7.11	13.9
MW-0061	02/17/2021 14:20	1.06	-295.4	8.49	0.44	0.893	7.83	5.1
MW-0061	02/17/2021 14:35	1.48	-277	8.44	0.46	0.928	7.99	6.2
MW-0061	05/19/2021 13:10	6.34	-10.9	6.71	1.25	2.426	17.99	7.8
MW-0061	05/19/2021 13:15	4.33	-23	6.58	1.22	2.38	17.26	6.9
MW-0061	05/19/2021 13:20	3.91	-36.7	6.57	1.19	2.326	15.99	7
MW-0061	05/19/2021 13:25	2.15	-66.7	6.62	1.17	2.272	16.31	6.9
MW-0061	05/19/2021 13:30	1.8	-67	6.65	1.17	2.274	16.22	7.4
MW-0061	05/19/2021 13:35	1.54	-61.8	6.65	1.17	2.267	17.08	6.7
MW-0061	05/19/2021 13:40	1.32	-66.1	6.66	1.19	2.295	17.87	6.5
MW-0061	05/19/2021 13:45	1.21	-69.8	6.66	1.21	2.341	17.88	5.8
MW-0061	05/19/2021 13:50	0.46	-83.2	6.64	1.26	2.432	17.6	4.7
MW-0061	05/19/2021 13:55	0.5	-91.8	6.63	1.27	2.451	17.9	4.6
MW-0061	09/02/2021 12:30	0.07	-178.9	6.45	3.85	7.035	22.6	-132.5
MW-0061	09/02/2021 12:35	0.07	-185.2	6.44	3.82	5.953	22.72	-130.5
MW-0061	02/24/2022 11:05	6.54	-100.8	7.77	0.35	0.718	8.16	16.8
MW-0061	02/24/2022 11:10	6.13	-91.9	7.57	0.34	0.696	7.88	16.7
MW-0061	02/24/2022 11:15	4.11	-47.6	6.85	0.32	0.658	6.37	15.1
MW-0061	02/24/2022 11:20	2.89	-36.3	6.55	0.32	0.652	6.25	13.4
MW-0061	02/24/2022 11:25	2.96	-36.7	6.53	0.32	0.65	6.21	13.5
MW-0061	02/24/2022 11:30	2.46	-38.9	6.47	0.32	0.647	6.27	12.3
MW-0061	02/24/2022 11:35	1.68	-41.2	6.41	0.31	0.641	5.68	11.3
MW-0061	02/24/2022 11:40	1.6	-41.5	6.41	0.31	0.64	5.65	11.1
MW-0061	02/24/2022 11:45	1.09	-42.2	6.38	0.31	0.635	5.41	10.6
MW-0061	02/24/2022 11:50	1.02	-43	6.39	0.31	0.635	5.5	10.5
MW-0062	02/16/2018 12:15	1.46	-104.10	8.02	0.57	1.142	8.16	1.20
MW-0062	02/16/2018 14:15	1.28	-72.50	7.23	0.51	1.025	9.78	2.50
MW-0062	02/16/2018 14:30	1.04	-82.90	7.61	0.56	1.067	10.81	3.80
MW-0062	05/16/2018 12:47	2.88	-117	6.55	0.1329	2.5615	13.88	4.6
MW-0062	05/16/2018 12:50	1.84	-110	6.55	0.1316	2.5360	14.19	4.2
MW-0062	05/16/2018 12:52	1.54	-109	6.57	0.1301	2.5096	14.12	4.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0062	05/16/2018 12:55	1.4	-109	6.58	0.1274	2.4591	14.2	5
MW-0062	05/16/2018 12:57	1.32	-110	6.59	0.1239	2.3947	14.18	4.9
MW-0062	05/16/2018 12:59	1.29	-110	6.61	0.1199	2.3218	13.98	4.6
MW-0062	05/16/2018 13:02	1.18	-111	6.61	0.1169	2.2664	13.97	5.2
MW-0062	05/16/2018 13:04	1.16	-112	6.62	0.1143	2.2179	13.99	4.7
MW-0062	05/16/2018 13:07	1.13	-113	6.63	0.1126	2.1867	13.98	4.7
MW-0062	05/16/2018 13:09	1.06	-114	6.65	0.1068	2.0809	14	6.2
MW-0062	05/16/2018 13:11	1.06	-115	6.66	0.1033	2.0142	14.04	4.7
MW-0062	05/16/2018 13:14	1.02	-115	6.66	0.1046	2.0382	14.06	5.9
MW-0062	05/16/2018 13:16	1.03	-116	6.67	0.0990	1.9352	13.98	4.7
MW-0062	05/16/2018 13:19	1.01	-117	6.68	0.0982	1.9197	13.99	4.9
MW-0062	05/16/2018 13:21	0.98	-118	6.68	0.0961	1.8812	14.04	5.5
MW-0062	05/16/2018 13:23	0.94	-119	6.69	0.0955	1.8699	14.11	7.6
MW-0062	05/16/2018 13:26	0.94	-119	6.69	0.0947	1.8540	14.07	8.1
MW-0062	05/16/2018 13:28	0.96	-119	6.7	0.0940	1.8418	14.35	5.1
MW-0062	05/16/2018 13:31	0.96	-119	6.7	0.0943	1.8464	14.58	5.6
MW-0062	05/16/2018 13:33	0.97	-120	6.7	0.0943	1.8448	14.82	4.8
MW-0062	05/16/2018 13:36	1	-120	6.7	0.0943	1.8441	15.03	4.9
MW-0062	05/17/2018 13:36	1.00	-120.00	6.70	0.09	1.836	15.21	4.88
MW-0062	05/17/2018 14:45	2.33	-124.00	6.74	0.08	1.504	14.07	17.70
MW-0062	08/31/2018 08:55	3.74	42.80	7.71	1.98	3.755	21.37	3.10
MW-0062	08/31/2018 11:00	4.15	12.10	7.58	1.27	2.460	21.86	4.90
MW-0062	08/31/2018 11:10	5.19	46.20	7.39	1.22	2.369	21.53	6.80
MW-0062	11/14/2018 09:00	0.25	-103.90	6.83	1.78	3.365	12.9	10.40
MW-0062	11/14/2018 11:00	1.36	-68.30	6.52	1.31	2.517	11.37	6.20
MW-0062	11/14/2018 11:10	1.21	-79.10	6.61	1.31	2.975	11.59	6.40
MW-0062	02/25/2019 09:40	0.4	-81.3	7.26	NM	2.127	6.04	2.8
MW-0062	02/25/2019 11:40	4.15	0.2	8.04	0.36	0.731	6.25	7.3
MW-0062	09/06/2019 10:05	6.46	-105.2	6.76	NM	1.511	20.5	4.5
MW-0062	09/06/2019 10:10	7.07	-117.4	6.72	NM	1.471	20.83	5
MW-0062	09/06/2019 10:15	5.89	-124.2	6.72	NM	1.461	20.88	5.6
MW-0062	09/06/2019 10:20	5.47	-127	6.71	NM	1.444	20.67	7.4
MW-0062	09/06/2019 10:25	7.27	-129.2	6.71	NM	1.447	20.59	7.3
MW-0062	09/06/2019 10:30	7.02	-131.4	6.72	NM	1.43	20.55	6.7
MW-0062	09/06/2019 10:35	5.91	-132.1	6.71	NM	1.432	20.43	7.3
MW-0062	09/06/2019 10:40	7.76	-132.8	6.72	NM	1.445	20.27	7.4
MW-0062	09/06/2019 10:45	5.59	-133.7	6.7	NM	1.452	20	7
MW-0062	09/06/2019 10:50	7.79	-134.3	6.7	NM	1.453	20.05	7.1
MW-0062	09/09/2019 14:25	2.03	106.7	6.95	0.85	1.693	22.74	2.9
MW-0062	09/09/2019 15:00	3.4	13.4	6.9	0.8	1.58	21.68	19.3
MW-0062	10/13/2020 09:25	4.21	43.5	6.98	0.51	1.027	16.49	7.3
MW-0062	10/13/2020 09:30	2.51	-76.4	6.93	0.5	1.008	16.05	6.2
MW-0062	10/13/2020 09:35	2.05	-110.4	6.98	0.44	0.897	15.64	6.1
MW-0062	10/13/2020 09:40	1.96	-116.9	6.98	0.43	0.869	15.6	6
MW-0062	10/13/2020 09:45	1.76	-122.8	6.98	0.42	0.845	15.6	5.7
MW-0062	10/13/2020 09:50	1.62	-128.3	6.98	0.42	0.843	15.61	5.7
MW-0062	10/13/2020 09:55	1.54	-133.1	6.97	0.42	0.856	15.65	5.8
MW-0062	10/13/2020 10:00	1.43	-141.9	6.97	0.44	0.881	15.65	5.5
MW-0062	10/13/2020 10:05	1.39	-142.5	6.97	0.43	0.875	15.56	5.5
MW-0062	10/13/2020 11:25	4.97	-105.4	7.42	0.33	0.68	16.95	13.3
MW-0062	10/13/2020 11:55	4.74	-88	7.39	0.29	0.591	16.68	15
MW-0062	02/17/2021 13:15	6.68	-223.8	9.85	0.33	0.672	6.17	26.9
MW-0062	02/17/2021 15:00	6	-145.8	9.65	0.07	0.159	4.56	8.2
MW-0062	02/17/2021 15:20	6.64	-119.7	9.69	0.05	0.102	4.98	9.1
MW-0062	05/25/2021 13:15	0.84	-220.8	7.18	1.66	3.149	15.88	28.9
MW-0062	05/25/2021 13:20	0.48	-227.2	7.16	1.68	3.195	15.34	16.1
MW-0062	05/25/2021 13:25	0.24	-262.7	7.24	0.89	1.763	14.21	5.4
MW-0062	05/25/2021 13:30	0.26	-262.9	7.25	0.79	1.582	14.36	5.4
MW-0062	05/25/2021 13:35	0.37	-268.9	7.37	0.56	1.124	14.98	10.2
MW-0062	05/25/2021 13:40	0.33	-269.2	7.37	0.55	1.095	15.05	10.6
MW-0062	05/25/2021 13:45	0.46	-269.2	7.38	0.51	1.017	15.29	11.5
MW-0062	05/25/2021 13:50	0.16	-270.8	7.36	0.48	0.967	15.56	8.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0062	05/25/2021 13:55	0.13	266.5	7.35	0.48	0.967	15.59	7.7
MW-0062	05/25/2021 14:00	0.12	-266.6	7.33	0.46	0.936	15.61	4.3
MW-0062	09/02/2021 13:55	0.31	-153.2	6.73	68	1.393	22.42	-126.6
MW-0062	09/02/2021 14:00	0.07	-165	6.49	0.98	1.937	22.34	-127.5
MW-0062	09/02/2021 14:05	0.09	-178.8	6.27	0.87	1.738	22.29	-127.3
MW-0062	09/02/2021 14:10	0.1	-209.5	6.17	0.83	1.646	22.36	-127.6
MW-0062	09/02/2021 14:15	0.12	-233.7	6.11	0.8	1.595	22.46	-127.6
MW-0062	09/02/2021 14:20	0.14	-244.6	6.04	0.78	1.541	22.44	-127.5
MW-0062	09/02/2021 14:25	0.18	-251.5	6	0.75	1.487	22.48	-127.7
MW-0062	09/02/2021 14:30	0.23	-255.1	5.96	0.72	1.445	22.48	-127.3
MW-0062	09/02/2021 14:35	0.32	-252.4	5.91	0.69	1.381	22.52	-127.1
MW-0062	09/02/2021 14:40	0.29	-251.7	5.9	0.68	1.356	22.51	-127.3
MW-0062	02/25/2022 13:15	1.37	-128.1	6.91	1.93	3.624	9.35	4.4
MW-0062	02/25/2022 13:20	1.78	-132.7	6.93	1.64	3.202	9.12	4.8
MW-0062	02/25/2022 13:25	4.23	-174	7.1	0.44	0.889	7.59	7.1
MW-0062	02/25/2022 13:30	4.14	-176.9	7.14	0.33	0.663	7.25	9.6
MW-0062	02/25/2022 13:35	3.09	-179.2	7.22	0.24	0.491	6.92	12.5
MW-0062	02/25/2022 13:40	3.52	-179.5	7.22	0.24	0.491	6.92	12.5
MW-0062	02/25/2022 13:45	3.27	-182.2	7.22	0.24	0.491	7	11.6
MW-0062	02/25/2022 13:50	2.92	-182.3	7.22	0.24	0.489	6.98	10.7
MW-0062	02/25/2022 13:55	2.77	-104.8	7.22	0.24	0.49	7.28	9.2
MW-0062	02/25/2022 14:00	2.81	-163.5	7.22	0.24	0.492	7.06	9.3
MW-0063	02/09/2018 09:55	1.39	-89.50	7.39	0.29	0.608	6.29	0.0000
MW-0063	02/09/2018 11:00	11.05	-47.10	7.50	0.32	0.648	7.52	0.0000
MW-0063	02/09/2018 11:15	4.69	-54.50	7.48	0.33	0.672	7.29	0.0000
MW-0063	05/16/2018 13:57	2.57	-103	NM	0.1217	2.3524	14.59	8.4
MW-0063	05/16/2018 13:59	1.48	-111	NM	0.1230	2.3767	14.47	7.1
MW-0063	05/16/2018 14:02	1.14	-116	NM	0.1228	2.3755	14.05	7.3
MW-0063	05/16/2018 14:04	0.97	-120	NM	0.1228	2.3753	14.04	7.5
MW-0063	05/16/2018 14:07	0.96	-123	NM	0.1229	2.3780	14.01	6.9
MW-0063	05/16/2018 14:09	0.9	-125	NM	0.1229	2.3779	13.97	7.7
MW-0063	05/17/2018 14:09	0.90	-125.00	6.98	0.12	2.367	14.15	7.68
MW-0063	08/31/2018 08:40	1.17	-98.90	6.65	2.27	4.256	21.53	3.90
MW-0063	08/31/2018 10:45	2.91	-39.70	6.78	2.30	4.309	20.07	9.70
MW-0063	08/31/2018 10:50	4.31	-122.50	6.84	2.77	4.389	20.1	24.70
MW-0063	11/15/2018 09:25	0.55	-89.90	7.89	1.49	2.846	12.13	10.70
MW-0063	11/15/2018 11:30	0.41	-90.20	7.76	1.34	2.490	11.47	12.40
MW-0063	11/15/2018 11:40	0.47	-88.60	7.69	1.34	2.586	11.39	54.90
MW-0063	02/25/2019 13:10	0.11	-27.5	7.75	NM	0.735	7.93	7.5
MW-0063	02/25/2019 14:40	2.52	56.9	8.13	0.36	0.733	7.16	3.8
MW-0063	09/05/2019 09:00	3.22	52.6	6.96	NM	2.707	21.53	4
MW-0063	09/05/2019 09:05	1.22	-25.4	6.57	NM	2.681	21.26	3.5
MW-0063	09/05/2019 09:10	0.86	-46.1	6.54	NM	2.674	21.27	3
MW-0063	09/05/2019 09:15	0.68	-55.9	6.56	NM	2.671	21.4	3
MW-0063	09/05/2019 09:20	0.63	-63	6.55	NM	2.667	21.52	2.9
MW-0063	09/05/2019 09:25	0.52	-66.2	6.56	NM	2.664	21.56	3.2
MW-0063	09/05/2019 09:30	0.48	-68.5	6.56	NM	2.665	21.6	3.4
MW-0063	09/05/2019 09:35	0.45	-72	6.57	NM	2.655	21.75	3.9
MW-0063	09/05/2019 09:40	0.41	-74.9	6.57	NM	2.654	21.76	3.7
MW-0063	09/05/2019 09:45	0.41	-77.1	6.59	NM	2.649	21.97	4
MW-0063	09/05/2019 11:10	1.1	-83.2	6.53	1.27	2.663	20.78	3.1
MW-0063	09/05/2019 11:20	1.23	-89.2	6.63	1.21	2.532	21.11	6.9
MW-0063	04/10/2020 12:45	0.18	-116.3	6.96	NM	1.987	12.35	29.2
MW-0063	04/10/2020 14:45	6.32	-78.3	7.79	1.05	2.051	10.21	7.5
MW-0063	10/06/2020 15:45	NM	NM	NM	NM	NM	NM	57.5
MW-0063	10/13/2020 13:15	3.68	-91.4	6.63	1.77	3.351	19.01	5.7
MW-0063	10/13/2020 13:20	2.12	-101.8	6.57	1.78	3.386	18.87	5.2
MW-0063	10/13/2020 13:25	1.98	-103.7	6.56	1.79	3.387	18.85	5.3
MW-0063	10/13/2020 13:30	1.91	-106.8	6.56	1.79	3.396	18.67	4.6
MW-0063	10/13/2020 13:35	1.85	-112.9	6.55	1.79	3.397	18.54	4.8
MW-0063	10/13/2020 13:40	1.82	-120.5	6.54	1.79	3.39	18.57	5.1
MW-0063	10/13/2020 13:45	1.84	-130	6.53	1.79	3.392	18.55	4.3

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0063	10/13/2020 13:50	1.9	-140.3	6.52	1.78	3.375	18.56	4
MW-0063	10/13/2020 13:55	1.92	-143.7	6.52	1.78	3.375	18.61	4.2
MW-0063	10/13/2020 14:00	1.93	-146	6.52	1.77	3.37	18.66	4.3
MW-0063	10/13/2020 15:28	3.72	-128.8	6.93	1.55	2.972	19.44	9.2
MW-0063	10/13/2020 15:45	3.29	-105.7	6.97	1.47	2.822	19.03	NM
MW-0063	02/17/2021 10:50	4.12	-90.6	7.83	0.58	1.167	7.5	2.6
MW-0063	02/17/2021 11:05	3.36	-95.6	7.71	0.59	1.19	7	3.5
MW-0063	03/01/2022 10:20	2.34	-93.7	7.52	1.58	3.017	9.25	15.4
MW-0063	03/01/2022 10:25	1.68	-129.4	6.89	1.02	1.989	8.94	13.9
MW-0063	03/01/2022 10:30	1.6	-130.6	6.89	1.02	1.992	8.94	13.3
MW-0063	03/01/2022 10:35	1.13	-137.8	6.91	1.01	1.982	8.9	12.4
MW-0063	03/01/2022 10:40	1.28	-143.6	6.91	1.01	1.979	8.86	12.3
MW-0063	03/01/2022 10:45	0.88	-143.6	6.92	1.01	1.977	8.83	11
MW-0063	03/01/2022 10:50	0.84	-147.3	6.92	1.01	1.973	8.86	10.4
MW-0063	03/01/2022 10:55	0.69	-150.1	6.93	1.01	1.976	9.12	10.4
MW-0063	03/01/2022 11:00	0.72	-150.3	6.93	1.01	1.977	9.12	10.7
MW-0063	03/01/2022 11:05	0.66	-151.4	6.94	1.01	1.981	8.95	10.7
MW-0065	03/28/2012 12:56	1.4	-82	7.34	0.07	1.39635	13.72	169.2
MW-0065	03/28/2012 12:59	0.37	-90	7.36	0.07	1.40218	12.46	123.1
MW-0065	03/28/2012 13:01	-0.17	-92	7.38	0.07	1.39259	12.51	72.5
MW-0065	03/28/2012 13:03	-0.29	-93	7.39	0.07	1.39044	12.44	90.7
MW-0065	03/28/2012 13:05	-0.35	-92	7.4	0.07	1.3847	12.43	87.7
MW-0065	03/28/2012 13:08	-0.4	-91	7.41	0.07	1.38244	12.4	168.5
MW-0065	03/28/2012 13:10	-0.43	-89	7.41	0.07	1.37902	12.31	120.7
MW-0065	03/28/2012 13:12	-0.45	-88	7.41	0.07	1.37956	12.24	211.4
MW-0065	03/28/2012 13:14	-0.48	-88	7.41	0.07	1.38179	12.19	134.4
MW-0065	03/28/2012 13:17	-0.5	-87	7.41	0.07	1.38003	12.13	215.5
MW-0065	03/28/2012 13:19	-0.5	-89	7.41	0.07	1.38431	12.09	103
MW-0065	03/28/2012 13:21	-0.52	-90	7.4	0.07	1.38566	12.03	91.6
MW-0065	03/28/2012 13:23	-0.52	-92	7.39	0.07	1.39351	12.15	381.2
MW-0065	03/28/2012 13:26	-0.54	-94	7.38	0.07	1.39618	12.08	150.8
MW-0065	03/28/2012 13:28	-0.55	-96	7.38	0.07	1.39556	12.01	70.6
MW-0065	03/28/2012 13:30	-0.53	-95	7.39	0.07	1.38803	12.13	84.5
MW-0065	03/28/2012 13:32	-0.55	-96	7.39	0.07	1.39934	12.12	77.8
MW-0065	03/28/2012 13:35	-0.54	-94	7.39	0.07	1.39002	12.21	101.8
MW-0065	03/28/2012 13:37	-0.55	-95	7.39	0.07	1.39893	12.17	82.1
MW-0065	03/28/2012 13:39	-0.55	-96	7.38	0.07	1.39906	12.2	71.2
MW-0065	03/28/2012 13:41	-0.59	-98	7.4	0.07	1.40219	12.12	53.7
MW-0065	03/28/2012 13:44	-0.59	-99	7.38	0.07	1.4031	12.04	53.9
MW-0065	03/28/2012 13:45	0.61	-100	6.95	0.07	1.342	11.72	68.60
MW-0065	03/28/2012 13:46	-0.61	-100	7.37	0.07	1.40372	11.71	68.6
MW-0065	03/28/2012 14:56	2.56	-104	7.53	0.08	1.543	12.22	41.90
MW-0065	03/29/2012 10:10	-0.17	-101	7.54	0.07	1.459	11.49	12.30
MW-0065	03/27/2013 13:18	0.68	-279	6.96	0.15	2.945	9.74	7.72
MW-0065	03/27/2013 14:02	4.38	-176	7.2	0.09	1.855	10.38	44.6
MW-0065	03/28/2013 11:17	0.42	-133	7.19	0.2	3.735	11.1	14.1
MW-0065	02/10/2014 10:27	0.42	-312	7.60	0.03	0.591	11.47	26.16
MW-0065	02/10/2014 11:34	1.25	-195	7.40	0.03	0.695	6.60	68.00
MW-0065	06/16/2016 10:30	1.52	-221	7.07	0.04	0.724	18.44	15.50
MW-0065	06/16/2016 10:45	5.28	-162	6.96	0.10	1.895	17.38	11.30
MW-0065	05/10/2017 09:01	1.94	94.00	6.89	0.03	0.688	14.89	18.30
MW-0065	05/10/2017 10:04	-0.03	-105.00	7.12	0.08	1.656	15.5	38.84
MW-0065	05/10/2017 10:52	1.80	-27.00	7.13	0.08	1.691	13.89	17.30
MW-0065	02/12/2018 10:10	1.89	-126.90	7.31	0.20	0.403	6.66	4.10
MW-0065	02/12/2018 12:00	5.23	-112.40	7.77	0.15	0.314	5.83	12.90
MW-0065	02/12/2018 12:15	4.90	-90.70	7.80	0.10	0.216	5.98	34.80
MW-0065	05/16/2018 08:44	4.51	-143	6.86	0.0297	0.6063	17.88	25.6
MW-0065	05/16/2018 08:46	1.56	-153	6.92	0.0292	0.5969	16.11	15.3
MW-0065	05/16/2018 08:48	1.25	-149	6.97	0.0289	0.5916	15.86	19.8
MW-0065	05/16/2018 08:50	1.13	-146	7.01	0.0290	0.5929	15.77	13.5
MW-0065	05/16/2018 08:52	1.04	-144	7.04	0.0289	0.5912	15.72	14.1
MW-0065	05/16/2018 08:55	1.04	-143	7.06	0.0288	0.5894	15.73	15.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0065	05/16/2018 08:57	0.99	-143	7.07	0.0289	0.5922	15.88	20.2
MW-0065	05/16/2018 08:59	1	-143	7.09	0.0289	0.5906	15.94	17.3
MW-0065	05/16/2018 09:01	0.96	-143	7.1	0.0289	0.5918	16.05	16.8
MW-0065	05/16/2018 09:03	0.93	-143	7.11	0.0289	0.5914	16.03	17.8
MW-0065	05/17/2018 09:03	0.93	-143.00	7.11	0.03	0.589	16.21	17.80
MW-0065	05/17/2018 09:51	4.92	-90.00	6.96	0.03	0.564	13.54	7.90
MW-0065	05/17/2018 10:13	0.99	-80.00	7.17	0.03	0.523	16.32	8.00
MW-0065	08/30/2018 13:10	6.65	-21.30	7.70	0.50	1.027	23.77	4.50
MW-0065	08/30/2018 14:40	5.60	-66.90	7.73	0.44	0.910	27.57	7.50
MW-0065	08/30/2018 14:50	6.71	-14.30	7.80	0.48	0.933	24.81	7.00
MW-0065	11/19/2018 09:45	0.56	-165.30	8.05	0.63	1.247	11.66	13.80
MW-0065	11/19/2018 11:45	4.08	-132.10	7.87	0.25	0.509	11.81	8.80
MW-0065	11/19/2018 11:55	5.35	-141.30	7.84	0.24	0.494	11.95	5.50
MW-0065	02/26/2019 09:05	0.48	-80.5	7.41	NM	0.378	4.86	9.4
MW-0065	02/26/2019 10:40	3.2	-44.9	8.1	0.2	0.41	7.31	5.4
MW-0065	09/03/2019 14:25	1.08	-5.8	6.88	NM	0.847	20.43	7.7
MW-0065	09/03/2019 14:30	0.5	-54.3	7.03	NM	0.801	20.1	4
MW-0065	09/03/2019 14:35	0.32	-90.7	7.12	NM	0.763	20.34	3.9
MW-0065	09/03/2019 14:40	0.24	-107.6	7.16	NM	0.747	20.92	4.2
MW-0065	09/03/2019 14:45	0.22	-115.3	7.19	NM	0.735	21.18	5.5
MW-0065	09/03/2019 14:50	0.19	-119.5	7.22	NM	0.723	21.51	8.7
MW-0065	09/03/2019 14:55	0.2	-124.5	7.23	NM	0.708	22	12.7
MW-0065	09/03/2019 15:00	0.19	-126.5	7.25	NM	0.704	21.99	15.6
MW-0065	09/03/2019 15:05	0.18	-128.4	7.25	NM	0.705	22.17	18.4
MW-0065	09/03/2019 15:10	0.18	-129.1	7.26	NM	0.707	22.22	17.6
MW-0065	09/03/2019 16:10	1.41	-55.2	7.11	0.35	0.717	24.76	14.7
MW-0065	09/03/2019 16:30	1.69	-75	7.09	0.37	0.753	22.56	10
MW-0065	04/10/2020 10:47	5.77	-61.8	7.8	0.22	0.458	10.99	3.7
MW-0065	10/02/2020 11:20	NM	NM	NM	NM	NM	NM	20
MW-0065	10/06/2020 08:50	7.58	41.6	7.88	0.22	0.464	18.55	27.6
MW-0065	10/06/2020 08:55	5.21	39.8	7.76	0.44	0.888	18.6	27.5
MW-0065	10/06/2020 09:00	9.41	28.5	7.3	0.4	0.81	18.82	26.8
MW-0065	10/06/2020 09:05	9.5	27.5	7.31	0.4	0.808	18.83	26.8
MW-0065	10/06/2020 09:10	12.21	15.6	7.29	0.39	0.8	18.95	27
MW-0065	10/06/2020 09:15	11.81	15	7.3	0.39	0.8	18.95	27
MW-0065	10/06/2020 09:20	2.29	9.7	7.3	0.39	0.788	19.03	27.4
MW-0065	10/06/2020 09:25	2.14	9.3	7.31	0.39	0.788	19.03	27.4
MW-0065	10/06/2020 09:30	0.3	1.8	7.32	0.39	0.786	19.06	27.5
MW-0065	10/06/2020 09:35	0.29	1.2	7.33	0.39	0.786	19.06	27.4
MW-0065	10/06/2020 11:10	0.6	85.4	8.3	0.43	0.88	19.89	18.7
MW-0065	10/06/2020 11:20	0.43	-47.9	8.81	0.43	0.865	19.89	NM
MW-0065	03/02/2021 12:25	7.34	-73.3	8.02	0.24	0.497	7.12	118.3
MW-0065	03/02/2021 12:30	2.19	-89.7	7.77	0.22	0.453	7.09	113.4
MW-0065	03/02/2021 12:35	1.04	-96.8	7.55	0.21	0.435	7.04	120.3
MW-0065	03/02/2021 12:40	0.88	-99.6	7.67	0.21	0.432	6.93	119
MW-0065	03/02/2021 12:45	0.48	-116	7.54	0.2	0.419	7.29	141.9
MW-0065	03/02/2021 12:50	0.5	-117.4	7.55	0.2	0.419	7.12	134.4
MW-0065	03/02/2021 12:55	0.5	-120.1	7.52	0.2	0.418	7.27	154.4
MW-0065	03/02/2021 13:00	0.54	-120.2	7.52	0.2	0.419	7.1	130.5
MW-0065	03/02/2021 13:05	0.52	-120.6	7.52	0.2	0.418	7.04	157
MW-0065	03/02/2021 13:10	0.57	-122.3	7.55	0.2	0.414	7.15	125.6
MW-0065	03/02/2021 14:17	3.29	-180.3	7.94	0.26	0.544	11.17	2.9
MW-0065	03/02/2021 14:25	4.55	-172.8	7.68	0.23	0.483	9.23	10.9
MW-0065	03/22/2022 11:45	2.11	-67	7.66	0.26	0.531	12.73	0
MW-0065	03/22/2022 11:50	0.46	-89.7	7.49	0.25	0.515	11.98	0
MW-0065	03/22/2022 11:55	0.3	-96.7	7.53	0.25	0.511	11.91	0
MW-0065	03/22/2022 12:00	0.23	-103.2	7.53	0.25	0.509	11.85	0
MW-0065	03/22/2022 12:05	0.21	-105.1	7.43	0.25	0.509	11.89	0
MW-0065	03/22/2022 12:10	0.18	-108.2	7.42	0.25	0.509	12	0
MW-0065	03/22/2022 12:15	0.19	-108.3	7.43	0.25	0.509	12	0
MW-0065	03/22/2022 12:20	0.18	-109.9	7.42	0.25	0.509	12.13	0
MW-0066	06/22/2020 12:30	0.64	-74	7.3	0.22	0.47	18.74	14.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0066	06/22/2020 12:35	0.6	-88.2	7.27	0.22	0.462	18.72	23.1
MW-0066	06/22/2020 12:40	0.63	-94.5	7.35	0.22	0.458	18.71	23.2
MW-0066	06/22/2020 12:45	0.33	-44.6	7.02	0.22	0.451	22.18	23.3
MW-0066	06/22/2020 12:50	0.39	-44.2	7.03	0.22	0.452	21.93	23.3
MW-0066	06/22/2020 12:55	0.36	-43.6	7.01	0.22	0.452	22.05	23
MW-0066	06/22/2020 13:00	0.21	-53.1	7.08	0.22	0.452	20.01	17.2
MW-0066	06/22/2020 13:05	0.21	-53.8	7.08	0.22	0.452	22.07	16.8
MW-0066	06/22/2020 13:10	0.21	-55.3	7.09	0.22	0.45	22.04	17.2
MW-0066	06/22/2020 13:15	0.22	-55.8	NM	0.22	0.452	NM	NM
MW-0066	06/22/2020 13:16	NM	NM	7.1	NM	NM	21.99	16.5
MW-0066	06/22/2020 14:15	0.18	-68.9	7.06	0.23	0.443	20.18	-19.3
MW-0066	06/22/2020 14:25	2.11	-55.9	7.03	0.23	0.548	21.03	17.4
MW-0066	03/04/2021 09:35	5.39	-47	6.43	0.14	0.307	9.6	26.5
MW-0066	03/04/2021 09:40	2.44	-54.8	6.21	0.14	0.285	9.48	27.2
MW-0066	03/04/2021 09:45	1.12	-64.6	6.2	0.13	0.28	9.4	25.2
MW-0066	03/04/2021 09:50	0.89	-68.9	6.23	0.13	0.282	9.28	23.9
MW-0066	03/04/2021 09:55	0.36	-92.2	6.41	0.14	0.286	10.01	406.4
MW-0066	03/04/2021 10:00	0.31	-100.5	6.74	0.14	0.294	9.59	9.1
MW-0066	03/04/2021 10:05	0.41	-106.5	6.4	0.14	0.282	9.36	37.4
MW-0066	03/04/2021 10:10	0.43	-109.3	6.45	0.14	0.284	9.46	26.3
MW-0066	03/04/2021 10:15	0.5	-113.4	6.47	0.14	0.294	9.07	28.4
MW-0066	03/04/2021 10:20	0.52	-113.5	6.44	0.14	0.295	8.87	30.2
MW-0066	03/04/2021 11:00	5.64	-74.1	6.78	0.18	0.381	10.12	10.8
MW-0066	03/04/2021 11:11	4.38	-82.6	6.8	0.18	0.364	9.95	13
MW-0066	03/17/2022 11:25	2.22	-96.2	7.28	0.27	0.554	10.66	21.9
MW-0066	03/17/2022 11:30	0.73	-77.7	6.79	0.24	0.495	10.48	20
MW-0066	03/17/2022 11:35	0.56	-68.7	6.6	0.22	0.454	10.81	19.2
MW-0066	03/17/2022 11:40	0.53	-69.6	6.57	0.22	0.452	10.84	17.7
MW-0066	03/17/2022 11:45	0.46	-68	6.55	0.21	0.439	10.49	18.9
MW-0066	03/17/2022 11:50	0.45	-67.3	6.53	0.21	0.437	10.53	18.5
MW-0066	03/17/2022 11:55	0.44	-68.8	6.53	0.21	0.436	10.53	18.1
MW-0067	04/23/2020 09:30	1.05	-140.4	7.47	NM	0.398	10.14	28.2
MW-0067	04/23/2020 10:15	4.62	-81.4	7.63	0.26	0.535	11.21	22.7
MW-0067	03/04/2021 12:15	6.83	-26.6	7.43	0.14	0.287	9.8	7.6
MW-0067	03/04/2021 12:20	3.71	-45.9	7.23	0.14	0.287	9.63	7.3
MW-0067	03/04/2021 12:25	1.09	-49.8	6.88	0.14	0.285	9.36	6.8
MW-0067	03/04/2021 12:30	0.88	-54.4	6.87	0.14	0.285	9.25	7.6
MW-0067	03/04/2021 12:35	0.59	-78.7	6.94	0.13	0.277	9.02	7.4
MW-0067	03/04/2021 12:40	0.66	-82.9	6.95	0.13	0.271	8.78	7.8
MW-0067	03/04/2021 12:45	0.79	-87.8	6.99	0.12	0.259	8.5	7.2
MW-0067	03/04/2021 12:50	0.68	-95.2	7.08	0.12	0.251	8.36	6.9
MW-0067	03/04/2021 12:55	0.82	-97	7.06	0.12	0.245	8.6	6.6
MW-0067	03/04/2021 13:00	0.86	-101	7.1	0.11	0.24	8.89	6.6
MW-0067	03/04/2021 13:45	8.45	-4.2	7.74	0.04	0.078	7.59	6.2
MW-0067	03/04/2021 13:56	7.32	-32.9	7.66	0.06	0.136	7.6	4.3
MW-0067	03/17/2022 12:45	4.74	-5	5.65	0.11	0.225	9.95	4.6
MW-0067	03/17/2022 12:50	0.54	-48.9	6.81	0.1	0.213	9.33	1.5
MW-0067	03/17/2022 12:55	0.5	-46.5	6.8	0.1	0.211	9.35	1.1
MW-0067	03/17/2022 13:00	0.37	-58.7	6.95	0.1	0.205	9.11	1.2
MW-0067	03/17/2022 13:05	0.36	-61.2	6.96	0.1	0.204	9.13	0.8
MW-0067	03/17/2022 13:10	0.32	-61.6	7	0.1	0.203	9.18	0.9
MW-0067	03/17/2022 13:15	0.31	-62	6.99	0.1	0.202	9.21	0.9
MW-0067	03/17/2022 13:20	0.32	-62.8	7	0.1	0.202	9.25	0.9
MW-0070	04/15/2015 14:58	4.85	-136	6.83	NM	0.909	11.00	508.80
MW-0070	05/10/2017 13:00	0.28	-22.00	6.76	0.13	2.522	14.68	160.80
MW-0071	04/23/2012 13:24	1.59	-185	6.71	0.59	10.44828	11.78	4.9
MW-0071	04/23/2012 13:27	1.01	-216	6.72	0.58	10.26898	11.66	5.7
MW-0071	04/23/2012 13:29	0.49	-232	6.71	0.57	10.03902	11.85	6.8
MW-0071	04/23/2012 13:32	0.32	-239	6.71	0.55	9.79163	12.06	8.4
MW-0071	04/23/2012 13:34	0.22	-245	6.72	0.54	9.63632	12.3	9.8
MW-0071	04/23/2012 13:36	0.16	-248	6.7	0.52	9.29162	12.31	11.6
MW-0071	04/23/2012 13:39	0.12	-251	6.77	0.51	9.15545	12.16	13.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0071	04/23/2012 13:41	0.12	-253	6.76	0.49	8.7824	12.27	13.8
MW-0071	04/23/2012 13:43	0.1	-255	6.74	0.48	8.66872	12.35	16.2
MW-0071	04/23/2012 13:46	0.1	-257	6.72	0.47	8.37601	12.34	17.8
MW-0071	04/23/2012 13:48	0.07	-258	6.71	0.45	8.11004	12.24	20.4
MW-0071	04/23/2012 13:50	0.07	-260	6.73	0.4	7.31356	12.43	24.6
MW-0071	04/23/2012 13:53	0.07	-261	6.75	0.37	6.75028	12.44	28.1
MW-0071	04/23/2012 13:55	0.06	-261	6.74	0.36	6.64048	12.46	28.8
MW-0071	04/23/2012 13:57	0.06	-262	6.74	0.33	6.07646	12.55	43.4
MW-0071	04/23/2012 14:00	0.06	-261	6.76	0.31	5.69106	12.45	42.6
MW-0071	04/23/2012 14:02	0.06	-261	6.77	0.29	5.40455	12.41	46
MW-0071	04/23/2012 14:04	0.06	-261	6.76	0.28	5.26808	12.32	46.2
MW-0071	04/23/2012 14:05	0.06	-261	6.76	0.28	5.268	12.32	46.15
MW-0071R	09/02/2014 09:29	0.30	69	6.02	0.11	2.050	25.56	11.13
MW-0071R	02/23/2016 14:39	1.18	-201	6.58	0.06	1.430	6.98	577.10
MW-0071R	11/23/2020 11:08	3.08	-69	7.51	6.41	11.22	13.19	14.6
MW-0071R	11/23/2020 11:25	2.34	-64.1	7.03	4.68	8.358	14.11	36
MW-0071RR	02/22/2021 12:30	0.61	-53.5	7.18	3.7	6.8	6.15	126.1
MW-0071RR	02/22/2021 12:35	0.29	-59.1	7.16	3.69	6.757	5.33	112.1
MW-0071RR	02/22/2021 12:40	0.13	-65.8	7.15	3.77	6.901	5.36	74.6
MW-0071RR	02/22/2021 12:45	0.09	-73.7	7.16	3.08	7.106	5.33	57.3
MW-0071RR	02/22/2021 12:50	0.09	-80.9	7.15	4	7.299	5.33	49.9
MW-0071RR	02/22/2021 12:55	0.09	-86.1	7.15	4.07	7.416	5.51	45
MW-0071RR	02/22/2021 13:00	0.09	-93.5	7.15	4.15	7.564	5.62	35.3
MW-0071RR	02/22/2021 13:05	0.08	-99.6	7.15	4.19	7.651	5.62	31.4
MW-0071RR	02/22/2021 13:10	0.09	-102.5	7.15	4.21	7.664	5.54	29.3
MW-0071RR	02/22/2021 13:15	0.09	-107	7.16	4.24	7.783	5.43	27.5
MW-0071RR	02/22/2021 14:15	0.24	-239.2	7.51	5.31	9.454	6.35	22.6
MW-0071RR	02/22/2021 14:25	0.2	-253.6	7.52	5.34	9.538	6.67	24.9
MW-0071RR	05/06/2021 09:25	5.57	-0.9	6.73	2.22	4.15	14.14	2.5
MW-0071RR	05/06/2021 09:30	3.02	-11.7	6.51	2.24	4.186	13.96	3.3
MW-0071RR	05/06/2021 09:35	1.81	-21.8	6.46	2.26	4.227	13.69	3.6
MW-0071RR	05/06/2021 09:40	0.7	-41.9	6.45	2.31	4.298	13.11	1.8
MW-0071RR	05/06/2021 09:45	0.66	-44.3	6.44	2.32	4.326	12.93	1.5
MW-0071RR	05/06/2021 09:50	0.51	-53.7	6.45	2.55	4.726	12.68	0.7
MW-0071RR	05/06/2021 09:55	0.49	-54.4	6.45	2.56	4.756	12.67	0.7
MW-0071RR	05/06/2021 10:00	0.49	-60.3	6.45	2.73	5.046	12.84	0.1
MW-0071RR	05/06/2021 10:05	0.42	-69.4	6.46	2.94	5.41	12.81	0.6
MW-0071RR	05/06/2021 10:10	0.3	-76.1	6.46	3.02	5.55	13	1.1
MW-0071RR	02/10/2022 12:30	6.53	-140.3	6.81	10.19	17.37	7.8	11.6
MW-0071RR	02/10/2022 12:35	5.2	-156.4	6.77	6.73	11.77	7.55	10.8
MW-0071RR	02/10/2022 12:40	4.88	-156.1	6.76	4.93	8.882	7.05	9.2
MW-0071RR	02/10/2022 12:45	4.23	-156	6.75	3.85	6.986	6.63	6.4
MW-0071RR	02/10/2022 12:50	3.73	-155.6	6.74	3.19	5.87	6.19	2.6
MW-0071RR	02/10/2022 12:55	3.37	-155.3	6.74	2.9	5.383	5.96	2.5
MW-0071RR	02/10/2022 13:00	3.23	-156.1	6.74	2.78	5.178	5.94	0.9
MW-0071RR	02/10/2022 13:05	2.82	-156.7	6.75	2.7	5.033	5.91	0.3
MW-0071RR	02/10/2022 13:10	2.9	-157.5	6.75	2.66	4.961	5.75	0.3
MW-0071RR	02/10/2022 13:15	2.59	-157.7	6.74	2.6	4.865	5.65	0.5
MW-0072	03/27/2012 14:24	2.92	-61	6.94	0.03	0.65011	13.1	13
MW-0072	03/27/2012 14:26	0.67	-59	6.78	0.03	0.63204	11.62	9.2
MW-0072	03/27/2012 14:29	0.27	-58	6.74	0.03	0.62743	11.64	10.7
MW-0072	03/27/2012 14:31	0.1	-58	6.73	0.03	0.62859	11.54	10.3
MW-0072	03/27/2012 14:33	-0.02	-56	6.71	0.03	0.6287	11.11	10.1
MW-0072	03/27/2012 14:36	-0.02	-57	6.71	0.03	0.62725	11.12	10.8
MW-0072	03/27/2012 14:38	-0.13	-57	6.73	0.03	0.62627	10.98	14.6
MW-0072	03/27/2012 14:41	-0.13	-56	6.72	0.03	0.62599	10.99	23.7
MW-0072	03/27/2012 14:43	-0.19	-57	6.72	0.03	0.6278	11.14	11.5
MW-0072	03/27/2012 14:45	-0.21	-57	6.72	0.03	0.6258	11.08	13.3
MW-0072	03/27/2012 14:48	-0.08	-58	6.73	0.03	0.62688	10.89	11.8
MW-0072	03/27/2012 14:50	-0.18	-58	6.73	0.03	0.62663	10.83	14.1
MW-0072	03/27/2012 14:52	-0.24	-57	6.72	0.03	0.62441	10.99	13.7
MW-0072	03/27/2012 14:55	-0.27	-58	6.73	0.03	0.62573	11.03	12.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-0072	03/27/2012 14:57	-0.12	-59	6.74	0.03	0.62664	11.01	13.8
MW-0072	03/27/2012 14:59	-0.27	-59	6.73	0.03	0.6271	11.04	12.9
MW-0072	03/27/2012 15:02	-0.31	-59	6.73	0.03	0.62698	10.75	13.3
MW-0072	03/27/2012 15:04	-0.28	-59	6.72	0.03	0.62624	10.71	14.1
MW-0072	03/27/2012 15:06	-0.32	-59	6.72	0.03	0.62512	11.04	14.8
MW-0072	03/27/2012 15:09	-0.28	-61	6.74	0.03	0.62681	10.97	15.7
MW-0072	03/27/2012 15:11	-0.32	-60	6.72	0.03	0.62565	10.81	14.5
MW-0072	03/27/2012 15:13	-0.33	-60	6.73	0.03	0.62596	10.83	16.3
MW-0072	03/27/2012 15:14	-0.33	-60	6.73	0.03	0.626	10.83	16.25
MW-0072	04/19/2013 09:25	1.47	-252	6.48	0.32	5.89	13.85	2.2
MW-0072	08/28/2014 13:36	0.33	57	6.18	0.09	1.726	24.89	10.29
MW-0072	04/17/2015 14:32	7.89	-82	6.59	NM	1.029	10.93	386.00
MW-0072	05/16/2017 11:01	0.0000	-48.00	6.62	0.07	1.465	15.66	7.59
MW-0072	05/16/2017 11:38	3.40	-58.00	7.22	0.07	1.432	14.52	40.20
MW-0072	04/23/2021 09:15	3.62	-106.3	6.49	0.21	0.414	11.51	14.3
MW-0072	04/23/2021 09:20	1.18	-127.4	6.52	0.17	0.352	11.21	11.8
MW-0072	04/23/2021 09:25	1.18	-133.2	6.59	0.17	0.346	11.05	13.1
MW-0072	04/23/2021 09:30	0.94	-139.3	6.64	0.17	0.344	11.05	10
MW-0072	04/23/2021 09:35	1.16	-140.2	6.64	0.16	0.343	11.02	11.7
MW-0072	04/23/2021 09:40	1.21	-142.2	6.66	0.16	0.342	11.12	9.7
MW-0072	04/23/2021 09:45	1.17	-144	6.68	0.16	0.342	11.16	10
MW-0072	04/23/2021 09:50	1.12	-142.2	6.66	0.16	0.342	11.14	10.3
MW-112	03/21/2012 14:34	9.14	-54	7.49	0.04	0.724	11.28	61.60
MW-112	03/22/2012 10:05	3.88	85	7.10	0.0000	0.623	11.60	24.60
MW-112	02/27/2013 15:40	3.16	-177	7.28	0.15	2.005	8.31	26.00
MW-112	09/03/2014 12:18	0.24	198	7.10	0.03	0.575	19.10	278.90
MW-112	09/04/2014 11:19	1.30	-343	7.20	0.03	0.594	24.02	5.40
MW-112	09/03/2015 11:35	4.43	1343	7.62	0.01	0.295	25.34	5.6
MW-112	09/03/2015 13:39	4.04	1084	7.89	0.01	0.281	22.8	791
MW-112	02/23/2016 09:56	6.07	36	6.81	0.02	0.344	11.34	44.80
MW-112	02/23/2016 11:20	9.43	-13	7.49	0.02	0.375	9.44	13.00
MW-112	01/16/2017 11:42	7.09	12	7.47	0.01	0.251	11.20	24.50
MW-112	01/16/2017 11:48	4.79	-89	7.43	0.01	0.269	9.56	13.40
MW-112	04/25/2017 10:47	0.35	-83.00	7.32	0.08	1.522	12.41	7.08
MW-112	01/30/2018 10:47	3.04	-3.00	8.04	0.06	1.284	8.57	47.10
MW-112	01/30/2018 12:44	6.68	95.00	7.90	0.11	2.148	8.33	7.44
MW-112	01/30/2018 13:20	3.60	146.00	8.06	0.08	1.558	11.26	140.60
MW-112	05/08/2018 12:28	6.5	6	7.03	0.0206	0.4242	20.9	19.4
MW-112	05/08/2018 12:30	4.31	-65	7.03	0.0200	0.4142	16.69	3.9
MW-112	05/08/2018 12:32	3.95	-89	7.02	0.0200	0.4141	16.81	4.1
MW-112	05/08/2018 12:35	3.88	-104	7.03	0.0200	0.4126	16.78	3.6
MW-112	05/08/2018 12:37	3.79	-114	7.04	0.0200	0.4129	16.46	4
MW-112	05/08/2018 12:39	3.74	-121	7.05	0.0199	0.4112	16.61	4.1
MW-112	05/08/2018 12:42	3.69	-128	7.06	0.0199	0.4111	16.92	7.2
MW-112	05/08/2018 12:44	3.66	-133	7.07	0.0198	0.4100	16.79	5
MW-112	05/08/2018 12:46	3.65	-138	7.08	0.0199	0.4119	16.3	4.1
MW-112	05/08/2018 12:49	3.59	-140	7.09	0.0198	0.4089	16.48	4.5
MW-112	05/08/2018 12:51	3.55	-142	7.1	0.0198	0.4100	16.55	5.3
MW-112	05/08/2018 12:54	3.5	-143	7.1	0.0196	0.4055	16.79	4
MW-112	05/08/2018 12:56	3.45	-144	7.11	0.0197	0.4073	16.74	4
MW-112	05/08/2018 12:58	3.48	-144.00	7.11	0.02	0.406	16.85	3.77
MW-112	07/11/2018 11:01	1.97	-56	7.69	0.0184	0.3799	25.84	14.6
MW-112	07/11/2018 11:04	1.13	-105	7.48	0.0196	0.4057	24.16	7.8
MW-112	07/11/2018 11:06	0.96	-114	7.37	0.0196	0.4057	24.57	6.8
MW-112	07/11/2018 11:08	0.89	-119	7.29	0.0197	0.4062	24.55	6.6
MW-112	07/11/2018 11:10	0.85	-123	7.23	0.0195	0.4020	24.11	6.6
MW-112	07/11/2018 11:12	0.83	-125	7.18	0.0195	0.4031	24.19	6.4
MW-112	07/11/2018 11:14	0.80	-127.00	7.14	0.02	0.404	24.59	6.43
MW-112	10/08/2018 13:55	7	7	NM	NM	7	67	NM
MW-112	11/05/2018 11:55	0.46	1.70	7.35	0.18	0.372	16.29	4.80
MW-112	11/05/2018 12:45	0.44	21.60	7.37	0.18	0.369	16.32	4.10
MW-112	11/05/2018 12:55	0.28	48.80	7.41	0.16	0.339	16.29	1.40

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-112	01/28/2019 13:20	9.78	76.80	8.15	0.09	0.197	8.44	5.80
MW-112	01/28/2019 15:00	0.70	75.60	7.85	0.09	0.199	8.2	18.40
MW-112	01/28/2019 15:10	0.70	76.30	7.81	0.10	0.200	8.19	1.20
MW-112	01/28/2020 12:45	2.04	-11.2	7.37	NM	0.192	10.04	4.3
MW-112	01/28/2020 14:10	1.74	-24.7	7.41	0.09	0.194	11.9	5
MW-112	01/29/2021 09:40	4.27	-6.5	7.21	0.11	0.223	6.82	14.4
MW-112	01/29/2021 09:45	4.03	-6.3	7.27	0.11	0.223	6.56	9.6
MW-112	01/29/2021 09:50	2.71	-4.5	7.29	0.11	0.221	6.28	12.7
MW-112	01/29/2021 09:55	2.39	-1	7.29	0.1	0.216	6.38	9.8
MW-112	01/29/2021 10:00	2.2	0.6	7.3	0.1	0.21	6.8	9.8
MW-112	01/29/2021 10:05	2.11	3.7	7.3	0.1	0.208	6.6	8.4
MW-112	01/29/2021 10:10	2.1	6.3	7.3	0.1	0.21	6.62	7.6
MW-112	01/29/2021 10:15	2.07	8.7	7.31	0.1	0.21	6.56	7.3
MW-112	01/29/2021 10:20	2.05	11.3	7.31	0.1	0.21	6.53	6.9
MW-112	01/29/2021 11:45	1.58	-26.2	7.35	0.13	0.268	10.22	0.8
MW-112	01/29/2021 11:55	1.84	-13.3	7.31	0.13	0.268	10.17	4.8
MW-114	03/15/2012 09:20	8.41	159	6.95	0.04	0.83068	10.42	4
MW-114	03/15/2012 09:22	4.97	159	6.94	0.04	0.84142	10.44	3.4
MW-114	03/15/2012 09:24	3.94	158	6.93	0.04	0.84034	10.82	2.3
MW-114	03/15/2012 09:26	3.51	157	6.92	0.04	0.84268	10.77	2.8
MW-114	03/15/2012 09:27	3.25	156	6.92	0.04	0.84204	10.79	2.2
MW-114	03/15/2012 09:29	3.48	155	6.92	0.04	0.8419	10.83	1.9
MW-114	03/15/2012 09:31	3.07	154	6.92	0.04	0.84229	10.74	3
MW-114	03/15/2012 09:33	3.02	153	6.92	0.04	0.84188	10.78	3.4
MW-114	03/15/2012 09:35	2.91	153	6.91	0.04	0.84175	10.8	2.8
MW-114	03/15/2012 09:37	3	152	6.91	0.04	0.84216	10.74	2.8
MW-114	03/15/2012 09:39	2.8	151	6.91	0.04	0.84164	10.76	2.8
MW-114	03/15/2012 10:19	4.00	94	6.40	0.04	0.838	11.95	1442.00
MW-114	03/16/2012 09:25	0.39	162	6.90	0.04	0.868	11.80	95.70
MW-114	05/14/2012 08:58	4.44	145	6.74	0.04	0.88327	20.95	12.5
MW-114	05/14/2012 08:59	4.43	139	6.74	0.04	0.88295	19.32	15.1
MW-114	05/14/2012 09:00	3.97	133	6.75	0.04	0.88417	18.4	16
MW-114	05/14/2012 09:02	3.56	128	6.75	0.04	0.88091	17.85	17
MW-114	05/14/2012 09:03	3.45	123	6.76	0.04	0.88155	17.69	14.5
MW-114	05/14/2012 09:04	3.3	119	6.75	0.04	0.87899	18	13.7
MW-114	05/14/2012 09:05	3.27	115	6.75	0.04	0.88041	18.22	13.6
MW-114	05/14/2012 09:07	3.33	113	6.76	0.04	0.88233	18.43	14.6
MW-114	05/14/2012 09:08	3.36	111	6.76	0.04	0.8832	18.31	14.8
MW-114	05/14/2012 09:09	3.62	110	6.77	0.04	0.88383	17.61	13.4
MW-114	05/14/2012 09:11	3.68	109	6.77	0.04	0.88273	17.36	15.6
MW-114	05/14/2012 09:12	3.65	107	6.77	0.04	0.88071	17.44	12.7
MW-114	05/14/2012 09:13	4.07	107	6.78	0.04	0.88197	16.8	17.7
MW-114	05/14/2012 09:14	4.25	106	6.79	0.04	0.88027	16.63	14.2
MW-114	05/14/2012 09:16	4.35	106	6.79	0.04	0.88024	16.46	12.7
MW-114	05/14/2012 09:17	4.41	105	6.79	0.04	0.87977	16.51	13.7
MW-114	05/14/2012 09:18	4.41	105	6.79	0.04	0.88	16.51	13.7
MW-114	05/14/2012 10:51	5.02	84	6.84	0.04	0.882	16.38	864.1
MW-114	05/15/2012 08:32	1.76	190	6.77	0.05	0.9273	15.1	28.8
MW-114	07/24/2012 09:02	1.48	87	6.64	0.05	0.91296	31.05	4.4
MW-114	07/24/2012 09:03	2.01	92	6.64	0.05	0.90602	24.24	8.7
MW-114	07/24/2012 09:04	1.48	92	6.64	0.04	0.89817	22.43	6.5
MW-114	07/24/2012 09:06	1.09	91	6.64	0.04	0.89824	22.23	6.4
MW-114	07/24/2012 09:07	0.94	91	6.64	0.04	0.89872	22.11	6.2
MW-114	07/24/2012 09:08	0.84	90	6.64	0.04	0.8984	22.15	6.8
MW-114	07/24/2012 09:10	0.79	91	6.64	0.04	0.89828	22.15	6.1
MW-114	07/24/2012 09:11	0.75	91	6.64	0.04	0.89818	22.17	6.4
MW-114	07/24/2012 09:12	0.71	91	6.64	0.04	0.89751	22.26	6.1
MW-114	07/24/2012 09:14	0.68	92	6.64	0.04	0.898	22.23	5.88
MW-114	07/24/2012 09:15	0.66	92	6.64	0.04	0.89801	22.29	6.8
MW-114	07/24/2012 11:05	4.17	119	6.74	0.05	0.930	19.99	2584.00
MW-114	07/25/2012 09:25	4.39	139	6.60	0.0000	0.980	20.88	23.90
MW-114	11/19/2012 09:14	5.89	176	6.69	0.00	0.92	16.5	3.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-114	11/19/2012 09:16	5.75	170	6.66	0.00	0.92	16.6	3.2
MW-114	11/19/2012 09:18	5.74	167	6.67	0.00	0.93	16.6	2.8
MW-114	11/19/2012 09:20	5.71	164	6.67	0.00	0.93	16.4	2.2
MW-114	11/19/2012 09:22	5.64	161	6.68	0.00	0.93	16.6	2.7
MW-114	11/19/2012 09:24	5.63	158	6.70	0.00	0.93	16.6	2.3
MW-114	11/19/2012 09:26	5.60	155	6.68	0.00	0.93	16.8	2.2
MW-114	11/19/2012 09:28	5.59	153	6.68	0.0000	0.928	16.72	2.20
MW-114	02/19/2013 08:58	4.28	-83	6.61	0.07	1.3673	10.34	2.3
MW-114	02/19/2013 08:59	4.66	-88	6.63	0.07	1.40034	9.26	2.3
MW-114	02/19/2013 09:01	4.46	-88	6.65	0.07	1.34393	10.06	2.4
MW-114	02/19/2013 09:02	4.4	-89	6.66	0.07	1.34208	10.22	2.1
MW-114	02/19/2013 09:03	4.4	-91	6.67	0.07	1.34244	10.11	2.4
MW-114	02/19/2013 09:05	4.38	-90	6.68	0.07	1.33912	10.15	2.3
MW-114	02/19/2013 09:06	4.36	-91	6.69	0.07	1.3376	10.2	2.5
MW-114	02/19/2013 09:08	4.37	-92	6.69	0.07	1.33886	10.17	2.2
MW-114	02/19/2013 09:09	4.39	-93	6.7	0.07	1.3368	10.15	2.1
MW-114	02/19/2013 09:11	4.46	-92	6.71	0.07	1.35056	10.14	2.6
MW-114	02/19/2013 09:12	4.48	-93	6.71	0.07	1.35499	10.16	2.4
MW-114	02/19/2013 09:13	4.56	-93	6.72	0.07	1.36049	10.14	2.5
MW-114	02/19/2013 09:14	4.56	-93	6.72	0.70	1.360	10.25	2.47
MW-114	06/10/2013 10:16	0.35	-106	6.55	0.13	1.058	17.14	6.42
MW-114	09/03/2013 10:31	0.76	-202	6.33	0.08	1.655	24.01	1.04
MW-114	09/03/2013 11:07	0.86	-148	5.83	0.11	2.114	21.73	2.00
MW-114	11/04/2013 10:32	5.65	-115	6.43	0.10	1.938	19.04	1.77
MW-114	03/05/2014 09:19	3.83	-18	6.47	0.04	0.837	9.66	4.86
MW-114	03/05/2014 10:31	7.22	-43	6.96	0.04	0.742	9.81	5.50
MW-114	05/19/2014 09:17	1.50	-501	6.46	0.08	1.620	14.34	5.83
MW-114	05/19/2014 09:58	1.43	-152	6.65	0.07	1.390	13.61	6.30
MW-114	08/04/2014 09:39	1.84	-329	6.55	0.05	0.990	23.38	34.51
MW-114	08/04/2014 10:18	2.01	-459	6.83	0.05	0.955	19.38	6.90
MW-114	10/22/2014 09:58	0.42	123	6.43	0.04	0.892	19.60	15.55
MW-114	10/22/2014 10:27	1.05	134	6.39	0.04	0.900	19.69	10.30
MW-114	03/24/2015 09:27	2.46	151	6.47	0.05	938.300	8.79	10.09
MW-114	03/24/2015 10:44	3.03	99	6.57	NM	927.800	9.60	8.80
MW-114	09/14/2015 11:44	2.13	267	6.37	0.12	2.282	20	79
MW-114	11/13/2015 09:57	4.1	45	6.76	0.0551	1101.1275	17.47	3
MW-114	11/13/2015 09:59	2.62	40	6.63	0.0541	1080.7622	17.9	2.5
MW-114	11/13/2015 10:01	2.32	39	6.57	0.0521	1043.7459	18.11	3
MW-114	11/13/2015 10:03	2.26	38	6.54	0.0483	970.4139	18.3	2.6
MW-114	11/13/2015 10:06	2.23	37	6.53	0.0501	1005.0439	18.41	2.7
MW-114	11/13/2015 10:08	2.23	36	6.52	0.0508	1017.2829	18.46	3.1
MW-114	11/13/2015 10:10	2.27	34	6.52	0.0510	1020.4994	18.43	3.5
MW-114	11/13/2015 10:12	2.3	35	6.51	0.0483	970.2411	18.32	4.1
MW-114	11/13/2015 10:14	2.3	34	6.52	0.0500	1002.1560	18.37	4
MW-114	11/13/2015 10:16	2.28	33	6.52	0.0521	1042.3422	18.34	3.8
MW-114	11/13/2015 10:19	2.28	32	6.52	0.0522	1045.2911	18.45	3.4
MW-114	11/13/2015 10:21	2.29	32	6.52	0.0483	970.0237	18.49	4.2
MW-114	11/13/2015 10:23	2.3	32	6.52	0.0491	984.2186	18.39	3.6
MW-114	11/13/2015 10:25	2.32	32	6.53	0.0510	1020.8193	18.31	3.9
MW-114	11/13/2015 10:27	2.3	30	6.53	0.0535	1070.1288	18.29	3.4
MW-114	11/13/2015 10:29	2.3	31	6.53	0.0492	986.1301	18.27	3.6
MW-114	11/13/2015 10:32	2.27	31	6.53	0.0497	995.9496	18.39	3.6
MW-114	11/13/2015 10:34	2.24	30	6.53	0.0530	1059.1405	18.29	2.9
MW-114	11/13/2015 10:36	2.24	30	6.53	0.0549	1096.1054	18.25	3.7
MW-114	11/13/2015 10:38	2.25	30	6.53	0.0501	1004.4979	18.18	4.2
MW-114	11/13/2015 10:40	2.23	29	6.53	0.0506	1014.8777	18.16	3.5
MW-114	11/13/2015 10:42	2.21	28	6.54	0.0544	1087.1266	18.16	3.2
MW-114	11/13/2015 10:45	2.2	28	6.54	0.0526	1052.8020	18.07	3.3
MW-114	11/13/2015 10:47	2.2	29	6.54	0.0529	1057.9944	18.19	3.4
MW-114	11/13/2015 11:13	2.42	33	6.56	0.06	1.175	18.87	9.90
MW-114	01/05/2016 10:12	5.45	96	7.24	0.0321	658.3064	12.49	6.4
MW-114	01/05/2016 10:14	4.9	80	7.17	0.0323	661.8598	13.06	5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-114	01/05/2016 10:17	4.73	66	7.08	0.0320	654.7773	13.43	5.4
MW-114	01/05/2016 10:19	4.7	47	7.04	0.0318	651.3457	13.46	6.2
MW-114	01/05/2016 10:21	4.66	30	7.01	0.0316	646.0215	13.58	1485.3
MW-114	01/05/2016 10:23	4.69	17	6.96	0.0313	640.0346	13.54	7.2
MW-114	01/05/2016 10:25	4.69	6	6.94	0.0305	624.3311	13.59	6.9
MW-114	01/05/2016 10:27	4.71	0	6.9	0.0312	639.2510	13.55	9.8
MW-114	01/05/2016 10:29	4.74	-4	6.89	0.0308	630.1559	13.44	5.8
MW-114	01/05/2016 10:32	4.81	-8	6.85	0.0302	619.8182	13.47	8
MW-114	01/05/2016 10:34	5.06	-15	6.86	0.0299	612.9067	13.54	6.1
MW-114	01/05/2016 10:36	4.86	-21	6.85	0.0306	627.2850	13.6	7.1
MW-114	01/05/2016 10:38	4.73	-23	6.83	0.0296	606.2872	13.61	7.1
MW-114	01/05/2016 10:40	4.65	-25	6.83	0.0294	602.3887	13.67	8.4
MW-114	01/05/2016 10:42	4.64	-28	6.8	0.0299	612.5854	13.47	5.4
MW-114	01/05/2016 10:45	4.68	-31	6.81	0.0299	612.3495	13.49	6.3
MW-114	01/05/2016 10:47	4.65	-34	6.81	0.0298	611.5886	13.51	1259.3
MW-114	01/05/2016 10:49	4.66	-35	6.8	0.0297	609.9078	13.59	6.3
MW-114	01/05/2016 10:51	4.63	-37	6.8	0.0291	596.2126	13.54	6.2
MW-114	01/05/2016 10:53	4.63	-38	6.79	0.0290	594.9975	13.62	6.3
MW-114	01/05/2016 11:20	3.75	-55	6.99	0.03	0.69	14.29	11.7
MW-114	04/06/2016 10:17	3.83	-5	7.04	0.0693	1382.0922	11.35	63.6
MW-114	04/06/2016 10:18	3.65	-5	7.02	NM	1382.8679	11.39	5.4
MW-114	04/06/2016 10:20	0.99	-16	6.75	0.0686	1367.9564	11.9	3.8
MW-114	04/06/2016 10:22	0.63	-18	6.66	0.0690	1376.0880	11.84	2.8
MW-114	04/06/2016 10:24	0.55	-20	6.61	0.0691	1377.7386	11.79	3.2
MW-114	04/06/2016 10:26	0.56	-20	6.58	0.0689	1373.5909	11.88	2.9
MW-114	04/06/2016 10:29	0.62	-20	6.56	0.0689	1372.9252	11.83	3
MW-114	04/06/2016 10:31	0.72	-22	6.56	0.0686	1367.8882	11.83	2.7
MW-114	04/06/2016 10:33	0.73	-22	6.55	0.0683	1361.2745	11.88	2.3
MW-114	04/06/2016 10:35	0.7	-23	6.54	0.0683	1361.0077	11.9	2.4
MW-114	04/06/2016 10:38	0.68	-24	6.54	0.0684	1362.9183	11.82	2.2
MW-114	04/06/2016 11:01	2.49	6	6.61	0.07	1.299	12.29	8.30
MW-114	07/18/2016 10:44	2.43	-67	6.65	NM	944.94	27.54	17.7
MW-114	07/18/2016 10:45	1.72	-71	6.6	NM	994.63	25.79	11.8
MW-114	07/18/2016 10:46	1.6	-73	6.57	NM	1028.86	24.4	8
MW-114	07/18/2016 10:48	1.79	-74	6.56	NM	1064.93	24.18	8.2
MW-114	07/18/2016 10:49	2.17	-75	6.57	NM	1080.47	24.03	7.1
MW-114	07/18/2016 10:51	2.62	-75	6.58	NM	1106.92	24.02	6.2
MW-114	07/18/2016 10:52	2.94	-76	6.59	NM	1108.71	24.06	7.6
MW-114	07/18/2016 10:54	3.24	-76	6.61	NM	1104.06	24.11	7.3
MW-114	07/18/2016 10:55	3.52	-76	6.63	NM	1107.98	23.98	8
MW-114	07/18/2016 10:56	3.73	-76	6.65	NM	1111.13	23.99	9
MW-114	07/18/2016 10:58	3.89	-77	6.65	NM	1127.87	23.89	26.3
MW-114	07/18/2016 10:59	4.07	-77	6.67	NM	1131.78	23.94	6.5
MW-114	07/18/2016 11:01	4.26	-77	6.68	NM	1132.06	23.96	8.5
MW-114	07/18/2016 11:02	4.39	-77	6.7	NM	1132.05	24.01	6.9
MW-114	07/18/2016 11:04	4.57	-77	6.72	NM	1122.41	23.91	8.6
MW-114	07/18/2016 11:05	4.73	-77	6.73	NM	1124.62	23.89	10.1
MW-114	07/18/2016 11:06	4.85	-77	6.75	NM	1138.16	24.19	9.2
MW-114	07/18/2016 11:08	5.06	-77	6.76	NM	1131.96	23.97	9.2
MW-114	07/18/2016 11:35	9.75	-73	6.84	0.07	1.406	21.36	17.20
MW-114	10/11/2016 12:47	3.67	-19	8.53	0.1439	2743.8048	22.48	8.8
MW-114	10/11/2016 12:49	1.3	-52	8.3	0.1313	2514.2128	22.54	8.7
MW-114	10/11/2016 12:52	0.81	-67	8.13	0.1327	2540.3278	22.64	8.3
MW-114	10/11/2016 12:54	0.79	-72	7.96	0.1338	2560.3943	22.66	8.5
MW-114	10/11/2016 12:56	0.86	-73	7.81	0.1345	2572.6088	22.67	6.8
MW-114	10/11/2016 12:58	0.95	-74	7.69	0.1352	2586.0589	22.59	7.4
MW-114	10/11/2016 13:00	1.03	-73	7.58	0.1354	2589.3217	22.65	7
MW-114	10/11/2016 13:02	1.05	-73	7.51	0.1359	2597.6945	22.59	8.7
MW-114	10/11/2016 13:05	1.04	-72	7.44	0.1356	2592.5464	22.65	8.7
MW-114	10/11/2016 13:07	0.98	-72	7.36	0.1364	2606.6414	22.52	7.9
MW-114	10/11/2016 13:09	0.98	-73	7.33	0.1365	2609.0121	22.57	8.8
MW-114	10/11/2016 13:11	0.98	-72	7.28	0.1366	2611.1369	22.54	9.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-114	10/11/2016 13:13	0.97	-72	7.23	0.1366	2611.7443	22.53	8.4
MW-114	10/11/2016 13:15	0.99	-72	7.2	0.1365	2608.8002	22.5	9
MW-114	10/11/2016 13:18	0.98	-71	7.17	0.1363	2606.4885	22.54	7.8
MW-114	10/11/2016 13:20	0.99	-72	7.15	0.1360	2599.8856	22.62	7.8
MW-114	10/11/2016 13:22	1.01	-71	7.12	0.1358	2595.9946	22.61	9.2
MW-114	10/11/2016 13:24	1.02	-71	7.09	0.1360	2600.7837	22.55	7.8
MW-114	10/11/2016 13:26	1.03	-71	7.07	0.1356	2592.2903	22.62	7.4
MW-114	10/11/2016 13:28	1.01	-70	7.05	0.1356	2593.3813	22.58	7
MW-114	10/11/2016 13:31	1.09	-71	7.05	0.1341	2565.6704	22.59	8.6
MW-114	10/11/2016 13:33	1.12	-70	7.04	0.1342	2567.5703	22.53	7.8
MW-114	10/11/2016 13:35	1.16	-70	7.04	0.1335	2554.5878	22.53	7.3
MW-114	10/11/2016 13:37	1.07	-70	7.02	0.1341	2565.1355	22.54	7.5
MW-114	10/11/2016 14:15	1.73	-24	8.16	0.14	2.696	22.57	22.90
MW-114	01/11/2017 10:22	5.85	56	7.08	0.5321	9476.3608	12.26	14.9
MW-114	01/11/2017 10:25	2.72	27	6.83	0.5159	9190.5551	13.13	14.6
MW-114	01/11/2017 10:26	2.68	26	6.82	0.5153	9180.7352	13.14	16.7
MW-114	01/11/2017 10:28	2.2	22	6.73	0.5119	9125.1218	13.09	13
MW-114	01/11/2017 10:29	2.18	22	6.73	0.5119	9125.7263	13.1	13.6
MW-114	01/11/2017 10:31	2.21	22	6.68	0.5121	9130.9861	12.94	12.5
MW-114	01/11/2017 10:33	2.08	22	6.64	0.5147	9174.6750	12.96	12.5
MW-114	01/11/2017 10:36	2.03	22	6.62	0.5165	9201.9096	13.09	12.7
MW-114	04/18/2017 08:27	4.57	266	7.1	0.0602	0.0120	14.16	11.2
MW-114	04/18/2017 08:31	1.63	271	6.86	0.0575	0.0115	12.66	9.5
MW-114	04/18/2017 08:32	1.6	271	6.86	0.0581	0.0116	12.66	9.7
MW-114	04/18/2017 08:35	0.84	269	6.78	0.0583	0.0117	12.61	10.2
MW-114	04/18/2017 08:37	0.46	268	6.73	0.0587	0.0118	12.58	10.2
MW-114	04/18/2017 08:39	0.24	267	6.68	0.0590	0.0118	12.55	9.3
MW-114	04/18/2017 08:42	0.09	265	6.66	0.0592	0.0119	12.53	10.3
MW-114	04/18/2017 08:44	0	263	6.63	0.0594	0.0119	12.54	10.6
MW-114	04/18/2017 08:46	-0.04	261	6.61	0.0596	0.0119	12.54	10.8
MW-114	04/18/2017 08:49	-0.07	260	6.6	0.0597	0.0120	12.54	11.3
MW-114	04/18/2017 08:51	-0.08	258	6.6	0.0599	0.0120	12.53	11.1
MW-114	04/18/2017 08:53	-0.08	257	6.58	0.0600	0.0120	12.56	11
MW-114	04/18/2017 08:56	-0.07	255	6.57	0.0601	0.0120	12.54	11.4
MW-114	04/18/2017 08:58	-0.08	254.00	6.57	0.06	1.216	12.2	10.66
MW-114	01/23/2018 10:12	3.99	213	7.1	0.1463	0.0281	12.53	7.3
MW-114	01/23/2018 10:14	1.33	213	7.09	0.1449	0.0279	12.36	3.7
MW-114	01/23/2018 10:16	1.41	212	7.07	0.1460	0.0281	12.29	4.3
MW-114	01/23/2018 10:18	1.31	211	7.05	0.1475	0.0283	12.32	4.5
MW-114	01/23/2018 10:20	1.38	210	7.03	0.1499	0.0288	12.3	5.1
MW-114	01/23/2018 10:23	1.2	209	7	0.1529	0.0293	12.28	4.5
MW-114	01/23/2018 10:25	1.01	208	6.98	0.1502	0.0288	12.3	24.4
MW-114	01/23/2018 10:27	0.9	206	6.97	0.1523	0.0292	12.27	5.6
MW-114	01/23/2018 10:29	0.83	205	6.95	0.1546	0.0296	12.24	5.8
MW-114	01/23/2018 10:31	0.78	205	6.93	0.1579	0.0302	12.2	5.8
MW-114	01/23/2018 10:33	0.74	204	6.92	0.1627	0.0311	12.19	6.4
MW-114	01/23/2018 10:35	0.72	203.00	6.91	0.16	3.088	12.07	6.36
MW-114	01/23/2018 10:36	0.72	203	6.91	0.1608	0.0308	12.21	6.4
MW-114	04/09/2018 09:47	6.48	199	6.41	0.0561	0.0011	10.02	8.9
MW-114	04/09/2018 09:49	2.45	193	6.4	0.0596	0.0012	10.67	2.7
MW-114	04/09/2018 09:51	2.25	188	6.38	0.0592	0.0012	10.76	3.7
MW-114	04/09/2018 09:53	2.5	184	6.38	0.0585	0.0012	10.68	4.5
MW-114	04/09/2018 09:55	2.8	180	6.37	0.0575	0.0012	10.8	7.3
MW-114	04/09/2018 09:57	3.15	177	6.36	0.0580	0.0012	10.8	4.3
MW-114	04/09/2018 10:00	3.24	175	6.35	0.0587	0.0012	10.78	5.2
MW-114	04/09/2018 10:02	3.48	173.00	6.35	0.06	1.169	10.57	5.20
MW-114	07/12/2018 10:13	4.45	9	7.08	0.0568	1.1318	22.05	4.4
MW-114	07/12/2018 10:15	0.98	-57	6.86	0.0569	1.1338	21.8	4.2
MW-114	07/12/2018 10:18	0.85	-80	6.74	0.0567	1.1293	21.58	4.7
MW-114	07/12/2018 10:20	0.96	-91	6.66	0.0570	1.1343	21.6	4.7
MW-114	07/12/2018 10:22	1.3	-98	6.6	0.0566	1.1271	21.68	4.7
MW-114	07/12/2018 10:24	1.9	-102	6.56	0.0566	1.1283	21.64	3.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-114	07/12/2018 10:26	2.09	-105	6.53	0.0563	1.1211	21.82	4.8
MW-114	07/12/2018 10:28	2.02	-107	6.51	0.0566	1.1276	21.79	4.5
MW-114	07/12/2018 10:31	1.85	-110	6.49	0.0566	1.1270	21.56	4.7
MW-114	07/12/2018 10:33	1.62	-111	6.48	0.0566	1.1266	21.64	4
MW-114	07/12/2018 10:35	1.47	-113	6.47	0.0567	1.1296	21.59	4.5
MW-114	07/12/2018 10:37	1.28	-114	6.47	0.0568	1.1307	22.22	4.5
MW-114	07/12/2018 10:39	1.13	-115	6.46	0.0569	1.1321	22.72	4.6
MW-114	07/12/2018 10:41	1.02	-116	6.46	0.0568	1.1313	22.9	4.6
MW-114	07/12/2018 10:44	0.93	-118	6.46	0.0565	1.1259	22.92	4.8
MW-114	07/12/2018 10:46	0.85	-119	6.46	0.0566	1.1280	22.75	4.2
MW-114	07/12/2018 10:48	0.8	-120	6.46	0.0566	1.1269	22.87	4.8
MW-114	07/12/2018 10:50	0.76	-121	6.46	0.0563	1.1220	22.79	4.5
MW-114	07/12/2018 10:52	0.76	-122	6.46	0.0567	1.1284	22.6	5
MW-114	07/12/2018 10:54	0.76	-123	6.46	0.0568	1.1302	22.41	4.4
MW-114	07/12/2018 10:57	0.77	-124	6.46	0.0565	1.1263	22.37	4.3
MW-114	07/12/2018 10:59	0.8	-124	6.46	0.0569	1.1329	22.51	5.3
MW-114	07/12/2018 11:01	0.84	-125.00	6.46	0.06	1.127	22.67	4.57
MW-114	10/18/2018 10:20	5.72	170.20	6.50	0.56	1.123	20.62	7.00
MW-114	04/08/2019 11:20	0.73	124.7	6.71	NM	0.957	12.36	77
MW-114	07/08/2019 10:05	12.22	147.8	6.44	NM	0.853	17.97	62.1
MW-114	07/08/2019 10:10	12.22	147.8	6.42	NM	0.853	17.97	62.1
MW-114	07/08/2019 10:15	11.08	148.2	6.44	NM	0.864	18.01	55.4
MW-114	07/08/2019 10:20	9.74	150.1	6.45	NM	0.883	18.25	48.7
MW-114	07/08/2019 10:25	8.42	151.4	6.45	NM	0.889	18.5	53
MW-114	07/08/2019 10:30	6.98	153.5	6.45	NM	0.891	18.81	82.6
MW-114	07/08/2019 10:35	5.83	155.2	6.44	NM	0.892	18.96	96.7
MW-114	07/08/2019 10:40	4.72	156.5	6.45	NM	0.892	19.18	92.5
MW-114	07/08/2019 10:45	3.68	158.3	6.44	NM	0.892	19.21	82.8
MW-114	07/08/2019 10:50	2.73	160.2	6.44	NM	0.893	19.25	77.1
MW-114	07/08/2019 11:40	2.73	160.2	6.44	NM	0.893	19.25	77.1
MW-114	10/04/2019 11:00	3.02	107.1	6.59	NM	0.442	21.66	30.7
MW-114	10/04/2019 11:05	2.22	92.6	6.56	NM	0.414	21.3	12.5
MW-114	10/04/2019 11:10	1.37	84.7	6.55	NM	0.411	20.32	4.7
MW-114	10/04/2019 11:15	1.02	83.7	6.55	NM	0.41	20.9	4.4
MW-114	10/04/2019 11:20	0.72	84.4	6.56	NM	0.41	20.81	3.9
MW-114	10/04/2019 11:25	0.65	84.5	6.55	NM	0.41	21.03	4.1
MW-114	10/04/2019 11:30	0.59	85.1	6.55	NM	0.41	21	3.8
MW-114	10/04/2019 11:35	0.42	85.9	6.56	NM	0.41	21.01	3.2
MW-114	10/04/2019 11:40	0.35	87.2	6.55	NM	0.41	21.03	3
MW-114	10/04/2019 11:45	0.32	87.9	6.55	NM	0.41	21.06	2.8
MW-114	01/08/2020 10:30	3.26	151	6.59	NM	0.303	11.52	1
MW-114	01/08/2020 10:35	2.26	127.6	6.62	NM	0.289	11.97	0.6
MW-114	01/08/2020 10:40	1.72	102.2	6.61	NM	0.286	12.73	0.7
MW-114	01/08/2020 10:45	1.69	95.8	6.6	NM	0.283	12.85	1.6
MW-114	01/08/2020 10:50	1.56	94.9	6.6	NM	0.283	12.8	1.9
MW-114	01/08/2020 10:55	1.66	93.2	6.6	NM	0.283	12.86	1.8
MW-114	01/08/2020 11:00	1.57	94.3	6.6	NM	0.283	12.84	2
MW-114	01/08/2020 11:05	1.56	93.3	6.59	NM	0.282	12.86	7.6
MW-114	01/08/2020 11:10	1.57	92.4	6.59	NM	0.283	13.01	2.2
MW-114	01/08/2020 11:15	1.57	92.5	6.59	NM	0.282	12.85	3
MW-114	04/08/2020 10:40	0.6	489.9	6.28	NM	0.738	13.79	7.2
MW-114	10/13/2020 13:25	1.34	136.2	6.53	0.2	0.42	19.86	33
MW-114	10/13/2020 13:30	1.2	136.3	6.51	0.2	0.421	19.87	29.7
MW-114	10/13/2020 13:35	0.79	134.7	6.49	0.2	0.424	19.96	21.8
MW-114	10/13/2020 13:40	0.76	134.6	6.49	0.2	0.424	19.95	19.5
MW-114	10/13/2020 13:45	0.74	134.6	6.49	0.2	0.424	19.93	20.2
MW-114	10/13/2020 13:50	0.75	134.1	6.49	0.2	0.424	20	20.4
MW-114	10/13/2020 13:55	0.75	134.1	6.49	0.2	0.424	20	20
MW-114	10/13/2020 14:00	0.75	134.1	6.49	0.2	0.424	20	20
MW-114	01/05/2021 12:45	11.89	6.6	6.73	0.54	1.076	12.15	7.1
MW-114	01/05/2021 12:50	14.88	25.1	6.62	0.54	1.074	12.69	6.5
MW-114	01/05/2021 12:55	10.62	26.1	6.61	0.54	1.073	12.74	6.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-114	01/05/2021 13:00	16.08	32.3	6.6	0.53	1.072	12.72	6.7
MW-114	01/05/2021 13:05	15.63	37.3	6.6	0.53	1.071	12.65	6.6
MW-114	01/05/2021 13:10	17.02	40.3	6.59	0.53	1.069	12.63	6.8
MW-114	01/05/2021 13:15	15.28	42.7	6.59	0.53	1.069	12.65	6.5
MW-114	01/05/2021 13:20	14.96	45.3	6.59	0.53	1.069	12.67	6.2
MW-114	01/05/2021 13:25	18.2	49	6.58	0.53	1.066	12.71	6.3
MW-114	01/05/2021 13:30	16.44	52.4	6.59	0.53	1.065	12.59	6.4
MW-114	04/07/2021 12:15	4.31	108.7	6.61	0.47	0.971	15.19	4.8
MW-114	04/07/2021 12:20	0.66	102.7	6.47	0.54	1.076	12.86	3.2
MW-114	04/07/2021 12:25	0.59	98.4	6.46	0.53	1.088	12.97	3.7
MW-114	04/07/2021 12:30	0.67	96	6.46	0.53	1.059	13.01	4.2
MW-114	04/07/2021 12:35	0.8	94.4	6.46	0.52	1.017	13.02	3.8
MW-114	04/07/2021 12:40	0.95	94.1	6.46	0.51	1.029	12.94	3.6
MW-114	04/07/2021 12:45	1.36	94.4	6.45	0.5	0.995	12.95	3.4
MW-114	04/07/2021 12:50	1.52	95	6.45	0.49	0.976	12.87	3.7
MW-114	04/07/2021 12:55	1.75	96	6.45	0.48	0.959	12.98	3.7
MW-114	04/07/2021 13:00	1.91	97.3	6.45	0.47	0.94	12.98	4
MW-114	01/20/2022 12:55	4	72.6	6.33	0.51	1.022	9.52	42.7
MW-114	01/20/2022 13:00	2.33	61.5	6.46	0.52	1.038	8.72	35
MW-114	01/20/2022 13:05	1.82	60.4	6.42	0.51	1.035	8.43	27.4
MW-114	01/20/2022 13:10	1.78	59.4	6.41	0.51	1.033	8.26	24.2
MW-114	01/20/2022 13:15	1.79	59.2	6.39	0.51	1.028	8.23	22.1
MW-114	01/20/2022 13:20	1.72	58.9	6.39	0.51	1.027	8.18	24.7
MW-114	01/20/2022 13:25	1.65	58.1	6.39	0.51	1.024	8.06	22.7
MW-114	01/20/2022 13:30	1.67	59.1	6.33	0.51	1.021	8.09	23.5
MW-114	04/08/2022 10:35	6.62	156.9	6.12	0.42	0.849	15.43	4.8
MW-114	04/08/2022 10:40	2.42	152.9	6.21	0.52	1.05	14.27	1.8
MW-114	04/08/2022 10:45	2.01	145.8	6.27	0.53	1.066	14.01	1.1
MW-114	04/08/2022 10:50	2.34	140.9	6.29	0.51	1.027	13.91	0.7
MW-114	04/08/2022 10:55	3.16	137	6.3	0.48	0.953	14.07	0.8
MW-114	04/08/2022 11:00	4.25	132.6	6.33	0.42	0.845	13.95	1
MW-114	04/08/2022 11:05	5.04	130.4	6.35	0.39	0.782	13.91	0.8
MW-114	04/08/2022 11:10	5.5	127.5	6.37	0.36	0.738	13.98	0.4
MW-114	04/08/2022 11:15	5.61	127	6.37	0.36	0.73	14.01	0.5
MW-114	04/08/2022 11:20	5.57	126.5	6.38	0.35	0.716	14.25	0.5
MW-115	03/15/2012 08:12	48.18	181	7.1	0.03	0.61471	12.5	4.8
MW-115	03/15/2012 08:15	21.32	172	7.2	0.03	0.61111	12.19	2
MW-115	03/15/2012 08:18	14.72	167	7.21	0.03	0.61311	12.22	1.3
MW-115	03/15/2012 08:22	11.21	164	7.21	0.03	0.61363	12.21	3.1
MW-115	03/15/2012 08:25	8.89	160	7.22	0.03	0.61438	12.34	1.7
MW-115	03/15/2012 08:28	7.51	158	7.22	0.03	0.61283	12.1	1.7
MW-115	03/15/2012 08:32	6.68	156	7.23	0.03	0.61405	12.02	1.1
MW-115	03/15/2012 08:35	5.6	154	7.24	0.03	0.61201	12.01	5.6
MW-115	03/15/2012 08:38	5.07	153	7.24	0.03	0.61214	12.07	1.8
MW-115	03/15/2012 08:42	4.72	151	7.24	0.03	0.61295	12.08	1.9
MW-115	03/15/2012 08:45	4.41	150	7.24	0.03	0.6133	11.9	3.8
MW-115	03/15/2012 08:48	4.5	148	7.25	0.03	0.61204	11.97	1.6
MW-115	03/15/2012 08:52	3.97	147	7.25	0.03	0.61058	11.85	3.3
MW-115	03/15/2012 08:55	3.79	145	7.25	0.03	0.60926	11.87	3.7
MW-115	03/15/2012 08:58	3.61	144	7.25	0.03	0.60579	12	4.7
MW-115	03/15/2012 09:02	3.42	143	7.25	0.03	0.60789	12.16	3.9
MW-115	03/15/2012 09:51	5.77	149	6.87	0.04	0.836	13.92	12.80
MW-115	03/16/2012 08:50	0.59	169	6.78	0.04	0.908	12.49	2.50
MW-115	05/14/2012 10:25	2.7	128	6.88	0.04	0.89635	18.96	0
MW-115	05/14/2012 10:27	2.85	129	6.85	0.04	0.90321	18.16	0.8
MW-115	05/14/2012 10:28	2.74	130	6.83	0.04	0.90321	16.33	0.7
MW-115	05/14/2012 10:29	2	130	6.81	0.04	0.89982	15.98	0.6
MW-115	05/14/2012 10:30	1.82	130	6.79	0.04	0.90141	16.02	0.9
MW-115	05/14/2012 10:32	1.76	130	6.79	0.04	0.90054	15.97	1
MW-115	05/14/2012 10:33	1.69	130	6.78	0.04	0.89984	16.3	0.4
MW-115	05/14/2012 10:34	1.72	130	6.77	0.04	0.90033	16.36	0.9
MW-115	05/14/2012 10:36	1.72	130	6.77	0.04	0.90194	16.25	0.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-115	05/14/2012 10:37	1.69	131	6.76	0.04	0.90135	16.2	0.3
MW-115	05/14/2012 10:38	1.67	131	6.76	0.04	0.90076	16.24	1
MW-115	05/14/2012 10:40	1.67	131	6.76	0.04	0.90106	16.28	0.9
MW-115	05/14/2012 10:41	1.64	130	6.76	0.04	0.90083	16.2	0.7
MW-115	05/14/2012 10:42	1.63	130	6.75	0.04	0.90041	16.28	0.8
MW-115	05/14/2012 10:44	1.62	130	6.75	0.04	0.90142	16.21	0.9
MW-115	05/14/2012 10:45	1.6	130	6.75	0.04	0.901	16.25	0.888
MW-115	05/14/2012 12:10	3.61	188	6.7	0.05	0.9085	16	4.5
MW-115	05/15/2012 08:54	2.41	190	6.79	0.04	0.9039	16.41	2.1
MW-115	07/24/2012 10:35	2.17	150	6.64	0.05	0.96721	34.16	4.1
MW-115	07/24/2012 10:37	2.06	156	6.62	0.05	0.97586	25.97	6.9
MW-115	07/24/2012 10:38	1.51	156	6.62	0.05	0.97619	23.73	7.1
MW-115	07/24/2012 10:39	1.31	157	6.61	0.05	0.96786	23.12	5.2
MW-115	07/24/2012 10:41	1.17	158	6.61	0.05	0.97099	22.78	5.7
MW-115	07/24/2012 10:42	1.08	159	6.61	0.05	0.96679	22.72	5.1
MW-115	07/24/2012 10:43	1.02	159	6.61	0.05	0.9684	22.62	6
MW-115	07/24/2012 10:44	0.97	160	6.6	0.05	0.96555	22.64	5.7
MW-115	07/24/2012 10:46	0.93	161	6.6	0.05	0.96725	22.51	6.1
MW-115	07/24/2012 10:47	0.89	161	6.6	0.05	0.96621	22.54	6.4
MW-115	07/24/2012 10:48	0.86	162	6.6	0.05	0.96555	22.44	5.5
MW-115	07/24/2012 10:50	0.82	162	6.6	0.05	0.96389	22.46	5.9
MW-115	07/24/2012 10:51	0.8	163	6.59	0.05	0.96309	22.43	6.2
MW-115	07/24/2012 10:52	0.77	163	6.59	0.05	0.96215	22.47	7
MW-115	07/24/2012 10:53	0.75	163	6.59	0.05	0.96316	22.5	6.9
MW-115	07/24/2012 10:55	0.74	164	6.59	0.05	0.963	22.47	7.15
MW-115	07/24/2012 12:10	3.71	204	6.61	0.05	0.926	22.95	5.60
MW-115	07/25/2012 09:53	4.35	52	6.53	0.0000	0.910	22.30	4.90
MW-115	11/19/2012 10:46	7.17	116	6.73	0.00	0.97	16.0	9.5
MW-115	11/19/2012 10:48	6.37	113	6.67	0.00	0.97	16.3	9.7
MW-115	11/19/2012 10:50	5.89	111	6.65	0.00	0.96	16.5	12.6
MW-115	11/19/2012 10:52	5.69	109	6.67	0.00	0.96	16.6	10.6
MW-115	11/19/2012 10:54	5.47	107	6.69	0.00	0.96	16.6	15.8
MW-115	11/19/2012 10:56	5.28	106	6.67	0.00	0.97	16.6	17.0
MW-115	11/19/2012 10:58	5.15	104	6.71	0.00	0.97	16.7	19.0
MW-115	11/19/2012 11:00	5.08	103	6.69	0.00	0.97	16.7	23.6
MW-115	11/19/2012 11:02	4.98	101	6.67	0.00	0.97	16.8	21.3
MW-115	11/19/2012 11:04	4.92	100	6.70	0.00	0.97	16.8	21.0
MW-115	11/19/2012 11:06	4.87	100	6.69	0.00	0.97	16.9	24.0
MW-115	11/19/2012 11:08	4.84	99	6.71	0.00	0.97	16.8	28.9
MW-115	11/19/2012 11:10	4.81	98	6.75	0.00	0.97	16.8	35.0
MW-115	11/19/2012 11:12	4.75	98	6.75	0.00	0.97	16.9	8.0
MW-115	11/19/2012 11:14	4.72	97	6.75	0.00	0.97	16.9	9.7
MW-115	11/19/2012 11:16	4.71	97	6.74	0.00	0.97	16.9	8.3
MW-115	11/19/2012 11:18	4.69	96	6.75	0.0000	0.978	16.77	9.00
MW-115	02/19/2013 10:06	5.95	-83	6.73	0.08	1.53834	11.51	0.7
MW-115	02/19/2013 10:08	6.07	-88	6.67	0.08	1.51659	11.51	1.7
MW-115	02/19/2013 10:09	5.91	-88	6.65	0.08	1.51449	12.19	1.4
MW-115	02/19/2013 10:11	5.92	-89	6.64	0.08	1.51207	12.48	1.8
MW-115	02/19/2013 10:13	5.88	-90	6.64	0.08	1.51152	12.66	2.7
MW-115	02/19/2013 10:15	5.89	-90	6.63	0.08	1.51575	12.77	1.7
MW-115	02/19/2013 10:16	5.87	-91	6.63	0.08	1.5169	12.81	2.8
MW-115	02/19/2013 10:18	5.8	-93	6.63	0.08	1.51756	12.87	1.2
MW-115	02/19/2013 10:20	5.75	-93	6.63	0.08	1.52073	12.88	1.4
MW-115	02/19/2013 10:22	5.58	-96	6.62	0.08	1.52214	12.93	1.3
MW-115	02/19/2013 10:23	5.47	-98	6.62	0.08	1.52522	12.98	1.5
MW-115	02/19/2013 10:25	5.38	-99	6.62	0.08	1.53142	12.97	1.8
MW-115	02/19/2013 10:27	5.23	-102	6.62	0.08	1.54083	12.82	1.8
MW-115	02/19/2013 10:29	5.18	-103	6.61	0.08	1.51912	12.8	3.3
MW-115	02/19/2013 10:31	5.25	-103	6.61	0.08	1.5458	12.82	2.8
MW-115	02/19/2013 10:32	5.51	-101	6.62	0.08	1.54596	12.84	3.5
MW-115	02/19/2013 10:34	5.82	-98	6.62	0.08	1.54792	12.9	4.1
MW-115	02/19/2013 10:36	5.9	-99	6.62	0.08	1.5524	12.88	4.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-115	02/19/2013 10:38	6.12	-97	6.62	0.08	1.55563	12.79	4.9
MW-115	02/19/2013 10:39	6.33	-96	6.62	0.08	1.5581	12.78	4.1
MW-115	02/19/2013 10:41	6.44	-96	6.63	0.08	1.55932	12.79	3.7
MW-115	02/19/2013 10:43	6.5	-96	6.63	0.08	1.5637	12.83	5
MW-115	02/19/2013 10:45	6.67	-96	6.63	0.08	1.56758	12.74	4.2
MW-115	02/19/2013 10:46	6.85	-94	6.63	0.08	1.56585	12.75	4.9
MW-115	02/19/2013 10:48	6.81	-95	6.63	0.08	1.5696	12.83	11.8
MW-115	02/19/2013 10:50	6.87	-94	6.63	0.08	1.56603	12.81	10.4
MW-115	02/19/2013 10:52	6.95	-93	6.63	0.08	1.57447	12.84	6.1
MW-115	02/19/2013 10:53	7.07	-92	6.64	0.08	1.57476	12.86	5.5
MW-115	02/19/2013 10:55	7.1	-91	6.64	0.08	1.57741	12.88	6.7
MW-115	02/19/2013 10:56	7.10	-91	6.64	0.08	1.577	12.99	6.65
MW-115	06/12/2013 13:17	2.64	-64	6.58	0.13	2.443	17.55	1.25
MW-115	06/12/2013 13:42	6.20	-72	6.64	0.14	0.266	20.48	6.80
MW-115	09/03/2013 12:53	1.33	-190	6.46	0.10	1.962	22.18	0.47
MW-115	09/03/2013 13:31	5.12	-32	5.79	0.07	1.469	23.03	1.40
MW-115	11/04/2013 13:14	1.09	-273	6.30	0.10	1.964	18.90	0.56
MW-115	03/05/2014 10:22	7.44	-8	6.72	0.04	0.763	12.03	33.28
MW-115	03/05/2014 10:51	9.61	87	7.28	0.04	0.774	10.89	5.40
MW-115	05/19/2014 10:23	5.52	-53	6.73	0.06	1.275	15.47	5.22
MW-115	05/19/2014 10:58	6.20	0	7.24	0.05	1.017	15.06	3.00
MW-115	08/04/2014 10:47	4.65	-203	6.70	0.04	0.902	22.00	20.57
MW-115	08/04/2014 11:27	5.55	-218	7.35	0.04	0.785	21.45	4.60
MW-115	10/22/2014 11:41	0.02	140	6.43	0.05	1.037	17.93	27.40
MW-115	10/23/2014 12:11	7.10	245	6.59	0.04	0.745	19.34	9.50
MW-115	03/02/2015 10:23	7.65	185	6.87	0.02	0.458	9.74	7.83
MW-115	03/02/2015 10:56	7.63	105	7.62	0.05	1.011	9.93	9.70
MW-115	09/14/2015 10:29	3.88	321	6.04	0.04	0.715	23.74	3.8
MW-115	11/13/2015 08:59	7	129	7.03	0.0303	619.3081	17.98	18.8
MW-115	11/13/2015 09:02	5.55	81	6.98	0.0283	578.9004	17.8	21
MW-115	11/13/2015 09:06	4.82	67	6.91	0.0276	565.0463	17.95	21
MW-115	11/13/2015 09:09	4.55	65	6.85	0.0277	567.0895	17.82	25.5
MW-115	11/13/2015 09:12	4.43	59	6.84	0.0287	587.3643	17.8	22.5
MW-115	11/13/2015 09:16	4.25	56	6.8	0.0293	599.4933	17.82	21.1
MW-115	11/13/2015 09:19	4.02	54	6.76	0.0297	606.2084	17.83	22.2
MW-115	11/13/2015 09:52	6.08	64	7.23	0.03	0.592	18.79	16.00
MW-115	01/05/2016 11:28	7.75	-81	7.42	0.0175	364.6622	12.76	104.7
MW-115	01/05/2016 11:31	7.43	-75	7.37	0.0177	368.2562	13.24	119.6
MW-115	01/05/2016 11:35	7.3	-72	7.32	0.0180	373.2701	13.49	713.4
MW-115	01/05/2016 11:38	7.22	-69	7.26	0.0180	373.9696	13.73	93.5
MW-115	01/05/2016 11:41	7.03	-68	7.23	0.0179	370.9743	13.97	81.6
MW-115	01/05/2016 11:45	6.92	-65	7.16	0.0180	373.6099	13.82	77
MW-115	01/05/2016 11:48	6.74	-65	7.16	0.0179	371.5171	14.09	76.4
MW-115	01/05/2016 12:23	8.25	0.87	6.97	0.03	0.569	14.51	82.53
MW-115	04/06/2016 09:08	7.5	51	7.01	0.0307	631.0928	10.47	43.5
MW-115	04/06/2016 09:12	6.95	36	7.48	0.0258	533.1910	10.86	83.4
MW-115	04/06/2016 09:15	6.77	25	7.79	0.0257	531.7123	10.92	73.2
MW-115	04/06/2016 09:18	6.66	17	8	0.0242	501.4915	11.03	63.2
MW-115	04/06/2016 09:22	6.67	11	8.12	0.0244	504.4933	10.95	77.3
MW-115	04/06/2016 09:25	6.65	6	8.23	0.0249	514.8715	11.15	81.3
MW-115	04/06/2016 09:28	6.59	2	8.29	0.0255	526.9686	11.35	69.7
MW-115	04/06/2016 09:32	6.58	-4	8.35	0.0263	542.4008	11.27	70
MW-115	04/06/2016 09:35	6.59	-5	8.39	0.0269	554.2321	11.17	60.8
MW-115	04/06/2016 09:38	6.53	-8	8.41	0.0270	556.4207	11.44	61.6
MW-115	04/06/2016 09:41	6.52	-10	8.44	0.0270	556.8040	11.67	60.8
MW-115	04/06/2016 10:05	6.76	-20	8.22	0.02	0.499	12.76	34.40
MW-115	07/18/2016 12:33	4.88	-68	7.07	NM	597.69	27.02	26.5
MW-115	07/18/2016 12:34	3.53	-74	6.93	NM	652.64	24.54	69.7
MW-115	07/18/2016 12:36	2.18	-84	6.9	NM	718.57	22.77	63.2
MW-115	07/18/2016 12:38	1.45	-90	6.91	NM	767.18	22.49	62.6
MW-115	07/18/2016 12:40	1.21	-94	6.92	NM	786.37	22.37	59.3
MW-115	07/18/2016 12:41	1.13	-97	6.92	NM	801.2	22.23	59.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-115	07/18/2016 12:43	1.05	-99	6.92	NM	807.87	22.2	54.9
MW-115	07/18/2016 12:45	0.98	-100	6.91	NM	813.15	22.03	54.8
MW-115	07/18/2016 12:47	0.91	-101	6.91	NM	817.63	22.07	57.3
MW-115	07/18/2016 12:49	0.84	-102	6.91	NM	818.56	22.03	66.4
MW-115	07/18/2016 12:50	0.81	-103	6.91	NM	831.04	21.91	58.5
MW-115	07/18/2016 12:52	0.76	-105	6.91	NM	838.27	21.81	59.8
MW-115	07/18/2016 12:54	0.71	-107	6.93	NM	844.43	21.72	65.8
MW-115	07/18/2016 12:56	0.71	-108	6.94	NM	863.89	21.53	67.8
MW-115	07/18/2016 12:57	0.67	-109	6.95	NM	879.72	21.39	63.2
MW-115	07/18/2016 12:59	0.6	-111	6.96	NM	873.1	21.63	72.4
MW-115	07/18/2016 13:01	0.57	-113	6.98	NM	888.93	21.09	72.1
MW-115	07/18/2016 13:03	0.51	-113	6.99	NM	908.76	21.36	74.6
MW-115	07/18/2016 13:05	0.49	-114	7	NM	907.44	21.61	69.6
MW-115	07/18/2016 13:06	0.48	-115	7.02	NM	905.22	21.51	68.6
MW-115	07/18/2016 13:40	5.46	-86	7.46	0.03	0.577	23.31	43.40
MW-115	10/11/2016 10:40	6.17	-75	9.15	0.0728	1435.2209	21	11.3
MW-115	10/11/2016 10:43	4.93	-91	9.15	0.0191	394.9744	20.47	52.2
MW-115	10/11/2016 10:47	4.26	-91	8.85	0.0166	345.3144	20.19	54
MW-115	10/11/2016 10:50	4.05	-91	8.66	0.0172	356.3132	20.13	50.4
MW-115	10/11/2016 10:54	3.91	-88	8.51	0.0176	363.8773	20.14	45.7
MW-115	10/11/2016 10:57	3.69	-85	8.36	0.0180	373.5932	20.11	42.4
MW-115	10/11/2016 11:01	3.43	-84	8.24	0.0186	385.5560	20.04	41.2
MW-115	10/11/2016 11:04	3.2	-83	8.14	0.0193	397.9171	19.99	34.5
MW-115	10/11/2016 11:07	2.89	-81	8	0.0202	417.4422	19.87	32.6
MW-115	10/11/2016 11:11	2.5	-81	7.89	0.0712	1404.7887	19.83	30.9
MW-115	10/11/2016 11:14	2.12	-81	7.78	0.0759	1493.9624	19.74	32.8
MW-115	10/11/2016 11:18	1.77	-82	7.69	0.0807	1583.6396	19.79	23.9
MW-115	10/11/2016 11:21	1.4	-81	7.55	0.0874	1709.1351	19.67	22.9
MW-115	10/11/2016 11:25	1.09	-82	7.45	0.0953	1857.2657	19.69	21.3
MW-115	10/11/2016 11:28	0.83	-82	7.34	0.1021	1981.4849	19.76	19.4
MW-115	10/11/2016 11:53	5.03	-59	8.69	0.02	0.398	21.31	18.00
MW-115	01/11/2017 09:15	8.53	66	7.3	0.4680	8390.6201	13.23	278.2
MW-115	01/11/2017 09:18	7.18	53	7.29	0.4260	7676.2093	13.89	393.7
MW-115	01/11/2017 09:22	6.55	51	7.23	0.4201	7570.0950	14.36	448.6
MW-115	01/11/2017 09:23	6.52	52	NM	NM	7568.2807	14.37	438.8
MW-115	01/11/2017 09:26	6.32	52	7.17	0.4186	7547.5204	14.15	403.6
MW-115	01/11/2017 09:29	6.19	54	7.11	0.4198	7567.0521	14.18	345.1
MW-115	01/11/2017 09:30	6.19	54	7.11	0.4195	7563.4093	14.18	381.3
MW-115	01/11/2017 09:34	6.09	59	7.01	0.4217	7596.9532	14.36	290.6
MW-115	01/11/2017 09:37	5.97	60	6.97	0.4235	7627.7013	14.39	295
MW-115	01/11/2017 09:40	5.77	60	6.93	0.4274	7694.8819	14.26	277.6
MW-115	04/18/2017 09:28	9.01	236	7.36	0.0387	0.0078	16.71	113.7
MW-115	04/18/2017 09:29	7.65	236	7.35	0.0347	0.0071	15.49	124.4
MW-115	04/18/2017 09:34	4.85	236	7.26	0.0321	0.0066	14.73	175.6
MW-115	04/18/2017 09:35	4.85	236	7.26	0.0320	0.0065	14.66	185.1
MW-115	04/18/2017 09:39	4.56	235	7.19	0.0319	0.0065	14.73	215.6
MW-115	04/18/2017 09:42	4.42	233	7.13	0.0319	0.0065	14.86	193.5
MW-115	04/18/2017 09:46	4.36	229.00	7.09	0.03	0.658	14.53	213.00
MW-115	01/23/2018 08:59	7.77	160	8.44	0.0488	0.0098	13.76	266.8
MW-115	01/23/2018 09:00	7.14	157	8.32	0.0515	0.0104	13.84	396.8
MW-115	01/23/2018 09:04	6.8	154	8.15	0.0620	0.0124	13.82	355.9
MW-115	01/23/2018 09:07	6.68	154	8.06	0.0665	0.0132	13.75	340.1
MW-115	01/23/2018 09:10	6.61	154	8	0.0706	0.0140	13.65	286.7
MW-115	01/23/2018 09:13	6.59	155	7.95	0.0731	0.0145	13.6	230.4
MW-115	01/23/2018 09:16	6.58	155	7.91	0.0751	0.0149	13.52	209.8
MW-115	01/23/2018 09:19	6.59	156	7.87	0.0769	0.0152	13.46	203.5
MW-115	01/23/2018 09:22	6.55	157	7.84	0.0788	0.0156	13.34	197.9
MW-115	01/23/2018 09:26	6.57	158	7.8	0.0799	0.0158	13.3	192.7
MW-115	01/23/2018 09:29	6.57	160	7.77	0.0825	0.0163	12.85	177.7
MW-115	01/23/2018 09:32	6.65	162	7.76	0.0849	0.0167	12.54	153.2
MW-115	01/23/2018 09:35	6.61	163	7.73	0.0855	0.0169	12.49	154.7
MW-115	01/23/2018 09:38	6.75	165	7.71	0.0874	0.0172	12.32	217.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-115	01/23/2018 09:41	6.8	166	7.69	0.0891	0.0175	12.41	331.3
MW-115	01/23/2018 09:44	7	168	7.67	0.0916	0.0180	12.21	667.7
MW-115	01/23/2018 09:47	7.39	170.00	7.65	0.09	1.867	12	1.47
MW-115	01/23/2018 09:48	7.39	170	7.65	0.0947	0.0186	12.14	1466.1
MW-115	04/09/2018 08:47	8.88	224	7.71	0.0189	0.0004	10.78	45.8
MW-115	04/09/2018 08:50	6.09	226	7.11	0.0178	0.0004	11.57	138.8
MW-115	04/09/2018 08:53	5.71	219	6.93	0.0178	0.0004	11.73	143.3
MW-115	04/09/2018 08:57	5.64	212	6.86	0.0181	0.0004	11.77	141.4
MW-115	04/09/2018 09:00	5.41	207	6.78	0.0183	0.0004	11.89	142.1
MW-115	04/09/2018 09:03	5.35	203	6.74	0.0180	0.0004	11.86	138.8
MW-115	04/09/2018 09:07	5.25	200	6.69	0.0184	0.0004	11.9	121.1
MW-115	04/09/2018 09:10	5.31	195	6.68	0.0187	0.0004	11.86	123
MW-115	04/09/2018 09:13	5.29	192	6.67	0.0187	0.0004	11.79	114.9
MW-115	04/09/2018 09:14	5.29	192.00	6.67	0.02	0.390	11.67	114.90
MW-115	07/12/2018 08:55	5.29	50	7.36	0.0185	0.3833	23.79	84.6
MW-115	07/12/2018 08:58	1.63	-41	7.18	0.0206	0.4253	20.38	132.4
MW-115	07/12/2018 09:01	1.17	-79	7.1	0.0207	0.4263	19.56	120.8
MW-115	07/12/2018 09:05	0.77	-93	7.03	0.0208	0.4291	19.36	94.9
MW-115	07/12/2018 09:08	0.68	-99	6.96	0.0213	0.4387	19.2	77.2
MW-115	07/12/2018 09:11	0.65	-103	6.91	0.0212	0.4375	18.98	64.6
MW-115	07/12/2018 09:15	0.83	-105	6.85	0.0214	0.4411	18.89	57.6
MW-115	07/12/2018 09:18	0.62	-107	6.81	0.0215	0.4427	18.93	51.3
MW-115	07/12/2018 09:21	0.58	-109	6.78	0.0215	0.4441	19.32	45.6
MW-115	07/12/2018 09:25	0.57	-111	6.76	0.0215	0.4428	19.48	39.7
MW-115	07/12/2018 09:28	0.55	-113	6.73	0.0216	0.4444	19.61	34.8
MW-115	07/12/2018 09:31	0.55	-115	6.71	0.0216	0.4450	19.55	33.4
MW-115	07/12/2018 09:35	0.55	-117	6.7	0.0215	0.4422	19.67	34.3
MW-115	07/12/2018 09:38	0.53	-119	6.68	0.0217	0.4468	19.63	30.2
MW-115	07/12/2018 09:41	0.54	-121	6.67	0.0216	0.4449	19.74	26.4
MW-115	07/12/2018 09:44	0.59	-122	6.66	0.0216	0.4447	19.71	26.6
MW-115	07/12/2018 09:45	0.59	-122.00	6.66	0.02	0.443	19.89	26.58
MW-115	10/18/2018 13:30	9.74	100.50	7.01	0.16	0.335	19.34	140.00
MW-115	04/08/2019 10:20	6.01	121.8	6.76	NM	0.202	13.63	26.1
MW-115	07/08/2019 10:05	2.34	108.5	7.87	NM	0.174	17.45	125
MW-115	07/08/2019 10:10	1.02	119.5	6.86	NM	0.166	16.69	38.8
MW-115	07/08/2019 10:15	0.8	110.8	6.46	NM	0.168	16.36	27.7
MW-115	07/08/2019 10:20	0.85	101	6.37	NM	0.167	16.31	21.1
MW-115	07/08/2019 10:25	0.75	95.3	6.36	NM	0.167	16.29	17.5
MW-115	07/08/2019 10:30	0.86	94.1	6.38	NM	0.178	16.24	14.2
MW-115	07/08/2019 10:35	1.08	123.1	6.18	NM	0.731	16.13	6.4
MW-115	07/08/2019 10:40	0.94	114.2	6.2	NM	0.617	16.15	9
MW-115	07/08/2019 10:45	0.97	118.1	6.19	NM	0.675	16.17	7.6
MW-115	07/08/2019 10:50	1.08	123.1	6.18	NM	0.731	16.13	6.4
MW-115	10/04/2019 09:05	3.85	146.2	6.52	NM	0.88	19.6	103.2
MW-115	10/04/2019 09:10	1.91	148.5	6.19	NM	0.065	19.35	50.1
MW-115	10/04/2019 09:15	1.48	135.5	6.14	NM	0.064	19.18	30.4
MW-115	10/04/2019 09:20	1.08	120.4	6.22	NM	0.068	19.09	20.4
MW-115	10/04/2019 09:25	0.68	110.6	6.31	NM	0.074	19.03	15
MW-115	10/04/2019 09:30	0.52	88.2	6.38	NM	0.085	18.89	10.3
MW-115	10/04/2019 09:35	0.39	66.8	6.41	NM	0.098	18.83	7.7
MW-115	10/04/2019 09:40	0.36	64.3	6.42	NM	0.109	18.79	5.8
MW-115	10/04/2019 09:45	0.31	61.4	6.42	NM	0.125	18.76	4.2
MW-115	10/04/2019 09:50	0.28	49.3	6.42	NM	0.144	18.79	3.4
MW-115	01/09/2020 10:45	9.76	-24.8	7.39	NM	0.082	7.89	21.2
MW-115	01/09/2020 10:50	9.63	-19.4	7.36	NM	0.064	8.68	17
MW-115	01/09/2020 10:55	8.95	-19.7	7.16	NM	0.045	11.86	9.8
MW-115	01/09/2020 11:00	8.87	30.5	7.09	NM	0.043	12.13	7.8
MW-115	01/09/2020 11:05	8.9	45	7.05	NM	0.042	12.02	7.1
MW-115	01/09/2020 11:10	8.77	51.7	7.04	NM	0.043	12.15	6.6
MW-115	01/09/2020 11:15	8.55	58	7.03	NM	0.042	12.39	6.4
MW-115	01/09/2020 11:20	8.51	61.4	7.03	NM	0.042	12.4	6.6
MW-115	01/09/2020 11:25	8.38	65	7.01	NM	0.042	12.27	6.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-115	04/08/2020 12:20	8.22	489.1	5.99	NM	0.132	14.26	34.2
MW-115	10/05/2020 13:10	NM	NM	NM	NM	NM	NM	112.5
MW-115	10/13/2020 12:25	11.13	72.5	7.9	0.03	0.057	20.14	206.8
MW-115	10/13/2020 12:30	11.12	79.1	7.82	0.02	0.047	20.33	193.1
MW-115	10/13/2020 12:35	11.08	95.2	7.64	0.02	0.043	20.08	134.2
MW-115	10/13/2020 12:40	10.98	104.3	7.52	0.02	0.043	20.12	144.4
MW-115	10/13/2020 12:45	11.03	105.5	7.51	0.02	0.042	20.01	140
MW-115	10/13/2020 12:50	11.03	108.9	7.47	0.02	0.042	20.09	144
MW-115	10/13/2020 12:55	11	110.5	7.44	0.02	0.042	20.14	141
MW-115	10/13/2020 13:00	10.97	111.3	7.42	0.02	0.042	20.34	116.5
MW-115	10/13/2020 13:05	11	113	7.4	0.02	0.042	20.49	104.5
MW-115	10/13/2020 13:10	11.02	113	7.4	0.02	0.042	20.5	NM
MW-115	01/05/2021 12:50	8.33	177.9	8.2	0.07	0.155	13.99	226.8
MW-115	01/05/2021 12:55	8.29	171.1	6.81	0.07	0.153	14.01	204.8
MW-115	01/05/2021 13:00	8.13	167.6	6.88	0.07	0.154	14.07	172.8
MW-115	01/05/2021 13:05	7.55	166.1	6.89	0.07	0.157	14.04	129.9
MW-115	01/05/2021 13:10	7.2	166.2	6.88	0.08	0.162	13.98	108.9
MW-115	01/05/2021 13:15	6.87	165.8	6.87	0.08	0.169	14.15	94.5
MW-115	01/05/2021 13:20	6.35	167	6.84	0.09	0.18	14.1	80.9
MW-115	01/05/2021 13:25	5.94	168.6	6.78	0.09	0.194	14.19	72.8
MW-115	01/05/2021 13:30	5.53	169.8	6.74	0.1	0.209	14.16	65.2
MW-115	01/05/2021 13:35	5.06	170.5	6.69	0.11	0.222	14.44	58.2
MW-115	04/07/2021 10:50	7.64	-25.2	7.97	0.09	0.191	13.16	35
MW-115	04/07/2021 10:55	6.4	-1.6	6.38	0.07	0.134	13.31	21.5
MW-115	04/07/2021 11:00	6.3	17.4	7.51	0.06	0.12	13.38	20.1
MW-115	04/07/2021 11:05	5.83	34.3	7.34	0.06	0.118	13.49	21.3
MW-115	04/07/2021 11:10	5.46	43	7.23	0.06	0.119	13.65	23.3
MW-115	04/07/2021 11:15	5.17	48.5	7.16	0.06	0.121	13.81	21.8
MW-115	04/07/2021 11:20	5.05	53	7.1	0.06	0.122	13.94	20.1
MW-115	04/07/2021 11:25	4.9	59.1	7.02	0.06	0.125	14.21	17
MW-115	04/07/2021 11:30	4.81	62.6	6.98	0.06	0.127	14.06	16.7
MW-115	04/07/2021 11:35	4.66	66.1	6.93	0.06	0.131	13.98	15.9
MW-115	01/20/2022 11:45	8.94	43	7	0.12	0.243	10.22	112.1
MW-115	01/20/2022 11:50	8.96	43.7	6.99	0.12	0.243	10.16	103.2
MW-115	01/20/2022 11:55	8.9	49.7	6.96	0.12	0.241	9.41	101.4
MW-115	01/20/2022 12:00	8.8	56.1	6.85	0.11	0.24	8.67	71.5
MW-115	01/20/2022 12:05	8.73	59.3	6.73	0.11	0.238	8.44	54.5
MW-115	01/20/2022 12:10	8.68	58.8	6.75	0.11	0.237	8.34	45.5
MW-115	01/20/2022 12:15	8.6	59.1	6.76	0.11	0.237	8.41	37.4
MW-115	01/20/2022 12:20	8.53	60.5	6.76	0.11	0.237	8.38	46.5
MW-115	01/20/2022 12:25	8.37	61.6	6.76	0.11	0.237	8.57	43.3
MW-115	01/20/2022 12:30	8.43	61.6	6.76	0.11	0.238	8.49	40.2
MW-115	04/08/2022 09:30	10.01	136.7	7.53	0.12	0.224	14.58	46.5
MW-115	04/08/2022 09:35	9.57	138	6.85	0.06	0.132	13.96	35.2
MW-115	04/08/2022 09:40	9.4	136.8	6.41	0.06	0.122	13.84	14.1
MW-115	04/08/2022 09:45	101.5	134	6.28	0.06	0.123	13.83	12
MW-115	04/08/2022 09:50	9.78	133	6.2	0.06	0.122	13.82	9.4
MW-115	04/08/2022 09:55	9.56	133.5	6.16	0.06	0.122	13.9	4.5
MW-115	04/08/2022 10:00	9.42	134.5	6.13	0.06	0.121	13.87	4.4
MW-115	04/08/2022 10:05	9.28	135.3	6.13	0.06	0.121	13.96	4.5
MW-116R	04/23/2012 08:48	7.89	44	6.60	0.08	1.656	12.35	7.60
MW-117	03/06/2012 09:56	-0.14	-70	8.09	0.04	0.81226	7.14	20.3
MW-117	03/06/2012 09:57	-0.13	-76	8.1	0.04	0.79263	5.71	17.3
MW-117	03/06/2012 09:59	-0.12	-82	8.09	0.04	0.85162	4.82	21.8
MW-117	03/06/2012 10:00	-0.12	-84	8.08	0.04	0.8375	4.55	19.9
MW-117	03/06/2012 10:02	-0.12	-84	8.08	0.04	0.85212	4.65	24.9
MW-117	03/06/2012 10:04	-0.12	-84	8.06	0.04	0.86733	4.66	19.5
MW-117	03/06/2012 10:06	-0.12	-84	8.05	0.04	0.87133	4.75	20.4
MW-117	03/06/2012 10:07	-0.11	-85	8.05	0.04	0.86974	4.8	23.8
MW-117	03/06/2012 10:09	-0.13	-85	8.03	0.04	0.86391	5.46	45.3
MW-117	03/06/2012 10:11	-0.1	-81	7.93	0.05	0.98211	5.94	23.3
MW-117	03/06/2012 10:13	-0.11	-80	7.91	0.05	0.98005	5.98	24.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-117	03/06/2012 10:14	-0.12	-80	7.92	0.05	0.618	5.98	22.66
MW-117	03/06/2012 10:15	-0.12	-80	7.92	0.05	0.97038	5.98	22.7
MW-117	03/06/2012 11:25	1.91	-93	7.03	0.73	9.150	10.20	76.50
MW-117	03/07/2012 10:00	0.48	-110	7.20	0.10	2.080	5.70	43.10
MW-117	03/26/2013 10:57	0.76	-247	7.26	0.47	8.546	8.99	9.38
MW-117	05/27/2014 11:02	1.38	-305	7.01	0.61	10.540	19.47	6.68
MW-117	08/07/2015 10:37	8.87	-144	7.05	2.11	33.31	22.99	22.2
MW-117	08/07/2015 12:12	1.72	-17	6.83	1.73	27.77	20.2	30.4
MW-117	02/18/2016 11:55	0.82	-191	8.19	0.18	3.533	0.58	89.60
MW-117	02/18/2016 15:05	8.72	-158	6.74	0.27	5.146	2.29	291.80
MW-117	02/07/2017 11:24	2.18	261	8.09	0.13	2.647	4.89	140.50
MW-117	02/07/2017 15:45	9.05	1123	7.46	0.15	2.960	5.18	247.00
MW-118	02/20/2012 09:04	-0.31	-59	7.07	0.19	3.72465	3.84	38.2
MW-118	02/20/2012 09:06	-0.3	-64	7.12	0.19	3.71304	4.39	8.86
MW-118	02/20/2012 09:08	-0.31	-67	7.14	0.19	3.70917	4.21	62.24
MW-118	02/20/2012 09:11	-0.31	-68	7.15	0.19	3.70887	4.31	8.42
MW-118	02/20/2012 09:13	-0.32	-70	7.15	0.19	3.69363	4.35	23.76
MW-118	02/20/2012 09:15	-0.34	-71	7.15	0.19	3.69476	4.2	68.14
MW-118	02/20/2012 09:18	-0.34	-71	7.15	0.19	3.68824	4.14	18.83
MW-118	02/20/2012 09:20	-0.36	-72	7.15	0.19	3.6982	4.19	23.03
MW-118	02/20/2012 09:22	-0.36	-72	7.15	0.19	3.69027	4.1	25.82
MW-118	02/20/2012 09:25	-0.37	-73	7.14	0.19	3.68663	4.16	23.72
MW-118	02/20/2012 09:27	-0.37	-74	7.14	0.19	3.68663	4.08	16.83
MW-118	02/20/2012 09:29	-0.37	-74	7.14	0.19	3.67304	4.31	19.52
MW-118	02/20/2012 09:32	-0.37	-74	7.14	0.19	3.68546	4.27	44.66
MW-118	02/20/2012 09:34	-0.38	-75	7.14	0.19	3.67712	4.23	19.66
MW-118	02/20/2012 09:36	-0.38	-75	7.13	0.19	3.66482	4.3	21.61
MW-118	02/20/2012 09:39	-0.38	-75	7.13	0.19	3.67407	4.37	25.43
MW-118	02/20/2012 09:41	-0.38	-75	7.12	0.19	3.67407	4.27	27.39
MW-118	02/20/2012 09:43	-0.39	-75	7.12	0.19	3.67336	4.37	19
MW-118	02/20/2012 09:46	-0.39	-75	7.12	0.19	3.66846	4.37	21.47
MW-118	02/20/2012 09:48	-0.39	-76	7.11	0.19	3.67585	4.23	20.23
MW-118	02/20/2012 09:49	-0.39	-76	7.11	0.19	3.676	4.23	20.23
MW-118	02/20/2012 10:35	-0.31	-44	7.07	0.40	3.572	6.40	18.90
MW-118	02/21/2012 09:52	0.24	-108	6.53	0.20	4.290	5.90	14.70
MW-118	09/30/2013 13:54	0.56	-405	6.71	1.65	26.710	19.64	8.64
MW-118	09/30/2013 15:07	3.48	-369	6.86	1.49	24.190	22.24	14.90
MW-118	10/01/2013 10:45	0.08	-226	6.80	1.04	17.430	18.02	12.40
MW-118	08/26/2014 10:53	0.63	222	6.67	0.25	4.716	22.42	16.23
MW-118	08/26/2014 11:40	1.87	225	6.71	0.58	10.220	19.07	36.10
MW-118	08/27/2014 11:15	0.57	-476	6.79	0.17	3.177	20.40	17.00
MW-118	10/23/2015 09:15	0.98	150	6.68	0.51	9.095	15.88	15.1
MW-118	10/23/2015 10:55	3.52	55	6.75	0.51	9.006	16.92	6.8
MW-118	02/24/2016 09:20	3.20	-96	7.26	0.33	6.125	5.69	7.00
MW-118	02/24/2016 10:22	6.30	-100	6.65	0.10	1.922	6.82	36.60
MW-118	02/03/2017 10:26	0.85	291	7.35	0.29	5.585	4.08	55.70
MW-118	02/03/2017 11:02	8.86	-100	6.73	0.13	2.469	7.27	29.50
MW-118	04/27/2017 11:05	0.04	-129.00	6.88	0.14	2.627	13.43	7.92
MW-118	02/01/2018 10:41	5.42	49	7.18	0.2568	4.9096	4.19	145.7
MW-118	02/01/2018 10:43	1.33	48	7.15	0.3144	5.9376	4.35	63.2
MW-118	02/01/2018 10:45	0.57	47	7.09	0.3297	6.1990	4.67	24
MW-118	02/01/2018 10:48	0.19	47	7.04	1.2882	0.0221	4.73	34.7
MW-118	02/01/2018 10:50	0.08	46	7	1.3292	0.0221	4.73	24.2
MW-118	02/01/2018 10:52	0.04	45	6.98	1.3520	0.0221	4.77	51.4
MW-118	02/01/2018 10:54	0.02	44	6.97	1.3751	0.0221	4.77	16.4
MW-118	02/01/2018 10:56	0	44	6.96	1.3765	0.0221	4.86	20.7
MW-118	02/01/2018 10:58	-0.03	43	6.95	1.3481	0.0221	4.88	23.7
MW-118	02/01/2018 11:01	-0.03	43	6.94	1.3619	0.0221	4.84	40.7
MW-118	02/01/2018 11:03	-0.07	42	6.93	1.3619	0.0221	4.92	16.6
MW-118	02/01/2018 11:05	-0.08	42	6.93	1.3758	0.0221	4.95	12.8
MW-118	02/01/2018 11:07	-0.09	41	6.92	1.3885	0.0221	5.01	14
MW-118	02/01/2018 11:09	-0.1	41	6.91	1.3846	0.0221	5.06	16.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-118	02/01/2018 11:11	-0.11	40	6.91	1.4002	0.0221	5.14	10.2
MW-118	02/01/2018 11:14	-0.12	40	6.9	1.4091	0.0221	5.13	13.2
MW-118	02/01/2018 11:16	-0.13	40	6.9	1.4305	0.0221	5.15	10.7
MW-118	02/01/2018 11:18	-0.14	39	6.9	1.4399	0.0221	5.16	18.1
MW-118	02/01/2018 11:20	-0.13	39	6.89	1.4084	0.0221	5.17	12.2
MW-118	02/01/2018 11:22	-0.07	39	6.89	1.4156	0.0221	5.19	12.8
MW-118	02/01/2018 11:24	-0.16	39	6.89	1.4332	0.0221	5.17	12.1
MW-118	02/01/2018 11:27	-0.17	39	6.89	1.4606	0.0221	5.23	16.5
MW-118	02/01/2018 11:29	-0.17	38	6.88	1.4765	0.0221	5.25	14.2
MW-118	02/01/2018 11:31	-0.17	38	6.88	1.4478	0.0221	5.21	11.4
MW-118	02/02/2018 10:15	1.89	19.00	7.02	1.83	30.900	2.45	34.50
MW-118	02/02/2018 11:31	-0.17	38.00	6.88	1.45	24.650	5.07	11.44
MW-118	02/02/2018 12:21	1.60	50.00	7.20	0.34	6.301	5.93	16.50
MW-118	05/03/2018 09:32	6.32	-39	7.55	0.3083	5.6264	22.31	11.9
MW-118	05/03/2018 09:34	2.49	-57	7.26	0.3516	6.3942	15.95	8.1
MW-118	05/03/2018 09:37	1.53	-64	7.26	0.3314	6.0471	16.38	5.7
MW-118	05/03/2018 09:40	1.28	-71	7.29	0.3355	6.1123	16.94	5.5
MW-118	05/03/2018 09:42	1.18	-72	7.25	0.3341	6.0850	17.45	5.8
MW-118	05/03/2018 09:45	1.14	-73	7.24	0.3478	6.3206	17.2	5.1
MW-118	05/03/2018 09:48	1.1	-71	7.2	0.3489	6.3426	16.66	5.8
MW-118	05/03/2018 09:50	0.93	-72	7.19	0.3432	6.2466	16.54	5.1
MW-118	05/03/2018 09:53	0.87	-74	7.21	0.3513	6.3847	16.64	4.9
MW-118	05/03/2018 09:55	0.82	-73	7.17	0.3511	6.3845	16.21	5.7
MW-118	05/03/2018 09:58	0.75	-74	7.18	0.3498	6.3593	16.6	5
MW-118	05/03/2018 10:01	0.77	-75	7.18	0.3631	6.5854	16.67	4.7
MW-118	05/03/2018 10:03	0.75	-74	7.14	0.3565	6.4738	16.56	4.3
MW-118	05/03/2018 10:06	0.70	-75.00	7.15	0.36	6.538	16.77	4.36
MW-118	07/25/2018 08:32	1.91	-40	6.9	0.325	5.9170	22.75	5.885
MW-118	07/25/2018 08:36	0.33	-100	6.65	0.324	5.9010	22.37	7.699
MW-118	07/25/2018 08:38	0.31	-108	6.66	0.317	5.7780	22.34	5.886
MW-118	07/25/2018 08:41	0.25	-114	6.67	0.308	5.6280	22.23	5.806
MW-118	07/25/2018 08:43	0.23	-119	6.68	0.302	5.5160	22.12	5.887
MW-118	07/25/2018 08:45	0.27	-122	6.69	0.292	5.3390	22.23	5.687
MW-118	07/25/2018 08:48	0.28	-125	6.7	0.288	5.2850	22.09	4.433
MW-118	07/25/2018 08:50	0.29	-127	6.7	0.289	5.2910	22.16	5.464
MW-118	07/25/2018 08:52	0.34	-130	6.72	0.277	5.0890	22.01	5.088
MW-118	07/25/2018 08:55	0.43	-132	6.74	0.270	4.9670	22.12	4.202
MW-118	07/25/2018 08:57	0.44	-134	6.74	0.263	4.8450	22.17	4.845
MW-118	07/25/2018 08:59	0.5	-135	6.75	0.260	4.7970	22.38	4.797
MW-118	07/25/2018 09:02	0.55	-137	6.76	0.257	4.7410	22.4	4.76
MW-118	07/25/2018 09:04	0.65	-138	6.76	0.251	4.6360	22.29	3.962
MW-118	07/25/2018 09:07	0.81	-139	6.76	0.250	4.6270	22.47	3.93
MW-118	07/25/2018 09:09	1.12	-141	6.77	0.246	4.5590	22.42	4.745
MW-118	07/25/2018 09:11	1.36	-142	6.78	0.241	4.4650	22.4	3.874
MW-118	07/25/2018 09:14	1.65	-143	6.79	0.238	4.4200	22.17	4.641
MW-118	07/25/2018 09:16	1.91	-144	6.79	0.234	4.3350	22.19	4.665
MW-118	07/25/2018 09:18	2.12	-145	6.79	0.232	4.3100	22.21	4.449
MW-118	07/25/2018 09:21	2.34	-146.00	6.80	0.23	4.286	22.41	5.13
MW-118	07/25/2018 09:32	1.91	-40	6.9	0.3254	5.9170	22.75	5.885
MW-118	07/25/2018 09:34	0.33	-100	6.65	0.3244	5.9010	22.37	7.699
MW-118	07/25/2018 09:37	0.31	-108	6.66	0.3172	5.7780	22.34	5.886
MW-118	07/25/2018 09:40	0.25	-114	6.67	0.3084	5.6280	22.23	5.806
MW-118	07/25/2018 09:42	0.23	-119	6.68	0.3019	5.5160	22.12	5.887
MW-118	07/25/2018 09:45	0.27	-122	6.69	0.2916	5.3390	22.23	5.687
MW-118	07/25/2018 09:48	0.28	-125	6.7	0.2884	5.2850	22.09	4.433
MW-118	07/25/2018 09:50	0.29	-127	6.7	0.2888	5.2910	22.16	5.464
MW-118	07/25/2018 09:53	0.34	-130	6.72	0.2770	5.0890	22.01	5.088
MW-118	07/25/2018 09:55	0.43	-132	6.74	0.2700	4.9670	22.12	4.202
MW-118	07/25/2018 09:58	0.44	-134	6.74	0.2629	4.8450	22.17	4.845
MW-118	07/25/2018 10:01	0.5	-135	6.75	0.2602	4.7970	22.38	4.797
MW-118	07/25/2018 10:03	0.55	-137	6.76	0.2569	4.7410	22.4	4.76
MW-118	07/25/2018 10:06	0.65	-138	6.76	0.2509	4.6360	22.29	3.962

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-118	07/25/2018 10:08	0.81	-139	6.76	0.2504	4.6270	22.47	3.93
MW-118	07/25/2018 10:10	1.12	-141	6.77	0.2465	4.5590	22.42	4.745
MW-118	07/25/2018 10:12	1.36	-142	6.78	0.2411	4.4650	22.4	3.874
MW-118	07/25/2018 10:14	1.65	-143	6.79	0.2385	4.4200	22.17	4.641
MW-118	07/25/2018 10:16	1.91	-144	6.79	0.2336	4.3350	22.19	4.665
MW-118	07/25/2018 10:18	2.12	-145	6.79	0.2322	4.3100	22.21	4.449
MW-118	07/25/2018 10:20	2.34	-146	6.8	0.2308	4.2860	22.23	5.128
MW-118	02/15/2019 10:35	3.87	-48.00	7.14	2.17	4.077	7.65	37.50
MW-118	02/15/2019 12:05	3.40	-92.80	7.05	1.66	3.168	9.81	5.00
MW-118	02/15/2019 12:25	4.68	-88.60	7.04	1.57	3.004	7.04	30.00
MW-118	01/29/2020 09:55	0.21	-115.2	7.24	NM	1.639	5.92	28.7
MW-118	01/29/2020 11:15	0.21	-157.1	7.09	0.5	1.009	7.36	1.3
MW-118	02/23/2021 09:10	0.84	-163	6.72	17.66	29	7.58	14.4
MW-118	02/23/2021 09:15	0.26	-174.4	6.62	17.52	28.65	7.39	15.2
MW-118	02/23/2021 09:20	0.18	-181.5	6.6	16.1	26.57	7.22	57.2
MW-118	02/23/2021 09:25	0.14	-188.1	6.62	14.54	24.19	7.13	236.1
MW-118	02/23/2021 09:30	0.21	-189.7	6.71	9.38	16.27	6.27	264.8
MW-118	02/23/2021 09:35	0.29	-182	6.74	7.67	13.44	6.26	153.6
MW-118	02/23/2021 09:40	0.5	-175.5	6.75	6.72	11.89	6.24	244.6
MW-118	02/23/2021 09:45	0.64	-171.8	6.82	5.53	9.922	6.29	210.5
MW-118	02/23/2021 09:50	1.14	-169.9	6.86	4.83	8.735	6.2	218.1
MW-118	02/23/2021 09:55	1.13	-167.6	6.93	4.36	7.896	6.09	87.9
MW-118	02/23/2021 11:20	0.76	-164.3	7.26	1.95	3.7	6.61	11.7
MW-118	02/23/2021 11:48	3.29	-131.3	7.16	1.27	2.472	5.74	21.8
MW-118	05/04/2021 11:25	2.78	-88.4	7.15	1.79	3.381	13.13	10.1
MW-118	05/04/2021 11:30	1.49	-96.8	6.99	1.79	3.381	12.28	9.5
MW-118	05/04/2021 11:35	0.5	-115.3	6.93	1.6	3.062	11.32	11.9
MW-118	05/04/2021 11:40	0.35	-126.4	6.98	1.49	2.855	11.19	19.4
MW-118	05/04/2021 11:45	0.33	-127.3	6.98	1.47	2.828	11.17	19.3
MW-118	05/04/2021 11:50	0.25	-129.8	6.99	1.45	2.777	11.05	18.2
MW-118	05/04/2021 11:55	0.24	-128.7	6.95	1.45	2.781	11.97	17
MW-118	05/04/2021 12:00	0.23	-128.3	6.94	1.45	2.778	12.18	16.3
MW-118	05/04/2021 12:05	0.26	-129	6.94	1.44	2.763	11.99	15.2
MW-118	05/04/2021 12:10	0.21	-130	6.94	1.42	2.732	12.04	13.9
MW-118	02/10/2022 10:40	2.91	-92.9	7.63	2.15	4.278	6.01	151.9
MW-118	02/10/2022 10:45	0.56	-51.2	7.32	1.89	3.596	6.08	142.2
MW-118	02/10/2022 10:50	0.5	-41	7.28	1.84	3.505	6.02	131.7
MW-118	02/10/2022 10:55	0.44	-25	7.2	1.78	3.398	6.08	112.5
MW-118	02/10/2022 11:00	0.35	-9.3	7.15	1.74	3.333	6.18	85.4
MW-118	02/10/2022 11:05	0.34	-2.6	7.1	1.73	3.312	6.4	67.6
MW-118	02/10/2022 11:10	0.3	-7.5	7.07	1.74	3.315	6.57	49
MW-118	02/10/2022 11:15	0.27	-18.2	7.02	1.74	3.327	6.57	36.2
MW-118	02/10/2022 11:20	0.26	-31.5	7.01	1.75	3.332	6.68	30.9
MW-118	02/10/2022 11:25	0.24	-37.7	7	1.75	3.336	6.77	28.4
MW-120	03/13/2012 10:03	2.04	75	6.37	0.08	1.50841	13.54	642.2
MW-120	03/13/2012 10:05	1.65	79	6.35	0.08	1.52679	13.02	988.6
MW-120	03/13/2012 10:07	1.62	82	6.34	0.08	1.51767	12.77	2104.8
MW-120	03/13/2012 10:09	1.73	85	6.33	0.08	1.51553	12.79	1087.3
MW-120	03/13/2012 10:11	1.82	87	6.33	0.08	1.51587	12.71	273.5
MW-120	03/13/2012 10:13	1.9	89	6.32	0.08	1.51415	12.8	204.6
MW-120	03/13/2012 10:15	1.89	90	6.32	0.08	1.51629	12.73	163.3
MW-120	03/13/2012 10:17	1.76	91	6.32	0.08	1.51583	12.77	496.9
MW-120	03/13/2012 10:19	1.68	92	6.31	0.08	1.51769	12.81	205.4
MW-120	03/13/2012 10:20	1.54	92	6.31	0.08	1.519	12.84	41.3
MW-120	03/13/2012 10:22	1.47	93	6.31	0.08	1.51772	12.94	50.8
MW-120	03/13/2012 10:24	1.37	94	6.31	0.08	1.51779	13.03	29.6
MW-120	03/13/2012 10:26	1.31	95	6.31	0.08	1.51979	13.08	69.7
MW-120	03/13/2012 10:28	1.25	96	6.31	0.08	1.51942	13.12	48.6
MW-120	03/13/2012 10:30	1.23	96	6.31	0.08	1.5192	13.16	61.1
MW-120	03/13/2012 10:32	1.16	97	6.31	0.08	1.51792	13.18	40.8
MW-120	03/13/2012 10:34	1.12	97	6.31	0.08	1.52013	13.04	50.7
MW-120	03/13/2012 10:36	1.09	98	6.31	0.08	1.51522	13.22	63.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-120	03/13/2012 10:38	1.06	99	6.3	0.08	1.51211	13.53	19
MW-120	03/13/2012 10:40	1.03	101	6.3	0.08	1.51008	13.98	14.5
MW-120	03/13/2012 10:42	1.01	103	6.29	0.08	1.51029	14.41	15.2
MW-120	03/13/2012 10:44	0.98	104	6.29	0.08	1.51155	14.8	11.2
MW-120	03/13/2012 10:46	0.95	106	6.28	0.08	1.5124	15.15	8.6
MW-120	03/13/2012 10:48	0.92	108	6.28	0.08	1.51337	15.47	7.2
MW-120	03/13/2012 10:50	0.89	109	6.28	0.08	1.51481	15.76	7.8
MW-120	03/13/2012 10:52	0.86	110	6.28	0.08	1.51602	16.00	7.4
MW-120	03/13/2012 11:21	3.01	75	6.40	0.07	1.483	12.80	47.50
MW-120	03/14/2012 09:48	0.30	47	5.92	0.10	1.590	11.90	21.20
MW-120	05/29/2012 09:04	1.4	121	6.1	0.08	1.54377	18.84	411.5
MW-120	05/29/2012 09:06	0.89	111	6.11	0.08	1.55018	18.5	269.7
MW-120	05/29/2012 09:07	0.7	105	6.11	0.08	1.5529	18.37	250.9
MW-120	05/29/2012 09:08	0.57	101	6.11	0.08	1.55058	18.18	211.1
MW-120	05/29/2012 09:09	0.48	97	6.11	0.08	1.54859	18.04	209.1
MW-120	05/29/2012 09:11	0.42	95	6.11	0.08	1.54617	18.16	176.6
MW-120	05/29/2012 09:12	0.4	94	6.1	0.08	1.54286	18.03	149.4
MW-120	05/29/2012 09:13	0.39	92	6.1	0.08	1.53938	18.01	128.1
MW-120	05/29/2012 09:14	0.38	91	6.1	0.08	1.53794	18.04	117.7
MW-120	05/29/2012 09:16	0.41	90	6.09	0.08	1.53582	18.16	91.2
MW-120	05/29/2012 09:17	0.42	90	6.09	0.08	1.53749	18.17	100.1
MW-120	05/29/2012 09:18	0.63	89	6.09	0.08	1.53764	18.12	74.9
MW-120	05/29/2012 09:20	0.85	89	6.09	0.08	1.53387	18.23	62.6
MW-120	05/29/2012 09:21	0.82	88	6.09	0.08	1.53289	18.18	100.7
MW-120	05/29/2012 09:22	0.75	88	6.09	0.08	1.53255	18.21	61.2
MW-120	05/29/2012 09:23	0.7	87	6.09	0.08	1.53363	18.16	66.8
MW-120	05/29/2012 09:25	1.04	87	6.09	0.08	1.53217	18.24	59.8
MW-120	05/29/2012 09:26	1.17	87	6.09	0.08	1.53192	18.1	52.2
MW-120	05/29/2012 09:27	1.05	87	6.09	0.08	1.52764	18.34	46.1
MW-120	05/29/2012 09:28	0.99	87	6.09	0.08	1.525	18.36	40.9
MW-120	05/29/2012 09:30	0.92	87	6.08	0.08	1.52886	18.28	41.7
MW-120	05/29/2012 09:31	0.9	87	6.08	0.08	1.52699	18.3	35.9
MW-120	05/29/2012 09:32	1.1	87	6.08	0.08	1.52982	18.32	38.3
MW-120	05/29/2012 09:33	1.09	87	6.09	0.08	1.52781	18.38	28.5
MW-120	05/29/2012 09:35	1.11	86	6.09	0.08	1.52826	18.38	31.4
MW-120	05/29/2012 09:36	1.08	86	6.08	0.08	1.52541	18.56	32.7
MW-120	05/29/2012 09:37	1.05	86	6.08	0.08	1.52455	18.67	27.6
MW-120	05/29/2012 09:38	1.04	87	6.08	0.08	1.52432	18.77	26.6
MW-120	05/29/2012 09:40	1.06	87	6.08	0.08	1.523	18.58	28.73
MW-120	05/29/2012 11:00	4.49	128	6.16	0.08	1.513	13.62	36.9
MW-120	05/30/2012 08:55	1.63	95	6.16	0.1	1.507	15.09	2.9
MW-120	07/31/2012 10:14	1.36	34	6.62	0.08	1.52828	24.04	2.4
MW-120	07/31/2012 10:16	1.27	36	6.82	0.08	1.52626	20.03	4.1
MW-120	07/31/2012 10:17	0.95	37	6.83	0.08	1.52652	18.76	5.5
MW-120	07/31/2012 10:18	0.9	37	6.84	0.08	1.52832	18.49	3.8
MW-120	07/31/2012 10:20	0.86	37	6.84	0.08	1.52222	18.46	4.3
MW-120	07/31/2012 10:21	0.88	36	6.82	0.08	1.52576	18.32	4.1
MW-120	07/31/2012 10:22	0.88	34	6.78	0.08	1.52221	18.43	7.4
MW-120	07/31/2012 10:23	0.91	35	6.78	0.08	1.5243	18.4	6.1
MW-120	07/31/2012 10:25	0.88	35	6.78	0.08	1.52544	18.33	5
MW-120	07/31/2012 10:26	0.82	35	6.74	0.08	1.52579	18.37	7
MW-120	07/31/2012 10:27	0.95	35	6.74	0.08	1.52596	18.36	6.2
MW-120	07/31/2012 10:28	1.02	35	6.74	0.08	1.52958	18.25	5.4
MW-120	07/31/2012 10:30	1.04	35	6.74	0.08	1.52904	18.2	6
MW-120	07/31/2012 10:31	1.13	34	6.71	0.08	1.52903	18.27	6.5
MW-120	07/31/2012 10:32	1.16	34	6.69	0.08	1.52752	18.29	5.9
MW-120	07/31/2012 10:33	1.14	34	6.7	0.08	1.52814	18.33	6.1
MW-120	07/31/2012 10:34	1.14	34	6.70	0.08	1.528	18.33	6.05
MW-120	07/31/2012 11:40	1.50	-13	6.16	0.07	1.430	17.20	45.10
MW-120	08/01/2012 09:39	4.92	27	6.09	0.10	1.600	19.50	21.10
MW-120	09/06/2013 11:19	0.59	-404	6.05	0.17	3.170	17.79	2.66
MW-120	11/11/2013 11:05	1.11	-250	5.88	0.17	3.239	14.82	16.32

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-120	03/06/2014 13:00	0.94	-207	5.94	0.08	1.546	9.84	9.95
MW-120	03/06/2014 13:37	3.49	17	6.59	0.01	1.573	9.34	30.90
MW-120	05/21/2014 14:36	1.42	-438	5.95	0.21	3.888	15.08	17.14
MW-120	08/06/2014 14:17	1.55	-444	6.06	0.08	1.654	19.40	16.29
MW-120	08/06/2014 14:50	2.67	-206	7.30	0.08	1.569	22.96	13.20
MW-120	10/23/2014 09:41	0.21	96	5.91	0.09	1.718	15.06	192.10
MW-120	10/23/2014 10:12	2.36	94	5.93	0.12	2.281	15.07	139.60
MW-120	03/23/2015 09:25	7.25	141	6.12	0.08	1.603	7.28	387.90
MW-120	03/23/2015 09:54	10.38	122	6.37	0.08	1.608	8.33	286.90
MW-120	09/15/2015 11:17	3.61	166	5.95	0.2	3.665	19.89	104.5
MW-120	11/16/2015 10:34	2.67	16	6.15	0.1689	3203.2417	16.8	2721.5
MW-120	11/16/2015 10:36	1.36	16	6.03	0.1698	3218.3525	17.11	1757
MW-120	11/16/2015 10:38	1.31	16	5.97	0.1800	3398.9231	17.84	1410.3
MW-120	11/16/2015 10:40	1.28	17	5.95	0.1901	3576.5921	18.41	1177.2
MW-120	11/16/2015 10:43	1.28	18	5.94	0.1987	3727.0902	18.97	1111.5
MW-120	11/16/2015 10:45	1.27	19	5.94	0.1988	3727.5648	19.53	925.1
MW-120	11/16/2015 10:47	1.23	20	5.94	0.1983	3718.5495	20.08	847.1
MW-120	11/16/2015 10:49	1.19	20	5.94	0.1975	3703.8271	20.59	826.2
MW-120	11/16/2015 10:51	1.16	22	5.94	0.1969	3691.2730	21.08	792.1
MW-120	11/16/2015 11:16	2.12	6	6.23	0.19	3.580	15.33	74.90
MW-120	01/13/2016 12:38	4.55	11	7.76	0.1382	2696.0205	7.61	208.8
MW-120	01/13/2016 12:40	1.23	7	7.43	0.1333	2590.1379	9.59	77.9
MW-120	01/13/2016 12:42	0.71	3	7.21	0.1300	2524.8784	10.13	47
MW-120	01/13/2016 12:45	0.6	0	7.03	0.1282	2490.1926	10.44	22.7
MW-120	01/13/2016 12:47	0.55	-2	6.89	0.1284	2495.0117	10.35	25.3
MW-120	01/13/2016 12:49	0.54	-6	6.78	0.1275	2478.0538	10.54	20.8
MW-120	01/13/2016 12:51	0.52	-9	6.67	0.1269	2464.1243	10.73	30.9
MW-120	01/13/2016 12:53	0.52	-11	6.59	0.1258	2443.6450	10.86	17.2
MW-120	01/13/2016 12:55	0.5	-12	6.51	0.1264	2454.8607	10.83	12.3
MW-120	01/13/2016 12:58	0.5	-14	6.47	0.1276	2479.4640	10.51	15.8
MW-120	01/13/2016 13:00	0.47	-17	6.41	0.1268	2463.0878	10.82	12
MW-120	01/13/2016 13:02	0.47	-18	6.37	0.1268	2463.9173	10.74	10.5
MW-120	01/13/2016 13:04	0.46	-19	6.34	0.1280	2485.2772	10.65	8.4
MW-120	01/13/2016 13:06	0.44	-21	6.31	0.1268	2461.7975	10.86	7.6
MW-120	01/13/2016 13:08	0.44	-22	6.28	0.1268	2462.7454	10.81	6.6
MW-120	01/13/2016 13:11	0.42	-24	6.26	0.1255	2436.5233	11.08	10.8
MW-120	01/13/2016 13:13	0.42	-25	6.25	0.1264	2454.4082	10.83	8
MW-120	01/13/2016 13:15	0.41	-27	6.23	0.1264	2455.3245	10.91	6.4
MW-120	01/13/2016 13:17	0.39	-28	6.21	0.1241	2411.5130	11.26	5.8
MW-120	01/13/2016 13:19	0.39	-30	6.2	0.1251	2430.2052	10.98	5.8
MW-120	01/13/2016 13:21	0.39	-31	6.19	0.1250	2427.6743	11.07	7.7
MW-120	01/13/2016 13:24	0.37	-33	6.18	0.1242	2412.2773	11.21	5.4
MW-120	01/13/2016 13:26	0.37	-34	6.17	0.1265	2457.4013	10.72	5.1
MW-120	01/13/2016 13:28	0.37	-36	6.17	0.1270	2466.5056	10.71	4.2
MW-120	01/13/2016 13:46	2.98	183	6.95	0.12	2.417	13.06	28.9
MW-120	04/08/2016 10:42	5.71	-108	6.49	0.1799	3435.3524	10.4	2486.8
MW-120	04/08/2016 10:44	1.82	-93	6.2	0.1818	3465.4988	10.82	1267
MW-120	04/08/2016 10:46	0.95	-84	6.08	0.1812	3455.2403	10.81	500.4
MW-120	04/08/2016 10:47	0.68	-79	6.02	0.1820	3469.9138	10.75	449.3
MW-120	04/08/2016 10:49	0.54	-76	5.98	0.1815	3459.4634	10.83	844
MW-120	04/08/2016 10:51	0.44	-73	5.96	0.1794	3420.3660	11.03	1067.2
MW-120	04/08/2016 10:53	0.39	-72	5.94	0.1764	3363.5238	11.38	189.4
MW-120	04/08/2016 10:55	0.37	-72	5.94	0.1744	3327.3160	11.45	119.3
MW-120	04/08/2016 10:57	0.35	-71	5.93	0.1724	3290.3509	11.72	204.5
MW-120	04/08/2016 10:59	0.34	-71	5.94	0.1742	3324.7999	11.44	165.9
MW-120	04/08/2016 11:01	0.32	-71	5.94	0.1765	3366.6641	11.27	87.1
MW-120	04/08/2016 11:03	0.32	-71	5.93	0.1767	3369.4535	11.36	116.1
MW-120	04/08/2016 11:05	0.31	-71	5.93	0.1768	3372.5299	11.3	83.1
MW-120	04/08/2016 11:07	0.3	-71	5.93	0.1735	3310.6676	11.62	196.2
MW-120	04/08/2016 11:08	0.3	-71	5.93	0.1742	3322.4853	11.56	138.6
MW-120	04/08/2016 11:10	0.31	-71	5.94	0.1763	3363.0937	11.33	77.8
MW-120	04/08/2016 11:12	0.32	-71	5.93	0.1752	3342.3388	11.48	63.3

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-120	04/08/2016 11:14	0.32	-71	5.94	0.1750	3338.0248	11.48	63.2
MW-120	04/08/2016 11:16	0.3	-71	5.93	0.1755	3346.9705	11.42	59.3
MW-120	04/08/2016 11:35	5.37	-62	6.10	0.21	3.953	11.32	194.30
MW-120	07/25/2016 08:49	1.99	15	6.08	NM	3848.79	24.34	362.9
MW-120	07/25/2016 08:50	2	9	6.07	NM	3894.78	24.24	298.3
MW-120	07/25/2016 08:52	1.2	-9	6.02	NM	4074.87	23.05	276.2
MW-120	07/25/2016 08:53	1.15	-12	5.97	NM	4158.79	23.09	245.3
MW-120	07/25/2016 08:54	1.14	-14	5.94	NM	4166.81	23.11	215
MW-120	07/25/2016 08:56	1.1	-16	5.93	NM	4250.45	23.07	208.5
MW-120	07/25/2016 08:57	1.18	-18	5.92	NM	4236.02	23.08	211.2
MW-120	07/25/2016 08:59	1.58	-20	5.92	NM	4231.74	22.93	188.7
MW-120	07/25/2016 09:00	1.42	-22	5.92	NM	4308.01	22.72	173.5
MW-120	07/25/2016 09:01	1.5	-24	5.92	NM	4336.17	22.58	172.5
MW-120	07/25/2016 09:03	1.44	-26	5.92	NM	4345.96	22.44	147
MW-120	07/25/2016 09:04	1.41	-28	5.93	NM	4409.12	22.24	138.3
MW-120	07/25/2016 09:05	1.4	-29	5.93	NM	4434.02	22.01	132.8
MW-120	07/25/2016 09:07	1.39	-30	5.93	NM	4480.84	22.11	134.1
MW-120	07/25/2016 09:36	1.06	-30	6.03	0.25	4.690	22.90	93.70
MW-120	10/21/2016 09:55	3.84	22	6.19	0.0972	1892.2618	19.01	181.5
MW-120	10/21/2016 09:57	1.88	17	6.07	0.0970	1889.7395	18.73	138.5
MW-120	10/21/2016 09:58	1.21	16	6.06	0.0977	1901.3416	18.69	128.5
MW-120	10/21/2016 10:00	1	15	6.05	0.0980	1908.4976	18.66	99.9
MW-120	10/21/2016 10:02	0.88	15	6.04	0.0982	1910.4546	18.66	89.3
MW-120	10/21/2016 10:04	0.74	12	6.04	0.0984	1914.8936	18.64	77.7
MW-120	10/21/2016 10:06	0.67	10	6.04	0.0985	1916.9128	18.65	69.2
MW-120	10/21/2016 10:08	0.57	8	6.03	0.0986	1919.5378	18.64	62.9
MW-120	10/21/2016 10:10	0.53	5	6.03	0.0992	1929.8148	18.63	53.7
MW-120	10/21/2016 10:12	0.46	2	6.02	0.0991	1927.8110	18.63	47.9
MW-120	10/21/2016 10:14	0.4	1	6.02	0.0990	1927.1029	18.62	42.3
MW-120	10/21/2016 10:16	0.43	0	6.02	0.0990	1925.9349	18.64	39.6
MW-120	10/21/2016 10:18	0.38	-2	6.02	0.0991	1928.1753	18.63	38.4
MW-120	10/21/2016 10:19	0.6	2	6.04	0.0989	1923.9401	18.67	45.9
MW-120	10/21/2016 10:21	0.75	3	6.05	0.0987	1921.4410	18.68	45.5
MW-120	10/21/2016 10:23	0.72	1	6.04	0.0987	1920.3947	18.68	44.6
MW-120	10/21/2016 10:25	0.58	0	6.03	0.0987	1921.1497	18.66	35
MW-120	10/21/2016 10:27	0.44	-4	6.03	0.0988	1921.8337	18.63	31
MW-120	10/21/2016 10:29	0.4	-4	6.02	0.0988	1922.8584	18.63	26.9
MW-120	10/21/2016 10:31	0.31	-4	6.02	0.0987	1920.3883	18.6	24.5
MW-120	10/21/2016 10:33	0.28	-5	6.02	0.0987	1920.9159	18.61	21.1
MW-120	10/21/2016 10:35	0.25	-6	6.02	0.0987	1920.6353	18.59	20.5
MW-120	10/21/2016 10:37	0.23	-7	6.02	0.0987	1920.8525	18.56	20.6
MW-120	10/21/2016 10:39	0.23	-7	6.02	0.0987	1920.1037	18.57	18.6
MW-120	10/21/2016 10:41	0.23	-7	6.02	0.0987	1919.8643	18.57	18.6
MW-120	10/21/2016 10:42	0.2	-7	6.02	0.0987	1920.3015	18.55	16.9
MW-120	10/21/2016 11:04	0.77	-2	6.05	0.10	1.914	18.33	37.90
MW-120	01/20/2017 08:34	6.91	82	6.58	0.0911	1800.1072	10.14	1341.9
MW-120	01/20/2017 08:36	2.74	53	6.48	0.0877	1737.5155	9.8	604
MW-120	01/20/2017 08:38	1.24	44	6.4	0.0874	1731.9049	9.57	375.1
MW-120	01/20/2017 08:41	0.75	41	6.33	0.0875	1734.6530	9.28	384.4
MW-120	01/20/2017 08:43	0.52	40	6.29	0.0875	1736.0536	9.28	291.9
MW-120	01/20/2017 08:45	0.33	40	6.26	0.0874	1733.8242	9.28	273.4
MW-120	01/20/2017 08:47	0.29	41	6.24	0.0874	1733.0096	9.28	297.8
MW-120	01/20/2017 08:49	0.41	43	6.22	0.0874	1733.2954	9.28	279.9
MW-120	01/20/2017 08:51	0.52	46	6.22	0.0873	1731.9876	9.22	313.6
MW-120	01/20/2017 08:53	0.62	46	6.21	0.0874	1733.3475	9.22	268.3
MW-120	01/20/2017 08:56	0.61	47	6.2	0.0873	1732.0580	9.23	281
MW-120	01/20/2017 08:58	0.66	48	6.2	0.0873	1731.5121	9.25	268.3
MW-120	04/20/2017 12:10	6.07	55	7.1	0.0974	0.0190	15.23	747.2
MW-120	04/20/2017 12:12	1.2	63	6.84	0.1043	0.0204	12.84	391.6
MW-120	04/20/2017 12:14	0.35	63	6.67	0.1080	0.0211	12.57	232.5
MW-120	04/20/2017 12:16	0.12	62	6.52	0.1098	0.0214	12.45	173.4
MW-120	04/20/2017 12:18	0.02	61	6.41	0.1112	0.0217	12.4	131

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-120	04/20/2017 12:21	-0.04	60	6.33	0.1116	0.0217	12.4	124.1
MW-120	04/20/2017 12:23	-0.09	58	6.26	0.1115	0.0217	12.39	99.5
MW-120	04/20/2017 12:25	-0.1	57	6.21	0.1110	0.0216	12.46	81.9
MW-120	04/20/2017 12:27	-0.11	56	6.18	0.1101	0.0215	12.66	69.9
MW-120	04/20/2017 12:29	-0.12	55	6.15	0.1100	0.0214	12.77	47.9
MW-120	04/20/2017 12:31	-0.14	55	6.13	0.1105	0.0215	12.52	48.4
MW-120	04/20/2017 12:34	-0.15	54	6.11	0.1110	0.0216	12.5	38.9
MW-120	04/20/2017 12:36	-0.15	53	6.1	0.1113	0.0217	12.43	32.5
MW-120	04/20/2017 12:38	-0.16	53	6.09	0.1111	0.0217	12.45	33.6
MW-120	04/20/2017 12:40	-0.15	52.00	6.08	0.11	2.200	12.15	31.37
MW-120	01/22/2018 08:47	4.35	156	7.98	0.1087	0.0213	11.03	1350.5
MW-120	01/22/2018 08:49	1.03	152	7.66	0.1391	0.0269	10.7	2743.1
MW-120	01/22/2018 08:51	1.07	151	7.45	0.1509	0.0291	10.54	3329.9
MW-120	01/22/2018 08:54	1.93	149	7.31	0.1572	0.0302	10.58	1675.1
MW-120	01/22/2018 08:56	1.41	147	7.22	0.1633	0.0313	10.51	452.1
MW-120	01/22/2018 08:58	0.82	145	7.13	0.1679	0.0322	10.42	262.6
MW-120	01/22/2018 09:00	0.52	143	7.05	0.1714	0.0328	10.39	209.5
MW-120	01/22/2018 09:02	0.33	142	6.98	0.1728	0.0331	10.5	174.4
MW-120	01/22/2018 09:04	0.22	140	6.92	0.1741	0.0333	10.58	134.3
MW-120	01/22/2018 09:07	0.16	139	6.86	0.1770	0.0338	10.47	143.3
MW-120	01/22/2018 09:09	0.11	138	6.8	0.1783	0.0341	10.38	114.6
MW-120	01/22/2018 09:11	0.06	137	6.75	0.1799	0.0343	10.42	102.7
MW-120	01/22/2018 09:13	0.02	136	6.71	0.1804	0.0344	10.51	99.7
MW-120	01/22/2018 09:15	0	135	6.66	0.1821	0.0347	10.43	90
MW-120	01/22/2018 09:17	-0.02	135	6.62	0.1835	0.0350	10.41	80.2
MW-120	01/22/2018 09:20	-0.05	134	6.58	0.1842	0.0351	10.44	78.3
MW-120	01/22/2018 09:22	-0.05	133	6.54	0.1851	0.0353	10.37	77.8
MW-120	01/22/2018 09:24	-0.08	133	6.51	0.1852	0.0353	10.48	66.9
MW-120	01/22/2018 09:26	-0.1	132	6.47	0.1854	0.0353	10.51	61.4
MW-120	01/22/2018 09:28	-0.12	132	6.44	0.1858	0.0354	10.45	64.1
MW-120	01/22/2018 09:30	-0.13	132	6.42	0.1869	0.0356	10.45	57.9
MW-120	01/22/2018 09:33	-0.14	131	6.39	0.1864	0.0355	10.53	57.8
MW-120	01/22/2018 09:34	0.14	131.00	6.36	0.19	3.564	10.45	58.03
MW-120	01/22/2018 09:35	-0.14	131	6.36	0.1864	0.0355	10.59	58
MW-120	04/10/2018 10:01	6.85	153	7.4	0.0950	0.0019	9.7	1039.8
MW-120	04/10/2018 10:03	2.16	139	7.06	0.0953	0.0019	10.21	672.9
MW-120	04/10/2018 10:05	1.47	136	6.85	0.0923	0.0018	10.27	388.7
MW-120	04/10/2018 10:08	1.3	134	6.7	0.0952	0.0019	10.35	304.4
MW-120	04/10/2018 10:10	1.14	134	6.59	0.0933	0.0018	10.31	238.6
MW-120	04/10/2018 10:12	1.09	134	6.48	0.0946	0.0019	10.42	238.5
MW-120	04/10/2018 10:14	1.16	134	6.41	0.0951	0.0019	10.32	169.6
MW-120	04/10/2018 10:17	1.14	135	6.33	0.0938	0.0019	10.28	181.6
MW-120	04/10/2018 10:19	1.09	135	6.26	0.0945	0.0019	10.4	141
MW-120	04/10/2018 10:21	1.17	136	6.21	0.0938	0.0019	10.41	126
MW-120	04/10/2018 10:23	1.2	137	6.16	0.0949	0.0019	10.34	130.6
MW-120	04/10/2018 10:26	1.19	137	6.12	0.0914	0.0018	10.29	122.1
MW-120	04/10/2018 10:28	1.18	137	6.07	0.0949	0.0019	10.25	123.7
MW-120	04/10/2018 10:30	1.26	138	6.04	0.0949	0.0019	10.29	128.7
MW-120	04/10/2018 10:32	1.17	138	6.01	0.0942	0.0019	10.38	112.7
MW-120	04/10/2018 10:35	1.18	137	5.98	0.0940	0.0019	10.48	92.4
MW-120	04/10/2018 10:37	1.14	137	5.95	0.0949	0.0019	10.55	82.2
MW-120	04/10/2018 10:39	1.15	137	5.93	0.0925	0.0018	10.59	82.6
MW-120	04/10/2018 10:41	1.1	137	5.91	0.0945	0.0019	10.56	83.1
MW-120	04/10/2018 10:42	1.10	137.00	5.91	0.09	1.869	10.44	83.09
MW-120	07/16/2018 09:02	1.7	-3	6.44	0.0815	1.6000	19.21	56.7
MW-120	07/16/2018 09:04	6.37	-42	6.33	0.0938	1.8300	18.23	606.7
MW-120	07/16/2018 09:06	6.5	-66	6.23	0.0936	1.8270	17.94	512.3
MW-120	07/16/2018 09:08	5.57	-77	6.15	0.0936	1.8270	17.81	165.8
MW-120	07/16/2018 09:11	4.71	-83	6.09	0.0937	1.8300	17.83	210.3
MW-120	07/16/2018 09:13	4.03	-88	6.04	0.0938	1.8310	17.79	163.3
MW-120	07/16/2018 09:15	3.47	-91	6	0.0946	1.8460	17.8	143.2
MW-120	07/16/2018 09:17	2.98	-94	5.98	0.0939	1.8330	17.78	128.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-120	07/16/2018 09:20	2.52	-97	5.7	0.0938	1.8310	17.66	111.2
MW-120	07/16/2018 09:22	2.2	-100	5.96	0.0936	1.8270	17.62	93.6
MW-120	07/16/2018 09:24	1.87	-102	5.95	0.0933	1.8220	17.6	86.9
MW-120	07/16/2018 09:26	1.3	-105	5.94	0.0936	1.8270	17.56	76.9
MW-120	07/16/2018 09:29	1.41	-107	5.94	0.0930	1.8170	17.57	77.5
MW-120	07/16/2018 09:31	1.21	-108	5.93	0.0927	1.8100	17.58	72.6
MW-120	07/16/2018 09:33	1.08	-110	5.93	0.0927	1.8110	17.4	69.2
MW-120	07/16/2018 09:35	0.98	-111	5.93	0.0928	1.8120	17.56	70.8
MW-120	07/16/2018 09:38	0.87	-113	5.93	0.0928	1.8130	17.49	56.5
MW-120	07/16/2018 09:40	0.82	-115	5.93	0.0921	1.8000	17.55	55.8
MW-120	07/16/2018 09:42	0.78	-116	5.92	0.0917	1.7920	17.5	49.8
MW-120	07/16/2018 09:44	0.8	-118	5.92	0.0917	1.7920	17.44	51.9
MW-120	07/16/2018 09:47	0.86	-119	5.92	0.0917	1.7920	17.51	44.7
MW-120	07/16/2018 09:49	1.06	-121.00	5.92	0.09	1.793	17.48	4.16
MW-120	10/30/2018 09:00	2.26	117.2	9.83	0.9	1.766	14.7	1373.2
MW-120	10/30/2018 09:05	0.64	88.4	6.44	0.9	1.761	15.19	1498
MW-120	10/30/2018 09:10	0.43	69.1	6.11	0.9	1.757	15.23	896.5
MW-120	10/30/2018 09:15	0.98	66.2	6.05	0.89	1.75	15.23	554.2
MW-120	10/30/2018 09:20	0.52	63.8	6.02	0.89	1.742	15.27	319.7
MW-120	10/30/2018 09:25	0.41	62.8	6.01	0.88	1.736	15.28	247.2
MW-120	10/30/2018 09:30	0.33	62.2	6	0.88	1.733	15.31	217.2
MW-120	10/30/2018 09:35	0.86	31.2	5.99	0.87	1.731	15.94	300.6
MW-120	10/30/2018 09:40	0.74	60.7	5.98	0.88	1.73	15.36	197.2
MW-120	10/30/2018 09:50	0.87	57.20	6.33	0.88	1.730	15.37	158.20
MW-120	04/03/2019 10:45	1.69	58.5	6.09	NM	1.796	11.44	1207.5
MW-120	07/01/2019 10:05	1.32	55.9	6.15	NM	1.82	19.61	1014.2
MW-120	07/01/2019 10:10	0.49	56	6.11	NM	1.834	16.72	750.1
MW-120	07/01/2019 10:15	0.33	55.2	6.16	NM	1.838	16.51	102.1
MW-120	07/01/2019 10:20	0.26	53.2	6.18	NM	1.816	16.34	57.1
MW-120	07/01/2019 10:25	0.21	49.9	6.23	NM	1.822	16.19	43.9
MW-120	07/01/2019 10:30	0.21	46	6.29	NM	1.813	16.02	44.7
MW-120	07/01/2019 10:35	0.19	45.6	6.31	NM	1.812	16.08	42.1
MW-120	07/01/2019 14:00	0.19	45.6	6.31	NM	1.812	16.08	42.1
MW-120	09/25/2019 12:40	4.56	-120.9	6.15	NM	1.289	19.41	26.8
MW-120	09/25/2019 12:45	2.65	-175.4	5.98	NM	1.238	17.92	18.4
MW-120	09/25/2019 12:50	2.76	-194.8	5.99	NM	1.224	17.74	15.7
MW-120	09/25/2019 12:55	2.89	-200.6	6.01	NM	1.215	17.61	13.4
MW-120	09/25/2019 13:00	2.94	-202.3	6.03	NM	1.215	17.37	17.7
MW-120	09/25/2019 13:05	3.05	-203.7	6.04	NM	1.216	17.46	6.5
MW-120	09/25/2019 13:10	3.1	-204.2	6.06	NM	1.214	17.45	6.5
MW-120	09/25/2019 13:15	3.05	-202.5	6.07	NM	1.215	17.39	4.9
MW-120	09/25/2019 13:20	3.06	-203.3	6.08	NM	1.211	17.26	27.4
MW-120	09/25/2019 13:25	3.1	-203.5	6.08	NM	1.212	17.2	4.1
MW-120	12/16/2019 10:03	4.61	189.2	6.13	NM	0.91	7.79	279.6
MW-120	12/16/2019 10:08	2.54	96.3	6.06	NM	0.901	9.3	202.6
MW-120	12/16/2019 10:13	2.07	93.7	6.06	NM	0.9	9.44	191
MW-120	12/16/2019 10:18	1.33	102	6.04	NM	0.896	11.29	161.8
MW-120	12/16/2019 10:23	1.03	107.7	6.03	NM	0.897	11.58	127.4
MW-120	12/16/2019 10:28	0.93	103.9	6.03	NM	0.893	11.85	112.7
MW-120	12/16/2019 10:33	0.93	101.6	6.03	NM	0.819	11.96	108.8
MW-120	12/16/2019 10:38	0.93	100.4	6.03	NM	0.879	11.9	99.2
MW-120	12/16/2019 10:43	0.89	98.9	6.03	NM	0.874	11.89	94.2
MW-120	12/16/2019 10:48	0.81	96.4	6.02	NM	0.782	12.05	82.9
MW-120	04/07/2020 11:05	0.17	456.6	5.46	NM	1.307	13	53.5
MW-120	10/01/2020 12:50	NM	NM	NM	NM	NM	NM	69.9
MW-120	10/12/2020 12:15	1.02	60.1	6.12	0.5	1	16.47	106.5
MW-120	10/12/2020 12:20	1.02	61.1	6.09	0.5	1.002	16.47	100.8
MW-120	10/12/2020 12:25	1.02	66.7	6.02	0.5	1.004	16.48	87.5
MW-120	10/12/2020 12:30	1.03	70	5.99	0.5	1.005	16.42	77.7
MW-120	10/12/2020 12:35	1.02	74.6	5.97	0.5	1.004	16.43	72.3
MW-120	10/12/2020 12:40	1.03	78.9	5.97	0.5	1.007	16.44	76.2
MW-120	10/12/2020 12:45	1.02	81.6	5.96	0.5	1.007	16.45	69.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-120	10/12/2020 12:50	1.04	82	5.96	0.5	1.011	16.43	NM
MW-120	01/08/2021 09:40	5.06	70.1	6.29	1.06	2.069	9.53	282.1
MW-120	01/08/2021 09:45	1.4	86.6	6.1	1.01	1.977	10.04	280.8
MW-120	01/08/2021 09:50	1	86.2	6.06	1	1.956	9.95	224
MW-120	01/08/2021 09:55	0.85	84.5	6.06	0.99	1.942	10.68	206.2
MW-120	01/08/2021 10:00	0.9	84.5	6.06	1	1.949	10.52	186.2
MW-120	01/08/2021 10:05	0.71	84.8	6.05	0.99	1.943	10.07	155
MW-120	01/08/2021 10:10	0.71	84.1	6.08	0.99	1.929	11.19	147.5
MW-120	01/08/2021 10:15	0.79	81.1	6.05	0.99	1.933	11.92	123.2
MW-120	01/08/2021 10:20	0.77	79.8	6.04	0.99	1.94	12.05	118.2
MW-120	01/08/2021 10:25	0.71	77.8	6.05	0.99	1.932	11.46	102.9
MW-120	04/06/2021 12:40	1.51	50.6	6.28	0.99	1.926	15.04	102.7
MW-120	04/06/2021 12:45	0.58	57.6	6.19	0.98	1.916	14.25	81.9
MW-120	04/06/2021 12:50	0.35	63.2	6.16	0.98	1.918	13.76	68.2
MW-120	04/06/2021 12:55	0.29	69.3	6.14	0.98	1.909	14.05	64.9
MW-120	04/06/2021 13:00	0.28	72	6.13	0.98	1.909	14.03	53
MW-120	04/06/2021 13:05	0.27	74.4	6.12	0.97	1.902	14.13	47.2
MW-120	04/06/2021 13:10	0.26	76.4	6.12	0.97	1.904	14.17	47.8
MW-120	04/06/2021 13:15	0.26	79.3	6.1	0.97	1.902	14.05	49.8
MW-120	01/20/2022 09:10	1.84	191.1	5.89	1.02	1.99	8.06	970.9
MW-120	01/20/2022 09:15	1.49	125.8	5.8	1.01	1.984	7.36	928.9
MW-120	01/20/2022 09:20	1.35	112.8	5.78	1.01	1.979	6.83	569.6
MW-120	01/20/2022 09:25	1.35	108.2	5.75	1.01	1.98	6.7	400.8
MW-120	01/20/2022 09:30	1.3	103.7	5.73	1.01	1.976	6.47	277.1
MW-120	01/20/2022 09:35	1.29	97.3	5.72	1.01	1.971	6.65	203.6
MW-120	01/20/2022 09:40	1.29	99.8	5.72	1.01	1.972	6.49	160.8
MW-120	01/20/2022 09:45	1.23	99.9	5.72	1.01	1.972	6.49	140.3
MW-120	01/20/2022 09:50	1.21	101.3	5.72	1.01	1.976	6.24	123.3
MW-120	01/20/2022 09:55	1.12	99.1	5.72	1	1.97	6.19	109.6
MW-120	04/08/2022 12:00	2.89	125.6	6.15	1.03	1.998	14.88	59.2
MW-120	04/08/2022 12:05	1.35	109.9	5.95	1.02	1.981	14.48	30.6
MW-120	04/08/2022 12:10	1.11	100.8	5.86	1.01	1.967	14.26	8.7
MW-120	04/08/2022 12:15	1.09	95.5	5.81	1.01	1.964	14.15	22.6
MW-120	04/08/2022 12:20	1.29	88.9	5.8	1	1.952	13.83	20.2
MW-120	04/08/2022 12:25	1.61	84.4	5.8	1	1.956	14.21	10.2
MW-120	04/08/2022 12:30	1.37	80.5	5.8	1	1.958	14.19	42.4
MW-120	04/08/2022 12:35	1.34	78	5.79	0.99	1.936	13.55	12.3
MW-120	04/08/2022 12:40	1.34	1.36	5.78	0.99	1.932	13.7	13.7
MW-120	04/08/2022 12:45	1.75	73.6	5.78	0.99	1.932	13.76	15
MW-121	03/15/2012 11:17	5.57	-40	6.82	0.14	2.736	10.68	8.10
MW-121	03/16/2012 10:17	9.38	-40	6.88	0.14	2.801	10.06	58.60
MW-121	02/28/2013 10:11	0.47	-244	6.58	0.34	4.374	9.13	42.60
MW-121	02/28/2013 10:28	5.56	-149	6.51	0.19	3.674	11.00	24.40
MW-121	08/25/2014 11:32	1.85	256	6.64	0.12	2.263	17.17	64.70
MW-121	08/26/2014 10:38	0.46	-406	6.44	0.11	2.075	18.65	16.10
MW-121R	04/27/2017 09:20	2.21	-107.50	6.65	1.04	2.101	13.66	0.0000
MW-121R	04/27/2017 09:45	9.20	-118.20	6.63	1.06	2.069	14.29	15.11
MW-121R	04/27/2017 09:55	7.73	-81.10	6.65	1.07	2.075	14.16	163.20
MW-121R	09/05/2018 08:10	2.99	-165.10	7.01	4.41	7.963	23.98	17.00
MW-121R	09/05/2018 09:30	1.70	-105.00	6.78	3.86	7.030	23.66	8.60
MW-121R	09/05/2018 09:40	0.73	-104.50	6.77	3.74	6.829	24.87	29.00
MW-121R	12/10/2018 09:20	0.2	-126	7.08	NM	6.35	10.86	0.6
MW-121R	12/10/2018 10:05	3.2	-99.6	7.03	3.43	6.249	12.34	6.7
MW-121R	02/22/2019 10:45	5.79	-89.10	6.93	2.20	4.149	10.79	31.30
MW-121R	02/22/2019 11:15	2.53	-60.40	6.75	3.11	5.729	9.92	5.30
MW-121R	02/22/2019 11:40	2.84	-67.20	6.79	3.11	5.889	10.1	11.20
MW-121R	06/10/2019 10:05	0.29	-74.1	6.95	NM	6.743	16.07	4.6
MW-121R	06/10/2019 10:10	0.34	-81.6	6.95	NM	6.685	16.51	8
MW-121R	06/10/2019 10:15	0.27	-91.9	6.99	NM	6.621	16.5	7.6
MW-121R	06/10/2019 10:20	0.22	-98	7	NM	6.593	16.64	10.3
MW-121R	06/10/2019 10:25	0.2	-100.2	7.01	NM	6.521	16.72	17.6
MW-121R	06/10/2019 10:30	0.2	-91.5	7.02	NM	6.364	16.75	28.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-121R	06/10/2019 10:35	0.25	-87.3	7.02	NM	6.068	16.8	43
MW-121R	06/10/2019 10:40	0.3	-82.8	7.01	NM	5.875	16.88	26.7
MW-121R	06/10/2019 10:45	0.31	-82.3	7.02	NM	5.826	16.94	30.3
MW-121R	06/10/2019 10:50	0.3	-83.7	7	NM	5.939	16.77	20.4
MW-121R	06/10/2019 11:30	2.71	-85.2	6.98	3.46	6.304	16.26	7.8
MW-121R	06/10/2019 11:45	3.15	-84.4	7	3.53	6.429	15.27	10.2
MW-121R	09/12/2019 08:25	2.13	-141.7	6.69	NM	4.214	22.78	8.8
MW-121R	09/12/2019 09:10	1.91	-107.5	6.67	2.43	4.55	23.54	9.4
MW-121R	09/12/2019 10:12	1.69	-111.4	6.58	2.46	4.615	23.72	35.2
MW-121R	12/09/2019 12:55	6.01	-96	6.85	NM	4.77	14.12	29.8
MW-121R	12/09/2019 13:00	0.89	-123.3	6.82	NM	4.983	14.14	31.5
MW-121R	12/09/2019 13:05	1.29	-124.7	6.81	NM	4.982	13.9	23.7
MW-121R	12/09/2019 13:10	1.3	-123.7	6.77	NM	4.97	13.71	15.7
MW-121R	12/09/2019 13:15	1.25	-109.6	6.73	NM	5.139	13.31	19.7
MW-121R	12/09/2019 13:20	1.04	-110.2	6.71	NM	4.99	13.45	19
MW-121R	12/09/2019 13:25	0.8	-111.7	6.71	NM	4.954	13.61	14.8
MW-121R	12/09/2019 13:30	0.8	-111.1	6.68	NM	4.951	13.6	10.1
MW-121R	12/09/2019 13:35	1.16	-110	6.67	NM	4.961	13.7	5.4
MW-121R	12/09/2019 13:40	1.17	-111	6.65	NM	4.964	13.73	5.5
MW-121R	12/09/2019 14:00	1.9	-110	6.83	1.32	2.548	14.23	13.4
MW-121R	12/09/2019 14:15	3.01	-107.4	6.83	2.76	5.094	14.1	14.3
MW-121R	06/18/2020 10:00	5.94	-42.2	7.1	3.06	3.146	20.07	2.3
MW-121R	06/18/2020 10:05	1.14	-83.4	6.9	3.31	6.057	19.22	2.2
MW-121R	06/18/2020 10:10	0.67	-92.7	6.92	3.28	6.019	19.16	2.7
MW-121R	06/18/2020 10:15	0.53	-98.8	6.94	3.25	5.959	19.42	2.7
MW-121R	06/18/2020 10:20	0.48	-103.9	6.95	3.22	5.914	19.49	2.9
MW-121R	06/18/2020 10:25	0.48	-105.4	6.96	3.22	5.911	19.49	2.6
MW-121R	06/18/2020 10:30	0.47	-105.8	6.96	3.21	5.9	19.59	2.3
MW-121R	06/18/2020 10:35	0.48	-105.6	6.97	3.21	5.898	19.5	2.4
MW-121R	06/18/2020 10:40	0.49	-105.6	6.97	3.21	5.892	19.44	2.4
MW-121R	10/01/2020 09:50	3.38	-67.7	7.17	2.85	5.271	20.52	13.6
MW-121R	10/01/2020 10:05	1.97	-74.2	7.12	2.93	5.412	21.2	NM
MW-121R	10/14/2020 10:05	NM	NM	NM	NM	NM	NM	62.7
MW-121R	12/16/2020 08:40	1.4	111.1	6.67	2.44	4.548	11.72	10.9
MW-121R	12/16/2020 08:45	0.89	17.9	6.63	2.45	4.577	10.23	7.6
MW-121R	12/16/2020 08:50	0.7	-33.9	6.66	2.43	4.529	8.87	4.7
MW-121R	12/16/2020 08:55	0.61	-52.9	6.69	2.41	4.508	8.34	4
MW-121R	12/16/2020 09:00	0.56	-64.6	6.71	2.41	4.499	8.37	3.7
MW-121R	12/16/2020 09:05	0.52	-70.5	6.73	2.4	4.484	8.24	3.5
MW-121R	12/16/2020 09:10	0.49	-73.1	6.73	2.39	4.475	8.29	3.5
MW-121R	12/16/2020 09:15	0.45	-75.6	6.74	2.39	4.472	8.29	3.1
MW-121R	12/16/2020 09:20	0.43	-76.8	6.74	2.39	4.462	8.19	3.4
MW-121R	12/16/2020 09:25	0.4	-77.5	6.74	2.38	4.452	8.3	3
MW-121R	12/16/2020 10:10	2.44	-56.6	7.08	2.43	4.533	10.9	7.9
MW-121R	12/16/2020 10:25	2.03	-77.2	6.99	2.45	4.562	10.11	29.2
MW-121R	03/10/2021 13:35	1.23	-73.5	7.04	2.53	4.716	9.09	2
MW-121R	03/10/2021 13:40	0.81	-88	7.02	2.41	4.503	9.14	2.5
MW-121R	03/10/2021 13:45	0.29	-90.5	7.03	2.25	4.236	8.68	9.7
MW-121R	03/10/2021 13:50	0.17	-92.1	7.03	2.19	4.112	8.34	9
MW-121R	03/10/2021 13:55	0.13	-93.9	7.01	2.16	4.073	8.16	4.8
MW-121R	03/10/2021 14:00	0.11	-94.6	7	2.2	4.133	8.19	1.5
MW-121R	03/10/2021 14:05	0.11	-100	7	2.52	4.699	9.1	0
MW-121R	03/10/2021 14:10	0.09	-101.1	7.03	2.3	4.312	8.33	0.6
MW-121R	03/10/2021 14:15	0.07	-100.7	7.02	2.33	4.364	8.26	0.2
MW-121R	03/10/2021 14:20	0.05	-102.1	7.02	2.34	4.382	8.22	0
MW-121R	03/10/2021 15:00	1.7	-79	7.12	2.49	4.639	9.12	10.4
MW-121R	03/10/2021 15:10	1.84	-81.9	7.13	2.5	4.662	8.89	8.9
MW-121R	03/30/2022 10:35	1.2	-89.4	6.88	2.09	3.943	8.41	44.8
MW-121R	03/30/2022 10:40	1.13	-88.6	6.79	2.09	3.397	8.41	40.7
MW-121R	03/30/2022 10:45	1.04	-91.5	6.79	2.03	3.835	8.44	28.7
MW-121R	03/30/2022 10:50	0.93	-96.5	6.74	1.97	3.713	8.46	15.6
MW-121R	03/30/2022 10:55	0.82	-95.7	6.78	1.94	3.673	8.53	10.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-121R	03/30/2022 11:00	0.76	-91.6	6.77	1.95	3.695	8.13	7.2
MW-121R	03/30/2022 11:05	0.76	-92.2	6.78	1.97	3.721	8.1	7.3
MW-121R	03/30/2022 11:10	0.76	-94.1	6.78	2.03	3.825	8.33	4.1
MW-121R	03/30/2022 11:15	0.78	-98.7	6.83	2.02	3.799	8.84	2.4
MW-121R	03/30/2022 11:20	0.8	-99.4	6.83	2.01	3.798	8.95	3.9
MW-122	03/08/2012 10:14	0.41	65	6.11	0.0000	0.318	11.10	43.70
MW-122	03/08/2012 10:53	2.40	-131	7.37	0.10	2.400	12.00	387.00
MW-122	03/09/2012 10:11	0.99	-53	6.54	0.0000	0.910	9.20	19.10
MW-122	04/08/2013 09:04	1.3	-301	6.79	0.34	6.294	10.26	5.09
MW-122	04/08/2013 09:40	6.68	-188	7.03	1.34	22.24	12.73	265.9
MW-122	04/09/2013 09:14	0.79	-149	6.68	0.13	2.465	9.54	9.2
MW-122	05/28/2014 11:17	1.42	-348	6.91	0.66	11.490	14.56	4.53
MW-122	05/28/2014 11:58	2.05	-217	7.07	1.32	21.850	14.01	150.50
MW-122	04/17/2015 14:58	4.69	-127	7.03	NM	7.201	14.58	687.50
MW-122	12/18/2019 09:00	0.77	-151.1	7.12	NM	2.581	12.35	25.8
MW-122	12/18/2019 09:05	0.19	-165.5	7.18	NM	2.328	12.6	20.9
MW-122	12/18/2019 09:10	0.32	26.6	7.19	NM	2.216	11.99	27.2
MW-122	12/18/2019 09:15	0.12	-141.1	7.17	NM	1.302	12.09	40.4
MW-122	12/18/2019 09:20	0.11	-109	7.09	NM	0.561	11.7	49.7
MW-122	12/18/2019 09:25	0.09	-88.7	6.98	NM	0.444	11.41	48.8
MW-122	12/18/2019 09:30	0.09	-84.3	6.94	NM	0.39	11.42	46.7
MW-122	12/18/2019 09:35	0.07	-85.6	6.93	NM	0.375	11.41	45.6
MW-122	12/18/2019 09:40	0.06	-87.8	6.94	NM	0.365	11.6	42.5
MW-122	12/18/2019 09:45	0.07	-89.9	6.93	NM	0.356	11.45	40.9
MW-122	12/18/2019 11:25	0.11	-170.1	7.24	0.23	0.457	13.48	9
MW-122	12/18/2019 11:40	0.59	-145.8	7.22	0.18	0.371	13.26	33.4
MW-123	08/20/2012 09:00	5.39	-169	6.94	0.10	4.310	21.76	21.80
MW-123	08/20/2012 10:18	7.44	-142	7.17	0.20	3.790	18.89	249.00
MW-123	08/21/2012 09:30	5.38	-143	6.99	0.20	4.520	22.55	70.90
MW-123	04/18/2013 15:20	2.16	-267	6.86	0.54	9.592	11.51	14.21
MW-123	04/18/2013 16:16	3.21	-205	7.05	0.56	9.908	11.22	62.8
MW-123	04/19/2013 11:00	0.2	-254	6.93	0.55	9.807	11.25	59.3
MW-123	08/19/2013 09:15	0.60	-25.4	6.36	3.40	6.412	17.95	27.90
MW-123	08/19/2013 09:54	0.29	-63.3	6.40	3.50	6.545	19.61	13.90
MW-123	08/19/2013 10:26	0.43	-52.5	6.36	3.61	6.570	19.57	14.90
MW-123	08/20/2013 10:26	0.43	-52.5	6.36	3.61	6.570	19.57	14.90
MW-123	08/26/2014 13:01	0.94	200	6.73	0.36	6.559	25.94	18.67
MW-123	08/26/2014 13:35	1.36	205	6.92	0.36	6.531	16.63	168.50
MW-123	08/27/2014 12:00	0.53	-492	6.76	0.37	6.630	20.61	31.70
MW-123	09/23/2014 12:40	1.81	-14.7	6.85	3.48	6.366	19.84	24.20
MW-123	09/23/2014 13:40	0.25	-43.5	6.69	3.50	6.389	17.71	11.80
MW-123	09/23/2014 13:55	3.05	-27.3	6.63	3.46	6.364	18.41	46.20
MW-123	02/18/2016 10:36	0.89	-138	7.02	0.24	4.507	6.88	63.30
MW-123	02/18/2016 11:50	1.25	-172	6.77	0.22	4.153	10.69	160.30
MW-123R	06/13/2019 13:15	4.55	82.9	8.54	NM	2.765	20.61	31.5
MW-123R	06/13/2019 13:39	5.39	50.2	8.01	1.17	2.272	19.63	8.6
MW-123R	06/13/2019 13:50	2.48	11.3	7.93	1.17	2.277	20.53	10.6
MW-123R	07/08/2019 15:05	0.25	-178	7.71	NM	3.527	22.8	4.7
MW-123R	07/10/2019 09:40	5.8	-147.8	8	0.85	1.693	23.51	1.7
MW-123R	07/10/2019 10:40	2.14	-152.1	7.4	NM	3.265	24.5	8.5
MW-123R	07/10/2019 10:45	5.8	-147.8	8	0.85	1.693	23.51	NM
MW-123R	07/10/2019 10:50	2.77	-146.8	7.78	1.71	3.26	22.62	1.7
MW-123R	07/10/2019 10:55	NM	NM	NM	NM	NM	NM	2.3
MW-123R	09/22/2020 11:15	NM	NM	NM	NM	NM	NM	19.5
MW-123R	10/14/2020 09:10	4.58	-16	6.73	2.87	5.292	16.7	15.4
MW-123R	10/14/2020 09:15	3.48	-104.6	7.18	2.86	5.269	16.59	12.5
MW-123R	10/14/2020 09:20	3.24	-124.2	7.32	2.86	5.274	16.54	11.6
MW-123R	10/14/2020 09:25	3.13	-128.7	7.37	2.85	5.267	16.61	9.9
MW-123R	10/14/2020 09:30	3.01	-131.9	7.41	2.86	5.273	16.7	7.8
MW-123R	10/14/2020 09:35	2.93	-133.8	7.43	2.86	5.269	16.84	6.4
MW-123R	10/14/2020 09:40	2.93	-135.9	7.45	2.86	5.272	16.88	6
MW-123R	10/14/2020 09:45	2.92	-137.5	7.46	2.85	5.264	16.98	3.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-123R	10/14/2020 09:50	2.94	-139.6	7.47	2.85	5.255	17.07	3.5
MW-123R	10/14/2020 09:55	2.85	-140.5	7.49	2.84	5.242	17.06	1.6
MW-123R	10/14/2020 11:00	4.42	-101.4	7.4	2.89	5.347	19.29	9.6
MW-123R	10/14/2020 11:15	2.35	-104.5	7.37	2.95	5.44	19.03	NM
MW-123R	01/08/2021 09:00	1.7	-76	7.01	1	1.968	5.58	66.6
MW-123R	01/08/2021 09:05	1.89	-83.6	7.28	1.01	1.976	5.42	56.9
MW-123R	01/08/2021 09:10	1.95	-85.5	7.3	1	1.974	5.46	42.6
MW-123R	01/08/2021 09:15	2.38	-86.2	7.3	1	1.975	5.46	35.9
MW-123R	01/08/2021 09:20	2.04	-85.2	7.31	1.01	1.977	5.44	39.1
MW-123R	01/08/2021 09:25	2.44	-84.7	7.34	1.01	1.977	5.45	37.1
MW-123R	01/08/2021 09:30	2.56	-113	7.53	0.99	1.945	5.22	18.1
MW-123R	01/08/2021 09:35	2.34	-127.2	7.6	0.98	1.93	5.31	8.8
MW-123R	01/08/2021 09:40	2.51	-143.4	7.67	1	1.958	5.36	9.4
MW-123R	01/08/2021 09:45	2.33	-144.2	7.67	0.99	1.957	5.34	7
MW-123R	01/08/2021 09:55	4.26	-79.9	7.7	1.01	1.978	6.8	1.6
MW-123R	01/08/2021 10:19	5.09	-60	8.09	0.87	1.73	5.44	26.2
MW-123R	04/12/2021 14:00	2.67	-99.7	6.97	2.55	4.763	11.04	21.8
MW-123R	04/12/2021 14:05	1.03	-123.5	6.93	2.93	5.396	10.93	18.9
MW-123R	04/12/2021 14:10	0.93	-132.2	6.98	2.76	5.102	11.07	18.2
MW-123R	04/12/2021 14:15	1.28	-119.2	7.07	2.36	4.391	11.28	9.7
MW-123R	04/12/2021 14:20	1.48	-118.6	7.12	2.24	4.189	11.35	7.9
MW-123R	04/12/2021 14:25	1.26	-120.3	7.18	2.1	3.916	11.4	11.4
MW-123R	04/12/2021 14:30	1.16	-126.9	7.23	1.93	3.635	11.37	8.2
MW-123R	04/12/2021 14:35	0.94	-132.9	7.26	1.81	3.41	11.31	3.4
MW-123R	04/12/2021 14:40	0.79	-137.2	7.25	1.7	3.278	11.31	2
MW-123R	04/12/2021 14:45	0.69	-137.4	7.25	1.65	3.148	11.32	1.4
MW-123R	02/02/2022 13:35	1.6	-124.2	7.58	0.97	1.899	7.05	245.3
MW-123R	02/02/2022 13:40	0.94	-138.5	7.6	1	1.971	6.84	98.7
MW-123R	02/02/2022 13:45	1.07	-139.1	7.58	1	1.971	6.3	74.6
MW-123R	02/02/2022 13:50	1.25	-138	7.61	0.99	1.952	5.76	112.4
MW-123R	02/02/2022 13:55	1.35	-136.8	7.62	1.01	1.977	5.42	102.3
MW-123R	02/02/2022 14:00	1.32	-137.4	7.62	1.03	2.036	5.15	81.5
MW-123R	02/02/2022 14:05	1.25	-139.5	7.65	1.06	2.079	5.01	71.1
MW-123R	02/02/2022 14:10	1.31	-141.6	7.67	1.07	2.108	4.85	54.1
MW-123R	02/02/2022 14:15	1.29	-144	7.69	1.07	2.129	4.81	44.2
MW-123R	02/02/2022 14:20	1.29	-145.9	7.7	1.09	2.146	4.75	34
MW-123R	04/12/2022 08:30	2.58	-66.8	8.15	0.28	0.582	11.5	18.9
MW-123R	04/12/2022 08:35	2.6	-118.2	8	0.29	0.588	11.34	24.2
MW-123R	04/12/2022 08:40	2.49	-140.2	7.93	0.29	0.599	11.16	26.9
MW-123R	04/12/2022 08:45	2.41	-151.2	7.88	0.3	0.611	11.1	23.6
MW-123R	04/12/2022 08:50	2.44	-159.7	7.87	0.3	0.622	11.11	18
MW-123R	04/12/2022 08:55	2.09	-165.8	7.86	0.31	0.635	11.03	13.7
MW-123R	04/12/2022 09:00	2.23	-169.8	7.85	0.32	0.645	11.02	10
MW-123R	04/12/2022 09:05	1.9	-173.2	7.85	0.32	0.654	11.01	5.9
MW-123R	04/12/2022 09:10	2.14	-175.1	7.85	0.32	0.659	10.99	5.2
MW-123R	04/12/2022 09:15	2.61	-176	7.85	0.32	0.66	11	4.3
MW-124	02/15/2012 08:20	3.99	189	6.53	0.06	1.18476	8.55	35.1
MW-124	02/15/2012 08:22	0.08	183	6.6	0.06	1.15219	8.48	16.3
MW-124	02/15/2012 08:24	0.07	179	6.63	0.06	1.15582	8.28	23.9
MW-124	02/15/2012 08:26	0.05	176	6.64	0.06	1.15607	8.26	16.76
MW-124	02/15/2012 08:28	0.04	173	6.65	0.06	1.15718	8.19	17.9
MW-124	02/15/2012 08:30	0.02	170	6.65	0.06	1.15906	8.06	19.75
MW-124	02/15/2012 08:32	0.01	168	6.66	0.06	1.15586	7.97	16.22
MW-124	02/15/2012 08:34	-0.01	166	6.67	0.06	1.15224	7.88	17.08
MW-124	02/15/2012 08:36	-0.02	164	6.67	0.06	1.15158	7.82	22.01
MW-124	02/15/2012 08:38	-0.02	162	6.67	0.06	1.14978	7.79	15.87
MW-124	02/15/2012 08:41	-0.03	161	6.68	0.06	1.14958	7.73	15.15
MW-124	02/15/2012 08:43	-0.04	159	6.68	0.06	1.14832	7.74	26.64
MW-124	02/15/2012 08:45	-0.05	157	6.68	0.06	1.14649	7.76	17.04
MW-124	02/15/2012 08:47	-0.06	155	6.68	0.06	1.1459	7.77	16.54
MW-124	02/15/2012 08:49	-0.06	153	6.68	0.06	1.14788	7.87	16.31
MW-124	02/15/2012 09:30	-0.17	-13	6.85	0.17	3.275	10.04	38.80

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-124	02/16/2012 08:40	-0.02	-55	6.87	0.19	3.571	9.27	30.70
MW-124	03/14/2013 15:39	0.66	-267	6.96	0.14	2.73	7.2	42.93
MW-124	03/14/2013 16:17	4.33	-167	7.19	0.14	2.743	7.3	80.4
MW-124	03/15/2013 11:37	0.7	-258	6.96	0.14	4.517	7.26	25.4
MW-124	06/04/2014 10:44	0.61	-206	7.14	0.12	2.351	25.05	9.69
MW-124	06/04/2014 11:25	0.81	-225	6.81	1.33	21.910	18.09	289.80
MW-124	06/05/2014 13:00	1.24	-290	7.00	0.15	2.908	19.75	8.60
MW-124	02/12/2015 12:54	0.21	-73	7.07	0.18	3.408	5.82	27.56
MW-124	02/12/2015 13:33	3.87	-71	6.86	0.46	8.336	9.48	401.60
MW-124	02/13/2015 11:23	2.02	-111	7.01	0.22	4.202	6.68	24.30
MW-124	02/17/2016 10:57	14.31	15	6.91	0.03	0.655	8.09	44.90
MW-124	02/17/2016 11:49	3.42	-77	6.67	0.06	1.287	10.54	495.70
MW-124	02/16/2017 12:04	0.35	238	7.39	0.13	2.500	8.40	16.40
MW-124	02/16/2017 15:07	9.28	10.05	7.47	0.05	1.001	9.10	34.60
MW-124	03/19/2018 08:35	9.53	185	7.16	0.0306	0.6317	8.85	827.9
MW-124	03/19/2018 08:37	4.3	112	6.99	0.0306	0.6334	8.34	430.9
MW-124	03/19/2018 08:40	3.28	85	6.84	0.0304	0.6302	8.15	2027.6
MW-124	03/19/2018 08:42	2.95	73	6.79	0.0309	0.6406	8	415.7
MW-124	03/19/2018 08:45	2.85	67	6.72	0.0310	0.6411	7.97	1081
MW-124	03/19/2018 08:47	2.78	61	6.7	0.0311	0.6444	7.98	859.8
MW-124	03/19/2018 08:49	2.76	56	6.7	0.0317	0.6553	7.89	1482.8
MW-124	03/19/2018 08:52	2.79	52	6.69	0.0317	0.6563	7.83	1329.5
MW-124	03/19/2018 08:54	2.76	49	6.67	0.0319	0.6593	7.85	472.2
MW-124	03/19/2018 08:57	2.73	47	6.66	0.0318	0.6578	7.85	508.9
MW-124	03/19/2018 08:59	2.76	44	6.67	0.0320	0.6620	7.75	97.3
MW-124	03/19/2018 09:01	2.77	43	6.66	0.0320	0.6626	7.79	57.2
MW-124	03/19/2018 09:04	2.77	41	6.66	0.0320	0.6613	7.78	74.1
MW-124	03/19/2018 09:06	2.74	40	6.66	0.0322	0.6654	7.82	82.6
MW-124	03/19/2018 09:09	2.74	38	6.67	0.0323	0.6684	7.76	157.3
MW-124	03/19/2018 09:11	2.74	37	6.66	0.0322	0.6662	7.78	92.1
MW-124	03/19/2018 09:13	2.73	34	6.68	0.0326	0.6750	7.67	78
MW-124	03/19/2018 09:16	2.73	33	6.67	0.0323	0.6677	7.74	43.5
MW-124	03/19/2018 09:18	2.71	33	6.64	0.0323	0.6680	7.8	37.9
MW-124	03/19/2018 09:21	2.71	32	6.65	0.0323	0.6684	7.88	53.6
MW-124	03/19/2018 09:23	2.71	32	6.65	0.0324	0.6703	7.85	50.9
MW-124	03/20/2018 09:23	2.71	32.00	6.65	0.03	0.673	7.73	50.87
MW-124	03/20/2018 09:50	11.06	-21.00	6.97	0.06	1.122	8.01	17.80
MW-124	03/20/2018 09:59	6.62	73.00	7.08	0.05	1.053	9.27	30.50
MW-124	03/14/2019 13:15	0.21	11.5	6.99	NM	0.323	8.83	53.8
MW-124	03/14/2019 14:41	0.2	-126.3	7.34	0.43	0.864	8.44	2
MW-124	02/03/2020 12:55	1.44	-16.1	7.2	NM	0.475	8.1	13.3
MW-124	02/03/2020 13:35	6.52	-118	7.32	0.4	0.806	10.67	4.2
MW-124	01/26/2021 08:05	2.57	153.2	6.75	0.43	0.711	8.07	234.8
MW-124	01/26/2021 08:10	0.74	146.9	6.17	0.32	0.653	8.32	153.2
MW-124	01/26/2021 08:15	0.25	126	6.24	0.32	0.654	8.96	70.8
MW-124	01/26/2021 08:20	0.2	94.3	6.47	0.33	0.671	8.98	40.8
MW-124	01/26/2021 08:25	0.18	72.4	6.55	0.689	0.69	8.75	31.1
MW-124	01/26/2021 08:30	0.17	53.5	6.63	0.35	0.709	8.78	25.4
MW-124	01/26/2021 08:35	0.16	27.9	6.77	0.36	0.743	8.93	24.8
MW-124	01/26/2021 08:40	0.16	11.2	6.82	0.38	0.711	8.89	23.2
MW-124	01/26/2021 08:45	0.15	-7	6.88	0.39	0.786	8.94	19.5
MW-124	01/26/2021 08:50	0.16	-22	6.94	0.41	0.832	8.92	17.8
MW-124	01/26/2021 09:55	0.13	-118.3	7.25	0.74	1.473	9.89	1.2
MW-124	01/26/2021 10:10	0.17	-117.1	7.19	0.85	1.671	9.86	26.3
MW-125	02/20/2012 10:50	-0.4	25	7.22	0.04	0.8822	6.85	26.62
MW-125	02/20/2012 10:52	-0.38	21	7.33	0.04	0.87244	7.29	5.28
MW-125	02/20/2012 10:55	-0.35	21	7.33	0.04	0.86914	7.13	5.64
MW-125	02/20/2012 10:57	-0.33	22	7.32	0.04	0.86256	7.21	4.1
MW-125	02/20/2012 11:00	-0.34	20	7.32	0.04	0.86494	7.29	1.36
MW-125	02/20/2012 11:02	-0.33	17	7.32	0.04	0.86474	7.35	11.6
MW-125	02/20/2012 11:04	-0.33	15	7.32	0.04	0.86421	7.48	1.9
MW-125	02/20/2012 11:07	-0.31	14	7.32	0.04	0.86531	7.43	2.33

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-125	02/20/2012 11:09	-0.31	11	7.31	0.04	0.85964	7.4	1.74
MW-125	02/20/2012 11:11	-0.31	9	7.32	0.04	0.85902	7.51	3.93
MW-125	02/20/2012 11:14	-0.3	8	7.32	0.04	0.85678	7.66	1.48
MW-125	02/20/2012 11:16	-0.29	7	7.33	0.04	0.85942	7.71	2.56
MW-125	02/20/2012 11:18	-0.29	6	7.33	0.04	0.85838	7.81	1.46
MW-125	02/20/2012 11:21	-0.28	5	7.33	0.04	0.85546	7.93	1.35
MW-125	02/20/2012 11:23	-0.28	4	7.33	0.04	0.8599	7.83	17.7
MW-125	02/20/2012 11:25	-0.28	5	7.32	0.04	0.85692	7.76	1.74
MW-125	02/20/2012 11:28	-0.28	4	7.33	0.04	0.86012	7.87	2.78
MW-125	02/20/2012 11:30	-0.28	3	7.33	0.04	0.85928	7.81	1.68
MW-125	02/20/2012 11:32	-0.27	2	7.32	0.04	0.85257	7.77	1.44
MW-125	02/20/2012 11:35	-0.27	0	7.33	0.04	0.85252	7.91	1.1
MW-125	02/20/2012 11:37	-0.27	-1	7.34	0.04	0.85549	8.10	1.25
MW-125	02/20/2012 12:10	11.30	-50	6.93	0.43	7.826	10.02	3.80
MW-125	02/21/2012 10:40	2.85	31	6.65	0.10	2.660	7.00	19.50
MW-125	03/27/2013 09:28	0.43	-261	6.82	0.33	6.128	8.65	2.6
MW-125	03/27/2013 10:11	3.32	-199	7.02	0.27	5.067	6.64	34.2
MW-125	03/28/2013 10:04	0.53	-90	6.81	0.37	6.923	6.76	4.8
MW-125	02/12/2014 10:01	0.16	-118	6.96	0.06	1.221	2.79	8.66
MW-125	02/12/2014 11:27	1.04	-163	6.69	0.36	6.650	6.25	3.90
MW-125	10/23/2015 10:58	0.84	24	6.51	0.39	7.038	17.68	9.4
MW-125	10/23/2015 12:11	3.49	122	6.58	1.39	22.83	19.37	8.8
MW-125	02/23/2016 10:02	-0.05	-199	6.77	1.42	23.520	13.00	15.20
MW-125	02/23/2016 13:15	3.88	-150	6.43	0.37	6.852	9.30	31.60
MW-125	01/25/2017 10:05	0.10	-157	6.67	NM	5.047	6.88	10.70
MW-125	01/25/2017 10:56	9.70	-147	6.49	NM	2.762	6.72	28.20
MW-125	04/27/2017 10:21	0.15	-122.00	6.60	0.13	2.523	15.64	10.74
MW-125	02/01/2018 08:55	3.92	22	7.32	0.2074	3.9876	5.61	79.8
MW-125	02/01/2018 08:57	1.46	22	7.2	0.2412	4.5798	6.73	70.7
MW-125	02/01/2018 08:59	0.98	22	7.09	0.2551	4.8356	6.39	92.7
MW-125	02/01/2018 09:01	0.7	24	7.05	0.2983	5.6592	4.03	91.9
MW-125	02/01/2018 09:03	0.35	24	7.01	0.3032	5.7375	4.41	84.3
MW-125	02/01/2018 09:05	0.26	25	6.99	0.3089	5.8393	4.4	88.2
MW-125	02/01/2018 09:08	0.23	26	6.96	0.3149	5.9464	4.35	72.3
MW-125	02/01/2018 09:10	0.26	27	6.94	0.3186	6.0129	4.35	133.3
MW-125	02/01/2018 09:12	0.13	28	6.93	0.3231	6.0911	4.39	58.3
MW-125	02/01/2018 09:14	0.08	28	6.91	0.3255	6.1364	4.28	77.9
MW-125	02/01/2018 09:16	0.04	29	6.89	0.3286	6.1902	4.3	64.7
MW-125	02/01/2018 09:18	0.01	30	6.88	0.3324	6.2624	4.17	58.7
MW-125	02/01/2018 09:21	-0.01	30	6.87	0.3367	6.3404	4.11	59.6
MW-125	02/01/2018 09:23	-0.04	31	6.86	1.2697	0.0219	4.08	56.1
MW-125	02/01/2018 09:25	-0.06	32	6.85	1.2704	0.0219	4.18	62.9
MW-125	02/01/2018 09:27	-0.06	32	6.84	1.2644	0.0218	4.27	53.2
MW-125	02/01/2018 09:29	-0.08	33	6.83	1.2733	0.0219	4.28	55.3
MW-125	02/01/2018 09:31	-0.1	33	6.83	1.2753	0.0219	4.34	59.8
MW-125	02/01/2018 09:34	-0.11	33	6.82	1.2788	0.0220	4.38	66.8
MW-125	02/01/2018 09:36	-0.12	34	6.81	1.2846	0.0221	4.46	70.5
MW-125	02/01/2018 09:38	-0.14	34	6.81	1.2913	0.0222	4.4	107.7
MW-125	02/01/2018 09:40	-0.14	35	6.8	1.2909	0.0222	4.38	54.9
MW-125	02/01/2018 09:42	-0.14	35	6.79	1.2934	0.0222	4.39	61.1
MW-125	02/01/2018 09:44	-0.16	35	6.79	1.2997	0.0223	4.34	57
MW-125	02/02/2018 09:31	0.26	28.00	6.77	2.24	36.730	4.45	23.50
MW-125	02/02/2018 09:44	-0.16	35.00	6.79	1.30	22.410	4.2	57.00
MW-125	02/02/2018 10:23	2.39	54.00	6.90	1.44	24.000	8.64	12.50
MW-125	05/03/2018 08:51	2.34	-41	7.41	0.3015	5.5110	21.36	15.9
MW-125	05/03/2018 08:54	1.68	-59	7.24	0.3182	5.8180	16.68	16.2
MW-125	05/03/2018 08:57	1.09	-64	7.22	0.3003	5.5084	16.93	8.5
MW-125	05/03/2018 08:59	0.86	-69	7.24	0.3014	5.5241	17.69	5.4
MW-125	05/03/2018 09:02	0.82	-70	7.2	0.3073	5.6249	17.72	6.6
MW-125	05/03/2018 09:05	0.81	-70	7.15	0.3100	5.6743	17.25	5.1
MW-125	05/03/2018 09:07	0.78	-70	7.11	0.3025	5.5452	17.28	4.3
MW-125	05/03/2018 09:10	0.74	-73	7.12	0.3073	5.6266	17.47	4.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-125	05/03/2018 09:12	0.74	-72.00	7.09	0.30	5.580	17.49	4.40
MW-125	07/25/2018 08:51	1.25	-147	6.64	0.4930	8.7200	23.71	5.417
MW-125	07/25/2018 08:54	1.18	-148	NM	0.5184	9.1370	23.71	6.24
MW-125	07/25/2018 09:08	NM	NM	7.11	NM	NM	NM	NM
MW-125	07/25/2018 09:10	3.6	-99	6.74	0.1561	2.9620	24.79	18.42
MW-125	07/25/2018 09:12	2.16	-122	6.67	0.1573	2.9830	24.27	5.895
MW-125	07/25/2018 09:14	1.96	-127	6.63	0.1586	3.0070	24.42	11.01
MW-125	07/25/2018 09:16	1.95	-129	6.61	0.1625	3.0770	24.38	9.441
MW-125	07/25/2018 09:18	1.96	-131	6.58	0.1681	3.1770	24.37	16.21
MW-125	07/25/2018 09:21	1.99	-131	6.56	0.1769	3.3340	24.36	5.813
MW-125	07/25/2018 09:23	1.99	-131	6.55	0.1918	3.5990	23.98	5.479
MW-125	07/25/2018 09:25	1.97	-132	6.51	0.2025	3.7870	23.96	25.01
MW-125	07/25/2018 09:27	1.9	-132	6.51	0.2360	4.3750	23.96	6.718
MW-125	07/25/2018 09:29	1.75	-133	6.52	0.2707	4.9770	23.95	5.48
MW-125	07/25/2018 09:31	1.78	-135	6.52	0.3019	5.5130	23.91	4.505
MW-125	07/25/2018 09:34	1.73	-136	6.55	0.3534	6.3910	23.7	5.28
MW-125	07/25/2018 09:36	1.65	-139	6.55	0.3779	6.8040	23.78	7.892
MW-125	07/25/2018 09:38	1.59	-140	6.58	0.4268	7.6230	23.87	5.496
MW-125	07/25/2018 09:39	3.6	-99	7.11	0.156	2.9620	24.79	18.42
MW-125	07/25/2018 09:40	1.51	-142	6.61	0.4555	8.1000	23.82	5.193
MW-125	07/25/2018 09:42	1.42	-145	6.62	0.4670	8.2910	23.74	5.408
MW-125	07/25/2018 09:44	1.31	-146	6.63	0.4923	8.7080	23.72	4.091
MW-125	07/25/2018 09:45	1.96	-127	6.67	0.159	3.0070	24.42	11.01
MW-125	07/25/2018 09:47	1.95	-129	6.63	0.163	3.0770	24.38	9.441
MW-125	07/25/2018 09:50	1.96	-131	6.61	0.168	3.1770	24.37	16.21
MW-125	07/25/2018 09:53	1.99	-131	6.58	0.177	3.3340	24.36	5.813
MW-125	07/25/2018 09:56	1.99	-131	6.56	0.192	3.5990	23.98	5.479
MW-125	07/25/2018 09:58	1.97	-132	6.55	0.202	3.7870	23.96	25.01
MW-125	07/25/2018 10:01	1.9	-132	6.51	0.236	4.3750	23.96	6.718
MW-125	07/25/2018 10:04	1.75	-133	6.51	0.271	4.9770	23.95	5.48
MW-125	07/25/2018 10:06	1.78	-135	6.52	0.302	5.5130	23.91	4.505
MW-125	07/25/2018 10:09	1.73	-136	6.52	0.353	6.3910	23.7	5.28
MW-125	07/25/2018 10:12	1.65	-139	6.55	0.378	6.8040	23.78	7.892
MW-125	07/25/2018 10:15	1.59	-140	6.55	0.427	7.6230	23.87	5.496
MW-125	07/25/2018 10:17	1.51	-142	6.58	0.455	8.1000	23.82	5.193
MW-125	07/25/2018 10:20	1.42	-145	6.61	0.467	8.2910	23.74	5.408
MW-125	07/25/2018 10:23	1.31	-146	6.62	0.492	8.7080	23.72	4.091
MW-125	07/25/2018 10:25	1.25	-147	6.63	0.493	8.7200	23.71	5.417
MW-125	07/25/2018 10:28	1.18	-148.00	6.64	0.05	9.137	23.89	6.24
MW-125	01/30/2019 10:00	0.79	-89.5	6.91	NM	2.658	4.79	NM
MW-125	01/31/2019 11:30	0.8	-146	6.74	3.6	6.573	8.05	6.7
MW-125	11/23/2020 13:50	0.63	-121.3	6.89	3.38	6.168	14.42	9.5
MW-125	11/23/2020 14:25	13.9	-86.1	7.28	1.5	2.862	12.18	98.7
MW-125	02/23/2021 12:45	2.52	-24	7.37	0.64	1.298	3.14	80.3
MW-125	02/23/2021 12:50	1.03	-24.8	7.16	0.64	1.286	3.24	69
MW-125	02/23/2021 12:55	0.64	-35.7	7.12	0.64	1.291	3.37	37.8
MW-125	02/23/2021 13:00	0.37	-63.5	7.08	0.66	1.324	3.86	17
MW-125	02/23/2021 13:05	0.38	-81.5	6.94	1.11	2.129	5.52	8.7
MW-125	02/23/2021 13:10	0.55	-94.9	6.96	1.2	2.333	5.75	6
MW-125	02/23/2021 13:15	0.59	-98.7	6.96	1.2	2.338	5.53	5.2
MW-125	02/23/2021 13:20	0.65	-102.5	6.91	1.55	2.945	5.93	3.1
MW-125	02/23/2021 13:25	1.08	-114.5	6.86	2.03	3.803	5.9	3
MW-125	02/23/2021 13:30	1.25	-127.4	6.84	2.29	4.301	5.84	2.3
MW-125	02/23/2021 14:50	2.92	-160.7	6.83	2.43	4.553	6.74	5.5
MW-125	02/23/2021 15:10	3.28	-217.7	6.87	2.52	4.718	6.84	6.9
MW-125	05/04/2021 13:05	4.3	-68.6	7.14	0.8	1.568	17.37	40.5
MW-125	05/04/2021 13:10	0.44	-86.9	6.81	0.95	1.847	14.69	12.8
MW-125	05/04/2021 13:15	0.29	-92.4	6.7	1.96	3.706	13.92	10.2
MW-125	05/04/2021 13:20	0.22	-105.2	6.69	3.01	5.512	14.11	9.7
MW-125	05/04/2021 13:25	0.18	-116.7	6.69	3.61	6.541	14.13	8.8
MW-125	05/04/2021 13:30	0.16	-127.1	6.68	4.35	7.83	14.69	8.3
MW-125	05/04/2021 13:35	0.18	-134	6.69	4.35	7.8	14.56	8.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-125	05/04/2021 13:40	0.16	-134.5	6.69	4.34	7.807	14.62	8.2
MW-125	05/04/2021 13:45	0.18	-139.8	6.69	4.33	7.784	14.77	8.1
MW-125	05/04/2021 13:50	0.14	-144.8	6.7	4.36	7.833	14.76	8.1
MW-125	08/04/2021 14:00	0.01	36.8	5.86	0.91	1.828	24.65	51.7
MW-125	08/04/2021 14:05	0.01	35.7	5.82	0.81	1.637	24.11	51.8
MW-125	08/04/2021 14:10	0.02	30	5.83	0.8	1.583	23.92	49.8
MW-125	08/04/2021 14:15	0.02	10.5	5.91	0.82	1.625	23.74	41.3
MW-125	08/04/2021 14:20	0.02	-1.5	5.96	0.87	1.717	23.58	35.6
MW-125	08/04/2021 14:25	0.02	-17.2	6.03	0.93	1.829	23.48	29.7
MW-125	08/04/2021 14:30	0.02	-26.5	6.07	1.02	1.984	23.39	27
MW-125	08/04/2021 14:35	0.01	-41.4	6.14	1.32	2.475	23.05	22.6
MW-125	08/04/2021 14:40	0.01	-69	6.28	2.26	4.177	22.85	17
MW-125	08/04/2021 14:45	0.01	-86.1	6.37	2.96	5.46	22.84	14.5
MW-125	02/10/2022 09:05	4.34	225.7	6.69	0.58	1.179	6.87	97.8
MW-125	02/10/2022 09:10	3.02	223.3	6.79	0.57	1.148	6.85	79.2
MW-125	02/10/2022 09:15	3.06	219.3	6.86	0.57	1.136	6.93	77.2
MW-125	02/10/2022 09:20	3.52	213	6.84	0.57	1.137	6.98	58.6
MW-125	02/10/2022 09:25	4.14	212.5	6.83	0.57	1.137	6.95	59.9
MW-125	02/10/2022 09:30	4.14	212.5	6.83	0.57	1.137	6.95	59.9
MW-125	02/10/2022 09:35	6.06	132.5	6.83	0.56	1.137	7.11	18
MW-125	02/10/2022 09:40	5.17	111.3	6.69	0.56	1.129	7.11	15.7
MW-125	02/10/2022 09:45	5.17	96.4	6.67	0.56	1.127	7.16	13.5
MW-125	02/10/2022 09:50	5.04	86.4	6.68	0.56	1.124	7.21	13
MW-126	02/15/2012 13:48	18.39	-274	7.05	NM	22.900	12.00	5.50
MW-126	02/16/2012 11:18	0.08	-31	7.02	NM	22.890	8.43	4.40
MW-126	03/14/2013 09:41	0.78	-270	7.1	3.16	49.05	9.72	11.1
MW-126	03/15/2013 12:33	0.46	-365	7.09	2.97	46.22	11.35	22.8
MW-126	06/05/2014 11:45	2.19	-3047	7.08	NM	62.340	15.22	91.10
MW-126	06/23/2014 15:09	1.45	-218	7.16	1.58	25.660	21.03	42.20
MW-126	06/24/2014 13:31	2.70	1	6.78	3.94	58.590	17.65	1.50
MW-126	02/18/2015 13:23	1.99	-144	6.90	1.29	21.700	8.38	80.90
MW-126	02/19/2015 12:05	-0.56	-291	7.23	2.89	45.380	8.86	87.50
MW-126	02/19/2015 13:23	1.99	-144	6.90	1.29	21.700	8.38	80.90
MW-126	06/06/2015 09:24	5.85	-166	6.86	2.30	21.570	17.19	4.00
MW-126	03/15/2016 11:43	6.57	-16	6.67	0.16	3.182	8.19	3.50
MW-126	03/15/2016 15:06	12.27	46	6.86	6.17	89.390	8.23	9.80
MW-126	03/23/2017 10:20	10.66	-271	6.9	4.1277	0.6346	5.89	6
MW-126	03/23/2017 10:23	5.67	-324	7.02	4.0165	0.6162	6.9	3.3
MW-126	03/23/2017 10:26	3.69	-384	7.03	3.9796	0.6101	7.28	2.6
MW-126	03/23/2017 10:29	4.26	-391	7.04	4.0399	0.6199	6.76	1.9
MW-126	03/23/2017 10:31	4	-395	7.04	4.0215	0.6168	6.95	2.5
MW-126	03/23/2017 10:34	2.97	-395	7.04	4.0130	0.6153	7.04	3.7
MW-126	03/23/2017 10:37	3.83	-393	7.03	4.0008	0.6133	7.17	4.3
MW-126	03/23/2017 10:40	3.91	-391	7.02	4.0245	0.6171	6.97	3.8
MW-126	03/23/2017 10:42	2.91	-389	7	4.0295	0.6179	6.93	3.2
MW-126	03/23/2017 10:45	2.85	-386	6.98	4.0018	0.6133	7.21	2.5
MW-126	03/23/2017 10:48	2.81	-385	6.98	4.0210	0.6164	7.05	1.7
MW-126	03/23/2017 10:51	3.63	-386	6.98	4.0273	0.6174	7.01	1.3
MW-126	03/23/2017 10:53	2.74	-387	6.98	4.0138	0.6154	7.07	1.2
MW-126	03/23/2017 10:56	2.71	-388	6.99	3.9973	0.6128	7.19	0.7
MW-126	03/23/2017 10:59	3.44	-389	6.99	3.9787	0.6097	7.38	0.5
MW-126	03/23/2017 11:01	3.4	-388	6.99	3.9684	0.6075	7.66	0.1
MW-126	03/23/2017 11:04	3.47	-388	7.01	3.9882	0.6119	7.04	-0.1
MW-126	03/23/2017 11:07	3.41	-388	7.01	3.9335	0.6040	7.21	-0.3
MW-126	03/23/2017 11:10	3.4	-389	7.02	3.9177	0.6017	7.24	-0.4
MW-126	03/24/2017 09:03	0.01	-368	7.22	2.34	37.190	11.45	7.60
MW-126	03/24/2017 11:50	11.57	-293	6.82	3.66	55.830	11.01	32.80
MW-126	04/30/2018 12:04	9.15	-220	7.02	4.0873	61.5322	11.2	3.4
MW-126	04/30/2018 12:07	3.18	-294	7.15	4.1423	62.3765	10.68	7.8
MW-126	04/30/2018 12:09	0.93	-319	7.18	4.1508	62.5074	10.6	8.5
MW-126	04/30/2018 12:12	2.42	-323	7.17	4.1451	62.4200	10.65	8.7
MW-126	04/30/2018 12:14	2.45	-322	7.13	4.1522	62.5295	10.58	8.3

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-126	04/30/2018 12:17	0.82	-318	7.08	4.1422	62.3764	10.67	8
MW-126	04/30/2018 12:19	0.78	-314	7.03	4.1376	62.3064	10.71	5.3
MW-126	04/30/2018 12:22	2.25	-313	7.01	4.1407	62.3543	10.68	3
MW-126	04/30/2018 12:24	0.69	-315	7.02	4.1320	62.2216	10.76	3.2
MW-126	04/30/2018 12:27	0.64	-318	7.03	4.1103	61.8887	10.96	2.9
MW-126	04/30/2018 12:29	2.01	-321	7.04	4.0996	61.7273	11.05	2
MW-126	04/30/2018 12:32	1.89	-324	7.06	4.0900	61.5827	11.13	2.3
MW-126	04/30/2018 12:35	0.58	-329	7.08	4.0870	61.5380	11.15	1.7
MW-126	04/30/2018 12:37	0.55	-330	7.08	4.0457	60.9088	11.54	1.7
MW-126	04/30/2018 12:40	1.61	-332	7.08	3.9823	59.9457	12.16	0.8
MW-126	04/30/2018 12:42	0.44	-334	7.08	3.8555	58.0346	13.45	1.5
MW-126	04/30/2018 12:45	1.47	-335	7.08	3.7303	56.1692	14.78	1.9
MW-126	04/30/2018 12:47	0.54	-338	7.08	3.6200	54.5430	16.01	2
MW-126	04/30/2018 12:50	0.46	-340	7.08	3.5126	52.9700	17.27	2.1
MW-126	04/30/2018 12:52	1.2	-343	7.08	3.4271	51.7282	18.32	1
MW-126	05/01/2018 11:14	8.02	-83.00	6.86	3.40	52.370	10.71	2.70
MW-126	05/01/2018 12:52	1.20	-343.00	7.08	3.43	51.530	18.5	1.04
MW-126	05/01/2018 13:25	8.48	-322.00	7.07	4.08	61.520	11.06	6.00
MW-126	11/27/2018 13:10	0.76	-127.7	7.1	23.53	37.13	12.01	1.6
MW-126	11/27/2018 13:15	0.05	-288.9	7.03	24.03	37.89	11.98	1.1
MW-126	11/27/2018 13:20	0.16	-244.2	7.05	24.15	39.95	12.09	0.1
MW-126	11/27/2018 13:25	0.33	-250.5	7.03	23.7	37.46	11.74	2.1
MW-126	11/27/2018 13:30	0.45	-250.1	7.04	22.54	36.51	11.35	3.2
MW-126	11/27/2018 13:35	0.4	-237.3	7.03	19.91	32.14	10.58	10.6
MW-126	11/27/2018 13:40	2.13	-210.2	7.09	16.44	26.98	10.18	9.1
MW-126	11/27/2018 13:45	5.67	-191.7	7.19	13.63	22.6	9.44	0.8
MW-126	11/27/2018 13:50	5.74	-192.8	7.22	13.83	22.94	9.48	0.7
MW-126	04/24/2019 14:20	4.88	-297.3	7.17	18.76	30.26	13.15	8.7
MW-126	03/04/2020 11:10	4.88	-222.1	6.8	11.8	19.74	10.5	4.5
MW-126	11/18/2020 10:50	4.28	-286.4	7.33	11.09	18.6	12.45	5.1
MW-126	11/18/2020 11:15	2.06	-304.1	7.26	17.96	29.04	12.89	7.5
MW-126	01/29/2021 08:50	2.26	-312.9	7.16	14.9	24.57	5.16	8.3
MW-126	01/29/2021 08:55	2.01	-314.7	7.13	15.6	25.01	5.32	6.3
MW-126	01/29/2021 09:00	1.34	-317.4	7.19	13.98	28.3	4.73	6.3
MW-126	01/29/2021 09:05	1.6	-325.2	7.25	17.44	28.96	4.14	7
MW-126	01/29/2021 09:10	2.33	-332.2	7.34	17.39	28.73	3.7	9.7
MW-126	01/29/2021 09:15	2.6	-325.2	7.25	17.22	28.48	3.57	7.4
MW-126	01/29/2021 09:20	2.64	-320.8	7.27	18.04	29.69	3.93	7.4
MW-126	01/29/2021 09:25	2.86	-316.4	7.24	18.73	30.96	1.87	12.7
MW-126	01/29/2021 09:30	2.9	-312.7	7.23	18.81	31.08	1.98	13
MW-126	01/29/2021 09:35	2.74	-315.3	7.27	19.43	32.07	2.19	15.2
MW-126	01/29/2021 11:15	4.74	-306.7	7.66	22.06	35.16	10.58	6.6
MW-126	01/29/2021 11:30	4.26	-319.8	7.61	22.29	35.61	9.25	3
MW-126	05/07/2021 13:25	5.4	-150.8	6.96	19.15	30.05	14.98	2.2
MW-126	05/07/2021 13:30	1.55	-244.8	7.05	20.18	32.24	13.39	0.3
MW-126	05/07/2021 13:35	0.72	-278.5	7.04	20.48	32.73	13.14	0.5
MW-126	05/07/2021 13:40	0.18	-293.9	7.03	20.64	32.94	12.83	0.2
MW-126	05/07/2021 13:45	0.07	-333	7.04	20.61	32.96	12.4	1.5
MW-126	05/07/2021 13:50	0.12	-336.1	7.06	20.61	32.91	12.37	1.5
MW-126	05/07/2021 13:55	0.3	-345.8	7.05	20.22	32.43	12.58	0.8
MW-126	05/07/2021 14:00	1.12	-346.7	7.09	20.02	32.09	12.71	1.5
MW-126	05/07/2021 14:05	1.21	-344.6	7.07	19.3	31.03	12.92	0.2
MW-126	05/07/2021 14:10	0.44	-330.6	7.06	18.07	29.2	13.07	1.1
MW-126	08/05/2021 10:35	1.93	-296.7	7.02	21.92	34.74	23.23	3.6
MW-126	08/05/2021 10:40	0.05	-329	7.11	21.86	34.74	24	5.8
MW-126	08/05/2021 10:45	0.01	-338.7	7.12	21.75	34.64	23.81	4.1
MW-126	08/05/2021 10:50	0	-341.2	7.11	21.71	34.54	23.99	4.4
MW-126	08/05/2021 10:55	0	-343.2	7.11	21.73	34.53	23.98	4.1
MW-126	08/05/2021 11:00	0	-343.5	7.11	21.69	34.53	24.11	6.1
MW-126	08/05/2021 11:05	0	-344.5	7.1	21.65	34.47	24.56	5.3
MW-126	08/05/2021 11:10	0	-344.5	7.1	21.54	34.33	24.45	4.3
MW-126	08/05/2021 11:15	0	-344	7.09	21.59	34.25	24.51	4.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-126	08/05/2021 11:20	0	-343.6	7.09	21.45	34.18	24.77	3.9
MW-126	11/11/2021 12:21	0.34	-251.8	7.2	21.51	34.17	17.78	7.5
MW-126	11/11/2021 12:26	0.1	-277	7.12	21.48	34.13	17.6	6.7
MW-126	11/11/2021 12:31	-0.5	-289.6	7.09	21.25	33.79	17.47	5.3
MW-126	11/11/2021 12:36	-0.87	-298.8	7.08	21.1	33.59	17.36	5.8
MW-126	11/11/2021 12:41	-0.85	-307.6	7.07	20.9	33.32	17.21	6.1
MW-126	11/11/2021 12:46	-0.7	-311.6	7.06	20.68	32.97	17.17	5.6
MW-126	11/11/2021 12:51	-0.4	-311.6	7.05	20.41	32.58	17.14	5.7
MW-126	02/11/2022 08:55	6.77	-311.5	7.71	22.08	35.35	8.95	10.1
MW-126	02/11/2022 09:00	10.77	-311.8	7.63	22.15	35.36	9.01	2
MW-126	02/11/2022 09:05	10.87	-313.4	7.6	22.25	35.25	9.25	-0.6
MW-126	02/11/2022 09:10	11.4	-316.1	7.63	21.44	34.05	9.87	2.3
MW-126	02/11/2022 09:15	13.18	-317.4	7.66	21.63	34.49	9.64	1.1
MW-126	02/11/2022 09:20	11.9	-317.7	7.64	21.34	34.19	9.52	1.5
MW-126	02/11/2022 09:25	12.44	-304.8	7.71	19.61	31.5	9.27	1.8
MW-126	02/11/2022 09:30	12.18	-306.6	7.71	19.25	30.9	9.31	0.8
MW-126	02/11/2022 09:35	15.93	-315.1	7.74	18	28.99	9.23	2.5
MW-126	02/11/2022 09:40	14.86	-316.6	7.78	17.37	28.33	9	-0.5
MW-127	02/15/2012 09:48	-0.18	47	6.64	0.2	3.82236	10.25	25.2
MW-127	02/15/2012 09:51	-0.15	39	6.67	0.2	3.79736	11.03	27.8
MW-127	02/15/2012 09:53	-0.15	34	6.68	0.2	3.80762	11.41	288
MW-127	02/15/2012 09:56	-0.13	31	6.69	0.2	3.82105	11.35	4.5
MW-127	02/15/2012 09:58	-0.14	29	6.69	0.2	3.82418	11.34	6.1
MW-127	02/15/2012 10:00	-0.13	27	6.69	0.2	3.81239	11.49	12.2
MW-127	02/15/2012 10:03	96.33	26	6.69	0.2	3.82164	11.61	7.1
MW-127	02/15/2012 10:05	29.7	24	6.69	0.2	3.83293	11.5	29.6
MW-127	02/15/2012 10:07	15.85	23	6.69	0.2	3.81932	11.61	4.2
MW-127	02/15/2012 10:10	11.97	22	6.69	0.2	3.83039	11.58	3.2
MW-127	02/15/2012 10:12	9.26	21	6.69	0.2	3.83948	11.57	3.4
MW-127	02/15/2012 10:13	8	20	6.69	0.2	3.83681	11.58	6.9
MW-127	02/15/2012 10:16	6.17	19	6.69	0.2	3.82375	11.47	35.1
MW-127	02/15/2012 10:18	4.86	19	6.69	0.2	3.8345	11.48	97.8
MW-127	02/15/2012 10:20	3.84	18	6.69	0.2	3.82958	11.55	98.2
MW-127	02/15/2012 10:23	3.15	17	6.69	0.2	3.84441	11.6	32
MW-127	02/15/2012 10:25	2.67	16	6.69	0.2	3.83398	11.69	144.1
MW-127	02/15/2012 10:27	2.32	16	6.69	0.2	3.84982	11.69	6
MW-127	02/15/2012 10:30	2.08	15	6.69	0.2	3.84918	11.65	18.3
MW-127	02/15/2012 10:32	1.92	14	6.69	0.2	3.84752	11.7	76.2
MW-127	02/15/2012 10:34	1.79	14	6.69	0.2	3.84426	11.81	62.9
MW-127	02/15/2012 10:37	1.7	14	6.69	0.2	3.84256	11.85	8.4
MW-127	02/15/2012 11:49	-0.18	12	6.67	0.60	10.541	13.87	4.44
MW-127	02/16/2012 09:30	1.86	-44	6.67	0.38	6.947	14.58	8.00
MW-127	03/11/2013 09:09	6.39	-125	6.55	0.2	3.764	7.85	16.84
MW-127	03/11/2013 10:23	3.94	-248	6.91	1.44	23.73	13.32	24.4
MW-127	03/12/2013 14:50	2.86	-223	6.48	0.79	13.7	13.48	18.5
MW-127	06/05/2014 14:30	2.57	-274	6.14	0.10	2.033	21.31	10.14
MW-127	06/05/2014 15:02	2.53	-301	6.91	2.14	33.780	19.76	185.40
MW-127	06/06/2014 10:30	3.33	-286	6.76	86.00	14.670	17.86	48.10
MW-127	06/23/2014 11:32	2.56	-81	6.86	0.99	16.730	15.91	76.10
MW-127	06/23/2014 12:46	2.72	-39	6.29	NM	2.830	26.58	14.30
MW-127	06/23/2014 12:49	1.68	-51	6.23	NM	2.650	23.61	8.60
MW-127	06/23/2014 12:51	1.21	-53	6.22	NM	2.546	23.32	8.20
MW-127	06/23/2014 12:54	1.08	-55	6.22	NM	2.431	22.81	9.70
MW-127	06/23/2014 12:56	0.98	-56	6.20	NM	2.291	22.21	9.90
MW-127	06/23/2014 12:58	0.86	-57	6.20	NM	2.244	22.48	10.20
MW-127	06/23/2014 13:01	0.78	-58	6.20	NM	2.161	22.06	10.50
MW-127	06/23/2014 13:03	0.75	-61	6.20	NM	2.104	21.87	12.10
MW-127	06/23/2014 13:06	0.67	-62	6.19	NM	2.082	22.53	28.60
MW-127	06/23/2014 13:08	0.63	-63	6.16	NM	2.057	22.49	28.70
MW-127	06/23/2014 13:11	0.61	-66	6.17	NM	1.955	22.27	28.70
MW-127	06/23/2014 13:13	0.58	-68	6.16	NM	1.811	22.17	26.00
MW-127	06/23/2014 13:16	0.57	-70	6.14	NM	1.700	22.53	27.60

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-127	06/23/2014 13:18	0.57	-74	6.13	NM	1.643	22.69	27.40
MW-127	06/23/2014 13:20	0.51	-78	6.12	NM	1.587	22.14	28.80
MW-127	06/23/2014 13:23	0.47	-82	6.11	NM	1.597	22.38	13.90
MW-127	06/23/2014 13:25	0.46	-89	6.11	NM	1.662	22.19	14.30
MW-127	06/23/2014 13:28	0.45	-97	6.13	NM	1.774	22.63	15.30
MW-127	06/23/2014 13:30	0.43	-102	6.13	NM	1.846	23.66	15.80
MW-127	06/23/2014 13:33	0.45	-109	6.15	NM	1.896	24.71	14.80
MW-127	06/23/2014 13:35	0.46	-115	6.16	0.10	1.935	25.72	12.66
MW-127	06/24/2014 12:37	0.21	-100	6.78	1.70	27.670	14.56	26.60
MW-127	02/18/2015 09:49	8.13	75	6.66	0.2678	0.0051	3.73	10
MW-127	02/18/2015 09:52	3.84	7	6.56	0.2492	0.0047	6.32	8
MW-127	02/18/2015 09:54	2.98	-17	6.54	0.2537	0.0048	6.5	6.8
MW-127	02/18/2015 09:57	2.94	-29	6.53	0.2551	0.0048	6.62	4.4
MW-127	02/18/2015 09:59	2.68	-36	6.53	0.2618	0.0050	6.61	3.7
MW-127	02/18/2015 10:01	2.38	-41	6.53	0.2598	0.0049	6.86	3.7
MW-127	02/18/2015 10:04	2.25	-44	6.54	0.26	4.960	6.64	3.61
MW-127	02/18/2015 10:37	3.32	7	6.76	0.56	9.900	14.92	10.68
MW-127	02/19/2015 11:05	0.72	-325	6.86	1.08	18.160	14.49	25.60
MW-128	04/17/2015 10:59	5.87	-95	6.56	NM	0.474	10.23	86.00
MW-128	12/03/2015 15:30	7.27	-98.2	7.04	0.27	0.558	15.56	0.0000
MW-128	12/03/2015 15:55	1.70	-95.8	6.93	0.28	0.576	12.97	0.0000
MW-128	07/20/2016 10:05	1.21	-18.7	6.74	0.44	0.888	25.32	0.0000
MW-128	07/20/2016 10:20	0.76	-74.3	6.60	0.42	0.864	24.07	0.0000
MW-128	05/16/2017 09:45	0.77	-43.00	7.09	0.06	1.153	14.69	7.90
MW-128	06/06/2018 11:20	1.93	-100.00	6.79	0.03	0.700	17.05	23.60
MW-128	10/24/2018 12:20	5.40	-192.20	5.91	0.26	0.546	17.92	18.40
MW-128	10/24/2018 14:00	6.15	-146.80	5.24	0.33	0.673	19.17	5.50
MW-128	10/24/2018 14:10	9.09	-113.10	5.45	0.16	0.332	19.27	71.50
MW-128	06/08/2020 11:40	5.37	-140	7.24	0.26	0.54	16.41	4.8
MW-13	03/16/2017 09:30	1.56	126.40	6.49	0.52	10.520	7.58	103.20
MW-13	03/16/2017 12:00	9.31	-77.80	7.15	0.75	1.494	9.15	75.10
MW-13	03/16/2017 12:10	7.34	11.00	6.96	0.50	0.997	10.11	221.60
MW-13	09/20/2018 12:30	3.19	-53.70	6.45	0.61	1.228	20.35	115.40
MW-13	09/20/2018 13:25	2.02	-66.30	6.39	0.63	1.329	19.11	10.40
MW-13	09/20/2018 13:35	4.28	-59.40	6.71	0.62	1.419	19.13	38.90
MW-13	12/10/2018 13:05	7.31	-11.70	6.51	0.26	0.541	12.93	74.50
MW-13	12/10/2018 14:30	1.28	-56.70	6.49	0.75	1.484	13.74	1292.20
MW-13	12/10/2018 14:40	0.53	-93.20	6.61	0.81	1.591	14.52	89.50
MW-13	02/25/2019 12:10	5.01	2.20	6.86	0.41	0.831	8.64	643.00
MW-13	02/25/2019 13:20	3.37	-47.90	6.91	0.31	0.624	8.09	1247.80
MW-13	02/25/2019 13:30	2.12	-51.50	6.92	0.29	0.596	8.05	1162.70
MW-13	06/07/2019 09:25	0.22	-24.9	6.47	NM	0.954	15.46	NM
MW-13	06/07/2019 10:05	1	-14.4	6.95	NM	1.063	14.66	4
MW-13	06/07/2019 10:10	0.55	-14.9	6.58	NM	1.06	15.39	1.8
MW-13	06/07/2019 10:15	0.49	-16.4	6.48	NM	1.054	15.12	0
MW-13	06/07/2019 10:20	0.38	-17.5	6.45	NM	1.039	15.19	0
MW-13	06/07/2019 10:25	0.33	-20.2	6.44	NM	1.023	15.33	0
MW-13	06/07/2019 10:30	0.3	-22	6.45	NM	1.012	15.33	0
MW-13	06/07/2019 10:35	0.27	-23.2	6.45	NM	0.999	15.39	0
MW-13	06/07/2019 10:40	0.25	-24.4	6.46	NM	0.996	15.45	0
MW-13	06/07/2019 10:45	0.24	-24.4	6.47	NM	0.976	15.42	0
MW-13	06/07/2019 10:50	0.22	-24.9	6.47	NM	0.954	15.46	0
MW-13	06/07/2019 11:00	3.92	85.2	6.67	0.42	0.851	17.17	15.6
MW-13	06/07/2019 11:15	4.01	3.5	6.56	0.38	0.779	17.23	283.9
MW-13	09/11/2019 08:46	7.83	-22.8	6.06	NM	1.202	20.34	60.8
MW-13	09/11/2019 10:30	2.25	-124.6	6.26	0.7	1.402	21.93	5.6
MW-13	09/11/2019 10:44	2.35	-93.8	6.27	0.71	1.415	21.56	52.9
MW-13	12/09/2019 09:45	4.08	-137.8	7.32	NM	1.58	12.55	257.9
MW-13	12/09/2019 09:50	1.28	-28.6	6.38	NM	1.397	12.9	115.9
MW-13	12/09/2019 09:55	0.99	-29.9	6.33	NM	1.34	13.8	72
MW-13	12/09/2019 10:00	0.77	-24.2	6.32	NM	1.335	13.98	43.7
MW-13	12/09/2019 10:05	0.96	-11.2	6.32	NM	1.323	13.86	40.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-13	12/09/2019 10:10	0.91	-7.4	6.32	NM	1.328	13.8	39.7
MW-13	12/09/2019 10:15	0.83	-3.2	6.31	NM	1.327	13.75	36.2
MW-13	12/09/2019 10:20	0.78	-11.3	6.31	NM	1.323	13.74	33.8
MW-13	12/09/2019 10:25	0.93	-19	6.31	NM	1.311	13.81	30.4
MW-13	12/09/2019 10:30	0.91	-21.3	6.31	NM	1.299	13.86	29.1
MW-13	12/09/2019 11:15	2.46	-67.1	6.47	0.59	1.221	27.3	138
MW-13	12/09/2019 11:22	2.46	-67.1	6.47	0.59	1.221	27.3	138
MW-13	12/09/2019 11:30	4.06	-66.8	6.46	0.6	1.2	30.32	131.5
MW-13	03/11/2020 10:35	4.05	54.7	6.37	0.33	0.673	11.55	122.3
MW-13	06/19/2020 11:45	3.67	-12.4	6.89	0.6	1.225	21.55	52.1
MW-13	06/19/2020 11:50	1.39	-34.4	6.5	0.56	1.117	18.17	49.6
MW-13	06/19/2020 11:55	1.04	-36.9	6.43	0.54	1.086	17.44	15.3
MW-13	06/19/2020 12:00	0.65	-38.3	6.42	0.53	1.072	17.53	27.8
MW-13	06/19/2020 12:05	0.5	-38.4	6.41	0.52	1.056	17.49	23.7
MW-13	06/19/2020 12:10	0.48	-38.2	6.4	0.52	1.048	17.78	17.8
MW-13	06/19/2020 12:15	0.42	-37.5	6.38	0.5	1.007	18.24	14.5
MW-13	06/19/2020 12:20	0.4	-36	6.36	0.49	0.996	18.87	6.6
MW-13	06/19/2020 12:25	0.4	-35.4	6.35	0.5	1	19.19	18.5
MW-13	06/19/2020 12:30	0.39	-36.8	6.35	0.5	1.007	19.42	5.7
MW-13	06/19/2020 13:05	3.56	-5.3	6.43	0.6	1.199	21.71	34
MW-13	06/19/2020 13:15	3.09	-15.4	6.42	0.6	1.2	22.05	32.4
MW-13	12/21/2020 10:20	3.2	-4.9	6.33	0.54	1.081	12.42	340.6
MW-13	12/21/2020 10:25	3.53	-14.8	6.36	0.52	1.044	12.36	274.6
MW-13	12/21/2020 10:30	3.18	-21.2	6.41	0.5	1.002	11.63	168.6
MW-13	12/21/2020 10:35	2.05	-24.4	6.41	0.48	0.966	10.18	58.3
MW-13	12/21/2020 10:40	1.7	-28.3	6.41	0.47	0.957	10.03	70.7
MW-13	12/21/2020 10:45	1.16	-32.3	6.42	0.47	0.941	9.51	63.6
MW-13	12/21/2020 10:50	0.81	-33.8	6.41	0.46	0.931	9.26	56.4
MW-13	12/21/2020 10:55	0.73	-34.5	6.41	0.46	0.924	9.32	67.3
MW-13	12/21/2020 11:00	0.59	-35.8	6.41	0.45	0.915	9.37	58.3
MW-13	12/21/2020 11:05	0.4	-36.9	6.41	0.45	0.908	9.42	42.3
MW-13	12/21/2020 12:30	0.71	-93.6	6.62	0.5	1.002	14.81	26.2
MW-13	12/21/2020 12:45	0.47	110	6.72	0.53	1.069	12.52	1399.5
MW-13	03/11/2021 09:05	2.07	198	6.38	0.23	0.469	9.68	0.4
MW-13	03/11/2021 09:10	1.71	190.5	6.36	0.22	0.464	9.75	43.2
MW-13	03/11/2021 09:15	1.3	178.3	6.36	0.22	0.46	9.77	2.6
MW-13	03/11/2021 09:20	1.07	173.2	6.36	0.22	0.457	9.84	0.5
MW-13	03/11/2021 09:25	0.98	170.5	6.35	0.22	0.455	9.99	0
MW-13	03/11/2021 09:30	0.93	168.9	6.35	0.22	0.455	9.97	0
MW-13	03/11/2021 09:35	0.9	167.4	6.35	0.22	0.455	10.08	0
MW-13	03/11/2021 10:45	2.37	100.6	6.38	0.24	0.497	11.28	77.6
MW-13	03/11/2021 11:00	2.11	97.1	6.39	0.25	0.507	12.57	15.1
MW-13	08/27/2021 12:45	1.28	-103.4	6.91	0.97	2.234	22.56	23.2
MW-13	08/27/2021 12:50	-0.14	122.1	6.56	0.002	0.006	42.04	6.3
MW-13	08/27/2021 12:55	-14	124.6	6.55	0	0.006	43.03	6.4
MW-13	08/27/2021 13:00	-0.01	-10.9	5.99	0.57	1.153	21.27	4
MW-13	08/27/2021 13:05	-0.08	-11.7	5.93	0.57	1.152	20.71	2.3
MW-13	08/27/2021 13:10	-0.26	-10.2	5.87	0.57	1.143	20.39	2.5
MW-13	08/27/2021 13:15	-0.17	-9.1	5.81	0.57	1.14	20.32	2.1
MW-13	08/27/2021 13:20	-0.26	-8.2	5.78	0.55	1.107	20.39	2.5
MW-13	08/27/2021 13:25	-0.3	-7	5.83	0.53	1.063	20.78	4.5
MW-13	08/27/2021 13:30	-0.36	-12.8	5.91	0.47	0.953	21.2	11.3
MW-13	02/11/2022 10:15	3.61	-3.3	6.25	0.3	0.604	11.55	199.2
MW-13	02/11/2022 10:20	2.37	-5.4	5.89	0.3	0.608	10.91	172
MW-13	02/11/2022 10:25	2.21	-0.8	5.79	0.3	0.614	10.78	146.4
MW-13	02/11/2022 10:30	2.29	4.2	5.7	0.3	0.623	10.63	113.5
MW-13	02/11/2022 10:35	2.13	4.2	5.65	0.31	0.63	10.72	93.9
MW-13	02/11/2022 10:40	1.96	5	5.63	0.31	0.634	10.73	80
MW-13	02/11/2022 10:45	2.23	4.4	5.6	0.31	0.637	10.6	69.5
MW-13	02/11/2022 10:50	2.26	4.2	5.6	0.31	0.637	10.66	59.6
MW-13	02/11/2022 10:55	2.34	3.9	5.58	0.31	0.637	10.9	53.4
MW-13	02/11/2022 11:00	2.42	5	5.57	0.31	0.635	10.88	49.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-133	04/23/2012 10:21	2.41	-97	7.11	0.05	1.08688	13.9	3.9
MW-133	04/23/2012 10:24	0.87	-105	7.12	0.05	1.08164	13.8	3.8
MW-133	04/23/2012 10:26	0.4	-109	7.13	0.05	1.08116	13.61	3.4
MW-133	04/23/2012 10:28	0.28	-112	7.14	0.05	1.08015	13.56	3.4
MW-133	04/23/2012 10:31	0.22	-114	7.14	0.05	1.08162	13.61	3.6
MW-133	04/23/2012 10:33	0.18	-115	7.14	0.05	1.08122	13.58	3.3
MW-133	04/23/2012 10:36	0.15	-117	7.15	0.05	1.07965	13.61	3.5
MW-133	04/23/2012 10:38	0.13	-118	7.15	0.05	1.07977	13.67	3.5
MW-133	04/23/2012 10:40	0.12	-119	7.15	0.05	1.08041	13.61	4.1
MW-133	04/23/2012 10:43	0.13	-120	7.15	0.05	1.08132	13.51	3.5
MW-133	04/23/2012 10:45	0.13	-120	7.16	0.05	1.08135	13.47	3.7
MW-133	04/23/2012 10:47	0.12	-121	7.16	0.05	1.08056	13.39	3.5
MW-133	04/23/2012 10:48	0.12	-121	7.16	0.05	1.081	13.39	3.49
MW-133	04/03/2013 14:33	0.47	-171	7.08	0.13	2.513	10.99	5.77
MW-133	09/09/2014 14:34	0.05	26	7.33	0.08	1.503	21.95	6.17
MW-133	04/17/2015 10:25	4.09	-120	6.72	NM	0.782	12.86	373.70
MW-133	05/10/2017 14:08	-0.06	-112.00	6.96	0.11	2.187	15.04	2.85
MW-133	06/28/2021 13:55	2.17	-68.5	6.46	0.42	0.875	29.02	51.4
MW-133	06/28/2021 14:00	0.59	-109.9	6.92	0.44	0.905	23.63	7.9
MW-133	06/28/2021 14:05	0.28	-117.4	7.01	0.45	0.917	26.32	0
MW-133	06/28/2021 14:10	0.25	-120.4	7.05	0.45	0.922	27.17	0
MW-133	06/28/2021 14:15	0.18	-123.4	7.06	0.45	0.923	27.21	0
MW-133	06/28/2021 14:20	0.14	-124.2	7.08	0.45	0.922	26.52	0
MW-133	06/28/2021 14:25	0.13	-122.4	7.08	0.45	0.921	26.54	0
MW-133	06/28/2021 14:30	0.13	-120.6	7.08	0.45	0.926	26.5	0
MW-133	02/07/2022 13:55	10.46	-62.9	7	0.01	0.016	10.17	527
MW-133	02/07/2022 14:00	10.46	-71.5	7.05	0.01	0.017	10.11	501.7
MW-133	02/07/2022 14:05	8.77	-72.2	7.05	0.01	0.015	10.06	540.7
MW-133	02/07/2022 14:10	8.91	-71	7.06	0.01	0.015	9.98	424.7
MW-133	02/07/2022 14:15	8.98	-70.4	7.07	0.01	0.015	10.09	1213.5
MW-133	02/07/2022 14:20	9.27	-71.9	7.06	0.01	0.015	10.18	225.6
MW-133	02/07/2022 14:25	8.78	-70.9	6.99	0.01	0.016	10.44	217.3
MW-133	02/07/2022 14:30	8.64	-71.2	6.98	0.01	0.015	10.04	303.9
MW-133	02/07/2022 14:35	8.6	-72.9	7.01	0.01	0.015	10.23	261.4
MW-133	02/07/2022 14:40	8.61	-73	6.99	0.01	0.017	10.16	157.1
MW-133	04/22/2022 12:25	0.85	-92.1	6.79	0.37	0.748	14.2	0
MW-133	04/22/2022 12:30	0.52	-96.6	6.73	0.37	0.749	13.93	0
MW-133	04/22/2022 12:35	0.4	-99.9	6.71	0.37	0.748	13.83	0
MW-133	04/22/2022 12:40	0.28	-116.2	6.69	0.37	0.747	14.5	0
MW-133	04/22/2022 12:45	0.25	-121.1	6.72	0.37	0.75	14.62	0
MW-133	04/22/2022 12:50	0.24	123.7	6.71	0.37	0.751	14.6	0
MW-133	04/22/2022 12:55	0.23	-126.6	6.76	0.37	0.752	14.47	0
MW-133	04/22/2022 13:00	0.22	-128.7	6.72	0.37	0.753	14.49	0
MW-133	04/22/2022 13:05	0.22	-128.8	6.71	0.37	0.753	14.52	0
MW-134	06/06/2012 12:55	1.43	-26	7.02	0.01	0.24405	24.7	8.6
MW-134	06/06/2012 12:57	0.68	-36	7.16	0.01	0.22713	22.96	4.8
MW-134	06/06/2012 12:59	0.46	-41	7.12	0.01	0.21838	22.3	2.7
MW-134	06/06/2012 13:02	0.41	-45	7.04	0.01	0.21994	22.42	5.5
MW-134	06/06/2012 13:04	0.37	-47	7.01	0.01	0.22007	22.27	6.3
MW-134	06/06/2012 13:06	0.37	-48	7	0.01	0.21981	21.94	3.9
MW-134	06/06/2012 13:08	0.36	-49	6.99	0.01	0.21786	21.69	3.2
MW-134	06/06/2012 13:11	0.35	-49	6.97	0.01	0.21962	21.68	4.4
MW-134	06/06/2012 13:13	0.33	-50	6.96	0.01	0.21945	21.9	2.9
MW-134	06/06/2012 13:15	0.33	-50	6.96	0.01	0.22292	21.77	3.2
MW-134	06/06/2012 13:17	0.35	-50	6.96	0.01	0.21906	21.41	4.3
MW-134	06/06/2012 13:20	0.35	-49	6.95	0.01	0.21941	21.35	3.7
MW-134	06/06/2012 13:22	0.37	-49	6.95	0.01	0.2202	21.14	4.1
MW-134	06/06/2012 13:24	0.39	-48	6.94	0.01	0.21947	21.12	2.5
MW-134	06/06/2012 13:26	0.42	-48	6.93	0.01	0.21941	21.13	3.3
MW-134	06/06/2012 13:29	0.42	-48	6.92	0.01	0.22017	21.52	3
MW-134	06/06/2012 13:31	0.45	-49	6.91	0.01	0.22343	21.86	5.1
MW-134	06/06/2012 13:33	0.48	-49	6.92	0.01	0.22076	22.02	3.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-134	06/06/2012 13:35	0.48	-49	6.92	0.01	0.21999	22.02	4
MW-134	06/06/2012 13:38	0.49	-49	6.92	0.01	0.22216	22	6.2
MW-134	06/06/2012 13:40	0.48	-49	6.92	0.01	0.22299	21.99	3
MW-134	06/06/2012 13:42	0.49	-49	6.92	0.01	0.21995	21.42	3
MW-134	06/06/2012 13:43	0.49	-49	6.92	0.01	0.220	21.42	3.04
MW-134	06/06/2012 14:23	2.24	-20	7.74	0.01	0.214	17.62	28.30
MW-134	06/07/2012 10:45	1.50	-39	6.18	0.0000	0.132	18.28	38.60
MW-134	05/20/2013 11:19	0.29	-220	6.35	0.03	0.573	18.15	13.13
MW-134	05/20/2013 11:57	0.93	-200	7.07	0.03	0.638	14.55	45.5
MW-134	05/21/2013 10:53	-0.02	-189	6.87	0.07	1.353	15.05	52.8
MW-134	06/24/2014 09:03	0.46	-118	6.47	0.02	0.496	23.14	12.14
MW-134	06/24/2014 09:45	0.95	-71	6.48	0.03	0.709	19.43	26.20
MW-134	06/25/2014 12:10	0.44	-75	6.57	0.02	0.344	22.15	9.30
MW-134	12/09/2015 09:44	6.83	-58	6.7	0.02	0.51	15.84	16.1
MW-134	12/09/2015 11:01	8.58	39	7.07	0.05	1.061	16.75	100.3
MW-134	06/03/2016 09:09	0.40	196	6.72	0.04	0.823	18.11	36.00
MW-134	06/03/2016 10:27	4.69	650	6.79	0.05	0.997	16.95	59.60
MW-134	06/06/2017 11:43	0.65	-101.00	6.37	0.04	0.883	18.05	13.90
MW-134	06/06/2017 13:43	0.17	-45.00	6.65	0.10	2.032	19.71	7.55
MW-134	06/06/2017 14:28	2.85	-86.00	7.53	0.11	2.148	17.25	14.60
MW-134	02/23/2018 09:36	9.52	-65.00	6.50	0.27	4.976	8.73	12.90
MW-134	02/23/2018 11:10	0.71	-30.00	6.43	0.18	3.542	8.22	17.05
MW-134	02/23/2018 11:48	2.70	-101.00	6.54	0.14	2.657	9.12	26.60
MW-134	05/14/2018 10:18	6.28	-160	6.91	0.0259	0.5320	16.27	28.5
MW-134	05/14/2018 10:20	1.59	-145	6.66	0.0238	0.4901	15.01	15.2
MW-134	05/14/2018 10:23	1.21	-141	6.62	0.0238	0.4897	15.13	11.1
MW-134	05/14/2018 10:25	1.06	-143	6.61	0.0237	0.4889	15.13	16.7
MW-134	05/14/2018 10:27	0.99	-145	6.61	0.0236	0.4862	15.11	12.8
MW-134	05/14/2018 10:30	0.97	-147	6.62	0.0235	0.4839	15.14	11.4
MW-134	05/14/2018 10:32	0.96	-148	6.62	0.0234	0.4817	15.25	12
MW-134	05/14/2018 10:35	0.94	-150	6.63	0.0235	0.4837	15.28	12
MW-134	05/15/2018 10:20	2.64	-15.00	6.92	0.05	0.967	16.38	14.90
MW-134	05/15/2018 10:35	0.94	-150.00	6.63	0.02	0.482	15.46	12.02
MW-134	05/15/2018 11:14	3.24	-126.00	6.81	0.03	0.577	13.12	129.80
MW-134	08/01/2018 12:32	3.28	-82	7.95	0.02	0.347	31.28	20.06
MW-134	08/01/2018 12:35	1.11	-125	7.42	0.02	0.321	28.51	9.85
MW-134	08/01/2018 12:38	0.8	-127	7.16	0.02	0.319	28.37	9.299
MW-134	08/01/2018 12:40	0.7	-127	7	0.02	0.319	28.49	8.95
MW-134	08/01/2018 12:43	0.64	-125	6.87	0.02	0.318	28.35	8.25
MW-134	08/01/2018 12:46	0.59	-124	6.77	0.02	0.317	28.19	8.4
MW-134	08/01/2018 12:48	0.57	-123	6.69	0.02	0.318	28.14	7.43
MW-134	08/01/2018 12:50	0.53	-123	6.64	0.02	0.318	27.94	7.98
MW-134	08/01/2018 12:53	0.52	-123	6.59	0.02	0.318	27.99	8.25
MW-134	08/02/2018 09:25	1.10	-139.00	6.73	0.02	0.317	25.95	15.60
MW-134	08/02/2018 12:53	0.52	-123.00	6.59	0.02	0.318	27.99	8.25
MW-134	08/02/2018 13:24	2.13	-165.00	7.69	0.02	0.358	22.42	67.70
MW-134	11/20/2018 13:55	0.86	-26.7	7.76	0.11	0.224	14.54	82.9
MW-134	11/20/2018 14:00	0.54	-10.9	7.48	0.11	0.221	14.57	76.5
MW-134	11/20/2018 14:05	0.37	15.8	6.99	0.1	0.219	14.51	64.7
MW-134	11/20/2018 14:10	0.3	18.3	6.85	0.1	0.219	14.6	61.8
MW-134	11/20/2018 14:15	0.34	13.3	6.79	0.1	0.218	14.47	64.7
MW-134	11/20/2018 14:20	0.31	12	6.78	0.1	0.219	14.46	57.9
MW-134	11/20/2018 14:25	0.23	4.7	6.78	0.1	0.219	14.76	50.7
MW-134	11/20/2018 14:30	0.22	0.4	6.75	0.1	0.219	14.79	51.6
MW-134	11/20/2018 14:35	0.21	-0.4	6.75	0.1	0.219	14.81	47.6
MW-134	11/20/2018 15:30	1.02	-10.40	6.69	0.12	0.243	15.11	21.00
MW-134	11/20/2018 15:55	1.16	-18.70	6.68	0.11	0.241	15.5	55.70
MW-134	02/28/2019 13:30	1.38	-7.10	7.25	0.10	0.203	7.89	3.70
MW-134	02/28/2019 14:45	1.32	-69.40	7.64	0.14	0.285	10.59	5.40
MW-134	02/28/2019 15:05	2.35	-64.70	7.48	0.11	0.231	8.1	5.10
MW-134	05/16/2019 09:40	0.45	-21.3	6.73	NM	0.282	14.56	13.5
MW-134	05/16/2019 11:00	0.54	-36.4	6.83	0.13	0.278	14.08	3.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-134	08/14/2019 09:20	0.12	-89.1	6.76	NM	0.251	25.42	0.9
MW-134	08/14/2019 10:05	4.78	-92	6.94	NM	0.285	22.69	22.8
MW-134	08/14/2019 10:10	1.44	-97.1	6.8	NM	0.249	23.18	8.8
MW-134	08/14/2019 10:15	0.61	-86.7	6.79	NM	0.25	23.74	5.7
MW-134	08/14/2019 10:20	0.03	-92	6.77	NM	0.254	24.16	3.6
MW-134	08/14/2019 10:25	0.12	-92.3	6.75	NM	0.253	24.61	3.4
MW-134	08/14/2019 10:30	0.09	-96.9	6.76	NM	0.25	24.66	2.4
MW-134	08/14/2019 10:35	0.02	-97.9	6.75	NM	0.249	24.8	1.7
MW-134	08/14/2019 10:40	0.08	-94.3	6.75	NM	0.25	25.1	1
MW-134	08/14/2019 10:45	0.11	-90.2	6.75	NM	0.252	25.33	1.3
MW-134	08/14/2019 10:50	0.12	-89.1	6.76	NM	0.251	25.42	0.9
MW-134	08/14/2019 10:55	1.19	-71.1	6.86	0.16	0.342	24.5	7
MW-134	08/14/2019 11:05	1.33	-72.6	6.89	0.13	0.276	25.06	27.9
MW-134	11/08/2019 10:45	5.56	-113.9	7.19	NM	0.117	15.4	16.8
MW-134	11/08/2019 10:50	1.34	-130.8	6.9	NM	0.084	16.51	10.3
MW-134	11/08/2019 10:55	0.87	-130.9	6.8	NM	0.082	16.5	8.1
MW-134	11/08/2019 11:00	0.71	-137.8	6.77	NM	0.081	16.67	7.4
MW-134	11/08/2019 11:05	0.62	-153.4	6.76	NM	0.08	16.67	7.7
MW-134	11/08/2019 11:10	0.64	-153.5	6.74	NM	0.08	15.96	6.1
MW-134	11/08/2019 11:15	0.7	-164	6.71	NM	0.079	17.24	5.4
MW-134	11/08/2019 11:20	0.45	-156.8	6.72	NM	0.079	17.43	5.4
MW-134	11/08/2019 11:25	0.43	-176	6.72	NM	0.079	17.24	4.3
MW-134	11/08/2019 11:30	0.41	-179	6.72	NM	0.079	17.27	10.4
MW-134	11/08/2019 12:50	0.6	-195.3	6.82	0.04	0.085	18.66	5.5
MW-134	11/08/2019 13:00	0.32	-211	6.87	0.04	0.085	18.57	1.1
MW-134	05/14/2020 08:45	0.5	-64.8	6.82	NM	0.234	13.49	8.4
MW-134	05/14/2020 09:45	0.46	-86.7	6.99	0.13	0.268	13.25	4.9
MW-134	03/31/2022 12:55	0.94	-78.8	7.09	0.93	1.828	11.62	22.1
MW-134	03/31/2022 13:00	0.83	-64.2	6.65	0.92	1.792	12.79	19.3
MW-134	03/31/2022 13:05	0.89	-62.7	6.64	0.92	1.795	12.86	19.3
MW-134	03/31/2022 13:10	0.89	-48.6	6.54	0.89	1.743	13.58	15.8
MW-134	03/31/2022 13:15	0.9	-37.1	6.48	0.81	1.603	13.95	10.8
MW-134	03/31/2022 13:20	0.93	-36.8	6.48	0.81	1.599	13.99	12.4
MW-134	03/31/2022 13:25	0.91	-35.2	6.47	0.8	1.572	13.95	13.7
MW-134	03/31/2022 13:30	0.94	-26.5	6.42	0.75	1.491	13.53	21
MW-134	03/31/2022 13:35	0.93	-26	6.42	0.75	1.488	13.41	20.3
MW-135	06/06/2012 10:43	1.48	18	7.12	0.26	4.84081	22.51	227.1
MW-135	06/06/2012 10:46	0.65	15	7.29	0.26	4.81234	19.04	124.9
MW-135	06/06/2012 10:48	0.34	14	7.22	0.26	4.8087	18.97	110.7
MW-135	06/06/2012 10:51	0.27	14	7.18	0.26	4.82952	18.68	102.5
MW-135	06/06/2012 10:53	0.24	14	7.12	0.26	4.79585	18.85	116.7
MW-135	06/06/2012 10:56	0.22	15	7.12	0.26	4.81892	18.59	104.5
MW-135	06/06/2012 10:59	0.21	15	7.1	0.26	4.8102	18.38	112.5
MW-135	06/06/2012 11:01	0.2	16	7.06	0.26	4.80643	18.27	129
MW-135	06/06/2012 11:04	0.19	16	7.02	0.26	4.80663	18.22	121.8
MW-135	06/06/2012 11:06	0.18	17	6.98	0.26	4.78939	18.34	110
MW-135	06/06/2012 11:09	0.17	17	6.94	0.26	4.8026	18.27	108.3
MW-135	06/06/2012 11:11	0.17	18	6.91	0.26	4.80478	18.14	125.7
MW-135	06/06/2012 11:14	0.17	18	6.88	0.26	4.79795	18.08	126.9
MW-135	06/06/2012 11:16	0.17	19	6.84	0.26	4.79819	18.17	139.6
MW-135	06/06/2012 11:17	0.17	19	6.84	0.26	4.798	18.17	139.60
MW-135	06/06/2012 12:01	1.32	-52	7.92	0.31	5.722	16.55	466.60
MW-135	06/07/2012 10:15	1.59	-218	6.80	0.30	8.900	15.17	0.0000
MW-135	05/20/2013 09:49	0.4	-101	6.13	0.53	9.415	16.5	139.7
MW-135	05/20/2013 10:37	0.2	-151	6.34	0.6	10.62	13.82	993.9
MW-135	05/21/2013 10:10	0.06	-160	6.17	0.53	9.405	13.17	239.7
MW-135	06/24/2014 10:19	0.27	16	6.19	0.59	10.290	20.90	74.31
MW-135	06/24/2014 11:14	0.37	-23	6.22	0.56	9.876	17.27	362.20
MW-135	06/25/2014 11:57	0.26	-54	6.16	0.25	4.598	15.82	29.80
MW-135	12/09/2015 10:33	-0.01	-41	5.91	0.69	11.97	16.79	69.2
MW-135	12/09/2015 12:16	4.78	-61	6.43	2	31.99	15.88	193.7
MW-135	02/12/2016 10:48	0.24	-10	5.62	0.67	11.700	11.77	22.80

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-135	02/12/2016 12:11	2.03	-65	5.92	1.87	30.370	11.24	210.70
MW-135	02/24/2017 09:51	3.91	-146	5.92	0.58	10.330	11.75	28.40
MW-135	02/24/2017 11:57	1.71	-114	6.05	0.64	11.310	11.65	176.20
MW-135	02/23/2018 09:07	0.87	-68.00	5.96	3.16	48.970	10.62	33.40
MW-135	02/23/2018 09:49	0.55	-83.00	5.90	2.15	22.560	8.55	15.13
MW-135	02/23/2018 10:40	7.67	-77.00	6.07	2.04	32.820	11.47	452.60
MW-135	05/14/2018 08:29	3.6	-72	6.09	0.5296	9.4044	13.94	91.1
MW-135	05/14/2018 08:32	1.47	-72	5.97	0.5282	9.3864	13.64	96.4
MW-135	05/14/2018 08:34	1.14	-69	5.97	0.5277	9.3792	13.64	102.4
MW-135	05/14/2018 08:36	1.05	-63	5.97	0.5284	9.3908	13.61	112
MW-135	05/14/2018 08:39	0.97	-60	5.97	0.5288	9.3988	13.5	145.5
MW-135	05/14/2018 08:41	0.94	-56	5.98	0.5294	9.4093	13.54	125.5
MW-135	05/14/2018 08:44	0.95	-50	5.98	0.5316	9.4439	13.61	366.4
MW-135	05/14/2018 08:46	0.99	-59	5.99	0.5288	9.3921	13.9	131.6
MW-135	05/14/2018 08:48	0.99	-59	6	0.5289	9.3911	14.11	109.6
MW-135	05/14/2018 08:51	0.91	-57	6	0.5293	9.3945	14.32	105.3
MW-135	05/14/2018 08:53	0.92	-55	6	0.5290	9.3859	14.54	103.4
MW-135	05/15/2018 08:53	0.92	-55.00	6.00	0.53	9.345	14.72	103.40
MW-135	05/15/2018 09:35	0.06	-53.00	6.45	1.01	17.220	12.41	91.20
MW-135	05/15/2018 10:03	2.37	-105.00	6.04	0.54	9.596	13.85	847.40
MW-135	08/01/2018 13:34	2.98	-108	6.83	0.48	8.886	22.77	21.29
MW-135	08/01/2018 13:37	1.38	-118	6.61	0.48	8.564	25.62	15.83
MW-135	08/01/2018 13:40	0.74	-119	6.46	0.48	8.572	25.58	14.87
MW-135	08/01/2018 13:42	0.56	-120	6.39	0.49	8.589	25.42	15.61
MW-135	08/01/2018 13:45	0.49	-122	6.34	0.49	8.601	25.52	14.28
MW-135	08/01/2018 13:47	0.44	-124	6.31	0.49	8.585	25.5	18.62
MW-135	08/01/2018 13:50	0.39	-125	6.29	0.49	8.606	25.62	17.22
MW-135	08/01/2018 13:52	0.38	-127	6.28	0.49	8.595	25.76	16.55
MW-135	08/01/2018 13:55	0.37	-129	6.27	0.49	8.607	25.5	18.11
MW-135	08/02/2018 08:57	2.93	-116.00	6.20	0.48	8.453	18.88	58.00
MW-135	08/02/2018 13:55	0.37	-129.00	6.27	0.49	8.607	25.5	18.11
MW-135	08/02/2018 14:41	1.20	-140.00	6.97	0.53	9.352	20.7	647.30
MW-135	11/21/2018 09:05	2.5	-43.4	5.64	1.67	3.172	13.32	8.9
MW-135	11/21/2018 09:10	0.67	-60.4	5.69	1.68	3.195	13.53	1.03
MW-135	11/21/2018 09:15	0.52	-63.3	5.71	1.68	3.193	13.6	1.02
MW-135	11/21/2018 09:20	0.46	-64.3	5.72	1.68	3.194	13.72	1.03
MW-135	11/21/2018 09:25	0.42	-65.6	5.72	1.68	3.195	13.71	1.09
MW-135	11/21/2018 09:30	0.41	-65.7	5.72	1.68	3.193	13.7	1.08
MW-135	11/21/2018 09:35	0.41	-65.6	5.72	1.68	3.194	13.71	1.08
MW-135	11/21/2018 09:45	2.85	-44.90	5.94	1.63	3.104	13.03	0.80
MW-135	11/21/2018 11:10	3.95	-27.20	6.07	1.64	3.125	14.03	2.40
MW-135	11/21/2018 11:20	1.79	-44.20	5.83	1.64	3.166	14.6	5.60
MW-135	02/28/2019 09:55	2.04	91.10	6.38	3.75	6.844	7.28	136.80
MW-135	02/28/2019 15:10	1.08	41.20	6.61	3.22	5.921	7.44	22.40
MW-135	02/28/2019 15:25	1.31	-2.20	6.50	3.19	5.866	8.32	55.10
MW-135	05/16/2019 13:25	1.22	96.1	6.3	NM	5.445	14.77	145.9
MW-135	05/16/2019 15:05	1.4	6	6.42	3.19	5.848	13.54	54.1
MW-135	08/15/2019 09:30	0.14	-61.8	6.27	NM	7.927	22.98	3.8
MW-135	08/15/2019 10:05	1.72	-57.6	6.23	NM	8.656	22	17.3
MW-135	08/15/2019 10:10	0.95	-62.7	6.25	NM	8.466	22.48	8.2
MW-135	08/15/2019 10:15	0.48	-62.6	6.26	NM	8.299	22.56	3
MW-135	08/15/2019 10:20	0.53	-63.9	6.27	NM	8.149	22.64	3.3
MW-135	08/15/2019 10:25	0.4	-64.3	6.27	NM	8.063	22.73	4.6
MW-135	08/15/2019 10:30	0.31	-66.3	6.27	NM	8.034	22.75	4.5
MW-135	08/15/2019 10:35	0.15	-66.3	6.27	NM	7.975	22.86	4.1
MW-135	08/15/2019 10:40	0.08	-63.4	6.27	NM	7.947	22.9	3.8
MW-135	08/15/2019 10:45	0.07	-62.3	6.27	NM	7.946	22.81	3.5
MW-135	08/15/2019 10:50	0.14	-61.8	6.27	NM	7.927	22.98	3.8
MW-135	08/15/2019 11:35	3.19	-63.7	6.34	4.45	8.016	23.46	11.3
MW-135	08/15/2019 11:45	3.72	-60.7	6.37	4.5	8.091	21.73	138
MW-135	11/12/2019 11:40	1.58	-73.9	6.49	NM	4.147	13.6	5.5
MW-135	11/12/2019 11:45	0.49	-76.8	6.37	NM	4.11	14.42	4.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-135	11/12/2019 11:50	0.42	-81.7	6.34	NM	4.107	14.76	4.9
MW-135	11/12/2019 11:55	0.39	-85	6.34	NM	4.106	14.6	4.8
MW-135	11/12/2019 12:00	0.38	-87	6.34	NM	4.103	13.86	4.8
MW-135	11/12/2019 12:05	0.36	-88.7	6.33	NM	4.103	13.74	5.8
MW-135	11/12/2019 12:10	0.34	-90.7	6.33	NM	4.099	14.38	4.9
MW-135	11/12/2019 12:15	0.33	-92	6.33	NM	4.086	14.56	5.9
MW-135	11/12/2019 12:20	0.33	-93.6	6.33	NM	4.093	15.06	4.9
MW-135	11/12/2019 12:25	0.33	-94.8	6.33	NM	4.086	14.99	5.2
MW-135	11/13/2019 09:00	3.83	-58.4	6.48	1.57	2.993	15	15.5
MW-135	11/13/2019 09:10	3.37	-67.7	6.45	1.47	2.821	16.02	15.4
MW-135	05/14/2020 11:20	2.06	-62.3	6.25	NM	6.004	14.98	158.5
MW-135	05/15/2020 10:15	4.7	-87	6.29	3.48	6.364	13.95	43.9
MW-135	03/25/2022 11:45	5.27	37.4	6.07	3.64	6.598	13.24	226.1
MW-135	03/25/2022 11:50	3.17	54.7	5.96	3.7	6.72	12.8	121.8
MW-135	03/25/2022 11:55	2.38	60.9	5.95	3.71	6.733	13.14	106.5
MW-135	03/25/2022 12:00	2.31	66.2	5.95	3.7	6.714	13.34	106.6
MW-135	03/25/2022 12:05	2.1	66.3	5.95	3.7	6.723	13.45	101.2
MW-135	03/25/2022 12:10	2	64.4	5.95	3.71	6.738	12.57	95.4
MW-135	03/25/2022 12:15	1.96	64.7	5.94	3.72	6.75	12.53	97.8
MW-135	03/25/2022 12:20	1.92	64.1	5.95	3.7	6.723	12.64	95.6
MW-136	02/13/2012 10:20	-0.11	-98	6.98	0.31	5.87997	5.68	4.4
MW-136	02/13/2012 10:23	-0.12	-98	6.96	0.31	5.87908	5.93	4.6
MW-136	02/13/2012 10:25	-0.13	-98	6.95	0.31	5.87283	5.87	18.4
MW-136	02/13/2012 10:27	-0.12	-97	6.94	0.31	5.87114	5.96	3.7
MW-136	02/13/2012 10:29	-0.14	-96	6.93	0.31	5.86706	5.85	4.5
MW-136	02/13/2012 10:31	-0.14	-95	6.92	0.31	5.86597	5.87	5.4
MW-136	02/13/2012 10:33	-0.14	-95	6.92	0.31	5.87014	5.86	3.9
MW-136	02/13/2012 10:36	-0.15	-94	6.91	0.31	5.85862	6.01	4.8
MW-136	02/13/2012 10:38	-0.15	-93	6.91	0.31	5.85997	6.15	3.7
MW-136	02/13/2012 10:40	-0.15	-92	6.91	0.31	5.85641	6.24	13.8
MW-136	02/13/2012 10:42	-0.15	-91	6.9	0.31	5.83012	6.34	11.2
MW-136	02/13/2012 10:44	-0.15	-91	6.9	0.31	5.81031	6.45	7
MW-136	02/13/2012 10:46	-0.15	-90	6.9	0.31	5.72513	6.63	8.4
MW-136	02/13/2012 10:49	-0.15	-90	6.92	0.29	5.53264	6.7	13
MW-136	02/13/2012 10:51	-0.15	-92	6.94	0.28	5.32832	6.77	20.5
MW-136	02/13/2012 10:53	-0.15	-93	6.96	0.27	5.1267	6.47	26.8
MW-136	02/13/2012 10:55	-0.14	-95	6.99	0.26	4.99866	6.31	25.2
MW-136	02/13/2012 10:57	-0.14	-96	7	0.26	4.91056	6.23	22.3
MW-136	02/13/2012 10:59	-0.15	-97	7.02	0.26	4.84019	6.47	21.2
MW-136	02/13/2012 11:02	-0.14	-98	7.03	0.25	4.81089	6.5	24.3
MW-136	02/13/2012 11:04	-0.14	-99	7.04	0.25	4.77367	6.48	23.5
MW-136	02/13/2012 11:06	-0.14	-100	7.04	0.25	4.72656	6.39	21.7
MW-136	02/13/2012 11:08	-0.13	-101	7.05	0.25	4.6671	6.46	16.8
MW-136	02/13/2012 14:53	NA	-162	6.84	1.28	21.368	11.70	17.70
MW-136	02/14/2012 10:20	4.63	-26	6.78	0.28	5.128	11.35	16.30
MW-136	03/04/2013 14:08	2.33	-192	6.62	2.41	38.56899	8.37	7.4
MW-136	03/04/2013 14:10	2	-193	6.61	2.63	41.92795	7.31	5.9
MW-136	03/04/2013 14:12	1.29	-197	6.6	2.73	43.38052	7.38	65.4
MW-136	03/04/2013 14:14	0.99	-199	6.59	2.62	41.7523	7.7	13.1
MW-136	03/04/2013 14:17	0.9	-200	6.59	2.57	40.98421	7.7	19.7
MW-136	03/04/2013 14:19	0.86	-199	6.58	2.51	40.22475	7.65	82.1
MW-136	03/04/2013 14:21	0.84	-198	6.58	2.5	40.05573	7.69	14.5
MW-136	03/04/2013 14:23	0.82	-196	6.57	2.49	39.96744	7.52	14.2
MW-136	03/04/2013 14:26	0.79	-194	6.56	2.53	40.46006	7.44	9.1
MW-136	03/04/2013 14:28	0.78	-193	6.56	2.53	40.50981	7.42	19.4
MW-136	03/04/2013 14:30	0.78	-192	6.56	2.53	40.57762	7.45	34.1
MW-136	03/04/2013 14:32	0.77	-191	6.56	2.57	41.05835	7.25	34.6
MW-136	03/04/2013 14:35	0.76	-191	6.56	2.57	41.05623	7.26	80.1
MW-136	03/04/2013 14:37	0.71	-190	6.56	2.56	41.04034	7.25	42.5
MW-136	03/04/2013 14:39	0.67	-190	6.57	2.59	41.39737	7.2	66.6
MW-136	03/04/2013 14:41	0.64	-190	6.57	2.59	41.41431	7.23	80.3
MW-136	03/04/2013 14:44	0.62	-190	6.58	2.6	41.66358	7.07	21.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-136	03/04/2013 14:46	0.6	-190	6.59	2.59	41.47415	7.14	14.1
MW-136	03/04/2013 14:48	0.57	-190	6.6	2.58	41.28823	7.05	9
MW-136	03/04/2013 14:50	0.55	-190	6.61	2.54	40.76003	7.01	10
MW-136	03/04/2013 14:53	0.54	-191	6.61	2.58	41.38377	6.85	12
MW-136	03/04/2013 14:55	0.53	-191	6.62	2.56	41.06165	7.01	9.6
MW-136	03/04/2013 14:56	0.53	-191	6.62	2.56	41.060	7.12	9.56
MW-136	03/04/2013 15:52	4.62	-285	6.78	4.02	60.260	13.63	24.80
MW-136	03/05/2013 10:38	0.29	-374	6.83	2.92	45240.000	14.09	-0.20
MW-136	06/02/2014 13:06	1.52	-211	6.64	NM	26.340	27.83	19.20
MW-136	06/02/2014 13:09	1.57	-193	6.61	NM	27.904	26.05	19.20
MW-136	06/02/2014 13:11	1.64	-198	6.65	NM	27.100	24.46	6.40
MW-136	06/02/2014 13:14	1.53	-212	6.66	NM	29.322	23.09	6.30
MW-136	06/02/2014 13:16	1.40	-242	6.67	NM	29.635	23.28	7.20
MW-136	06/02/2014 13:18	1.31	-306	6.68	NM	28.611	23.70	8.20
MW-136	06/02/2014 13:21	1.28	-324	6.70	NM	27.676	23.36	7.10
MW-136	06/02/2014 13:23	1.25	-325	6.70	NM	27.913	23.37	8.10
MW-136	06/02/2014 13:25	1.22	-328	6.71	NM	27.031	23.35	11.20
MW-136	06/02/2014 13:28	1.21	-332	6.73	NM	26.180	23.24	9.30
MW-136	06/02/2014 13:30	1.18	-335	6.74	NM	25.929	23.41	7.30
MW-136	06/02/2014 13:32	1.17	-336	6.76	NM	25.402	23.52	9.30
MW-136	06/02/2014 13:35	1.16	-336	6.77	NM	24.950	23.50	8.50
MW-136	06/02/2014 13:37	1.14	-335	6.79	NM	24.418	23.59	11.70
MW-136	06/02/2014 13:39	1.15	-340	6.80	NM	23.975	23.33	8.20
MW-136	06/02/2014 13:42	1.14	-341	6.81	NM	23.994	23.45	8.60
MW-136	06/02/2014 13:44	1.13	-345	6.82	1.49	24.200	23.45	8.81
MW-136	06/02/2014 14:41	1.11	-412	6.85	4.11	60.390	23.55	14.50
MW-136	06/03/2014 11:08	1.63	-281	6.75	0.77	13.160	19.55	11.10
MW-136	09/29/2015 13:35	3.39	221	6.34	1.2956	0.0213	26.54	100.5
MW-136	09/29/2015 13:38	2.13	212	6.31	1.3114	0.0215	25.66	92.8
MW-136	09/29/2015 13:40	1.59	191	6.29	1.3086	0.0215	25.41	91.1
MW-136	09/29/2015 13:42	1.44	164	6.28	1.3087	0.0215	25.24	198.9
MW-136	09/29/2015 13:44	1.39	134	6.27	1.3069	0.0215	25.23	67.7
MW-136	09/29/2015 13:46	1.34	105	6.28	1.3068	0.0215	25.19	65.7
MW-136	09/29/2015 13:48	1.29	81	6.27	1.3084	0.0215	25.14	76.4
MW-136	09/29/2015 13:51	1.19	62	6.27	1.3065	0.0215	25.12	68.8
MW-136	09/29/2015 13:53	1.15	48	6.28	1.3051	0.0214	25.03	65.7
MW-136	09/29/2015 13:55	1.08	38	6.28	1.3052	0.0214	25	68.5
MW-136	09/29/2015 13:57	1.02	30	6.28	1.3048	0.0214	24.96	65.5
MW-136	09/29/2015 13:59	0.95	23	6.28	1.3050	0.0214	25	64.6
MW-136	09/29/2015 14:01	0.94	18	6.28	1.3049	0.0214	24.98	59.5
MW-136	09/29/2015 14:04	0.85	14	6.27	1.3043	0.0214	25.07	64.6
MW-136	09/29/2015 14:06	0.82	10	6.28	1.3057	0.0214	25.13	58.9
MW-136	09/29/2015 14:08	0.8	7	6.29	1.3057	0.0214	24.94	63.5
MW-136	09/30/2015 12:01	0.0000	20	6.61	2.67	41.210	20.21	8.30
MW-136	09/30/2015 15:22	5.46	-258	6.87	1.52	24.710	18.93	26.20
MW-136	02/15/2016 09:12	3.400	-31.000	6.640	7.658	110.332	3.720	14.600
MW-136	02/15/2016 09:14	1.770	-51.000	6.660	7.582	109.176	4.020	25.200
MW-136	02/15/2016 09:16	1.210	-66.000	6.690	6.986	101.897	3.880	15.100
MW-136	02/15/2016 09:18	0.920	-77.000	6.720	7.004	102.000	4.070	8.200
MW-136	02/15/2016 09:20	0.800	-85.000	6.740	7.076	102.998	3.920	7.600
MW-136	02/15/2016 09:26	0.710	-99.000	6.790	7.267	105.523	3.710	8.200
MW-136	02/15/2016 09:28	0.700	-102.000	6.790	7.148	104.100	3.640	14.400
MW-136	02/15/2016 09:30	0.720	-104.000	6.800	7.150	104.018	3.790	34.300
MW-136	02/15/2016 09:32	0.740	-106.000	6.810	7.098	103.413	3.730	14.600
MW-136	02/15/2016 09:35	0.750	-108.000	6.820	7.328	106.385	3.560	18.200
MW-136	02/15/2016 09:37	0.780	-110.000	6.820	7.156	104.269	3.530	27.400
MW-136	02/15/2016 09:39	0.800	-112.000	6.820	7.004	102.213	3.750	13.300
MW-136	02/15/2016 09:41	0.800	-112.000	6.820	6.974	101.698	3.960	11.100
MW-136	02/15/2016 09:43	0.830	-114.000	6.820	7.071	103.043	3.760	17.800
MW-136	02/15/2016 09:45	0.830	-115.000	6.810	7.020	102.349	3.850	12.200
MW-136	02/15/2016 09:48	0.820	-116.000	6.810	6.895	100.802	3.830	28.800
MW-136	02/15/2016 09:50	0.810	-117.000	6.800	6.931	101.357	3.670	13.000

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-136	02/15/2016 09:52	0.790	-118.000	6.800	7.174	104.445	3.600	11.800
MW-136	02/15/2016 09:54	0.780	-119.000	6.790	7.312	106.167	3.600	12.100
MW-136	02/15/2016 09:56	0.770	-120.000	6.790	7.056	103.131	3.390	13.000
MW-136	02/16/2016 10:38	0.23	-329	6.68	2.57	40.200	14.51	5.90
MW-136	02/16/2016 11:59	0.69	-315	6.59	10.52	137.000	12.99	25.80
MW-136	03/16/2017 10:21	9.61	-170	6.72	0.5093	0.0939	3.29	43
MW-136	03/16/2017 10:24	6.1	-173	6.74	0.5061	0.0937	2.62	26.7
MW-136	03/16/2017 10:26	4.53	-177	6.73	0.5136	0.0946	3.36	10.7
MW-136	03/16/2017 10:29	3.38	-178	6.74	0.5140	0.0943	3.99	10
MW-136	03/16/2017 10:32	2.96	-178	6.75	0.5136	0.0941	4.3	11.4
MW-136	03/16/2017 10:34	2.59	-178	6.75	0.5136	0.0940	4.49	8.9
MW-136	03/16/2017 10:37	2.51	-178	6.75	0.5134	0.0940	4.59	9.3
MW-136	03/16/2017 10:39	2.43	-178	6.76	0.5129	0.0939	4.53	9.3
MW-136	03/17/2017 10:35	4.64	-425	6.58	3.55	54.020	12.87	3.00
MW-136	03/17/2017 13:04	6.07	-225	6.51	1.40	23.310	11.10	15.30
MW-136	03/30/2018 09:30	0.40	-182.00	6.74	0.97	16.670	10.3	42.10
MW-136	03/30/2018 10:52	2.71	43.00	6.87	2.00	21.920	7.71	17.90
MW-136	03/30/2018 11:35	4.29	-74.00	6.76	2.26	36.250	10.09	24.20
MW-136	03/21/2019 13:35	5.42	-43.7	7.27	NM	8.26	7.79	53.7
MW-136	03/21/2019 15:10	2	-280.5	6.82	17.09	27.9	10.65	12.9
MW-136	02/04/2020 13:35	1.51	-199.1	7.01	NM	3.311	8.31	35.9
MW-136	02/05/2020 11:25	3.02	-272.6	6.89	4.19	7.546	12.03	44.8
MW-136	01/26/2021 10:35	0.72	275.8	6.57	40.33	61.27	10.94	6.5
MW-136	01/26/2021 10:40	0.31	-329.4	6.64	40.23	60.13	11.58	1.4
MW-136	01/26/2021 10:45	0.28	-332.3	6.49	37.5	56.56	11.37	1.8
MW-136	01/26/2021 10:50	1.27	-330.2	6.46	33.39	50.93	11.14	3
MW-136	01/26/2021 10:55	3.35	-325.8	6.43	28.91	44.72	10.62	6
MW-136	01/26/2021 11:00	3.04	-319.8	6.42	24.88	39.08	10.24	7.8
MW-136	01/26/2021 11:05	2.9	-313.9	6.43	22.85	36.3	9.59	6.8
MW-136	01/26/2021 11:10	2.73	-313.2	6.46	22.14	35.27	9.39	7.4
MW-136	01/26/2021 11:15	2.56	-313.1	6.48	21.32	34.08	8.92	7.8
MW-136	01/26/2021 11:20	2.5	-317.2	6.52	20.93	33.54	8.2	8.2
MW-136	01/27/2021 08:15	2.3	-173.4	6.85	3.98	7.204	11.43	31.2
MW-136	01/27/2021 08:30	4.62	-178.9	6.95	3.69	6.711	11.14	25.9
MW-136	01/27/2021 11:20	2.5	-317.2	6.52	20.93	33.54	8.2	8.2
MW-136	03/25/2022 10:55	1.75	-177.6	6.59	8.47	14.36	11.73	17.1
MW-136	03/25/2022 11:00	0.41	-207.9	6.71	9.16	15.61	11.84	10.5
MW-136	03/25/2022 11:05	0.05	-279.9	6.87	8.76	15	11.51	13.8
MW-136	03/25/2022 11:10	0.01	-278.5	6.89	8.6	14.69	11.58	16.6
MW-136	03/25/2022 11:15	0.02	-288	6.92	7.49	13.04	11.76	18.1
MW-136	03/25/2022 11:20	0.01	-295.4	6.93	7.02	12.25	11.72	17.9
MW-136	03/25/2022 11:25	0	-302.2	6.93	6.62	11.62	12.05	17.1
MW-136	03/25/2022 11:30	0.02	-306.8	6.93	6.22	10.98	12.26	17.1
MW-136	03/25/2022 11:35	0.01	-313.3	6.95	5.24	9.35	12.11	16.5
MW-136	03/25/2022 11:40	0	-311.3	6.94	5.25	9.19	12.12	16.8
MW-137	03/26/2012 12:53	1.86	-63	7.17	0.03	0.54646	12.64	324.8
MW-137	03/26/2012 12:55	0.76	-64	7.1	0.03	0.53538	10.57	97.1
MW-137	03/26/2012 12:58	0.38	-65	7.13	0.03	0.53599	10.57	81.3
MW-137	03/26/2012 13:00	0.28	-66	7.14	0.03	0.536	10.56	71.8
MW-137	03/26/2012 13:02	0.23	-66	7.14	0.03	0.53528	10.5	69.3
MW-137	03/26/2012 13:05	0.15	-66	7.15	0.03	0.53841	10.48	58.8
MW-137	03/26/2012 13:07	0.15	-67	7.15	0.03	0.53644	10.46	61.4
MW-137	03/26/2012 13:09	0.1	-67	7.15	0.03	0.53501	10.62	57
MW-137	03/26/2012 13:12	0.13	-67	7.15	0.03	0.53715	10.7	67.4
MW-137	03/26/2012 13:14	0.06	-66	7.16	0.03	0.53669	10.48	57.1
MW-137	03/26/2012 13:17	0.07	-66	7.15	0.03	0.53649	10.53	57
MW-137	03/26/2012 13:19	0.07	-65	7.16	0.03	0.53584	10.52	53.9
MW-137	03/26/2012 13:21	0.11	-64	7.16	0.03	0.53701	10.64	54.7
MW-137	03/26/2012 13:24	0.11	-64	7.16	0.03	0.53793	10.62	54
MW-137	03/26/2012 13:26	0.13	-64	7.16	0.03	0.53743	10.61	55.6
MW-137	03/26/2012 13:28	0.15	-63	7.16	0.03	0.53694	10.6	51.7
MW-137	03/26/2012 13:31	0.19	-64	7.17	0.03	0.53765	10.86	50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-137	03/26/2012 13:33	0.21	-64	7.17	0.03	0.53937	10.7	49
MW-137	03/26/2012 13:35	0.29	-63	7.17	0.03	0.53867	10.72	50
MW-137	03/26/2012 13:38	0.33	-64	7.17	0.03	0.53821	10.89	52.4
MW-137	03/26/2012 13:40	0.31	-63	7.17	0.03	0.53994	10.64	49.5
MW-137	03/26/2012 13:41	0.32	-61	7.15	0.03	0.540	10.75	48.35
MW-137	03/26/2012 13:42	0.32	-61	7.15	0.03	0.53954	10.75	48.4
MW-137	03/26/2012 14:23	4.70	-94	7.26	0.03	0.642	10.96	216.00
MW-137	03/27/2012 10:20	1.53	1	6.43	0.0000	0.343	9.85	8.30
MW-137	04/02/2013 10:45	0.54	-262	6.88	0.06	1.3	6.82	7.62
MW-137	04/02/2013 11:45	1.13	-151	7.01	0.08	1.513	9.02	296.9
MW-137	04/03/2013 10:21	0.23	-190	6.99	0.14	2.762	8.24	20.1
MW-137	09/04/2014 11:21	0.15	-12	6.78	0.05	1.075	26.68	13.74
MW-137	09/04/2014 12:40	1.10	151	6.81	0.06	1.218	19.57	239.10
MW-137	09/05/2014 10:00	-0.10	148	6.45	0.04	0.853	20.31	9.10
MW-137	09/14/2016 08:57	0.54	-223	6.58	0.02	0.477	22.09	6.00
MW-137	09/14/2016 10:44	0.42	-71	6.62	0.21	3.896	21.18	175.20
MW-137	02/14/2017 09:37	0.70	244	7.76	0.05	0.927	8.41	11.20
MW-137	02/14/2017 10:47	2.63	281	7.18	0.02	0.426	8.58	48.50
MW-137	02/27/2018 10:29	6.45	193.00	7.19	0.01	0.260	8.13	4.10
MW-137	02/27/2018 10:35	9.50	106.00	7.62	0.07	1.501	7.79	6.91
MW-137	02/27/2018 11:42	5.68	160.00	6.84	0.06	1.147	8.76	63.10
MW-137	02/19/2019 10:35	3.36	175.3	7.08	NM	0.315	5.64	5.5
MW-137	02/19/2019 10:45	5.05	187.70	7.21	0.16	0.334	5.61	3.50
MW-137	02/19/2019 11:55	4.66	-29.80	7.08	0.25	0.515	3.19	4.30
MW-137	02/19/2019 12:10	3.95	-70.60	7.07	0.26	0.530	5.84	83.80
MW-137	02/03/2020 10:25	0.66	-55.3	6.85	NM	0.183	9.41	9.8
MW-137	02/04/2020 08:55	4.81	132.3	7.08	0.07	0.138	9.26	5.1
MW-138	03/21/2012 08:25	30.71	-47	7.47	0.05	0.97457	14.01	34.7
MW-138	03/21/2012 08:27	12.59	-63	7.51	0.05	0.98013	11.81	28.6
MW-138	03/21/2012 08:30	16.66	-70	7.52	0.05	0.97993	11.46	27.7
MW-138	03/21/2012 08:32	15.07	-75	7.53	0.05	0.9809	11.39	27.8
MW-138	03/21/2012 08:34	13.48	-78	7.54	0.05	0.98091	11.41	28.5
MW-138	03/21/2012 08:37	7	-81	7.55	0.05	0.98172	11.33	27.7
MW-138	03/21/2012 08:39	4.46	-83	7.55	0.05	0.98167	11.34	32.3
MW-138	03/21/2012 08:41	3.41	-85	7.55	0.05	0.98199	11.28	27.4
MW-138	03/21/2012 08:44	2.88	-87	7.54	0.05	0.98205	11.27	27.2
MW-138	03/21/2012 08:46	2.53	-88	7.55	0.05	0.98246	11.26	27.5
MW-138	03/21/2012 08:48	2.26	-89	7.55	0.05	0.98245	11.19	27.3
MW-138	03/21/2012 08:51	2.05	-90	7.55	0.05	0.98233	11.16	27.8
MW-138	03/21/2012 08:53	1.9	-91	7.56	0.05	0.98248	11.15	31
MW-138	03/21/2012 08:55	1.8	-92	7.56	0.05	0.9833	11.15	28.2
MW-138	03/21/2012 08:58	1.71	-92	7.55	0.05	0.98226	11.14	28.3
MW-138	03/21/2012 09:00	1.63	-93	7.55	0.05	0.98259	11.12	27.4
MW-138	03/21/2012 09:02	1.59	-93	7.55	0.05	0.982	11.01	28.04
MW-138	03/21/2012 09:03	1.59	-93	7.55	0.05	0.98245	11.01	28
MW-138	03/21/2012 09:42	2.80	-75	7.38	0.06	1.115	10.95	36.50
MW-138	03/22/2012 08:40	3.60	-36	6.56	0.0000	1.100	10.30	60.00
MW-138	04/02/2013 13:25	0.53	-232	7.45	0.08	1.585	8.98	21.01
MW-138	04/02/2013 14:18	2.41	-203	7.09	0.09	1.859	9.65	23.4
MW-138	04/03/2013 11:11	1.93	-153	7.14	0.12	2.306	8.67	22.8
MW-138	09/08/2014 10:41	-0.04	121	6.73	0.06	1.148	25.56	11.18
MW-138	09/08/2014 11:21	0.18	151	7.03	0.09	1.795	19.96	78.20
MW-138	10/01/2015 10:45	-0.66	-52	6.65	0.12	2.293	24.03	4.30
MW-138	10/01/2015 12:08	5.48	-38	6.95	0.17	3.130	20.79	113.40
MW-138	09/14/2016 10:23	0.62	-166	6.71	0.04	0.784	21.90	10.10
MW-138	09/14/2016 13:33	1.97	-55	6.77	0.21	3.951	22.64	35.20
MW-138	02/14/2017 11:08	2.44	262	8.20	0.05	1.043	8.20	4.40
MW-138	02/14/2017 14:34	7.80	403	7.21	0.02	0.417	8.30	8.80
MW-138	02/27/2018 11:13	1.49	219.00	6.90	0.02	0.351	8.44	8.80
MW-138	02/27/2018 13:01	0.38	108.00	7.11	0.10	1.959	9.23	7.79
MW-138	02/27/2018 13:53	4.57	13.00	6.65	0.07	1.394	9.46	8.30
MW-138	02/19/2019 13:20	3.25	40.3	7.39	NM	0.355	5.86	1.4

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-138	02/19/2019 13:30	5.39	66.00	7.36	0.17	0.358	5.75	4.90
MW-138	02/19/2019 14:55	4.92	59.60	7.48	0.23	0.354	3.83	3.20
MW-138	02/19/2019 15:10	5.43	55.20	7.52	0.17	0.362	6.7	38.50
MW-138	02/03/2020 12:25	2.56	4	7.07	NM	0.214	9.91	3.4
MW-138	02/04/2020 08:20	7.47	157.1	6.89	0.09	0.19	9.19	1.6
MW-138	03/30/2021 13:50	1.42	91	6.47	0.3	0.617	12.04	14.3
MW-138	03/30/2021 13:55	1.19	90	6.28	0.3	0.616	11.77	8.5
MW-138	03/30/2021 14:00	1.12	93	6.13	0.3	0.615	11.67	5.6
MW-138	03/30/2021 14:05	1.03	97.8	5.96	0.3	0.616	11.58	5.2
MW-138	03/30/2021 14:10	1.14	97.8	5.88	0.3	0.611	11.48	3.9
MW-138	03/30/2021 14:15	1.49	85.2	5.83	0.3	0.606	11.47	2
MW-138	03/30/2021 14:20	1.82	56.6	5.82	0.3	0.606	11.54	1.6
MW-138	03/30/2021 14:25	1.88	44.6	5.79	0.3	0.61	11.49	2.1
MW-138	03/30/2021 14:30	1.81	44.7	5.74	0.3	0.611	11.42	2.5
MW-138	03/30/2021 14:35	1.75	42.4	5.78	0.3	0.613	11.51	3.3
MW-138	03/31/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-138	03/31/2021 11:45	6.31	151.9	6.97	0.2	0.406	12.82	7.2
MW-138	03/31/2021 12:05	7.18	179.2	7.11	0.19	0.389	11.78	10.2
MW-138	03/31/2021 14:35	1.75	42.4	5.78	0.3	0.613	11.51	3.3
MW-139	03/21/2012 14:48	4.17	-14	6.76	0.04	0.76409	16.67	9.8
MW-139	03/21/2012 14:50	3.51	-17	6.78	0.04	0.74153	13.32	7.4
MW-139	03/21/2012 14:52	2.52	-18	6.78	0.04	0.73705	12.62	7.4
MW-139	03/21/2012 14:55	2.22	-20	6.78	0.04	0.73535	12.52	7.2
MW-139	03/21/2012 14:57	2.46	-21	6.78	0.04	0.73701	12.37	7.4
MW-139	03/21/2012 14:59	2.02	-23	6.78	0.04	0.73314	12.47	7.3
MW-139	03/21/2012 15:02	1.63	-23	6.78	0.04	0.73523	12.31	7.6
MW-139	03/21/2012 15:04	1.37	-24	6.78	0.04	0.73598	12.21	7.4
MW-139	03/21/2012 15:06	1.1	-25	6.78	0.04	0.73658	12.16	7.6
MW-139	03/21/2012 15:09	0.77	-26	6.78	0.04	0.73845	12.01	7.9
MW-139	03/21/2012 15:11	0.87	-26	6.78	0.04	0.73982	12.06	7.4
MW-139	03/21/2012 15:14	0.62	-27	6.78	0.04	0.74189	12.1	7.4
MW-139	03/21/2012 15:16	0.57	-28	6.79	0.04	0.74778	12.06	7.3
MW-139	03/21/2012 15:18	0.55	-29	6.79	0.04	0.75893	12.05	7.4
MW-139	03/21/2012 15:21	0.55	-31	6.79	0.04	0.77253	12.12	6.9
MW-139	03/21/2012 15:45	2.40	-9	6.94	0.04	0.785	11.17	12.90
MW-139	03/22/2012 10:52	0.33	-57	6.36	0.0000	0.865	10.80	36.50
MW-139	04/02/2013 09:03	1.14	-240	6.42	0.06	1.191	8.55	7.68
MW-139	04/02/2013 09:38	-0.49	-219	6.55	0.39	7.207	10.08	2.4
MW-139	04/03/2013 09:35	0.26	-167	6.63	0.61	10.73	10.85	14.9
MW-139	09/08/2014 09:29	-0.01	124	6.27	0.14	2.593	23.48	13.70
MW-139	09/08/2014 10:00	0.74	114	6.75	0.15	2.854	21.91	4.80
MW-139	09/09/2014 09:36	0.03	-414	6.48	0.16	2.948	22.61	9.50
MW-139	04/15/2015 10:03	-0.53	-129	6.71	0.0000	4.544	11.58	2.69
MW-139	04/15/2015 10:40	2.02	-129	6.65	0.17	3.203	9.34	7.70
MW-139	04/16/2015 10:02	-1.43	-144	6.61	0.19	3.650	8.95	16.70
MW-139	02/09/2016 11:35	0.31	-22	6.17	0.05	0.949	10.55	12.80
MW-139	02/09/2016 15:03	5.34	-91	6.29	0.05	0.995	10.74	33.50
MW-139	02/14/2017 08:52	2.06	192	7.04	0.11	2.138	10.98	58.00
MW-139	02/14/2017 09:20	7.16	118	6.95	0.06	1.224	9.56	9.60
MW-139	02/27/2018 09:11	0.21	-95.00	6.65	0.14	2.782	8.91	6.90
MW-139	02/27/2018 09:39	2.63	-115.00	6.49	0.12	2.276	9.26	15.40
MW-139	02/27/2018 09:44	3.21	74.00	6.27	0.06	1.188	9.22	8.80
MW-139	02/15/2019 02:10	2.91	18.30	6.46	0.37	0.748	11.9	30.30
MW-139	02/15/2019 02:50	2.82	11.30	6.67	0.79	1.558	13.32	5.50
MW-139	02/15/2019 03:05	3.86	-41.80	6.65	0.53	1.069	10.93	19.10
MW-139	01/28/2021 11:25	2.36	-60.9	7.71	0.25	0.523	8.25	56
MW-139	01/28/2021 11:30	0.82	-75.8	7.12	0.25	0.513	9.31	41.8
MW-139	01/28/2021 11:35	0.64	-73.8	6.94	0.25	0.513	9.48	42.9
MW-139	01/28/2021 11:40	0.62	-74.3	6.87	0.26	0.527	9.43	32.1
MW-139	01/28/2021 11:45	0.52	-76.9	6.83	0.29	0.601	9.36	26.4
MW-139	01/28/2021 11:50	0.51	-83.8	6.84	0.34	0.697	9.61	23.2
MW-139	01/28/2021 11:55	0.52	-89.7	6.85	0.4	0.811	9.49	20.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-139	01/28/2021 12:00	0.52	-95.4	6.86	0.48	0.93	9.97	16.8
MW-139	01/28/2021 12:05	0.52	-102.8	6.88	0.52	1.039	10.14	15
MW-139	01/28/2021 12:10	0.74	-111.4	6.9	0.59	1.176	10.02	13.5
MW-139	01/28/2021 12:40	0.42	-132.1	6.97	0.88	1.729	11.18	5.6
MW-139	01/28/2021 13:00	0.12	-132.2	6.97	0.94	1.838	11.17	11.2
MW-140	03/28/2012 15:03	4.86	-56	7.11	0.03	0.656	12.83	137.00
MW-140	03/29/2012 11:09	0.25	-36	7.04	0.03	0.647	12.37	22.70
MW-140	09/08/2014 13:24	0.08	201	7.12	0.05	0.956	18.78	71.40
MW-140	09/09/2014 10:58	-0.03	-487	6.91	0.05	1.056	23.52	9.90
MW-140	12/29/2015 10:16	9.99	618	7.96	0.01	278.6	12.8	18.5
MW-140	12/29/2015 11:40	4.77	-84	7.8	0.03	0.705	15.59	484
MW-140	09/14/2016 09:37	0.76	-137	6.66	0.05	1.093	24.02	12.50
MW-140	09/14/2016 11:30	3.33	-33	6.76	0.21	3.858	21.74	15.70
MW-140	02/14/2017 10:18	3.06	255	7.81	0.05	0.928	9.89	54.80
MW-140	02/14/2017 11:47	8.66	253	7.16	0.02	0.324	10.75	14.70
MW-140	02/27/2018 11:50	2.75	223.00	6.87	0.02	0.374	9.86	6.80
MW-140	02/27/2018 14:33	2.53	202.00	6.87	0.06	1.295	10.96	19.90
MW-140	03/06/2019 11:24	10.19	39.3	7.61	0.16	0.327	5.41	24.5
MW-140	03/04/2020 09:50	4.32	181.2	7.43	0.3	0.342	10.76	12.2
MW-154	03/26/2012 08:20	1.68	-83	6.53	0.18	3.34577	14.16	56.7
MW-154	03/26/2012 08:22	0.28	-80	6.5	0.18	3.36746	12.78	6.2
MW-154	03/26/2012 08:25	-0.08	-78	6.49	0.18	3.36537	12.62	8.3
MW-154	03/26/2012 08:27	-0.15	-78	6.49	0.18	3.35892	12.65	13
MW-154	03/26/2012 08:29	-0.2	-77	6.5	0.18	3.35319	12.63	10.1
MW-154	03/26/2012 08:32	-0.28	-77	6.5	0.18	3.35522	12.66	10.8
MW-154	03/26/2012 08:34	-0.28	-77	6.5	0.18	3.35747	12.7	11.7
MW-154	03/26/2012 08:36	-0.31	-77	6.51	0.18	3.35764	12.7	12.5
MW-154	03/26/2012 08:39	-0.33	-77	6.51	0.17	3.31523	12.71	19.8
MW-154	03/26/2012 08:41	-0.32	-77	6.51	0.18	3.34177	12.75	13
MW-154	03/26/2012 08:44	-0.77	-77	6.52	0.17	3.28328	12.82	21.3
MW-154	03/26/2012 08:46	-0.74	-77	6.51	0.17	3.30088	12.88	20.1
MW-154	03/26/2012 08:48	-0.74	-76	6.51	0.17	3.30254	12.82	20.1
MW-154	03/26/2012 10:26	2.16	-40	6.37	0.17	3.261	12.62	74.30
MW-154	03/27/2012 09:00	1.93	35	6.04	0.20	3.550	11.82	1.70
MW-154	08/15/2012 08:36	4.50	-56	6.15	0.10	2.870	25.42	92.10
MW-154	08/15/2012 09:37	7.39	-99	6.28	0.10	3.910	24.74	69.90
MW-154	08/16/2012 08:55	4.62	-72	6.13	0.20	3.360	24.26	78.30
MW-154	04/03/2013 09:41	0.62	-219	6.23	0.26	4.809	9.98	61.83
MW-154	04/03/2013 10:29	3.17	-87	6.23	0.25	4.667	11.74	135.8
MW-154	04/04/2013 09:31	2.37	-118	6.3	0.22	4.141	9.43	22.6
MW-154	09/19/2013 09:05	0.85	-328	5.96	0.09	1.780	22.46	202.70
MW-154	09/19/2013 10:02	0.54	-368	6.21	0.11	2.168	21.12	539.70
MW-154	10/28/2013 10:30	1.52	-317	6.12	0.28	5.077	19.70	56.40
MW-154	10/29/2013 09:35	0.14	-235	6.00	0.33	5.957	19.25	44.40
MW-154	03/27/2014 14:32	1.39	-329	6.11	1.04	17.730	9.00	52.16
MW-154	03/27/2014 16:00	2.75	-311	6.10	0.23	4.348	10.04	523.60
MW-154	03/28/2014 10:56	1.83	-298	6.37	1.34	22.550	9.09	8.20
MW-154	11/12/2014 10:46	2.03	-290	6.01	0.15	2.820	16.89	85.69
MW-154	11/12/2014 12:25	2.08	-207	6.09	0.17	3.228	18.36	729.30
MW-154	11/13/2014 11:00	16.08	265	6.97	0.04	0.810	12.35	0.70
MW-154	04/15/2015 12:19	3.51	40	6.12	0.06	1.110	12.39	9.50
MW-154	04/15/2015 12:35	-0.70	-20	6.05	0.07	1.465	10.46	247.50
MW-154	04/16/2015 11:10	2.45	-92	6.39	0.16	3.024	9.97	6.50
MW-154	02/09/2016 09:59	0.37	-15	6.12	0.04	0.847	12.46	43.30
MW-154	02/09/2016 10:37	2.35	-115	6.12	0.03	0.660	11.85	154.50
MW-154	08/16/2016 09:24	0.51	-134	6.23	0.03	0.702	21.42	110.20
MW-154	08/16/2016 10:07	0.47	-92	6.99	0.03	0.645	21.69	905.70
MW-154	02/15/2017 11:27	1.53	215	6.89	0.02	0.365	11.29	57.70
MW-154	02/15/2017 14:12	3.14	82	6.98	0.02	0.476	10.46	49.00
MW-154	03/19/2018 10:17	9.88	93	7.3	0.0150	9.8800	9.81	320.2
MW-154	03/19/2018 10:19	6.65	100	6.96	0.0140	6.6500	9.49	148.6
MW-154	03/19/2018 10:22	5.6	102	6.77	0.0142	5.6000	9.68	98.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-154	03/19/2018 10:24	5.08	100	6.72	0.0141	5.0800	9.67	86.7
MW-154	03/19/2018 10:27	5.45	97	6.7	0.0142	5.4500	9.48	91.6
MW-154	03/19/2018 10:29	4.16	101	6.55	0.0141	4.1600	9.87	76.4
MW-154	03/19/2018 10:31	5.04	100	6.53	0.0141	5.0400	9.86	60
MW-154	03/19/2018 10:34	4.95	98	6.53	0.0140	4.9500	9.72	84.7
MW-154	03/19/2018 10:36	4.23	97	6.5	0.0138	4.2300	9.61	67.8
MW-154	03/19/2018 10:39	4.17	99	6.44	0.0136	4.1700	9.73	80
MW-154	03/19/2018 10:41	4.4	101	6.38	0.0138	4.4000	9.91	63.7
MW-154	03/19/2018 10:43	4.49	99	6.4	0.0136	4.4900	9.82	60.5
MW-154	03/19/2018 10:46	4.67	100	6.36	0.0137	4.6700	9.79	61.1
MW-154	03/20/2018 10:38	1.79	4.00	6.23	0.03	0.662	10.43	59.70
MW-154	03/20/2018 10:45	4.67	100.00	6.36	0.01	0.290	9.67	61.09
MW-154	03/20/2018 11:42	2.94	103.00	6.77	0.03	0.571	12.02	879.10
MW-154	08/23/2018 09:34	0.79	-83.00	6.55	0.03	0.662	23.6	13.22
MW-154	08/23/2018 09:53	0.39	-35.00	6.17	0.06	1.284	19.95	34.90
MW-154	08/23/2018 10:45	1.27	3.00	6.75	0.08	1.534	18.01	467.90
MW-154	03/14/2019 10:00	0.19	40.4	6.48	NM	0.199	9.1	191.3
MW-154	03/14/2019 11:42	0.36	-92.9	6.87	0.18	0.377	13.41	29.8
MW-154	08/23/2019 08:05	1.11	-67.8	6.94	NM	0.405	20.74	14.7
MW-154	08/23/2019 08:10	0.62	-57.3	6.43	NM	0.359	21.06	7.5
MW-154	08/23/2019 08:15	0.49	-58.1	6.41	NM	0.347	21.13	5.7
MW-154	08/23/2019 08:20	0.4	-59.6	6.43	NM	0.339	21.19	7
MW-154	08/23/2019 08:25	0.37	-61.4	6.45	NM	0.331	21.26	7
MW-154	08/23/2019 08:30	0.36	-62.3	6.46	NM	0.329	21.37	8.4
MW-154	08/23/2019 08:35	0.34	-63	6.47	NM	0.33	21.44	9.9
MW-154	08/23/2019 08:40	0.34	-62.7	6.48	NM	0.33	21.47	13
MW-154	08/23/2019 08:45	0.34	-61.9	6.48	NM	0.329	21.51	17.4
MW-154	08/23/2019 08:50	0.35	-61	6.47	NM	0.329	21.59	17.5
MW-154	08/23/2019 10:55	6.57	-44.3	6.95	0.5	1.003	16.86	22.5
MW-154	08/23/2019 11:05	3.99	-26.5	6.36	0.47	0.95	16.95	86.7
MW-154	02/03/2020 10:25	1.72	-10.1	6.61	NM	0.39	8.4	41
MW-154	02/04/2020 11:27	6.19	-63	6.62	0.32	0.656	10.59	70.3
MW-154	01/26/2021 12:20	11.27	92.6	7.65	0.21	0.436	7.34	87.1
MW-154	01/26/2021 12:25	9.14	88.3	7.56	0.21	0.436	7.34	107
MW-154	01/26/2021 12:30	5.22	85.9	7.09	0.21	0.428	7.63	68.5
MW-154	01/26/2021 12:35	5.12	83.6	7.03	0.21	0.428	7.59	71.8
MW-154	01/26/2021 12:40	5.11	58.6	6.91	0.21	0.426	7.64	77.6
MW-154	01/26/2021 12:45	5.06	37.7	6.86	0.21	0.425	7.66	73.3
MW-154	01/26/2021 12:50	4.92	9.1	6.8	0.2	0.423	7.77	66.4
MW-154	01/26/2021 12:55	4.85	2.7	6.78	0.2	0.423	7.79	67.4
MW-154	01/26/2021 13:00	4.88	-2.9	6.77	0.2	0.422	7.86	68
MW-154	01/26/2021 13:05	4.52	-11.1	6.74	0.2	0.422	7.98	69.9
MW-154	01/27/2021 08:32	12.16	-40.6	7.96	0.19	0.403	9.2	77.2
MW-154	01/27/2021 08:57	4.43	2.6	6.67	0.19	0.386	8.3	92.2
MW-154	01/27/2021 13:05	4.52	-11.1	6.74	0.2	0.422	7.98	69.9
MW-158	06/06/2012 08:33	1.07	-52	6.61	1.1	18.34396	22.32	67
MW-158	06/06/2012 08:36	0.74	-70	6.63	1.27	21.00334	18.72	10
MW-158	06/06/2012 08:38	0.45	-78	6.65	1.25	20.76479	17.41	12.4
MW-158	06/06/2012 08:40	0.35	-83	6.67	1.24	20.5594	17.7	11.6
MW-158	06/06/2012 08:42	0.31	-86	6.67	1.23	20.38687	17.77	15.6
MW-158	06/06/2012 08:45	0.28	-88	6.68	1.22	20.28753	17.95	19.3
MW-158	06/06/2012 08:47	0.26	-90	6.69	1.21	20.08767	18.01	12.4
MW-158	06/06/2012 08:49	0.25	-91	6.69	1.2	19.92799	18.06	16.1
MW-158	06/06/2012 08:51	0.24	-92	6.7	1.19	19.82828	18.07	16
MW-158	06/06/2012 08:54	0.23	-93	6.7	1.18	19.68195	18.12	20.2
MW-158	06/06/2012 08:56	0.22	-94	6.71	1.18	19.60808	18.07	18.1
MW-158	06/06/2012 08:58	0.21	-95	6.71	1.17	19.45414	18.24	22.2
MW-158	06/06/2012 09:00	0.2	-95	6.71	1.17	19.49261	18.33	20.4
MW-158	06/06/2012 09:03	0.2	-96	6.72	1.16	19.2902	18.28	26.1
MW-158	06/06/2012 09:05	0.2	-96	6.72	1.16	19.37285	18.2	25.3
MW-158	06/06/2012 09:07	0.19	-96	6.72	1.16	19.28377	18.42	29.5
MW-158	06/06/2012 09:09	0.19	-97	6.73	1.15	19.20125	18.31	26.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-158	06/06/2012 09:12	0.2	-97	6.74	1.15	19.14554	18.27	52.6
MW-158	06/06/2012 09:14	0.19	-97	6.74	1.14	19.00789	18.36	25.6
MW-158	06/06/2012 09:16	0.19	-98	6.74	1.14	19.0663	18.35	23.4
MW-158	06/06/2012 09:18	0.19	-98	6.74	1.14	19.09574	18.22	24.9
MW-158	06/06/2012 10:04	1.05	-105	7.78	1.91	30.580	15.78	367.30
MW-158	06/07/2012 09:02	2.25	-65	6.99	1.20	20.300	12.25	27.30
MW-158	09/04/2012 08:50	6.65	-119	7.00	0.90	15.000	21.80	3.20
MW-158	09/04/2012 09:41	5.48	-183	7.28	2.00	31.700	17.68	-5.00
MW-158	09/05/2012 09:00	2.21	-34	7.11	1.10	18.500	16.06	12.80
MW-158	05/20/2013 13:20	1.24	-153	6.61	1.66	26.678	22.11	59.7
MW-158	05/20/2013 13:22	1.13	-151	6.61	1.72	27.785	18.95	51.3
MW-158	05/20/2013 13:25	0.76	-154	6.62	1.72	27.742	18.19	91.4
MW-158	05/20/2013 13:27	0.53	-157	6.63	1.68	27.196	18.04	41.1
MW-158	05/20/2013 13:29	0.5	-158	6.64	1.66	26.903	17.89	38.8
MW-158	05/20/2013 13:31	0.46	-158	6.64	1.64	26.583	18.16	30.1
MW-158	05/20/2013 13:34	0.43	-159	6.64	1.63	26.444	18.02	35.3
MW-158	05/20/2013 13:36	0.4	-158	6.64	1.61	26.078	18.34	34.9
MW-158	05/20/2013 13:38	0.38	-159	6.64	1.62	26.211	18.1	40.6
MW-158	05/20/2013 13:40	0.36	-159	6.64	1.63	26.413	17.89	40.7
MW-158	05/20/2013 13:43	0.34	-159	6.65	1.62	26.258	17.83	46.1
MW-158	05/20/2013 13:45	0.33	-159	6.64	1.59	25.777	17.76	38.4
MW-158	05/20/2013 13:47	0.32	-160	6.65	1.59	25.891	17.46	43
MW-158	05/20/2013 13:50	0.3	-161	6.64	1.62	26.332	17.42	32.1
MW-158	05/20/2013 13:52	0.28	-158	6.65	1.58	25.736	17.88	39.2
MW-158	05/20/2013 13:54	0.27	-156	6.65	1.56	25.324	17.98	50.5
MW-158	05/20/2013 13:56	0.26	-155	6.66	1.57	25.4734	17.88	35.9
MW-158	05/20/2013 13:58	0.26	-156	6.65	1.57	25.50757	17.69	44.1
MW-158	05/20/2013 14:01	0.26	-155	6.66	1.55	25.19699	17.75	40.4
MW-158	05/20/2013 14:03	0.25	-151	6.66	1.54	25.01	18.42	40.66
MW-158	05/20/2013 14:48	0.95	-183	6.93	4.06	60.54	14.7	556.9
MW-158	05/21/2013 11:39	-0.52	-184	6.9	2.77	43.23	12.18	80.7
MW-158	06/24/2014 02:04	1.77	-135	6.7	NM	35.57153	26.36	42.4
MW-158	06/24/2014 02:06	1.34	-123	6.68	NM	33.80742	22.98	11.8
MW-158	06/24/2014 02:08	1.08	-119	6.68	NM	33.08213	22.20	10.2
MW-158	06/24/2014 02:10	1.01	-118	6.66	NM	33.47516	22.96	8.9
MW-158	06/24/2014 02:12	1.02	-117	6.67	NM	33.9592	23.08	14.3
MW-158	06/24/2014 02:14	0.92	-116	6.67	NM	33.43384	22.76	10
MW-158	06/24/2014 02:16	0.86	-116	6.67	NM	33.32886	22.72	8.6
MW-158	06/24/2014 02:18	0.78	-117	6.66	NM	33.65199	23.22	9.1
MW-158	06/24/2014 02:20	0.71	-117	6.66	NM	33.57541	23.21	9.1
MW-158	06/24/2014 14:20	0.71	-117	6.66	2.22	34.760	23.21	9.12
MW-158	06/24/2014 15:10	0.48	-119	6.66	2.46	38.500	16.10	16.20
MW-158	06/25/2014 11:35	0.25	-114	6.61	0.19	19.960	13.50	13.00
MW-158	11/05/2014 01:08	-0.59	-69	6.71	NM	22.62047	16.46	73.2
MW-158	11/05/2014 01:10	-0.59	-79	6.73	NM	23.51688	16.21	192.1
MW-158	11/05/2014 01:13	-0.61	-81	6.75	NM	12.3365	15.59	175
MW-158	11/05/2014 01:15	-0.63	-79	6.75	NM	12.14494	15.25	551.4
MW-158	11/05/2014 01:17	-0.63	-76	6.75	NM	22.47078	15.28	37.3
MW-158	11/05/2014 01:19	-0.63	-73	6.76	NM	22.57147	15.09	44.7
MW-158	11/05/2014 01:21	-0.63	-71	6.75	NM	23.27752	15.12	69.9
MW-158	11/05/2014 01:24	-0.63	-69	6.76	NM	23.77187	15.24	65.6
MW-158	11/05/2014 01:26	-0.63	-66	6.77	NM	23.93372	15.23	69.8
MW-158	11/05/2014 13:26	-0.63	-66	6.77	1.82	29.420	15.23	69.79
MW-158	11/05/2014 14:04	-0.55	-132	6.74	2.52	39.340	16.36	5536.00
MW-158	11/06/2014 13:41	0.0000	-50	6.74	1.09	18.360	15.38	72.50
MW-158	07/14/2015 14:23	1.83	-105	6.52	6.0719	0.0849	22.68	15
MW-158	07/14/2015 14:24	0.86	-113	6.52	5.8654	0.0824	22.52	14.5
MW-158	07/14/2015 14:26	0.84	-114	6.52	5.4830	0.0777	22.77	12.2
MW-158	07/14/2015 14:27	0.76	-115	6.52	5.4972	0.0779	22.92	14.4
MW-158	07/14/2015 14:28	0.73	-116	6.53	5.4876	0.0778	23.05	16.5
MW-158	07/14/2015 14:30	0.72	-116	6.53	5.3945	0.0766	23.09	13.4
MW-158	07/14/2015 14:31	0.63	-117	6.53	5.4317	0.0771	22.66	15.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-158	07/14/2015 14:33	0.49	-117	6.54	5.3771	0.0764	22.72	17.3
MW-158	07/14/2015 14:34	0.44	-117	6.54	5.3885	0.0766	22.83	19.6
MW-158	07/14/2015 14:36	0.4	-118	6.54	5.0374	0.0722	22.96	19.8
MW-158	07/14/2015 14:37	0.37	-118	6.55	5.1635	0.0738	23.09	19.6
MW-158	07/14/2015 14:39	0.34	-118	6.55	5.1463	0.0735	23.26	17.9
MW-158	07/14/2015 14:40	0.35	-119	6.56	5.0089	0.0718	23.46	18.8
MW-158	07/15/2015 15:21	2.55	-88	6.66	13.6	166	16.45	85.4
MW-158	07/15/2015 15:45	3.73	-370	NM	1.62	26.52	13.21	49.4
MW-158	03/17/2016 08:59	2.250	-106.000	6.850	2.718	42.812	10.120	151.200
MW-158	03/17/2016 09:03	0.780	-116.000	6.790	2.863	44.951	9.540	83.500
MW-158	03/17/2016 09:05	0.650	-118.000	6.780	2.898	45.427	9.720	78.300
MW-158	03/17/2016 09:07	0.710	-119.000	6.780	2.924	45.731	10.160	74.100
MW-158	03/17/2016 09:09	0.840	-119.000	6.780	2.946	45.993	10.480	69.400
MW-158	03/17/2016 09:12	0.840	-119.000	6.780	2.956	46.094	10.740	67.400
MW-158	03/17/2016 09:14	0.780	-119.000	6.780	2.946	45.903	11.070	65.900
MW-158	03/18/2016 10:04	1.41	-121	6.76	3.50	53.920	9.33	79.70
MW-158	03/18/2016 10:13	2.84	-3	5.90	0.42	7.678	8.22	9.50
MW-158	09/13/2016 10:59	0.18	-95	6.84	4.66	67.776	20.05	11.10
MW-158	09/13/2016 11:33	1.30	-159	6.84	0.73	12.650	18.49	8.40
MW-158	03/28/2017 13:46	-0.09	-114	6.81	1.2437	0.2115	7.16	128.1
MW-158	03/28/2017 13:47	-0.1	-114	6.82	1.2380	0.2106	7.15	109.8
MW-158	03/28/2017 13:48	-0.09	-114	6.82	1.2373	0.2105	7.15	68.9
MW-158	03/28/2017 13:50	-0.1	-113	6.83	1.2230	0.2083	7.05	57.4
MW-158	03/28/2017 13:52	-0.09	-111	6.84	1.2074	0.2059	7.03	64.3
MW-158	03/28/2017 13:54	-0.09	-111	6.85	1.1998	0.2047	7.04	66.7
MW-158	03/29/2017 11:18	6.10	0	6.23	0.51	9.250	6.92	24.00
MW-158	03/29/2017 14:45	3.35	-112	6.67	1.32	22.230	8.10	30.40
MW-158	05/14/2018 12:28	4.11	-153	6.72	1.2599	0.0209	16.27	33.9
MW-158	05/14/2018 12:31	1.71	-160	6.74	1.2467	0.0207	15.42	23.1
MW-158	05/14/2018 12:33	1.37	-164	6.74	1.2497	0.0208	15.4	22.8
MW-158	05/14/2018 12:35	1.2	-166	6.76	1.2465	0.0207	15.18	21.8
MW-158	05/14/2018 12:38	4.29	-158	6.93	0.0008	0.0208	16.11	2.9
MW-158	05/14/2018 12:40	3.4	-165	6.81	1.2465	0.0208	13.83	25
MW-158	05/14/2018 12:43	1.33	-172	6.78	1.2416	0.0207	14.18	22.2
MW-158	05/14/2018 12:45	1.07	-171	6.79	1.2459	0.0208	14.31	21.4
MW-158	05/14/2018 12:47	1.01	-170	6.8	1.2467	0.0208	14.41	22.4
MW-158	05/14/2018 12:50	0.97	-169	6.8	1.2437	0.0207	14.56	21.6
MW-158	05/15/2018 11:10	3.63	93.00	6.92	1.68	27.500	11.42	5.30
MW-158	05/15/2018 12:50	0.97	-169.00	6.80	1.24	20.630	14.74	21.55
MW-158	05/15/2018 13:40	2.90	-175.00	6.77	1.32	21.960	12.53	397.60
MW-158	11/21/2018 09:30	0.76	-107.90	6.71	11.66	19.520	10.57	5.80
MW-158	11/21/2018 11:30	5.44	-96.00	7.04	13.62	22.510	14.48	9.70
MW-158	11/21/2018 11:40	4.00	-109.50	6.98	16.38	26.680	13.82	12.50
MW-158	05/08/2019 10:15	0.12	-86.3	6.75	NM	21.07	13.33	3.4
MW-158	05/08/2019 11:47	0.05	-78	6.77	11.92	19.95	11.86	6
MW-158	07/23/2019 10:15	1.65	-162.9	6.96	NM	31.87	18.17	8.6
MW-158	07/23/2019 12:10	3.86	-98.3	7.14	9.13	15.62	20.63	6.5
MW-158	07/23/2019 12:15	3.86	-98.3	7.14	9.13	15.62	20.63	6.5
MW-158	07/23/2019 12:25	3.4	-81.9	6.89	8.51	14.62	20.5	10.7
MW-158	08/22/2019 10:00	0.93	-169.1	6.85	NM	35.92	19.96	246.5
MW-158	08/22/2019 10:05	0.88	-181.7	6.74	NM	37.34	18.5	304.7
MW-158	08/22/2019 10:10	0.54	-177.5	6.74	NM	35.81	18.03	123.6
MW-158	08/22/2019 10:15	0.26	-146.6	6.72	NM	29.22	18.93	29.3
MW-158	08/22/2019 10:20	0.22	-134.4	6.67	NM	25.92	18.98	10.1
MW-158	08/22/2019 10:25	0.28	-131.3	6.65	NM	24.62	18.84	9.7
MW-158	08/22/2019 10:30	0.26	-131.5	6.65	NM	23.95	19.51	2.9
MW-158	08/22/2019 10:35	0.21	-132	6.64	NM	23.34	19.99	11.2
MW-158	08/22/2019 10:40	0.21	-133.1	6.63	NM	22.67	20.17	23.5
MW-158	08/22/2019 10:45	0.14	-134.9	6.62	NM	21.92	20.22	38.8
MW-158	08/22/2019 15:05	1.01	-31.5	7.31	13.3	22.24	21.47	19.8
MW-158	08/22/2019 15:30	3.98	-44.1	7.12	13.24	22.17	23.88	90.8
MW-158	11/12/2019 08:40	0.92	38.3	5.67	NM	12.98	12.35	5.4

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-158	11/12/2019 08:45	0.64	66.4	6.71	NM	6.658	12.73	3.2
MW-158	11/12/2019 08:50	0.9	-93.8	6.74	NM	13.02	12.43	3.9
MW-158	11/12/2019 08:55	1.36	-99.2	6.74	NM	13.05	12.13	6.8
MW-158	11/12/2019 09:00	1.25	-103.8	6.75	NM	13.05	12.74	6.4
MW-158	11/12/2019 09:05	0.58	-108.8	6.82	NM	13.15	13.12	5
MW-158	11/12/2019 09:10	0.58	-109.3	6.75	NM	13.18	13.44	6.9
MW-158	11/12/2019 09:15	0.37	-110.5	6.75	NM	13.1	13.56	5.6
MW-158	11/12/2019 09:20	0.33	-112.4	6.75	NM	13.09	13.51	5.6
MW-158	11/12/2019 09:25	0.32	-113.7	6.76	NM	13.09	13.6	5.3
MW-158	11/13/2019 08:20	3.8	272.3	6.73	3.26	5.97	13.77	13.4
MW-158	11/13/2019 08:35	2.47	264.7	6.86	3.72	6.767	14.62	23.5
MW-158	02/24/2020 11:55	0.27	-83.8	6.73	NM	10.2	8.59	18.7
MW-158	02/25/2020 09:25	5.69	215.3	6.64	2.5	5.279	2.85	5.1
MW-158	06/04/2020 09:15	4.37	-77.6	6.86	NM	15.01	18.16	11.1
MW-158	06/04/2020 10:30	4.24	-74.4	7.91	9.89	16.81	17.76	13.9
MW-158	11/05/2020 09:00	2.2	-51.6	6.59	9.97	16.89	14.76	23.6
MW-158	11/05/2020 09:05	1.49	-73.8	6.68	10.03	16.97	14.63	20.9
MW-158	11/05/2020 09:10	1.15	-86.1	6.74	10.05	17.01	14.36	19
MW-158	11/05/2020 09:15	1.11	-91.7	6.77	10.06	17.04	14.22	19.1
MW-158	11/05/2020 09:20	0.99	-94.1	6.79	10.07	17.04	14.17	18.8
MW-158	11/05/2020 09:25	1.01	-96.3	6.79	10.07	17.05	14.26	18.6
MW-158	11/05/2020 09:30	1.02	-98.2	6.8	10.08	17.06	14.38	18.8
MW-158	11/06/2020 11:25	1.12	-45.6	7.31	11.25	18.67	17.64	65
MW-158	11/06/2020 11:35	1.06	9.4	7.04	9.27	15.82	17.35	21.8
MW-158	02/26/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-158	02/26/2021 09:10	4.54	-122	7.32	12.22	20.58	6.59	20
MW-158	02/26/2021 09:15	0.86	-120.9	6.79	12.18	20.35	6.4	9.9
MW-158	02/26/2021 09:20	0.59	-121.4	6.73	12.18	20.53	6.36	9.8
MW-158	02/26/2021 09:25	0.45	-121.5	6.7	12.2	20.57	6.3	11.1
MW-158	02/26/2021 09:30	0.4	-121.5	6.7	12.24	20.61	6.28	11.6
MW-158	02/26/2021 09:35	0.49	-120.9	6.69	12.21	20.59	6.1	11.6
MW-158	02/26/2021 09:40	0.59	-120.3	6.69	12.22	20.63	6.11	11.7
MW-158	02/26/2021 09:45	0.5	-120.1	6.7	12.21	20.59	6.07	12
MW-158	02/26/2021 09:50	0.51	-119.3	6.7	12.2	20.58	6.06	12.1
MW-158	02/26/2021 09:55	0.48	-118.9	6.69	12.21	20.6	6	12.2
MW-158	02/26/2021 11:20	0.98	-85.6	6.78	12.6	21.05	9.74	16.8
MW-158	02/26/2021 11:40	3.46	-111.7	6.72	13.03	21.72	8.87	21.6
MW-158	06/16/2021 13:30	5.59	-87.2	6.88	10.73	9.828	26.47	18.9
MW-158	06/16/2021 13:35	2.65	-114.6	6.77	10.96	18.48	22.72	11.9
MW-158	06/16/2021 13:40	1.91	-122.9	6.8	10.95	18.45	22.22	10.4
MW-158	06/16/2021 13:45	1.45	-131.3	6.83	10.78	18.17	17.11	10
MW-158	06/16/2021 13:50	0.86	-132.5	6.89	10.55	17.8	16.96	9.5
MW-158	06/16/2021 13:55	0.76	-130.4	6.93	10.26	17.36	17.51	9.2
MW-158	06/16/2021 14:00	0.72	-120.7	6.87	9.96	16.88	18.22	12.3
MW-158	06/16/2021 14:05	0.73	-114.1	6.97	9.83	16.67	18.78	16.7
MW-158	06/16/2021 14:10	0.77	-116.2	6.95	9.73	16.54	19.15	16.2
MW-158	06/16/2021 14:15	0.81	-123.7	6.93	9.73	16.51	19.26	13.3
MW-158	08/16/2021 11:30	0.94	-99.3	6.78	11.75	20.05	24.55	18.4
MW-158	08/16/2021 11:35	0.45	-106.4	6.73	12.46	20.79	20.91	9.6
MW-158	08/16/2021 11:40	0.36	-109.7	6.74	12.33	20.57	20.61	9
MW-158	08/16/2021 11:45	0.27	-111.2	6.74	12.07	20.15	20.24	9
MW-158	08/16/2021 11:50	0.26	-111.2	6.76	11.79	19.73	20.31	9.4
MW-158	08/16/2021 11:55	0.23	-110.7	6.76	11.5	19.27	20.5	10
MW-158	08/16/2021 12:00	0.2	-113.3	6.78	11.23	18.87	20.67	11.5
MW-158	08/16/2021 12:05	0.22	-114	6.79	10.97	18.47	20.85	13
MW-158	08/16/2021 12:10	0.21	-115.8	6.82	10.74	18.14	21.14	16.1
MW-158	08/16/2021 12:15	0.22	-115.2	6.83	10.61	17.92	21.15	18.2
MW-158	12/03/2021 08:50	2.66	-97.1	6.92	13.08	21.74	12.09	146
MW-158	12/03/2021 08:55	1.51	-115.5	6.78	13.18	21.87	11.72	7.2
MW-158	12/03/2021 09:00	1.17	-122.3	6.77	13.15	21.81	11.39	5.6
MW-158	12/03/2021 09:05	0.82	-126	6.78	13.12	21.8	11.2	5.1
MW-158	12/03/2021 09:10	0.75	-127.3	6.78	13.11	21.77	11.17	6.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-158	12/03/2021 09:15	0.83	-128.2	6.78	13.11	21.79	11.07	4.8
MW-158	12/03/2021 09:20	0.64	-127.5	6.79	13.09	21.76	11.12	4.6
MW-158	12/03/2021 09:25	0.59	-127.9	6.79	13.08	21.73	11.17	4.4
MW-158	12/03/2021 09:30	0.58	-127.9	6.79	13.09	21.76	11.18	4.6
MW-158	03/02/2022 12:05	3.25	-50.5	6.87	10.36	17.49	9.34	36.6
MW-158	03/02/2022 12:10	0.52	-61.3	6.87	10.43	17.71	8.5	33.7
MW-158	03/02/2022 12:15	0.38	-64.3	6.87	10.37	17.6	9.07	35.9
MW-158	03/02/2022 12:20	0.42	-63	6.87	10.37	17.57	9.78	40.6
MW-158	03/02/2022 12:25	0.37	-62.2	6.87	10.37	17.57	9.89	34.6
MW-158	03/02/2022 12:30	0.38	-63	6.87	10.36	17.57	9.96	39.7
MW-158	03/02/2022 12:35	0.35	-63.5	6.87	10.36	17.55	10.14	37.6
MW-158	03/02/2022 12:40	0.38	-62.9	6.86	10.34	17.51	10.19	36.8
MW-159	09/10/2014 11:07	0.36	66	6.63	0.15	2.794	23.45	120.60
MW-159	09/10/2014 11:53	0.65	183	6.95	0.13	2.527	19.36	148.50
MW-159	09/11/2014 10:05	0.53	-340	6.67	0.14	2.630	19.77	66.80
MW-164	03/19/2012 08:16	-0.38	4	7.08	0.06	1.13362	11.44	7.6
MW-164	03/19/2012 08:19	-0.05	-11	7.13	0.06	1.13224	10.69	2.1
MW-164	03/19/2012 08:21	0.9	-22	7.14	0.06	1.12992	10.53	1.7
MW-164	03/19/2012 08:23	11.3	-28	7.14	0.06	1.128	10.46	1.5
MW-164	03/19/2012 08:25	15.85	-33	7.15	0.06	1.1265	10.46	3.6
MW-164	03/19/2012 08:28	15.05	-36	7.15	0.06	1.12868	10.47	1.4
MW-164	03/19/2012 08:30	13.02	-39	7.15	0.06	1.12964	10.45	1.5
MW-164	03/19/2012 08:32	10.37	-42	7.15	0.06	1.1297	10.46	1.4
MW-164	03/19/2012 08:34	5.53	-44	7.15	0.06	1.12995	10.49	1.4
MW-164	03/19/2012 08:37	4.99	-46	7.15	0.06	1.12999	10.5	1.3
MW-164	03/19/2012 08:39	4.9	-48	7.15	0.06	1.12913	10.55	1.3
MW-164	03/19/2012 08:41	4.6	-50	7.15	0.06	1.12894	10.58	1.3
MW-164	03/19/2012 08:42	4.6	-50	7.15	0.06	1.129	10.58	1.313
MW-164	03/19/2012 09:21	1.28	-49	7.22	0.06	1.155	10.83	10.1
MW-164	03/20/2012 09:09	0.38	-120	6.62	0.1	1.31	11.3	20.1
MW-164	08/13/2012 08:34	3.08	-173	7.14	0.06	1.163	22.17	15.2
MW-164	08/13/2012 08:36	1.35	-185	7.85	0.06	1.244	22.11	9.5
MW-164	08/13/2012 08:38	0.97	-191	7.85	0.06	1.249	22.26	10.8
MW-164	08/13/2012 08:40	0.78	-194	7.85	0.06	1.25	22.48	13.1
MW-164	08/13/2012 08:42	0.73	-197	7.85	0.06	1.247	22.67	12.5
MW-164	08/13/2012 08:44	0.71	-200	7.32	0.06	1.251	22.57	11.2
MW-164	08/13/2012 08:46	0.68	-202	7.11	0.06	1.253	22.67	12.16
MW-164	08/13/2012 08:47	0.68	-202	7.11	0.06	1.253	22.67	12.2
MW-164	08/13/2012 09:58	5.47	-210	10.37	0.06	1.273	16.50	70.50
MW-164	08/14/2012 09:35	5.75	-220	6.82	0.06	1.250	17.93	16.30
MW-164	02/21/2013 13:47	8.95	-93	7	0.13	2.61346	8.73	11.1
MW-164	02/21/2013 13:49	8.61	-101	7.05	0.14	2.72977	7.86	6.5
MW-164	02/21/2013 13:51	8.49	-106	7.05	0.15	2.89879	7.61	5.8
MW-164	02/21/2013 13:54	8.41	-109	7.06	0.15	3.00283	7.53	5.5
MW-164	02/21/2013 13:56	8.34	-112	7.07	0.16	3.05218	7.55	5.9
MW-164	02/21/2013 13:58	8.34	-114	7.07	0.16	3.1319	7.3	3.4
MW-164	02/21/2013 14:01	8.32	-116	7.08	0.16	3.10237	7.38	3.2
MW-164	02/21/2013 14:03	8.38	-117	7.09	0.16	3.17856	7.14	3
MW-164	02/21/2013 14:06	8.4	-118	7.1	0.17	3.20445	7.24	4.1
MW-164	02/21/2013 14:08	8.44	-119	7.1	0.17	3.19243	7.28	4
MW-164	02/21/2013 14:10	8.44	-120	7.1	0.16	3.16473	7.56	3.3
MW-164	02/21/2013 14:13	8.46	-122	7.11	0.16	3.1378	7.34	3.7
MW-164	02/21/2013 14:15	8.41	-123	7.11	0.16	3.15882	7.52	3.7
MW-164	02/21/2013 14:16	8.41	-123	7.11	0.16	3159.000	7.63	3.71
MW-164	02/21/2013 15:05	7.65	-168	6.96	0.19	3542.000	9.57	5.50
MW-164	02/22/2013 10:23	1.32	-281	6.87	0.16	3079.000	10.50	12.80
MW-164	09/19/2013 10:25	2.3	-275	6.92	0.05	1.06612	23.87	9.1
MW-164	09/19/2013 10:28	1.44	-304	6.86	0.06	1.211965	23.01	5.3
MW-164	09/19/2013 10:30	1.16	-274	6.85	0.07	1.32242	22.81	4.8
MW-164	09/19/2013 10:32	0.97	-255	6.85	0.07	1.40164	22.82	4.4
MW-164	09/19/2013 10:35	0.9	-248	6.86	0.07	1.46689	22.69	4.4
MW-164	09/19/2013 10:37	0.83	-244	6.86	0.08	1.50425	22.86	5.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-164	09/19/2013 10:39	0.78	-242	6.85	0.08	1.53586	22.93	4.2
MW-164	09/19/2013 10:42	0.77	-241	6.86	0.08	1.55669	22.79	4.4
MW-164	09/19/2013 10:44	0.74	-242	6.86	0.08	1.57202	22.72	4.2
MW-164	04/02/2014 08:31	9.01	-162	6.55	NM	0.48692	8.88	9.2
MW-164	04/02/2014 08:33	4.24	-246	6.57	NM	0.63462	8.81	5.2
MW-164	04/02/2014 08:36	2.83	-290	6.63	NM	0.70273	8.25	5.4
MW-164	04/02/2014 08:38	2.19	-298	6.67	NM	0.76837	7.93	5.2
MW-164	04/02/2014 08:40	1.92	-300	6.7	NM	0.8148	7.78	5.2
MW-164	04/02/2014 08:43	1.77	-301	6.72	NM	0.85962	7.73	5.1
MW-164	04/02/2014 08:45	1.65	-300	6.74	NM	0.8937	7.73	5.1
MW-164	04/02/2014 08:47	1.57	-297	6.75	NM	0.91931	7.71	5.1
MW-164	04/02/2014 08:50	1.55	-297	6.77	NM	0.94401	7.68	5.1
MW-164	04/02/2014 08:52	1.57	-299	6.78	NM	0.96318	7.56	5.2
MW-164	04/02/2014 08:54	1.56	-302	6.78	NM	0.98536	7.52	5.1
MW-164	04/02/2014 08:57	1.54	-301	6.79	NM	1.00414	7.50	5.1
MW-164	04/02/2014 08:59	1.54	-302	6.79	NM	1.02469	7.47	5.1
MW-164	04/02/2014 09:01	1.54	-296	6.8	NM	1.03757	7.45	5.4
MW-164	04/02/2014 09:02	1.54	-296	6.80	0.08	1.561	7.45	5.38
MW-164	04/02/2014 09:50	5.69	-298	6.86	0.07	1.472	8.40	16.00
MW-164	04/03/2014 09:40	3.97	24	6.93	0.07	1.431	9.32	14.70
MW-164	12/11/2014 09:16	1.54	-96	6.94	0.05	1.050	9.67	1.49
MW-164	12/11/2014 09:58	1.59	-203	6.91	0.08	1.586	14.42	123.70
MW-164	12/12/2014 09:08	0.20	-333	6.81	0.09	1.807	14.71	42.20
MW-164	06/26/2015 10:46	2.59	-45	6.74	0.1165	0.0022	23.2	6.4
MW-164	06/26/2015 10:49	1.48	-87	6.8	0.1639	0.0031	18.34	2.5
MW-164	06/26/2015 10:50	0.780	-90.020	6.180	NM	1655.530	11.260	9.440
MW-164	06/26/2015 10:51	0.73	-106	6.8	0.1671	0.0032	18.74	3.2
MW-164	06/26/2015 10:52	0.680	-88.090	6.180	NM	1665.030	11.250	9.440
MW-164	06/26/2015 10:53	0.49	-118	6.82	0.1665	0.0032	18.7	3.8
MW-164	06/26/2015 10:55	0.620	-87.190	6.180	NM	1669.110	11.270	9.610
MW-164	06/26/2015 10:56	0.38	-125	6.84	0.1701	0.0032	18.4	4.6
MW-164	06/26/2015 10:58	0.31	-129	6.84	0.1736	0.0033	18.29	16.5
MW-164	06/26/2015 11:00	0.16	-133	6.87	0.1729	0.0033	18.36	4
MW-164	06/26/2015 11:03	0.08	-136	6.88	0.1755	0.0033	18.22	5.5
MW-164	06/26/2015 11:05	0.05	-139	6.89	0.1770	0.0033	18.07	3.3
MW-164	06/26/2015 11:07	0.01	-142	6.9	0.1780	0.0034	17.95	3.6
MW-164	06/26/2015 11:10	-0.01	-145	6.9	0.1749	0.0033	18.27	2.7
MW-164	06/26/2015 11:12	-0.01	-146	6.9	0.1724	0.0033	18.78	3.5
MW-164	06/26/2015 11:14	-0.01	-148	6.9	0.1693	0.0032	18.67	2.9
MW-164	06/26/2015 11:17	-0.04	-149	6.91	0.1741	0.0033	18.05	4.1
MW-164	06/26/2015 11:19	-0.08	-151	6.9	0.1788	0.0034	17.85	2.2
MW-164	06/26/2015 11:21	-0.1	-152	6.9	0.1745	0.0033	17.87	3.4
MW-164	06/26/2015 11:24	-0.12	-154	6.9	0.1758	0.0033	17.95	2.6
MW-164	06/26/2015 11:26	-0.11	-156	6.9	0.1662	0.0032	18.59	2.2
MW-164	06/26/2015 11:29	-0.1	-157	6.9	0.1615	0.0031	18.89	3.1
MW-164	06/26/2015 11:31	-0.07	-157	6.89	0.1546	0.0029	19.54	3.5
MW-164	06/26/2015 11:33	-0.05	-157	6.89	0.1508	0.0029	19.83	4.2
MW-164	06/26/2015 11:36	-0.03	-158	6.89	0.1521	0.0029	19.66	4.1
MW-164	06/26/2015 12:32	2.03	-85	6.73	0.23	4.214	14.17	29.2
MW-164	06/26/2015 12:50	1.14	-104	6.77	0.26	4.841	13.61	49.1
MW-164	03/15/2016 10:50	0.780	-90.020	6.180	NM	1655.530	11.260	9.440
MW-164	03/15/2016 10:52	0.680	-88.090	6.180	NM	1665.030	11.250	9.440
MW-164	03/15/2016 10:55	0.620	-87.190	6.180	NM	1669.110	11.270	9.610
MW-164	03/15/2016 10:58	0.590	-86.590	6.170	NM	1678.550	11.220	9.310
MW-164	03/15/2016 11:00	0.600	-86.210	6.180	NM	1677.150	11.300	9.280
MW-164	03/16/2016 11:18	0.93	-159	6.62	0.05	0.972	10.34	10.10
MW-164	03/16/2016 11:37	1.43	-153	6.22	0.09	1.711	11.72	10.70
MW-164	08/31/2016 11:28	0.330	-123.650	6.820	NM	5641.850	25.820	4.620
MW-164	08/31/2016 11:31	0.330	-124.420	6.820	NM	5564.930	25.910	5.100
MW-164	08/31/2016 11:33	0.330	-125.060	6.820	NM	5574.540	25.910	7.310
MW-164	08/31/2016 11:35	0.330	-125.750	6.810	NM	5565.780	25.990	8.080
MW-164	08/31/2016 11:38	0.340	-126.300	6.810	NM	5524.760	26.000	9.180

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-164	09/01/2016 10:29	-0.12	-99	6.81	0.33	5.963	16.15	11.00
MW-164	09/01/2016 12:24	1.36	-142	7.48	0.34	6.185	18.36	8.80
MW-164	03/27/2017 10:27	4.96	295	7.25	0.0510	0.0104	8.38	5.8
MW-164	03/27/2017 10:30	4.68	280	7.21	0.0504	0.0102	8.35	6
MW-164	03/27/2017 10:32	4.48	265	7.17	0.0494	0.0101	8.39	9.9
MW-164	03/27/2017 10:35	4.56	251	7.14	0.0479	0.0098	8.46	7.5
MW-164	03/27/2017 10:37	4.44	235	7.12	0.0477	0.0097	8.48	5.7
MW-164	03/27/2017 10:39	4.45	221	7.1	0.0476	0.0097	8.51	6.3
MW-164	03/27/2017 10:42	4.44	209	7.09	0.0477	0.0097	8.5	18.9
MW-164	03/27/2017 10:44	4.45	200	7.08	0.0476	0.0097	8.57	5.2
MW-164	03/27/2017 10:47	4.45	193	7.07	0.0477	0.0097	8.57	5.5
MW-164	03/27/2017 10:49	4.49	188	7.06	0.0478	0.0097	8.52	5.8
MW-164	03/27/2017 10:51	4.49	183	7.06	0.0477	0.0097	8.6	5.4
MW-164	03/28/2017 10:26	9.22	181	6.36	0.05	1.048	8.68	1.20
MW-164	03/28/2017 11:33	8.02	143	7.46	0.06	1.149	8.52	21.60
MW-164	06/11/2018 08:22	3.83	-61	6.59	0.0485	0.9751	16.05	8.7
MW-164	06/11/2018 08:24	2.12	-95	6.58	0.0465	0.9383	14.83	5.2
MW-164	06/11/2018 08:27	1.71	-105	6.54	0.0458	0.9245	14.71	6.9
MW-164	06/11/2018 08:29	1.64	-110	6.54	0.0452	0.9114	14.66	6.3
MW-164	06/11/2018 08:31	1.67	-112	6.55	0.0444	0.8964	14.63	4.7
MW-164	06/11/2018 08:34	1.67	-112	6.56	0.0436	0.8811	14.61	5.8
MW-164	06/11/2018 08:36	1.74	-111	6.57	0.0428	0.8661	14.61	4.8
MW-164	06/11/2018 08:39	1.76	-110	6.58	0.0423	0.8555	14.61	4.6
MW-164	06/11/2018 08:41	1.8	-108	6.58	0.0420	0.8502	14.65	4.4
MW-164	06/12/2018 08:41	1.80	-108.00	6.58	0.04	0.847	14.83	4.36
MW-164	06/12/2018 09:17	2.95	-168.00	6.67	0.06	1.205	13.28	41.00
MW-164	06/12/2018 12:20	1.35	-95.00	6.76	0.05	1.098	14.96	12.80
MW-164	10/04/2018 09:40	2.10	81.30	6.91	0.42	0.843	20.92	2.10
MW-164	10/04/2018 11:00	1.51	83.60	6.92	0.42	0.855	20.36	1.80
MW-164	10/04/2018 11:15	3.91	90.10	7.01	0.43	0.832	20.81	2.10
MW-164	12/11/2018 13:40	0.27	40.70	7.00	0.76	1.505	13.09	1.20
MW-164	12/11/2018 14:20	0.27	-8.60	6.89	0.78	1.539	12.97	5.40
MW-164	12/11/2018 14:30	0.27	-14.20	6.86	0.80	1.574	12.88	5.70
MW-164	03/21/2019 09:25	1.24	78.2	7.06	NM	0.734	8.03	2.8
MW-164	03/21/2019 10:51	4.31	-125.4	7.62	0.54	1.077	9.74	3.5
MW-164	06/20/2019 09:30	3.05	-83.7	7.08	NM	1.254	15.7	5.9
MW-164	06/20/2019 11:02	3.84	-37	7.07	0.39	0.794	16.52	5.9
MW-164	06/20/2019 11:15	3.55	-25.4	6.9	0.4	0.802	15.81	5.8
MW-164	09/04/2019 13:20	0.88	-54.9	7.66	NM	2.684	21.19	1.7
MW-164	09/04/2019 13:25	0.46	-62.8	7.59	NM	2.647	20.85	1.5
MW-164	09/04/2019 13:30	0.2	-70.4	7.57	NM	2.636	21.49	1.4
MW-164	09/04/2019 13:35	0.18	-73.7	7.56	NM	2.599	21.75	1.4
MW-164	09/04/2019 13:40	0.17	-74.9	7.52	NM	2.455	21.88	1.4
MW-164	09/04/2019 13:45	0.21	-58.8	7.32	NM	2.194	22.1	0.8
MW-164	09/04/2019 13:50	0.27	-47	7.24	NM	2.202	22.05	0.6
MW-164	09/04/2019 13:55	0.27	-47.5	7.27	NM	2.282	21.75	0.4
MW-164	09/04/2019 14:00	0.26	-50.7	7.28	NM	2.346	21.61	0.4
MW-164	09/04/2019 14:05	0.24	-62.4	7.37	NM	2.408	20.95	0.9
MW-164	09/04/2019 15:05	5.64	-47.7	7.75	1.47	2.819	21.17	294.3
MW-164	09/04/2019 15:20	6.59	-47.6	8.05	1.38	2.647	18.96	345.6
MW-164	12/10/2019 12:05	3.14	111.3	7.05	NM	0.392	13.39	0.6
MW-164	12/10/2019 12:10	4.42	115.2	7.02	NM	0.392	13.23	1.4
MW-164	12/10/2019 12:15	4.55	124.2	7.01	NM	0.392	13.01	0.7
MW-164	12/10/2019 12:20	4.07	129.1	7.01	NM	0.391	12.96	0.4
MW-164	12/10/2019 12:25	5	136.5	7.37	NM	0.387	12.85	5.7
MW-164	12/10/2019 12:30	4.01	104.1	7.03	NM	0.385	12.7	0.5
MW-164	12/10/2019 12:35	3.23	10.7	6.99	NM	0.387	12.6	0.3
MW-164	12/10/2019 12:40	2.69	-30.8	6.94	NM	0.399	12.55	0.2
MW-164	12/10/2019 12:45	2.18	-33	6.93	NM	0.409	12.71	1.2
MW-164	12/10/2019 12:50	1.79	-36.1	6.92	NM	0.417	12.77	0.3
MW-164	12/10/2019 14:15	1.25	-86.7	7.12	0.14	0.288	14.16	1.6
MW-164	12/10/2019 14:25	0.87	-78.9	7.04	0.24	0.486	14.17	4.2

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-164	03/19/2020 09:50	2.75	111.6	6.93	NM	0.842	9.24	1.7
MW-164	03/19/2020 11:10	2.66	132.9	7.03	0.43	0.881	9.34	1.1
MW-164	06/22/2020 09:05	2.14	-155	7.18	0.56	1.123	17.55	1.1
MW-164	06/22/2020 09:10	1.12	-160.8	6.67	0.55	1.091	16.25	0.1
MW-164	06/22/2020 09:15	3.08	-175.1	6.69	0.54	1.088	16.19	0
MW-164	06/22/2020 09:20	6.83	-182.4	6.72	0.54	1.084	16.27	0.2
MW-164	06/22/2020 09:25	10.79	-192.4	6.75	0.54	1.079	16.32	0
MW-164	06/22/2020 09:30	12.71	-196.8	6.76	0.54	1.075	0.54	0.1
MW-164	06/22/2020 09:35	8.74	-200.2	6.76	0.53	1.067	16.44	0.1
MW-164	06/22/2020 09:40	11.78	-205.1	6.75	0.52	1.042	16.53	0.1
MW-164	06/22/2020 09:45	13.15	-200.1	6.74	0.51	1.029	16.68	0
MW-164	06/22/2020 09:50	13.5	-194.9	6.75	0.51	1.033	17.02	0
MW-164	06/22/2020 10:50	2.71	-142.8	7.14	0.56	1.134	20.01	2.7
MW-164	06/22/2020 11:00	2.25	-149	6.74	0.55	1.095	17.66	0
MW-164	12/18/2020 11:05	6.82	70.4	7.22	0.44	0.886	8.63	1.6
MW-164	12/18/2020 11:10	2.81	99.8	7.05	0.43	0.872	9.27	1.4
MW-164	12/18/2020 11:15	2.75	101.5	7.05	0.43	0.872	9.31	1.4
MW-164	12/18/2020 11:20	2.12	117.7	7.03	0.43	0.868	9.68	1.5
MW-164	12/18/2020 11:25	2.17	118.3	7.03	0.43	0.868	9.71	1.2
MW-164	12/18/2020 11:30	2.04	123.5	7.02	0.43	0.865	10.01	1.1
MW-164	12/18/2020 11:35	2	126.3	7.03	0.43	0.867	9.99	1.2
MW-164	12/18/2020 11:40	1.91	128.5	7.02	0.43	0.866	9.94	1.1
MW-164	12/18/2020 11:45	1.99	128.6	7.02	0.43	0.866	9.93	1.1
MW-164	12/18/2020 13:00	7.75	26.1	7.17	0.45	0.912	10.8	1.3
MW-164	12/18/2020 13:10	5.93	-9.1	7.02	0.46	0.926	10.5	1.1
MW-164	03/09/2021 08:50	10.69	189.1	7.1	0.34	0.717	9.08	7.8
MW-164	03/09/2021 08:55	7.59	184.9	6.79	0.32	0.661	8.82	7.7
MW-164	03/09/2021 09:00	5.76	175.1	6.52	0.32	0.646	8.55	5.2
MW-164	03/09/2021 09:05	5.66	164.5	6.51	0.32	0.645	8.44	5.8
MW-164	03/09/2021 09:10	5.59	159	6.57	0.32	0.644	8.42	2.1
MW-164	03/09/2021 09:15	5.55	155.4	6.58	0.31	0.644	8.41	1.5
MW-164	03/09/2021 09:20	5.53	108.8	6.82	0.31	0.641	8.38	0.1
MW-164	03/09/2021 09:25	5.48	99.4	6.82	0.31	0.641	8.4	0.1
MW-164	03/09/2021 09:30	5.41	84.5	6.91	0.31	0.645	8.5	0.7
MW-164	03/09/2021 09:35	5.44	81.8	6.93	0.31	0.644	8.42	0.7
MW-164	03/09/2021 10:31	8.06	-118.1	7.16	0.36	0.731	10.45	0.7
MW-164	03/09/2021 10:50	8.07	-133.1	7.14	0.51	1.031	9.6	58
MW-164	05/26/2021 10:40	2.62	-104.4	7.34	0.6	1.199	20.34	31.5
MW-164	05/26/2021 10:45	0.7	-119.1	7.03	0.59	1.178	18.03	15.4
MW-164	05/26/2021 10:50	0.55	-129.7	6.97	0.59	1.173	18.55	11.3
MW-164	05/26/2021 10:55	0.59	-138.5	6.97	0.58	1.169	18.85	4.6
MW-164	05/26/2021 11:00	0.68	-144.1	6.95	0.58	1.169	19.9	3.9
MW-164	05/26/2021 11:05	0.8	-151.5	6.98	0.58	1.17	20.54	2.5
MW-164	05/26/2021 11:10	0.93	-158.6	6.95	0.58	1.17	21.5	2.1
MW-164	05/26/2021 11:15	1.04	-159.4	6.95	0.58	1.169	22.34	2.5
MW-164	05/26/2021 11:20	1.06	-161.1	6.94	0.58	1.169	22.38	2.4
MW-164	05/26/2021 11:25	1.1	-161.3	6.94	0.58	1.17	22.42	2.4
MW-164	08/27/2021 09:15	-0.18	137.3	7.53	0.02	0.042	26.69	0
MW-164	08/27/2021 09:20	-0.01	105.4	6	0.24	0.5	21.54	2.6
MW-164	08/27/2021 09:25	-0.03	62.4	5.92	0.23	0.483	21.21	2.4
MW-164	08/27/2021 09:30	-0.04	47.9	6.03	0.22	0.46	21.17	2.9
MW-164	08/27/2021 09:35	-0.06	42.1	6.13	0.22	0.448	21.19	2.6
MW-164	08/27/2021 09:40	-0.05	32.5	6.22	0.21	0.433	21.38	2.6
MW-164	08/27/2021 09:45	-0.06	9.6	6.25	0.2	0.422	21.56	2.5
MW-164	08/27/2021 09:50	-0.06	-27	6.26	0.2	0.417	21.75	2
MW-164	08/27/2021 09:55	-0.07	-53.3	6.27	0.2	0.42	21.88	1.8
MW-164	08/27/2021 10:00	-0.06	-67.8	6.28	0.21	0.428	22.02	2
MW-164	10/21/2021 13:00	13.83	-45.3	7.91	0	0.011	28.48	19.3
MW-164	10/21/2021 13:05	2	-105.4	7.08	0.36	0.734	21.45	-0.3
MW-164	10/21/2021 13:10	1.04	-133.2	7.07	0.36	0.734	21.02	-0.3
MW-164	10/21/2021 13:15	1.06	-142.2	7.06	0.35	0.726	21.13	0
MW-164	10/21/2021 13:20	1.17	-143.8	7.03	0.34	0.639	21.19	1.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-164	10/21/2021 13:25	1.7	-129.8	6.99	0.3	0.626	21.19	4.4
MW-164	10/21/2021 13:30	1.77	-127.8	6.98	0.3	0.622	21.19	4.5
MW-164	10/21/2021 13:35	1.77	-126.9	6.95	0.28	0.568	21.22	3.6
MW-164	10/21/2021 13:40	1.73	-127.3	6.91	0.27	0.566	21.24	3.4
MW-164	02/15/2022 11:15	6.22	27.8	6.69	0.32	0.658	8.47	-6.1
MW-164	02/15/2022 11:20	5.93	31.1	6.67	0.32	0.658	8.54	-4
MW-164	02/15/2022 11:25	6.21	34.5	6.66	0.32	0.658	8.53	-7.1
MW-164	02/15/2022 11:30	6.17	35.5	6.78	0.32	0.658	8.43	-5.1
MW-164	02/15/2022 11:35	6.09	36.7	6.87	0.32	0.56	8.34	-7.4
MW-164	02/15/2022 11:40	5.87	39.6	6.87	0.32	0.66	8.33	2
MW-164	02/15/2022 11:45	5.59	30.5	6.85	0.32	0.663	8.15	9.6
MW-164	02/15/2022 11:50	5.55	28.6	6.85	0.32	0.664	8.14	15
MW-164	02/15/2022 11:55	5.28	7	6.82	0.33	0.67	8.06	15.2
MW-164	02/15/2022 12:00	5.23	5.6	6.81	0.33	0.669	8.09	16.2
MW-164	05/03/2022 11:40	0.8	-145.8	7.13	0.52	1.05	13.51	0
MW-164	05/03/2022 11:45	0.61	-149.1	7	0.52	1.04	13.54	0
MW-164	05/03/2022 11:50	0.56	-150.2	7	0.52	1.037	13.58	0
MW-164	05/03/2022 11:55	0.28	-182.6	7	0.5	0.997	13.29	0
MW-164	05/03/2022 12:00	0.28	-183.3	7	0.49	0.991	13.25	0
MW-164	05/03/2022 12:05	0.29	-182.3	6.99	0.49	0.987	13.33	0
MW-164	05/03/2022 12:10	0.3	-183.1	6.99	0.48	0.972	13.44	0
MW-165R	04/26/2017 10:35	7.42	13.00	6.65	1.19	2.305	11.43	1.40
MW-165R	04/26/2017 10:55	7.01	15.20	6.73	1.27	2.445	11.99	11.40
MW-165R	04/26/2017 11:05	8.33	15.10	6.68	1.19	2.514	12.02	17.30
MW-165R	03/09/2018 09:15	65.31	4.70	6.95	0.88	1.733	8.45	32.40
MW-165R	03/09/2018 09:55	5.63	-56.10	6.64	0.86	1.700	8.39	12.40
MW-165R	03/09/2018 10:15	5.41	-39.60	6.72	0.87	1.702	8.42	24.30
MW-165R	06/12/2018 09:44	1.35	-128.00	6.59	0.15	2.885	16.88	34.64
MW-165R	06/12/2018 10:45	3.48	-119.00	6.62	0.16	3.052	14.44	19.70
MW-165R	06/12/2018 12:40	1.42	-136.00	6.54	0.17	3.294	15.38	17.90
MW-165R	09/05/2018 13:10	1.37	-114.80	6.67	2.20	4.168	26.8	32.70
MW-165R	09/05/2018 14:10	0.94	-107.80	6.68	2.31	4.351	26.12	18.80
MW-165R	09/05/2018 14:20	1.48	-108.40	6.85	2.25	4.230	21.36	18.50
MW-165R	12/11/2018 11:00	0.34	-93.00	6.77	2.94	5.404	14.35	26.90
MW-165R	12/11/2018 11:08	0.35	-94.40	6.77	2.95	5.429	14.41	94.00
MW-165R	12/11/2018 11:15	0.35	-98.50	6.77	3.00	5.511	14.41	116.20
MW-165R	03/21/2019 13:25	0.74	-105.3	6.86	NM	3.686	8.84	2.3
MW-165R	03/21/2019 13:51	0.39	-104.2	6.86	1.9	3.604	8.91	16.3
MW-165R	06/04/2019 10:05	1.77	-123.6	6.89	NM	4.278	13.76	5.5
MW-165R	06/04/2019 10:10	1.21	-119.7	6.76	NM	4.689	13.46	5.7
MW-165R	06/04/2019 10:15	0.78	-114.4	6.74	NM	4.585	13.69	2.3
MW-165R	06/04/2019 10:20	0.7	-112.7	6.76	NM	4.496	13.73	1.9
MW-165R	06/04/2019 10:25	0.67	-107.4	6.75	NM	4.403	13.94	5.6
MW-165R	06/04/2019 10:30	0.65	-105	6.77	NM	4.349	14.15	8.2
MW-165R	06/04/2019 10:35	0.64	-104.4	6.76	NM	4.33	14.33	7
MW-165R	06/04/2019 10:40	0.64	-103.5	6.76	NM	4.339	14.33	5.4
MW-165R	06/04/2019 10:45	0.63	-103.3	6.73	NM	4.358	14.21	4.1
MW-165R	06/04/2019 10:50	0.62	-102.9	6.72	NM	4.385	14.11	3.7
MW-165R	06/04/2019 13:45	0.62	-102.9	6.72	NM	4.385	14.11	3.7
MW-165R	06/04/2019 14:05	0.58	-105.4	6.77	2.41	4.5	12.26	0.7
MW-165R	06/04/2019 14:20	0.6	-105.3	6.76	2.43	4.517	12.57	2
MW-165R	09/04/2019 13:20	3.04	-132.5	6.63	NM	5.507	23.76	3.1
MW-165R	09/04/2019 13:40	5.31	-131.2	6.99	2.76	5.146	22.69	29.6
MW-165R	09/04/2019 13:55	4.56	-117.8	6.87	2.65	4.931	21.83	39.8
MW-165R	12/09/2019 12:40	11.54	24.5	7.3	NM	1.578	13.17	3.7
MW-165R	12/09/2019 12:45	2.29	-89.2	6.8	NM	2.786	13.5	3.7
MW-165R	12/09/2019 12:50	1.19	-88.5	6.74	NM	2.764	14.11	4.7
MW-165R	12/09/2019 12:55	0.36	-95.1	6.73	NM	2.761	14.34	3.2
MW-165R	12/09/2019 13:00	0.35	-100.1	6.7	NM	2.725	14.39	0.8
MW-165R	12/09/2019 13:05	0.24	-102.5	6.7	NM	2.705	14.52	0.4
MW-165R	12/09/2019 13:10	0.25	-102.5	6.7	NM	2.704	14.62	0.6
MW-165R	12/09/2019 13:15	0.25	-102.8	6.7	NM	2.709	14.69	0.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-165R	12/09/2019 13:20	0.23	-107.9	6.7	NM	2.752	14.67	1.6
MW-165R	12/09/2019 13:25	0.31	-105.8	6.71	NM	2.76	15.07	0.7
MW-165R	12/09/2019 14:00	2.63	-107.5	0.76	1.42	2.724	14.55	5.9
MW-165R	12/09/2019 14:10	3.61	-104.9	6.8	1.48	2.824	14.83	11.7
MW-165R	03/20/2020 08:40	9.48	-85.5	7.14	2.02	3.811	10.03	35.3
MW-165R	06/02/2020 09:05	0.28	-103.6	6.64	NM	4.012	16.98	10.8
MW-165R	06/02/2020 09:55	2.65	-97.6	6.35	2.29	4.282	15.87	11.3
MW-165R	09/01/2020 10:20	1.45	-136.8	6.62	4.4	7.912	20.81	11.2
MW-165R	09/01/2020 10:50	1.21	-134.8	6.61	4.23	7.633	20.96	45.7
MW-165R	09/01/2020 11:00	1.72	-128.9	6.63	4.31	7.777	20.9	42.1
MW-165R	12/22/2020 08:50	2.08	-103.9	6.62	3.07	5.642	12.67	19.4
MW-165R	12/22/2020 08:55	1.4	-101.1	6.57	3.04	5.594	12.37	18.5
MW-165R	12/22/2020 09:00	1.07	-99.6	6.57	2.95	5.436	11.06	17.5
MW-165R	12/22/2020 09:05	1.04	-94.9	6.58	2.81	5.205	9.88	16.8
MW-165R	12/22/2020 09:10	0.95	-92.2	6.59	2.76	5.11	9.59	18.9
MW-165R	12/22/2020 09:15	0.85	-90.3	6.6	2.71	5.034	9.58	20
MW-165R	12/22/2020 09:20	0.79	-88.8	6.61	2.66	4.941	9.39	20.8
MW-165R	12/22/2020 09:25	0.74	-88.2	6.62	2.62	4.868	9.1	19.8
MW-165R	12/22/2020 09:30	0.7	-87.3	6.62	2.58	4.794	9.06	22.1
MW-165R	12/22/2020 09:35	0.69	-87.2	6.63	2.55	4.752	9.11	18.2
MW-165R	12/22/2020 10:15	2.9	-90.8	6.69	2.67	4.942	14.38	3
MW-165R	12/22/2020 10:30	3.67	-102.2	6.74	2.66	4.921	14.03	9.4
MW-165R	12/23/2020 12:15	5.83	-35.4	5.53	2.64	4.891	10.98	35.9
MW-165R	12/23/2020 12:20	3.64	-42.2	5.61	2.66	4.93	11.41	28.7
MW-165R	12/23/2020 12:25	3.26	-46.3	5.72	2.67	4.943	11.96	23.8
MW-165R	12/23/2020 12:30	3.33	-46.8	5.72	2.67	4.937	12	22.8
MW-165R	12/23/2020 12:35	3.36	-41.2	5.91	2.66	4.931	12.56	22.3
MW-165R	12/23/2020 12:40	3.25	-38.1	5.99	2.64	4.903	10.97	20.6
MW-165R	12/23/2020 12:45	3.26	-40.9	6.15	2.65	4.916	12.26	16.7
MW-165R	12/23/2020 12:50	3.22	-40.8	6.22	2.65	4.907	12.36	15.2
MW-165R	12/23/2020 12:55	4.01	-38.8	6.33	2.64	4.895	12.67	11.1
MW-165R	12/23/2020 13:00	3.35	-38	6.34	2.64	4.89	12.65	11.9
MW-165R	12/23/2020 13:20	3.03	-34.2	6.36	2.6	4.889	12.35	10.4
MW-165R	12/23/2020 13:30	4.21	-44.7	6.6	2.33	4.825	12.09	30.6
MW-165R	03/11/2021 11:40	1.14	-61.7	6.7	2.34	4.37	13.24	1.2
MW-165R	03/11/2021 11:45	0.55	-73	6.7	2.33	4.345	12.5	0
MW-165R	03/11/2021 11:50	0.52	-77.3	6.7	2.32	4.335	12.57	0
MW-165R	03/11/2021 11:55	0.47	-81.3	6.7	2.29	4.287	12.52	0
MW-165R	03/11/2021 12:00	0.44	-84.6	6.7	2.24	4.203	12.44	0.9
MW-165R	03/11/2021 12:05	0.44	-85.8	6.7	2.24	4.19	12.42	0.7
MW-165R	03/11/2021 12:10	0.45	-82.9	6.7	2.42	4.18	12.46	0.7
MW-165R	03/11/2021 12:45	2.1	-84.9	6.75	2.36	4.397	12.24	2.5
MW-165R	03/11/2021 13:00	2.1	-102	6.8	2.44	4.539	12.54	123.4
MW-165R	05/26/2021 12:30	1.62	-106.3	6.74	2.41	4.515	22.09	6.6
MW-165R	05/26/2021 12:35	1.85	-101.3	6.74	2.44	4.564	23.65	5.9
MW-165R	05/26/2021 12:40	1.86	-102.3	6.74	2.44	4.582	23.73	5.8
MW-165R	05/26/2021 12:45	1.8	-101.8	6.76	2.46	4.609	23.7	5.7
MW-165R	08/03/2021 13:25	3.91	-113.8	6.92	11.9	4.319	22.79	40.8
MW-165R	08/03/2021 13:30	2.72	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 13:35	2.72	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 13:40	2.72	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 13:45	272	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 13:50	2.72	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 13:55	2.72	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 14:00	2.72	-115.9	6.72	2.29	4.301	22.44	39.4
MW-165R	08/03/2021 14:05	2.59	-113.7	6.69	2.34	4.378	21.96	35.7
MW-165R	02/15/2022 12:40	11.53	45.6	7.05	0	0.003	8.29	-0.3
MW-165R	02/15/2022 12:45	11.53	45.6	7.05	0	0.003	8.29	-0.3
MW-165R	02/15/2022 12:50	3.2	-108	6.55	1.81	3.438	7.26	37.1
MW-165R	02/15/2022 12:55	3.65	-107.7	6.53	1.81	3.443	6.9	47.4
MW-165R	02/15/2022 13:00	2.54	-107	6.52	1.81	3.444	6.86	44.4
MW-165R	02/15/2022 13:05	2.78	-106	6.52	1.81	3.45	6.75	19.24

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-165R	02/15/2022 13:10	2.92	-102.7	6.52	1.81	3.447	6.79	4.7
MW-165R	02/15/2022 13:15	1.96	-104.9	6.52	1.81	3.452	6.8	4.3
MW-165R	02/15/2022 13:20	1.52	-104.2	6.51	1.82	3.46	6.82	44.8
MW-165R	02/15/2022 13:25	1.44	-103.7	6.51	1.82	3.464	6.83	45.4
MW-166	03/19/2012 09:46	4.76	-20	6.57	0.08	1.5631	12.57	1.5
MW-166	03/19/2012 09:49	6.24	-19	6.58	0.08	1.55253	12.88	1.4
MW-166	03/19/2012 09:52	5.78	-21	6.57	0.08	1.55289	12.87	2.1
MW-166	03/19/2012 09:54	6.62	-22	6.56	0.08	1.55233	12.91	1.7
MW-166	03/19/2012 09:57	5.9	-24	6.56	0.08	1.5528	12.96	1.5
MW-166	03/19/2012 09:59	4.74	-25	6.56	0.08	1.54973	13.02	1.7
MW-166	03/19/2012 10:02	3.93	-26	6.55	0.08	1.55109	13.04	1.8
MW-166	03/19/2012 10:04	3.35	-28	6.55	0.08	1.55095	13.17	1.8
MW-166	03/19/2012 10:07	3.18	-29	6.55	0.08	1.55191	13.17	1.5
MW-166	03/19/2012 10:09	3.04	-30	6.55	0.08	1.55269	13.28	1.8
MW-166	03/19/2012 10:12	2.94	-31	6.55	0.08	1.55425	13.27	1.7
MW-166	03/19/2012 10:15	2.74	-32	6.55	0.08	1.54006	13.67	3
MW-166	03/19/2012 10:17	2.7	-32	6.55	0.08	1.55194	13.49	1.5
MW-166	03/19/2012 10:20	2.6	-33	6.56	0.08	1.54754	13.65	1.6
MW-166	03/19/2012 10:22	2.56	-34	6.56	0.08	1.55008	13.62	1.4
MW-166	03/19/2012 10:25	2.49	-35	6.57	0.08	1.54732	13.78	1.5
MW-166	03/19/2012 10:27	2.48	-36	6.57	0.08	1.55385	13.6	1.6
MW-166	03/19/2012 10:28	2.48	-36	6.57	0.08	1.554	13.6	1.607
MW-166	03/19/2012 11:05	3.62	-35	6.68	0.09	1.753	12.91	15.1
MW-166	03/20/2012 10:00	0.32	-77	6.19	0.1	1.89	12	39.7
MW-166	08/13/2012 13:16	3.17	-134	8.23	0.09	1.844	27.07	4.2
MW-166	08/13/2012 13:18	4.62	-134	8.19	0.09	1.845	25.05	4.7
MW-166	08/13/2012 13:20	4.35	-137	8.19	0.09	1.843	24.18	5
MW-166	08/13/2012 13:23	4.03	-138	8.13	0.09	1.832	24.18	6.2
MW-166	08/13/2012 13:25	4.14	-140	8.2	0.09	1.828	24.14	6.6
MW-166	08/13/2012 13:27	4.2	-141	8.3	0.09	1.823	24.21	6.7
MW-166	08/13/2012 13:29	4.08	-143	8.4	0.09	1.822	24.11	7.3
MW-166	08/13/2012 13:30	4.08	-143	8.40	0.09	1.822	24.11	7.34
MW-166	08/13/2012 14:20	8.07	-152	9.87	0.12	2.369	18.84	11.20
MW-166	08/14/2012 12:10	5.48	-119	6.39	0.10	2.320	18.62	22.70
MW-166	02/21/2013 15:17	6.84	-140	6.4	0.16	3.00805	9.42	1.4
MW-166	02/21/2013 15:19	1.8	-147	6.22	0.17	3.26056	9.54	0.9
MW-166	02/21/2013 15:22	1.07	-153	6.21	0.18	3.41649	9.79	0.7
MW-166	02/21/2013 15:24	0.8	-161	6.21	0.18	3.43278	9.67	0.7
MW-166	02/21/2013 15:27	0.69	-167	6.22	0.18	3.45115	9.59	0.7
MW-166	02/21/2013 15:30	0.65	-172	6.22	0.18	3.4681	9.59	0.7
MW-166	02/21/2013 15:32	0.61	-177	6.22	0.18	3.42807	9.71	0.8
MW-166	02/21/2013 15:35	0.5	-182	6.22	0.18	3.39269	9.52	0.7
MW-166	02/21/2013 15:38	0.48	-187	6.22	0.18	3.38242	9.35	0.6
MW-166	02/21/2013 15:40	0.44	-190	6.22	0.18	3.37292	9.64	0.7
MW-166	02/21/2013 15:43	0.46	-194	6.22	0.17	3.32667	9.65	0.8
MW-166	02/21/2013 15:46	0.48	-197	6.22	0.17	3.2727	9.68	0.7
MW-166	02/21/2013 15:48	0.44	-201	6.22	0.17	3.25387	9.5	0.8
MW-166	02/21/2013 15:49	0.44	-201	6.22	0.17	3254.000	9.61	0.76
MW-166	02/21/2013 16:17	3.33	-155	6.23	0.17	3.196	12.48	9.90
MW-166	02/22/2013 12:10	0.51	-252	6.29	0.15	2872.000	12.33	9.10
MW-166	09/19/2013 13:21	1.47	-320	6.25	0.07	1.42919	26.09	17.8
MW-166	09/19/2013 13:24	1.24	-312	6.25	0.09	1.73245	22.52	4.2
MW-166	09/19/2013 13:26	1.1	-293	6.26	0.1	1.89109	22.17	3.6
MW-166	09/19/2013 13:29	0.92	-276	6.27	0.1	1.97616	22.07	3.7
MW-166	09/19/2013 13:31	0.77	-257	6.28	0.1	2.00862	22.29	4.2
MW-166	09/19/2013 13:34	0.73	-245	6.28	0.11	2.04444	22.38	4.4
MW-166	09/19/2013 13:36	0.7	-235	6.28	0.11	2.0402	22.5	3.5
MW-166	09/19/2013 13:39	0.65	-231	6.29	0.11	2.06587	22.35	3.6
MW-166	09/19/2013 13:41	0.63	-229	6.29	0.11	2.08712	22.27	3.4
MW-166	09/19/2013 13:44	0.62	-228	6.29	0.11	2.10108	22.26	3.4
MW-166	04/02/2014 10:11	2.87	-307	6.15	NM	0.76985	9.64	3
MW-166	04/02/2014 10:12	2.27	-332	6.17	NM	0.83716	9.59	2.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-166	04/02/2014 10:14	2.13	-353	6.19	NM	0.90575	9.48	2.3
MW-166	04/02/2014 10:17	1.82	-362	6.2	NM	0.93848	9.39	2.2
MW-166	04/02/2014 10:23	1.58	-379	6.22	NM	1.02119	9.40	2
MW-166	04/02/2014 10:25	1.5	-374	6.23	NM	1.03156	9.40	2.1
MW-166	04/02/2014 10:28	1.3	-371	6.23	NM	1.03644	9.42	2.1
MW-166	04/02/2014 10:31	1.27	-366	6.24	NM	1.04348	9.24	2.3
MW-166	04/02/2014 10:33	1.28	-366	6.24	0.08	1.510	8.98	2.09
MW-166	04/03/2014 11:30	10.33	93	6.74	0.24	9.434	15.42	233.00
MW-166	12/11/2014 11:31	0.02	-209	6.28	0.07	1.466	12.33	3.41
MW-166	12/11/2014 12:07	0.76	-103	6.32	0.11	2.210	16.45	205.70
MW-166	12/12/2014 10:17	0.23	-270	6.27	0.11	2.163	16.21	31.10
MW-166	07/13/2015 09:18	-0.02	-102	6.16	0.0743	0.0015	19.63	29.8
MW-166	07/13/2015 09:20	0.07	-102	6.15	0.0714	0.0014	20.78	33
MW-166	07/13/2015 09:21	0.14	-102	6.18	0.0832	0.0016	18.74	32.1
MW-166	07/13/2015 09:23	0.08	-103	6.17	0.0812	0.0016	18.39	33
MW-166	07/13/2015 09:24	0.03	-104	6.17	0.0743	0.0015	18.44	33.4
MW-166	07/13/2015 09:26	-0.01	-105	6.17	0.0718	0.0014	18.43	34.9
MW-166	07/13/2015 09:27	-0.04	-106	6.17	0.0703	0.0014	18.38	33.7
MW-166	07/13/2015 09:29	-0.07	-106	6.17	0.0692	0.0014	18.28	34.2
MW-166	07/13/2015 09:31	-0.09	-107	6.17	0.0674	0.0013	18.61	34.1
MW-166	07/13/2015 09:32	-0.12	-108	6.17	0.0658	0.0013	18.67	34.1
MW-166	07/13/2015 09:34	-0.15	-109	6.17	0.0653	0.0013	18.74	32.5
MW-166	07/13/2015 09:35	-0.14	-110	6.17	0.0636	0.0013	19.2	31.7
MW-166	07/13/2015 09:37	-0.13	-110	6.17	0.0620	0.0012	19.61	31.7
MW-166	07/13/2015 09:38	-0.1	-109	6.16	0.0616	0.0012	20.16	35
MW-166	07/13/2015 09:40	-0.03	-109	6.18	0.0639	0.0013	19.97	33.1
MW-166	07/13/2015 09:42	-0.11	-110	6.19	0.0661	0.0013	18.12	33.6
MW-166	07/13/2015 09:43	-0.18	-111	6.18	0.0835	0.0016	18.19	34.5
MW-166	07/13/2015 09:45	-0.22	-112	6.19	0.0898	0.0018	18.22	36.4
MW-166	07/13/2015 09:46	-0.26	-113	6.19	0.0890	0.0017	18.15	36.2
MW-166	07/13/2015 09:48	-0.28	-113	6.19	0.0859	0.0017	18.18	35.5
MW-166	07/13/2015 09:50	-0.29	-114	6.19	0.0925	0.0018	18.43	34.8
MW-166	07/13/2015 09:51	-0.31	-114	6.19	0.0743	0.0015	18.35	35.8
MW-166	07/13/2015 09:53	-0.33	-115	6.2	0.0704	0.0014	18.31	40.1
MW-166	07/13/2015 09:54	-0.34	-114	6.2	0.0708	0.0014	18.36	35
MW-166	07/13/2015 09:56	-0.35	-115	6.19	0.0751	0.0015	18.42	36.3
MW-166	07/13/2015 09:57	-0.36	-116	6.19	0.0873	0.0017	18.73	35.8
MW-166	07/13/2015 09:59	-0.36	-115	6.19	0.0570	0.0011	18.43	37.8
MW-166	07/13/2015 10:01	-0.38	-116	6.19	0.0626	0.0012	18.46	37.3
MW-166	07/13/2015 10:02	-0.37	-116	6.19	0.0789	0.0016	18.93	38.5
MW-166	07/13/2015 10:04	-0.37	-116	6.2	0.0571	0.0011	18.58	37.8
MW-166	07/13/2015 10:05	-0.39	-116	6.19	0.0655	0.0013	18.36	38.3
MW-166	07/13/2015 10:07	-0.39	-116	6.2	0.0787	0.0015	18.63	39.7
MW-166	07/14/2015 10:50	0.09	-78	6.16	0.25	4.634	14.3	36.7
MW-166	07/14/2015 11:25	2.48	-306	NM	0.1	1.929	13.49	17.7
MW-166	03/15/2016 08:46	2.010	-4.000	6.790	0.082	1.638	9.240	3.500
MW-166	03/15/2016 08:48	1.220	-14.000	6.760	0.085	1.683	9.450	2.800
MW-166	03/15/2016 08:51	1.190	-16.000	6.760	0.086	1.699	9.460	3.800
MW-166	03/15/2016 08:53	1.070	-17.000	6.750	0.087	1.718	9.480	3.000
MW-166	03/15/2016 08:55	1.000	-19.000	6.750	0.088	1.740	9.490	3.800
MW-166	03/15/2016 08:57	1.010	-19.000	6.750	0.089	1.760	9.490	3.500
MW-166	03/15/2016 08:59	1.030	-18.000	6.750	0.090	1.773	9.540	2.600
MW-166	03/15/2016 09:01	1.000	-19.000	6.740	0.090	1.784	9.600	2.400
MW-166	03/15/2016 09:04	0.900	-21.000	6.750	0.091	1.800	9.590	2.400
MW-166	03/15/2016 09:06	0.960	-20.000	6.750	0.092	1.812	9.600	2.500
MW-166	03/15/2016 09:08	1.060	-18.000	6.750	0.092	1.816	9.640	2.800
MW-166	03/15/2016 09:10	1.210	-15.000	6.750	0.092	1.820	9.660	2.400
MW-166	03/15/2016 09:12	1.330	-13.000	6.760	0.092	1.827	9.620	2.400
MW-166	03/15/2016 09:14	1.690	-8.000	6.770	0.092	1.826	9.600	2.100
MW-166	03/15/2016 09:17	2.130	-1.000	6.770	0.092	1.813	9.600	2.200
MW-166	03/15/2016 09:19	2.090	0.000000	6.780	0.092	1.817	9.670	2.200
MW-166	03/15/2016 09:21	2.110	0.000000	6.780	0.092	1.813	9.700	2.300

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-166	03/16/2016 10:03	4.31	-128	6.60	0.09	1.864	12.06	12.80
MW-166	03/16/2016 10:28	0.23	-210	6.13	0.04	0.862	11.49	13.50
MW-166	08/31/2016 09:33	0.870	-66.110	6.260	NM	7134.750	21.080	6.430
MW-166	08/31/2016 09:36	0.790	-67.130	6.260	NM	7060.880	21.110	5.040
MW-166	08/31/2016 09:38	0.730	-68.460	6.260	NM	7078.770	20.980	3.580
MW-166	08/31/2016 09:41	0.670	-69.310	6.260	NM	7070.230	21.090	3.920
MW-166	08/31/2016 09:44	0.620	-70.470	6.260	NM	7048.470	21.200	4.280
MW-166	09/01/2016 09:43	0.84	-52	6.29	0.41	7.393	18.03	14.50
MW-166	09/01/2016 10:32	0.65	-74	6.54	0.56	9.802	17.71	39.70
MW-166R	04/26/2017 09:20	2.43	-70.10	6.44	1.20	2.117	12.18	20.30
MW-166R	04/26/2017 09:40	2.48	-63.70	6.42	1.20	1.552	12.57	27.70
MW-166R	04/26/2017 09:50	3.77	-61.40	6.44	1.20	1.677	12.18	54.40
MW-166R	03/09/2018 10:30	5.19	-93.80	7.31	0.87	1.721	7.8	30.80
MW-166R	03/09/2018 11:05	6.11	-71.80	7.05	0.89	1.757	8.65	13.50
MW-166R	03/09/2018 11:20	4.23	-69.80	6.87	0.89	1.742	8.97	71.70
MW-166R	06/11/2018 10:56	4.42	-134	7.16	0.1457	2.7816	17.99	19.2
MW-166R	06/11/2018 10:59	1.66	-161	7.22	0.1447	2.7651	17.17	19.9
MW-166R	06/11/2018 11:02	1.32	-173	7.29	0.1434	2.7417	17.23	22
MW-166R	06/11/2018 11:04	1.22	-180	7.35	0.1415	2.7085	16.96	25.4
MW-166R	06/11/2018 11:07	1.15	-183	7.37	0.1395	2.6711	17.01	25.9
MW-166R	06/11/2018 11:10	1.15	-183	7.39	0.1380	2.6443	16.99	24.8
MW-166R	06/12/2018 11:10	1.15	-183.00	7.39	0.14	2.634	17.17	24.80
MW-166R	06/12/2018 11:55	6.17	-103.00	6.95	0.17	3.265	14.03	27.80
MW-166R	06/12/2018 13:00	2.08	-99.00	6.64	0.17	3.187	15.96	15.70
MW-166R	10/03/2018 09:50	0.43	-112.60	6.99	1.74	3.361	22.46	0.0000
MW-166R	10/03/2018 10:30	0.39	-116.90	7.06	1.74	3.428	21.16	0.0000
MW-166R	10/03/2018 10:50	3.42	-129.80	7.09	1.76	3.466	22.04	0.0000
MW-166R	12/11/2018 09:40	3.52	-93.90	7.03	2.75	5.083	12.91	0.90
MW-166R	12/11/2018 09:48	3.06	-81.60	6.96	2.75	4.129	12.83	7.80
MW-166R	12/11/2018 09:55	3.63	-81.10	7.01	2.73	5.047	12.55	2.00
MW-166R	03/20/2019 13:20	0.05	-173.1	8.05	NM	2.711	11.03	2
MW-166R	03/20/2019 13:45	1.54	-71.3	7.33	1.43	2.781	12.44	6.5
MW-166R	06/04/2019 09:55	0.38	-117	7.34	NM	3.271	12.94	4.4
MW-166R	06/04/2019 10:05	2.56	-80.1	7.32	NM	3.206	13.41	6.5
MW-166R	06/04/2019 10:10	1.39	-130.6	7.41	NM	3.239	14.33	0.7
MW-166R	06/04/2019 10:15	0.29	128.9	7.18	1.74	3.308	11.39	3.7
MW-166R	06/04/2019 10:20	0.98	-122.8	7.47	NM	3.245	14.85	0.6
MW-166R	06/04/2019 10:25	0.62	-135.8	7.53	NM	3.256	12.94	4.4
MW-166R	06/04/2019 10:30	0.44	-145.1	7.51	1.74	3.221	12.6	1.3
MW-166R	06/04/2019 10:35	0.43	-141.1	7.42	NM	3.218	12.75	3.7
MW-166R	06/04/2019 10:40	0.42	-123.2	7.31	NM	3.245	12.95	2.3
MW-166R	06/04/2019 10:45	0.39	-126.4	7.29	NM	3.267	12.99	4.1
MW-166R	06/04/2019 10:50	0.38	-117	7.34	NM	3.271	12.94	4.4
MW-166R	06/04/2019 11:10	3.1	-88.4	7.07	NM	3.304	12.44	3.5
MW-166R	09/04/2019 09:05	0.68	-57.7	8.02	NM	6.446	21.29	1.1
MW-166R	09/04/2019 09:10	0.21	-57.9	8.04	NM	6.436	21.79	2.1
MW-166R	09/04/2019 09:15	0.45	-79.5	8.26	NM	6.442	21.78	1.9
MW-166R	09/04/2019 09:20	0.22	-101.1	8.57	NM	6.391	21.61	1.5
MW-166R	09/04/2019 09:25	0.17	-97.4	8.29	NM	6.394	21.38	1.5
MW-166R	09/04/2019 09:30	0.27	-89.7	8.04	NM	6.451	21.1	1.9
MW-166R	09/04/2019 09:35	0.18	-85.4	7.88	NM	6.49	20.96	2
MW-166R	09/04/2019 09:40	1.23	-88.2	7.88	NM	6.522	20.44	1.1
MW-166R	09/04/2019 09:45	0.53	-78.4	7.71	NM	6.544	20.41	1.8
MW-166R	09/04/2019 09:50	1.96	-107.3	7.74	NM	6.541	21.41	1.1
MW-166R	09/04/2019 10:25	3.13	-24.7	7.43	3.71	6.766	20.81	1.6
MW-166R	09/04/2019 11:00	2.88	-17.9	7.07	3.85	6.998	21.69	15.5
MW-166R	12/09/2019 09:45	3.56	-97.7	7.13	NM	1.742	12.87	2.4
MW-166R	12/09/2019 09:50	1.11	-116.5	7.26	NM	1.719	13.38	1.7
MW-166R	12/09/2019 09:55	0.89	-158.2	7.28	NM	1.714	13.7	1.5
MW-166R	12/09/2019 10:00	0.67	-184.3	7.28	NM	1.713	13.7	0.8
MW-166R	12/09/2019 10:05	0.49	-201.3	7.3	NM	1.709	13.84	0.4
MW-166R	12/09/2019 10:10	2.1	-127.3	7.38	NM	1.722	13.17	0.9

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-166R	12/09/2019 10:15	2.51	-127.5	7.39	NM	1.725	12.99	1.7
MW-166R	12/09/2019 10:20	1.02	-165.1	7.33	NM	1.709	14.03	0.1
MW-166R	12/09/2019 10:25	0.34	-133.7	7.3	NM	1.705	14.26	0.1
MW-166R	12/09/2019 10:30	0.24	-139.4	7.23	NM	1.704	14.54	0.1
MW-166R	12/09/2019 11:10	2.45	-112.9	6.72	0.95	1.854	14.3	7.7
MW-166R	12/09/2019 11:20	3.05	-86.5	6.71	0.94	1.837	15.25	12.1
MW-166R	03/18/2020 13:10	0.34	-7.4	8.41	NM	2.52	12	1.4
MW-166R	03/18/2020 13:30	0.28	-8.9	8.33	1.38	2.555	11.98	1.1
MW-166R	06/02/2020 11:50	0.36	342.3	7.09	NM	2.851	17.42	NM
MW-166R	06/02/2020 12:45	1.39	77.8	6.28	1.57	3.004	16.61	3.8
MW-166R	12/23/2020 09:05	5.36	21.8	6.56	1.43	2.748	11.36	8
MW-166R	12/23/2020 09:10	1.77	-38.7	7	1.46	2.793	12.67	4.1
MW-166R	12/23/2020 09:15	1.59	-41.5	7.02	1.46	2.795	12.88	4
MW-166R	12/23/2020 09:20	1.49	-59.4	7.25	1.46	2.789	12.81	3.4
MW-166R	12/23/2020 09:25	1.31	-86.4	7.66	1.45	2.778	12.67	3
MW-166R	12/23/2020 09:30	2.73	-37.1	7.22	1.45	2.772	12.2	3.5
MW-166R	12/23/2020 09:35	3.74	7.6	7.05	1.45	2.777	11.76	3.6
MW-166R	12/23/2020 09:40	4.76	53.3	6.89	1.45	2.784	11.01	3.8
MW-166R	12/23/2020 09:45	3.4	-41.6	7.4	1.45	2.777	12.51	3
MW-166R	12/23/2020 09:50	3.23	-46.3	7.42	1.45	2.782	12.48	2.8
MW-166R	12/23/2020 10:20	2.38	-44.2	7.35	1.46	2.667	12.12	2
MW-166R	12/23/2020 10:30	4.53	-55.8	7.43	1.5	3.34	12.26	12.8
MW-166R	03/12/2021 08:30	4.37	186.7	7.03	1.38	2.686	12.16	6.2
MW-166R	03/12/2021 08:35	5.67	166.6	7.49	1.4	2.713	12.01	1.6
MW-166R	03/12/2021 08:40	2.07	92	8.64	1.38	2.648	11.01	1.2
MW-166R	03/12/2021 08:45	1.38	69.1	8.68	1.38	2.65	10.75	1.1
MW-166R	03/12/2021 08:50	0.85	17.1	8.73	1.38	2.654	10.79	0.1
MW-166R	03/12/2021 08:55	0.61	-63.6	8.82	1.38	2.651	10.77	0.3
MW-166R	03/12/2021 09:00	0.5	-88.1	8.88	1.37	2.636	11.22	0.4
MW-166R	03/12/2021 09:05	0.43	-109.1	8.92	1.36	2.617	11.44	0.7
MW-166R	03/12/2021 09:10	0.37	-127.3	8.92	1.36	2.611	11.64	0.7
MW-166R	03/12/2021 09:15	0.33	-133.3	8.9	1.36	2.612	11.94	1.4
MW-166R	03/12/2021 09:48	4.95	-21.2	8.46	1.44	2.758	14.02	0.9
MW-166R	03/12/2021 10:24	3.77	-148.9	7.99	1.52	2.907	12.69	6.9
MW-166R	05/26/2021 12:25	2.11	68	6.49	1.42	2.721	15.82	13.3
MW-166R	05/26/2021 12:30	0.73	73.3	6.25	1.43	2.731	15.23	8.9
MW-166R	05/26/2021 12:35	2.13	75.8	6.15	1.43	2.749	14.88	5.1
MW-166R	05/26/2021 12:40	0.78	73.3	6.09	1.43	2.735	14.7	3
MW-166R	05/26/2021 12:45	0.59	68.1	6.07	1.43	2.741	14.53	2.6
MW-166R	05/26/2021 12:50	2.76	61.2	6.09	1.43	2.752	16.54	1.9
MW-166R	05/26/2021 12:55	1.85	61.8	5.99	1.45	2.771	17.35	1.8
MW-166R	05/26/2021 13:00	0.93	67.9	5.85	1.45	2.779	17.8	2
MW-166R	05/26/2021 13:05	0.64	69.5	5.78	1.45	2.789	17.92	2
MW-166R	05/26/2021 13:10	0.71	69	5.76	1.45	2.792	18.05	1.9
MW-166R	08/03/2021 10:08	1.56	-59.8	7.71	1.62	3.086	21.46	8
MW-166R	08/03/2021 10:13	1.59	-127.7	7.29	1.44	2.778	20.65	3.5
MW-166R	08/03/2021 10:18	1.41	-171.2	7.58	1.42	2.73	20.29	0.8
MW-166R	08/03/2021 10:23	1.23	-202.8	8.04	1.37	2.654	19.96	1
MW-166R	08/03/2021 10:28	2.06	-151.8	7.54	1.36	2.62	20.67	0
MW-166R	08/03/2021 10:33	3.19	-95.2	7.17	1.37	2.637	21.39	0
MW-166R	08/03/2021 10:38	3.78	-75.7	7.05	1.37	2.649	21.82	0
MW-166R	08/03/2021 10:43	4.26	-63.6	6.99	1.38	2.659	22.21	0
MW-166R	08/03/2021 10:48	4.6	-57.5	6.95	1.38	2.671	22.35	0
MW-166R	08/03/2021 10:53	2.1	-137.4	7.26	1.41	2.709	18.62	2.4
MW-166R	10/21/2021 09:15	2.52	-84.6	7.71	0.77	1.522	19.28	6.7
MW-166R	10/21/2021 09:20	1.41	-146.2	8	0.78	1.552	19.3	2.4
MW-166R	10/21/2021 09:25	1.07	-168.8	8.1	0.78	1.552	19.25	1.9
MW-166R	10/21/2021 09:30	0.79	-191.2	8.46	0.78	1.543	19.25	0.2
MW-166R	10/21/2021 09:35	0.59	-197.2	8.31	0.78	1.536	19.33	-0.2
MW-166R	10/21/2021 09:40	0.63	-188.3	7.91	0.78	1.549	19.32	0
MW-166R	10/21/2021 09:45	0.65	-180.4	7.84	0.79	1.553	19.34	1
MW-166R	10/21/2021 09:50	0.62	-171.5	7.69	0.79	1.559	19.28	-0.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-166R	10/21/2021 09:55	0.55	-125.3	7.6	0.79	1.559	19.58	-0.7
MW-166R	02/15/2022 09:30	8.41	103.3	6.85	1.03	2.01	9.81	27.1
MW-166R	02/15/2022 09:35	2.91	-75.7	6.48	1.04	2.036	10.21	889.2
MW-166R	02/15/2022 09:40	2.89	-76.1	6.48	1.04	2.032	10.23	895.1
MW-166R	02/15/2022 09:45	2.31	-75.7	6.46	1.04	2.023	10.41	890.2
MW-166R	02/15/2022 09:50	2.37	-75.1	6.34	1.04	2.035	9.95	881.5
MW-166R	02/15/2022 09:55	2.22	-70.2	6.21	1.05	2.048	10.48	-6.8
MW-166R	02/15/2022 10:00	2.13	-70	6.2	1.05	2.049	10.58	-6.9
MW-166R	02/15/2022 10:05	2.22	-71.1	6.24	1.07	2.088	10.51	-8.8
MW-166R	02/15/2022 10:10	1.99	-72.8	6.24	1.08	2.093	10.56	-8.6
MW-179	09/03/2014 11:12	0.20	191	6.96	0.07	1.407	18.97	53.80
MW-179	02/24/2016 11:13	1.55	-63	6.83	0.04	0.908	9.17	15.30
MW-179	02/24/2016 14:52	1.94	-136	6.74	0.03	0.620	10.36	12.70
MW-179	04/25/2017 09:11	0.24	-55.00	7.12	0.06	1.217	12.22	11.45
MW-179	02/05/2018 13:44	13.56	164	7.83	0.028	0.5761	6.37	84.9
MW-179	02/05/2018 13:48	2.85	148	7.32	0.028	0.5787	6.36	13
MW-179	02/05/2018 13:51	2.15	144	7.13	0.027	0.5690	5.52	11
MW-179	02/05/2018 13:55	1.77	139	7.03	0.027	0.5632	6	12
MW-179	02/05/2018 13:58	1.6	136	7.01	0.027	0.5626	5.94	13
MW-179	02/05/2018 14:02	1.44	135	6.98	0.027	0.5619	6.01	11.3
MW-179	02/05/2018 14:06	1.33	133	6.98	0.027	0.5633	5.9	10.7
MW-179	02/05/2018 14:09	1.24	121	6.96	0.027	0.5637	5.9	11.5
MW-179	02/05/2018 14:13	1.14	105	6.95	0.027	0.5650	5.74	13
MW-179	02/05/2018 14:17	1.08	102	6.93	0.027	0.5639	5.69	9.9
MW-179	02/05/2018 14:20	0.99	87	6.9	0.027	0.5658	5.97	14.5
MW-179	02/05/2018 14:24	0.94	87	6.9	0.027	0.5653	6.08	16.8
MW-179	02/05/2018 14:27	0.89	75	6.89	0.027	0.5676	5.93	10.4
MW-179	02/05/2018 14:31	0.83	79	6.87	0.027	0.5661	6.09	11.9
MW-179	02/05/2018 14:35	0.8	70	6.86	0.027	0.5703	6.23	10.1
MW-179	02/06/2018 11:32	1.44	242.00	7.42	0.02	0.503	9.82	9.60
MW-179	02/06/2018 14:34	0.80	70.00	6.86	0.03	0.572	6.11	10.15
MW-179	02/06/2018 15:10	4.69	0.0000	7.45	0.03	0.694	8.49	57.40
MW-179	05/07/2018 09:32	4.05	-152	6.87	0.026	0.5423	17	29.4
MW-179	05/07/2018 09:35	1.99	-158	6.91	0.026	0.5282	16.2	46.7
MW-179	05/07/2018 09:38	1.37	-164	6.93	0.025	0.5214	16.09	28.2
MW-179	05/07/2018 09:40	1.12	-171	6.95	0.025	0.5110	15.93	14.4
MW-179	05/07/2018 09:43	0.98	-177	6.96	0.024	0.5004	16.04	7.2
MW-179	05/07/2018 09:46	0.86	-183	6.97	0.024	0.4934	16.12	10.9
MW-179	05/07/2018 09:48	0.79	-189	6.98	0.024	0.4923	16.14	7.5
MW-179	05/07/2018 09:51	0.78	-194	6.99	0.024	0.4886	16.06	7.7
MW-179	05/07/2018 09:53	0.80	-197.00	7.00	0.02	0.482	16.17	7.99
MW-179	05/07/2018 09:54	0.8	-197	7	0.024	0.4842	15.99	8
MW-179	07/11/2018 09:44	2.57	-107	7.13	0.036	0.7252	25.89	7.4
MW-179	07/11/2018 09:48	1.26	-122	6.78	0.036	0.7367	27.2	7.1
MW-179	07/11/2018 09:52	1.16	-128	6.73	0.036	0.7311	28.3	6
MW-179	07/11/2018 09:56	1.08	-133	6.72	0.036	0.7259	28.26	5.4
MW-179	07/11/2018 10:00	1.05	-136	6.72	0.036	0.7255	28.23	10
MW-179	07/11/2018 10:04	0.89	-139	6.72	0.036	0.7290	28.41	5.7
MW-179	07/11/2018 10:09	0.82	-142	6.73	0.036	0.7356	28.01	5.9
MW-179	07/11/2018 10:13	0.82	-144	6.74	0.036	0.7325	27.85	8.3
MW-179	07/11/2018 10:17	0.78	-144	6.74	0.036	0.7313	28.36	5.7
MW-179	07/11/2018 10:21	0.71	-145	6.74	0.036	0.7377	28.73	5.3
MW-179	07/11/2018 10:25	0.6	-146	6.74	0.037	0.7419	29.01	6.2
MW-179	07/11/2018 10:29	0.55	-147	6.74	0.037	0.7416	29.31	7.5
MW-179	07/11/2018 10:33	0.54	-148.00	6.74	0.04	0.734	29.53	6.45
MW-179	11/07/2018 14:20	1.13	-70.20	7.19	0.27	0.555	16.4	7.00
MW-179	11/07/2018 15:00	1.04	-70.60	7.20	0.28	0.576	16.32	6.10
MW-179	11/07/2018 15:10	1.05	-74.30	7.21	0.28	0.579	16.28	5.60
MW-179	03/01/2019 09:45	0.19	-120.4	6.9	NM	0.574	9.23	NM
MW-179	03/01/2019 11:30	9.86	-123	7.41	0.34	0.596	9.46	0.9
MW-187	04/25/2012 11:25	7.24	-60	7.12	0.22	4.043	13.63	119.50
MW-187	04/26/2012 10:00	0.65	-46	7.38	0.21	4.037	13.57	78.70

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-187	06/14/2012 11:23	4.75	-119	8.97	0.20	3.710	29.85	65.10
MW-187	08/13/2012 13:20	10.33	-184	9.95	0.21	3.897	22.92	74.70
MW-187	03/26/2014 11:45	4.62	-226	6.82	0.25	4.619	9.91	97.50
MW-187	03/26/2014 13:10	1.44	-389	7.38	1.17	19.990	7.48	20.80
MW-187	09/23/2014 10:10	0.71	-93.2	7.23	2.23	4.166	15.31	2.90
MW-187	09/23/2014 10:40	0.13	-107.6	7.66	2.31	4.282	15.44	3.00
MW-187	09/23/2014 10:55	1.46	-101.4	7.41	2.29	4.301	16.03	12.00
MW-187	12/05/2014 09:35	0.92	-117.2	7.20	NM	4.560	13.37	3.40
MW-187	12/05/2014 10:30	0.15	-133.4	7.17	NM	4.389	14.03	2.70
MW-187	12/05/2014 11:00	4.91	-110.8	7.06	NM	4.441	13.74	7.00
MW-187	12/10/2015 10:10	1.8	1.88	9.69	0.17	3.287	13.86	25.7
MW-187	12/10/2015 11:23	5.14	277	8.35	0.18	3.34	14.14	75.6
MW-187	03/03/2016 10:45	0.74	-245	7.57	0.18	3.368	8.02	0.10
MW-187	03/03/2016 11:59	3.17	-166	9.33	0.49	8.871	10.77	64.30
MW-187	02/08/2017 11:18	0.12	1110	8.23	0.12	2.399	8.91	11.30
MW-187	02/08/2017 14:20	5.52	1117	7.60	0.16	3.165	9.66	41.60
MW-187	03/06/2018 12:05	10.82	39.00	10.40	0.10	1.999	8.28	10.90
MW-187	03/06/2018 15:05	7.94	37.00	10.48	0.55	9.794	10.82	47.80
MW-187	03/19/2019 09:44	2.21	74.1	9.75	0.01	0.034	8.73	2.4
MW-187	07/10/2019 10:05	0.7	-194.2	7.84	NM	2.821	16.88	3.8
MW-187	07/10/2019 10:10	0.22	-196.6	7.79	NM	2.831	16.06	1
MW-187	07/10/2019 10:15	0.29	-172.8	7.52	NM	2.916	15.79	0.7
MW-187	07/10/2019 10:20	0.2	-160	7.26	NM	3.151	15.96	0.2
MW-187	07/10/2019 10:25	0.19	-153.1	7.19	NM	3.27	15.98	0.1
MW-187	07/10/2019 10:30	0.18	-151.2	7.17	NM	3.277	17.32	0.4
MW-187	07/10/2019 10:35	0.11	-160.8	7.16	NM	3.288	17.94	0.4
MW-187	07/10/2019 10:40	0.11	-149.1	7.16	NM	3.314	18.28	0.3
MW-187	07/10/2019 10:45	0.19	-147.5	7.16	NM	3.311	18.26	0.4
MW-187	07/10/2019 10:50	0.16	-146.3	7.16	NM	3.307	18.1	0.4
MW-187	07/10/2019 11:20	0.16	-146.3	7.16	NM	3.307	18.1	0.4
MW-187	07/10/2019 14:00	1.99	-123.6	7.09	1.78	3.378	16.56	0.7
MW-187	07/10/2019 14:15	1.01	-146.4	7.02	1.48	2.851	16.98	16.4
MW-187	02/12/2020 14:15	7.05	-153.5	7.02	0.85	1.666	13.67	2
MW-187	10/12/2020 15:15	NM	NM	NM	NM	NM	NM	10.3
MW-187	10/15/2020 11:05	1.15	-94.8	7.68	1.7	3.242	20.06	10
MW-187	10/15/2020 11:10	0.77	-164.8	7.63	1.69	3.216	20.93	5
MW-187	10/15/2020 11:15	0.75	-176.8	7.64	1.69	3.23	21.29	5.7
MW-187	10/15/2020 11:20	0.43	-186	7.63	1.68	3.214	19.73	8.9
MW-187	10/15/2020 11:25	0.36	-201.3	7.66	1.69	3.207	19.66	22.4
MW-187	10/15/2020 11:30	0.31	-207.7	7.67	1.7	3.227	19.5	22.5
MW-187	10/15/2020 11:35	0.31	-209.1	7.67	1.7	3.231	19.38	22.1
MW-187	10/15/2020 11:40	0.29	-215.1	7.51	1.68	3.205	18.89	28.6
MW-187	10/15/2020 11:45	0.27	-213.7	7.46	1.69	3.218	18.96	25.5
MW-187	10/15/2020 11:50	0.28	-212.6	7.44	1.69	3.219	19.3	19.7
MW-187	10/15/2020 15:00	1.94	-98.7	8.05	1.72	3.269	19.53	11.1
MW-187	10/15/2020 15:15	5.09	-57.5	8.1	1.73	3.286	20.16	NM
MW-187	01/13/2021 12:35	2.22	-20.9	7.91	1.64	3.117	12.52	22.9
MW-187	01/13/2021 12:40	1.4	-32.6	7.87	1.64	3.116	12.64	14.9
MW-187	01/13/2021 12:45	1.66	-40.5	7.79	1.65	3.147	10.67	8.8
MW-187	01/13/2021 12:50	1.05	-60.5	7.73	1.62	3.095	11.43	5.6
MW-187	01/13/2021 12:55	1.12	-89.1	7.72	1.63	3.107	11.66	47.6
MW-187	01/13/2021 13:00	0.98	-105.2	7.72	1.63	3.106	11.76	25.7
MW-187	01/13/2021 13:05	1.07	-114.3	7.71	1.63	3.098	11.78	8.7
MW-187	01/13/2021 13:10	1.04	-130.5	7.7	1.63	3.096	11.9	6.5
MW-187	01/13/2021 13:15	1.09	-140.2	7.68	1.62	3.085	11.55	5.5
MW-187	01/13/2021 13:20	1.04	-149.3	7.66	1.62	3.077	11.63	4.7
MW-187	01/13/2021 14:45	2.31	-123.7	7.27	2.02	3.804	12.7	4.4
MW-187	01/13/2021 15:00	3.49	-33	7.7	1.64	3.113	12.85	24.1
MW-187	04/08/2021 09:10	1.16	-195.2	7.79	1.66	3.157	11.16	34
MW-187	04/08/2021 09:15	0.85	-195.6	7.79	1.66	3.156	11.19	31.4
MW-187	04/08/2021 09:20	1.34	-192.7	7.76	1.66	3.16	11.31	41.5
MW-187	04/08/2021 09:25	2.39	-196.9	7.79	1.66	3.158	11.35	55.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-187	04/08/2021 09:30	197.7	42.9	7.83	1.66	3.156	11.5	47.8
MW-187	04/08/2021 09:35	5.86	-195.6	7.79	1.66	3.164	11.65	40.9
MW-187	04/08/2021 09:40	8.15	-195.3	7.78	1.66	3.153	11.75	46.3
MW-187	04/08/2021 09:45	10.12	-195.2	7.76	1.66	3.164	11.74	54.3
MW-187	04/08/2021 09:50	11.02	-193.6	7.74	1.66	3.156	11.84	41
MW-187	04/08/2021 09:55	11.9	-190.3	7.71	1.67	3.157	11.9	35.4
MW-187	01/26/2022 10:45	2.93	9.8	7.73	1.3	2.485	11.08	15.1
MW-187	01/26/2022 10:50	1.43	-20.1	7.79	1.36	2.605	11.95	12.9
MW-187	01/26/2022 10:55	2.62	-141.2	8.17	1.54	2.936	12.84	0.9
MW-187	01/26/2022 11:00	3.73	-148.7	7.63	1.6	3.052	12.84	0.3
MW-187	01/26/2022 11:05	4.56	-148.1	7.46	1.65	3.136	12.81	-0.4
MW-187	01/26/2022 11:10	4.8	-148.2	7.45	1.65	3.145	12.75	-0.4
MW-187	01/26/2022 11:15	5.08	-151.5	7.41	1.75	3.311	13.1	0.4
MW-187	01/26/2022 11:20	6.2	-151.1	7.39	1.9	3.581	13.04	0.8
MW-187	01/26/2022 11:25	6.84	-152.9	7.36	1.98	3.725	13.21	1.4
MW-187	01/26/2022 11:30	7.27	-153.7	7.32	2.07	3.883	13.47	0.5
MW-187	04/13/2022 09:55	1.01	-4.6	7.9	0.78	1.541	15.3	6.5
MW-187	04/13/2022 10:00	0.67	-50.9	7.96	0.79	1.552	15.35	4.1
MW-187	04/13/2022 10:05	0.46	-119.5	8.05	0.79	1.556	15.52	3.7
MW-187	04/13/2022 10:10	0.37	-149	8.09	0.79	1.56	15.54	7.9
MW-187	04/13/2022 10:15	0.44	-174.7	8.08	0.79	1.562	15.67	5.8
MW-187	04/13/2022 10:20	0.49	-178.1	7.94	0.8	1.582	15.65	7.2
MW-187	04/13/2022 10:25	0.53	169.4	7.69	0.82	1.607	15.81	4.7
MW-187	04/13/2022 10:30	0.58	-166.4	7.53	0.83	1.628	15.88	4.7
MW-187	04/13/2022 10:35	0.54	-165.5	7.46	0.83	1.643	16.01	1.5
MW-187	04/13/2022 10:40	0.52	-165	7.42	0.84	1.654	16.09	0.8
MW-192	03/19/2012 13:25	0.48	-45	6.86	0.01	0.27813	18.78	1486.3
MW-192	03/19/2012 13:27	-0.65	-44	6.82	0.01	0.27882	18.46	2498.9
MW-192	03/19/2012 13:30	-0.4	-46	6.81	0.01	0.2975	17.47	2089.7
MW-192	03/19/2012 13:33	0.05	-50	6.81	0.02	0.32161	17.4	1181.8
MW-192	03/19/2012 13:35	0.36	-54	6.82	0.02	0.3388	17.14	851.4
MW-192	03/19/2012 13:38	0.39	-58	6.83	0.02	0.35188	17.12	2498.9
MW-192	03/19/2012 13:41	0.62	-62	6.84	0.02	0.36562	16.78	2051.3
MW-192	03/19/2012 13:43	0.58	-64	6.85	0.02	0.37751	17.1	1086.6
MW-192	03/19/2012 13:46	0.89	-67	6.85	0.02	0.39014	17.41	2223.8
MW-192	03/19/2012 13:48	0.89	-70	6.86	0.02	0.39712	17.33	2498.9
MW-192	03/19/2012 13:51	0.6	-72	6.86	0.02	0.40696	17.87	681
MW-192	03/19/2012 13:54	0.58	-74	6.86	0.02	0.41204	17.49	204.4
MW-192	03/19/2012 13:56	0	-75	6.87	0.02	0.41928	17.91	97.5
MW-192	03/19/2012 13:59	-0.14	-77	6.88	0.02	0.42981	17.85	245.7
MW-192	03/19/2012 14:02	0.28	-80	6.88	0.02	0.43835	18.22	432.9
MW-192	03/19/2012 14:04	0.27	-82	6.89	0.02	0.4493	18.48	276.3
MW-192	03/19/2012 14:07	0.36	-83	6.89	0.02	0.44926	18.01	227.3
MW-192	03/19/2012 14:10	-0.34	-84	6.9	0.02	0.45403	17.89	151.9
MW-192	03/19/2012 14:12	0.1	-86	6.91	0.02	0.45772	17.97	347.8
MW-192	03/19/2012 14:14	0.1	-86	6.91	0.02	0.4577	12.97	347.8
MW-192	03/19/2012 14:15	-0.1	-87	6.91	0.02	0.46391	17.73	251.2
MW-192	03/19/2012 14:44	18.45	-67	6.86	0.02	0.473	12.29	171.1
MW-192	03/20/2012 12:00	0.3	-147	6.49	0	0.536	11.3	77.4
MW-192	02/25/2013 15:04	3.6	-186	6.86	0.03	0.52308	8.61	352.7
MW-192	02/25/2013 15:06	1.12	-222	6.73	0.03	0.52553	8.25	2269.5
MW-192	02/25/2013 15:08	0.77	-233	6.68	0.03	0.53021	8.3	457.6
MW-192	02/25/2013 15:10	0.61	-239	6.66	0.03	0.53278	8.28	72.6
MW-192	02/25/2013 15:12	0.51	-241	6.65	0.07	1.49101	8.46	81.2
MW-192	02/25/2013 15:14	0.49	-244	6.65	0.08	1.52219	8.4	71.6
MW-192	02/25/2013 15:16	0.48	-249	6.65	0.08	1.54312	8.37	76.6
MW-192	02/25/2013 15:18	0.48	-251	6.65	0.08	1.55364	8.44	72.5
MW-192	02/25/2013 15:19	0.48	-251	6.65	0.08	1554.000	8.55	72.51
MW-192	02/25/2013 15:53	1.75	-164	6.72	0.07	1496.000	9.32	155.90
MW-192	02/26/2013 12:05	0.68	-58	6.64	0.03	520.000	9.25	165.50
MW-192	09/04/2014 13:40	0.53	10	6.35	0.03	0.582	27.87	12.41
MW-192	09/04/2014 14:22	0.19	165	6.81	0.03	0.636	22.03	30.20

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-192	09/05/2014 10:51	0.11	75	6.41	0.03	0.604	20.88	59.30
MW-192	09/23/2016 10:11	0.49	-30.00	6.52	0.10	1.989	21.44	27.60
MW-192	09/23/2016 11:17	0.83	-59	7.28	0.12	2.259	22.02	451.30
MW-192	09/11/2020 10:25	2.5	-155.9	7	0.21	0.431	20.66	11.4
MW-192	09/11/2020 10:30	2.31	-151	6.99	0.2	0.414	20.84	6.6
MW-192	09/11/2020 10:35	2.12	-141.8	6.98	0.2	0.412	20.84	5.4
MW-192	09/11/2020 10:40	1.91	-144.2	6.96	0.2	0.419	20.68	2.9
MW-192	09/11/2020 10:45	1.99	-146.5	6.97	0.2	0.422	20.88	3.5
MW-192	09/11/2020 10:50	1.84	-146.4	6.97	0.2	0.424	20.48	2.8
MW-192	09/11/2020 10:55	1.78	-145.1	6.96	0.2	0.424	20.38	2.9
MW-192	09/11/2020 11:00	1.76	-145.4	6.97	0.2	0.423	20.84	2.7
MW-192	09/11/2020 11:15	1.31	-141.7	6.95	0.2	0.417	19.21	2
MW-192	09/11/2020 11:35	1.59	-131.1	6.87	0.19	0.405	18.94	7
MW-192	03/19/2021 14:10	3.61	-114.6	8.88	1	1.787	9.55	50.9
MW-192	03/19/2021 14:15	0.64	-92	7.88	0.47	0.927	8.98	8.7
MW-192	03/19/2021 14:20	0.55	-35.7	7.63	0.42	0.847	8.84	0.7
MW-192	03/19/2021 14:25	0.48	-95.3	7.5	0.39	0.79	8.84	0.8
MW-192	03/19/2021 14:30	0.39	-97.1	7.38	0.38	0.761	8.99	0.6
MW-192	03/19/2021 14:35	0.37	-97.3	7.31	0.37	0.751	9.14	0.4
MW-192	03/19/2021 14:40	0.36	-97.1	7.29	0.37	0.746	9.06	0.5
MW-192	03/19/2021 15:00	0.26	-97.8	7.12	0.36	0.742	8.76	2
MW-192	03/19/2021 15:10	3.31	-98.4	7.24	0.36	0.724	9.08	95.5
MW-195	01/25/2012 13:53	2.8	-200	7.53	0.06	0.88029	12.75	39.4
MW-195	01/25/2012 13:55	2.03	-186	7.4	0.05	0.68977	10.03	21.9
MW-195	01/25/2012 13:57	0.32	-177	7.32	0.05	0.69454	10.49	8.9
MW-195	01/25/2012 13:59	0.27	-172	7.26	0.05	0.69207	10.47	8
MW-195	01/25/2012 14:01	0.26	-169	7.21	0.05	0.69796	10.56	6.5
MW-195	01/25/2012 14:03	0.25	-167	7.18	0.05	0.69702	10.21	10.2
MW-195	01/25/2012 14:05	0.25	-165	7.15	0.05	0.68962	9.91	4.9
MW-195	01/25/2012 14:07	1.2	-163	7.13	0.05	0.68794	9.92	4.6
MW-195	01/25/2012 14:08	1.69	-160	7.11	0.05	0.68718	9.74	4.4
MW-195	01/25/2012 14:10	1.46	-158	7.1	0.05	0.68809	9.54	17.9
MW-195	01/25/2012 14:12	0.24	-155	7.08	0.05	0.68252	9.51	6.6
MW-195	01/25/2012 14:14	0.22	-153	7.07	0.05	0.68073	9.49	16.5
MW-195	01/25/2012 14:16	0.21	-151	7.06	0.05	0.68147	9.53	53
MW-195	01/25/2012 14:18	0.21	-149	7.05	0.05	0.68162	9.52	6.5
MW-195	01/25/2012 14:20	0.2	-148	7.04	0.05	0.68102	9.47	7.4
MW-195	01/25/2012 14:22	0.25	-146	7.04	0.05	0.68132	9.49	6.6
MW-195	01/25/2012 14:24	0.19	-144	7.03	0.05	0.68552	9.47	6.8
MW-195	01/25/2012 14:25	0.19	-144	7.03	0.05	0.686	9.47	6.82
MW-195	01/25/2012 15:33	0.18	-144	7.18	0.06	0.873	9.72	215.30
MW-195	01/26/2012 11:00	5.65	-198	6.42	0.09	1.330	10.70	33.70
MW-195	04/11/2012 13:37	2.35	-183	7.39	0.08	1.63048	14.33	11.9
MW-195	04/11/2012 13:39	1.35	-176	7.14	0.07	1.45941	13.14	26
MW-195	04/11/2012 13:41	1.63	-173	6.99	0.07	1.47446	12.65	13.9
MW-195	04/11/2012 13:43	2.18	-169	6.89	0.07	1.4468	12.83	12.7
MW-195	04/11/2012 13:45	2.4	-164	6.8	0.07	1.44768	13.51	11.3
MW-195	04/11/2012 13:47	2.44	-159	6.75	0.07	1.43564	13.48	11.9
MW-195	04/11/2012 13:49	2.41	-154	6.69	0.07	1.41628	13.4	9.6
MW-195	04/11/2012 13:51	2.36	-148	6.65	0.07	1.40393	13	9.4
MW-195	04/11/2012 13:53	2.32	-143	6.61	0.07	1.38863	12.87	8.8
MW-195	04/11/2012 13:55	2.28	-137	6.57	0.07	1.37401	13	8.2
MW-195	04/11/2012 13:57	2.24	-132	6.53	0.07	1.36717	13.21	8
MW-195	04/11/2012 13:59	2.17	-126	6.5	0.07	1.35409	12.9	8.6
MW-195	04/11/2012 14:01	2.11	-119	6.47	0.07	1.34618	12.79	8.1
MW-195	04/11/2012 14:03	2.05	-114	6.44	0.07	1.33296	12.88	8.6
MW-195	04/11/2012 14:05	2.01	-109	6.41	0.07	1.30618	13.16	9.2
MW-195	04/11/2012 14:06	1.97	-105	6.41	0.06	1.2936	13.76	9.8
MW-195	04/11/2012 14:08	1.93	-100	6.41	0.06	1.29182	13.69	11.4
MW-195	04/11/2012 14:10	1.87	-94	6.4	0.06	1.27424	13.09	10.5
MW-195	04/11/2012 14:12	1.8	-90	6.39	0.06	1.25568	12.99	11
MW-195	04/11/2012 14:13	1.8	-90	6.39	0.01	0.1256	12.99	10.99

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-195	04/11/2012 15:13	3.4	-176	7.09	0.01	0.1429	12.17	27
MW-195	04/12/2012 11:20	2.3	-209	6.23	0	0.834	11.29	4.7
MW-195	07/10/2012 10:48	1.35	-37	6.63	0.07	1.43307	26.16	17.3
MW-195	07/10/2012 10:50	0.94	-35	6.51	0.07	1.41371	23.77	17.3
MW-195	07/10/2012 10:52	0.61	-35	6.38	0.07	1.41035	23.14	16.9
MW-195	07/10/2012 10:54	0.47	-34	6.31	0.07	1.41202	23.02	16.2
MW-195	07/10/2012 10:56	0.4	-33	6.28	0.07	1.41081	23.41	16.1
MW-195	07/10/2012 10:58	0.36	-32	6.25	0.07	1.41245	23.5	15.9
MW-195	07/10/2012 11:00	0.34	-31	6.24	0.07	1.41329	23.44	16.4
MW-195	07/10/2012 11:02	0.3	-30	6.21	0.07	1.41455	23.2	15.7
MW-195	07/10/2012 11:04	0.28	-28	6.19	0.07	1.41268	23.18	15.2
MW-195	07/10/2012 11:06	0.27	-26	6.16	0.07	1.41663	23.6	15.4
MW-195	07/10/2012 11:08	0.26	-23	6.14	0.07	1.41261	23.54	15.1
MW-195	07/10/2012 11:46	10.57	-32	6.59	0.07	1.389	21.74	38.40
MW-195	07/11/2012 09:35	2.77	-57	5.76	0.10	1.450	17.59	34.70
MW-195	10/08/2012 13:28	1.77	-270	6.87	0.07	1.36792	18.48	5.8
MW-195	10/08/2012 13:30	1.11	-276	6.92	0.07	1.35662	19.3	255.8
MW-195	10/08/2012 13:32	0.85	-271	6.79	0.07	1.37447	19.44	123.7
MW-195	10/08/2012 13:35	0.85	-271	6.76	0.07	1.37113	19.47	73.1
MW-195	10/08/2012 13:37	0.79	-276	6.84	0.07	1.37522	19.41	40.9
MW-195	10/08/2012 13:39	0.75	-275	6.82	0.07	1.37626	19.34	31.7
MW-195	10/08/2012 13:41	0.71	-276	6.83	0.07	1.37534	19.28	234
MW-195	10/08/2012 13:43	0.7	-278	6.84	0.07	1.37394	19.28	10.2
MW-195	10/08/2012 13:45	0.7	-278	6.83	0.07	1.3741	19.23	125.8
MW-195	10/08/2012 13:48	0.71	-276	6.8	0.07	1.37173	19.28	16.4
MW-195	10/08/2012 13:50	0.71	-277	7.08	0.07	1.37148	19.23	31.9
MW-195	10/08/2012 13:52	0.73	-276	6.86	0.07	1.36937	19.26	60.1
MW-195	10/08/2012 13:54	0.73	-276	6.82	0.07	1.37348	19.31	17.6
MW-195	10/08/2012 13:56	0.73	-276	6.79	0.07	1.36865	19.26	40.1
MW-195	10/08/2012 13:58	0.7	-277	6.77	0.07	1.36994	19.36	7.4
MW-195	10/08/2012 14:01	0.71	-278	6.76	0.07	1.37059	19.43	23
MW-195	10/08/2012 14:03	0.7	-278	6.81	0.07	1.37548	19.46	9.5
MW-195	10/08/2012 14:05	0.7	-279	6.77	0.07	1.37009	19.49	9.1
MW-195	10/08/2012 14:07	0.69	-278	6.79	0.07	1.373	19.55	9.15
MW-195	10/08/2012 15:02	4.27	-255	6.54	0.07	1.331	19.78	13.80
MW-195	10/09/2012 11:00	1.49	-117	7.20	0.06	1.211	19.95	9.10
MW-195	01/22/2013 14:47	6.74	-157	6.71	0.21	4.114	5.53	144.5
MW-195	01/22/2013 14:49	2.26	-181	6.68	0.2	3.856	6.87	42
MW-195	01/22/2013 14:51	1.13	-189	6.65	0.2	3.787	7.69	11.3
MW-195	01/22/2013 14:53	0.82	-207	6.63	0.2	3.888	7.6	21.3
MW-195	01/22/2013 14:54	0.62	-215	6.62	0.2	3.871	8.18	19.6
MW-195	01/22/2013 14:56	0.5	-225	6.61	0.2	3.886	8.02	26.8
MW-195	01/22/2013 14:58	0.46	-235	6.61	0.2	3.845	7.9	19.6
MW-195	01/22/2013 15:00	0.43	-239	6.61	0.2	3.85	7.99	16.8
MW-195	01/22/2013 15:02	0.43	-233	6.61	0.2	3.827	7.9	9.1
MW-195	01/22/2013 15:04	0.45	-231	6.6	0.2	3.838	8.21	7.4
MW-195	01/22/2013 15:06	0.47	-229	6.6	0.2	3.85	8.18	12.7
MW-195	01/22/2013 15:08	0.48	-234	6.6	0.2	3.848	8.01	20.3
MW-195	01/22/2013 15:10	0.48	-237	6.6	0.2	3.836	8.16	23.5
MW-195	01/22/2013 15:12	0.49	-233	6.6	0.02	3.854	8	8
MW-195	01/22/2013 15:14	0.51	-227	6.6	0.2	3.834	8.06	6.6
MW-195	01/22/2013 15:16	0.51	-224	6.6	0.2	0.3801	8.22	6.3
MW-195	01/22/2013 15:18	0.5	-224	6.6	0.2	3.822	8.09	12.2
MW-195	01/22/2013 15:20	0.49	-227	6.6	0.2	3.834	7.95	5.2
MW-195	01/22/2013 15:22	0.48	-222	6.6	0.19	3.796	7.99	5.8
MW-195	01/22/2013 15:24	0.48	-225	6.59	0.19	3.749	7.85	14.1
MW-195	01/22/2013 15:26	0.47	-227	6.59	0.18	3.697	7.88	17.5
MW-195	01/22/2013 15:28	0.46	-220	6.59	0.17	3.555	7.87	17.3
MW-195	01/22/2013 15:30	0.47	-220	6.6	0.16	3.39	7.44	15
MW-195	01/22/2013 15:32	0.45	-215	6.59	0.2	3.198	7.31	13
MW-195	01/22/2013 15:34	0.45	-215	6.59	0.2	3.051	7.41	26.8
MW-195	01/22/2013 15:35	0.45	-215	6.59	0.16	3.051	7.41	26.80

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-195	01/22/2013 16:15	6.46	-125	6.55	0.21	4.007	7.50	42.20
MW-195	01/23/2013 11:18	5.79	-164	6.73	0.14	2.618	10.69	10.10
MW-195	04/15/2013 15:04	2.42	-230	6.23	0.13	2.605	12.4	20.78
MW-195	04/15/2013 16:07	4.4	-132	6.37	0.14	2.656	11.67	20.4
MW-195	04/16/2013 11:04	3.54	-176	6.42	0.06	1.756	9.96	8.6
MW-195	07/17/2013 14:56	1.99	-154	6.01	0.11	2.083	22.67	2019.00
MW-195	07/17/2013 15:54	5.87	-171	7.29	0.09	1.810	21.63	161.70
MW-195	07/18/2013 11:15	0.49	-215.00	6.20	0.13	2.434	17.98	1.00
MW-195	03/03/2014 14:17	0.97	-261	6.78	0.04	0.840	3.87	5.24
MW-195	03/03/2014 15:37	8.13	-85	7.40	0.01	0.121	5.14	5.10
MW-195	03/04/2014 11:47	1.53	-200	6.76	0.07	1.396	8.37	8.00
MW-195	04/23/2014 14:41	1.04	-348	6.34	0.05	1.082	13.09	5.71
MW-195	04/23/2014 15:39	3.96	-229	6.44	0.06	1.257	11.79	17.50
MW-195	04/24/2014 13:27	1.46	-205	6.59	0.08	1.510	9.73	16.70
MW-195	07/21/2014 08:45	0.67	29	5.60	0.06	1.151	21.28	8.41
MW-195	07/21/2014 09:49	3.84	60	6.27	0.05	0.985	20.90	22.50
MW-195	07/22/2014 08:49	0.31	-216	6.14	0.05	0.938	17.56	16.30
MW-195	10/13/2014 09:51	0.76	-228	5.80	0.15	2.773	18.68	6.25
MW-195	10/13/2014 11:00	3.19	-93	6.27	0.14	2.637	19.17	14.70
MW-195	03/30/2015 15:06	5.46	-9	6.72	0.03	0.613	9.29	5.99
MW-195	03/30/2015 16:10	8.06	-69	6.56	0.04	0.909	8.40	14.30
MW-195	03/31/2015 11:16	5.82	-29	6.60	0.06	1.145	7.77	57.47
MW-195	05/07/2015 10:00	5.74	-46	6.34	0.08	1.614	10.22	14.7
MW-195	05/07/2015 11:31	0.45	-52	6.39	0.05	0.952	12.09	10.7
MW-195	07/17/2015 10:04	0.37	-161	6.41	0.09	1.831	16.75	9
MW-195	07/17/2015 12:13	3.91	-40	6.79	0.04	0.74	20.32	7.2
MW-195	10/13/2015 11:28	5.18	-32	6.59	0.09	1.795	21.19	20.9
MW-195	10/13/2015 13:05	2.93	-62	6.33	0.1	1.903	19.7	11.6
MW-195	03/09/2016 10:50	2.32	-190	6.58	0.07	1.461	9.79	9.30
MW-195	03/09/2016 11:59	9.25	-37	6.52	0.06	1.177	11.77	27.00
MW-195	03/23/2017 09:59	3.89	169	6.56	0.09	1.850	9.04	0.90
MW-195	03/23/2017 11:55	10.98	-118	7.50	0.08	1.659	8.17	13.80
MW-195	04/25/2018 13:10	4.6	-244	9.9	0.0932	1.8307	12.33	18.6
MW-195	04/25/2018 13:12	1.65	-239	9.65	0.0862	1.7015	11.77	7.7
MW-195	04/25/2018 13:14	1.17	-222	9.38	0.0846	1.6710	11.69	6.5
MW-195	04/25/2018 13:17	0.96	-209	9.08	0.0846	1.6726	11.71	5.4
MW-195	04/25/2018 13:19	0.94	-194	8.77	0.0852	1.6822	11.67	7.7
MW-195	04/25/2018 13:21	0.86	-182	8.44	0.0851	1.6815	11.6	11.2
MW-195	04/25/2018 13:23	0.87	-172	8.21	0.0850	1.6805	11.55	6.3
MW-195	04/25/2018 13:25	0.86	-163	8.01	0.0853	1.6854	11.46	7.2
MW-195	04/25/2018 13:27	6.02	-144	7.95	0.0884	1.7436	11.39	7.9
MW-195	04/25/2018 13:30	7.91	-116	7.78	0.0001	0.0032	11.79	1.6
MW-195	04/25/2018 13:32	9.55	-123	7.87	0.0904	1.7805	11.81	30.2
MW-195	04/25/2018 13:34	1.99	-126	7.54	0.0842	1.6672	11.03	11.7
MW-195	04/25/2018 13:36	1.13	-128	7.48	0.0843	1.6686	10.96	10.3
MW-195	04/25/2018 13:38	0.91	-127	7.4	0.0846	1.6737	10.95	11
MW-195	04/25/2018 13:40	0.88	-125	7.32	0.8382	1.6594	10.97	8.8
MW-195	04/25/2018 13:43	0.84	-123	7.26	0.8356	1.6546	10.96	8.6
MW-195	04/25/2018 13:45	0.99	-123	7.24	0.8494	1.6796	11.25	10.3
MW-195	04/25/2018 13:47	1.29	-123	7.24	0.8231	1.6295	11.38	10.5
MW-195	04/25/2018 13:49	0.91	-123	7.15	0.7698	1.5287	11.31	8.4
MW-195	04/25/2018 13:51	0.91	-124	7.11	0.7255	1.4443	11.36	8.8
MW-195	04/25/2018 13:53	0.89	-126	7.09	0.7110	1.4163	11.43	8.7
MW-195	04/25/2018 13:56	0.98	-126	7.03	0.6920	1.3802	11.42	8.7
MW-195	04/25/2018 13:58	0.98	-125	7	0.6822	1.3614	11.42	10.1
MW-195	04/25/2018 14:00	1.04	-125	6.97	0.6790	1.3550	11.5	9.8
MW-195	04/26/2018 10:58	6.58	-109.00	6.45	0.07	1.345	10.09	6.80
MW-195	04/26/2018 14:00	1.04	-125.00	6.97	0.68	1.359	11.38	9.80
MW-195	04/26/2018 14:50	4.80	-79.00	7.93	0.09	1.836	10.13	68.40
MW-195	06/10/2019 10:05	2.28	21.3	6.44	NM	0.666	15.88	44
MW-195	06/10/2019 10:10	0.82	14.5	6.17	NM	0.653	15.94	17.5
MW-195	06/10/2019 10:15	0.41	13.2	6.16	NM	0.65	15.9	16.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-195	06/10/2019 10:20	0.48	9.6	6.24	NM	0.648	15.94	21.9
MW-195	06/10/2019 10:25	0.47	9.7	6.25	NM	0.648	15.95	21.1
MW-195	06/10/2019 10:30	0.45	6.3	6.3	NM	0.656	16.21	10.4
MW-195	06/10/2019 10:35	0.39	8.2	6.29	NM	0.658	16.29	6.8
MW-195	06/10/2019 10:40	0.4	11.1	6.29	NM	0.652	16.38	5
MW-195	06/10/2019 10:45	0.44	12.7	6.3	NM	0.634	16.48	5
MW-195	06/10/2019 10:50	0.54	8.8	6.3	NM	0.624	16.52	3.6
MW-195	06/10/2019 11:15	0.54	8.8	6.3	NM	0.624	16.52	3.6
MW-195	06/10/2019 11:55	0.61	-38.9	6.94	0.33	0.674	15.92	3.2
MW-195	06/10/2019 12:10	0.68	-59.6	6.94	0.33	0.675	15.95	5.2
MW-195	06/17/2020 12:10	2.32	28.2	5.64	0.32	0.669	18.69	0
MW-195	06/17/2020 12:15	1.46	64.1	5.21	0.32	0.649	19.51	0
MW-195	06/17/2020 12:20	1.33	73	5.33	0.32	0.653	20.71	0
MW-195	06/17/2020 12:25	1.29	90.1	5.28	0.35	0.708	21.01	0
MW-195	06/17/2020 12:30	1.26	121.5	5.15	0.37	0.754	21.05	0
MW-195	06/17/2020 12:35	1.23	221.3	4.89	0.4	0.805	20.96	0
MW-195	06/17/2020 12:40	1.2	269.1	4.78	0.41	0.832	20.99	0
MW-195	06/17/2020 12:45	1.2	312.2	4.62	0.42	0.863	20.74	0
MW-195	06/17/2020 12:50	1.25	332.9	4.53	0.44	0.884	20.5	0
MW-195	06/17/2020 12:55	1.2	344.7	4.52	0.44	0.896	20.48	0
MW-195	06/17/2020 13:40	3.06	315.6	3.4	0.65	1.306	19.63	6
MW-195	06/17/2020 13:55	3	389.8	4.5	0.66	1.331	20.34	16.7
MW-195	05/28/2021 10:50	6.19	-34.8	7.93	1.25	2.665	18.61	47.2
MW-195	05/28/2021 10:55	4.33	-26.4	7.11	0.67	1.379	15.42	101.1
MW-195	05/28/2021 11:00	3.16	-19.3	6.61	0.45	0.908	15.72	30.9
MW-195	05/28/2021 11:05	2.68	-17.1	6.51	0.43	0.869	15.67	15.7
MW-195	05/28/2021 11:10	2.22	-15.9	6.45	0.42	0.849	15.49	12.8
MW-195	05/28/2021 11:15	1.81	-17.1	6.41	0.41	0.836	15.74	8.4
MW-195	05/28/2021 11:20	1.74	-19.1	6.41	0.41	0.833	15.93	8
MW-195	05/28/2021 11:25	1.58	-23.3	6.4	0.41	0.829	15.6	7
MW-195	05/28/2021 11:30	1.47	-27	6.41	0.41	0.834	15.5	6.9
MW-195	05/28/2021 11:35	1.35	-29	6.41	0.41	0.84	15.43	6.9
MW-196	01/25/2012 12:51	3.16	-180	8.1	1.81	22.73233	13.32	10.6
MW-196	01/25/2012 12:55	1.57	-239	8.14	1.85	22.73103	12.26	2.1
MW-196	01/25/2012 12:59	1.36	-268	8.15	1.85	22.72813	12.4	0.6
MW-196	01/25/2012 13:03	1.29	-285	8.16	1.86	22.72445	12.21	0.1
MW-196	01/25/2012 13:07	1.22	-297	8.17	1.86	22.72261	12.11	0.5
MW-196	01/25/2012 13:11	1.17	-305	8.18	1.86	22.72309	12.04	0.2
MW-196	01/25/2012 13:15	1.13	-310	8.19	1.86	22.72266	12.18	0.5
MW-196	01/25/2012 13:19	1.09	-315	8.2	1.86	22.72094	12.1	0.2
MW-196	01/25/2012 13:22	1.07	-318	8.2	1.86	22.71971	12.08	0.2
MW-196	01/25/2012 13:23	1.07	-318	8.20	1.86	22.720	12.08	0.18
MW-196	01/25/2012 15:16	2.42	-200	7.85	1.76	22.730	14.30	7.60
MW-196	01/26/2012 10:33	0.0000	-374	7.31	2.40	37.200	14.00	6.80
MW-196	04/11/2012 12:28	1.74	-215	8.19	1.93	30.85061	17.5	4.8
MW-196	04/11/2012 12:32	0.55	-267	8.36	2.07	33.01255	14.56	4.1
MW-196	04/11/2012 12:35	0.36	-287	8.38	2.1	33.5503	13.89	3.6
MW-196	04/11/2012 12:39	0.27	-297	8.4	2.11	33.70127	13.71	3.5
MW-196	04/11/2012 12:43	0.21	-304	8.4	2.1	33.49334	13.98	4.3
MW-196	04/11/2012 12:46	0.22	-308	8.41	2.13	33.95761	13.42	3.5
MW-196	04/11/2012 12:50	0.2	-311	8.42	2.14	34.20017	13.14	3.6
MW-196	04/11/2012 12:54	0.15	-314	8.42	2.09	33.33404	14.2	3.4
MW-196	04/11/2012 12:58	0.14	-316	8.43	2.07	33.11638	14.47	3.2
MW-196	04/11/2012 13:01	0.16	-319	8.43	2.07	32.98986	14.62	40.3
MW-196	04/11/2012 13:05	0.15	-321	8.43	2.05	32.72438	14.95	3.3
MW-196	04/11/2012 13:09	0.2	-322	8.44	2.09	33.34684	14.15	3.3
MW-196	04/11/2012 13:12	0.22	-322	8.44	2.11	33.70776	13.71	3.5
MW-196	04/11/2012 13:16	0.22	-323	8.45	2.13	33.93202	13.45	3.3
MW-196	04/11/2012 15:06	1.52	-277	7.72	2.09	33.41	14.13	28.7
MW-196	04/12/2012 10:45	1.17	-339	7.5	1.8	29.3	12.43	0.9
MW-196	07/02/2012 08:40	0.5	-286	8.68	1.73	27.89371	19.45	3
MW-196	07/02/2012 08:44	0.3	-319	8.77	1.74	28.05598	19.16	3.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-196	07/02/2012 08:48	0.23	-334	8.79	1.74	28.00407	19.23	3.3
MW-196	07/02/2012 08:52	0.21	-342	8.82	1.75	28.13106	19	3.6
MW-196	07/02/2012 08:56	0.18	-347	8.83	1.75	28.12428	19	3.5
MW-196	07/02/2012 09:00	0.16	-350	8.84	1.74	28.0108	19.18	3.4
MW-196	07/02/2012 09:04	0.15	-353	8.84	1.74	27.97702	19.23	3.5
MW-196	07/02/2012 09:07	0.14	-356	8.84	1.74	28.02516	19.14	3.2
MW-196	07/02/2012 09:11	0.13	-358	8.84	1.74	28.00338	19.17	3.5
MW-196	07/02/2012 09:15	0.13	-360	8.85	1.73	27.87991	19.37	3.4
MW-196	07/02/2012 11:38	1.47	-295	8.80	1.93	31.050	14.50	14.70
MW-196	07/03/2012 08:35	3.05	2.4	7.58	2.37	37.300	16.31	8.40
MW-196	10/08/2012 12:42	2.08	-334	7.98	1.69	27.22874	18.22	6
MW-196	10/08/2012 12:46	3.08	-340	8.01	1.74	28.14592	16.73	48.1
MW-196	10/08/2012 12:50	0.82	-337	7.93	1.71	27.56028	17.66	6.5
MW-196	10/08/2012 12:54	0.6	-339	7.94	1.69	27.33622	18.03	3.5
MW-196	10/08/2012 12:58	0.56	-340	7.96	1.69	27.24688	18.18	2
MW-196	10/08/2012 13:02	0.54	-342	7.98	1.68	27.2146	18.23	2.1
MW-196	10/08/2012 13:06	0.54	-342	7.98	1.69	27.23403	18.2	1.9
MW-196	10/08/2012 13:07	0.54	-342	7.98	1.69	27.234	18.20	1.94
MW-196	10/08/2012 15:08	2.89	-328	10.82	1.81	29.260	15.02	3.40
MW-196	10/09/2012 10:32	0.38	-318	9.29	1.62	26.280	19.82	5.50
MW-196	01/22/2013 13:37	4.73	-314	7.89	2.46	39.952	5.04	3.8
MW-196	01/22/2013 13:40	0.94	-357	8.24	2.88	45.57935	7.47	2.1
MW-196	01/22/2013 13:44	0.64	-362	8.24	2.93	46.1049	8.13	0.9
MW-196	01/22/2013 13:47	0.53	-355	8.25	2.92	46.03431	7.9	0.9
MW-196	01/22/2013 13:51	0.49	-341	8.23	2.92	46.03679	8.06	1.1
MW-196	01/22/2013 13:55	0.47	-333	8.18	2.88	45.3693	8.63	1.8
MW-196	01/22/2013 13:58	0.51	-327	8.08	2.89	45.5618	8.1	3.8
MW-196	01/22/2013 14:02	0.52	-325	7.94	2.8	44.2491	8.2	2
MW-196	01/22/2013 14:05	0.53	-327	7.86	2.76	43.72219	7.96	2.4
MW-196	01/22/2013 14:09	0.5	-330	7.81	2.74	43.49595	7.48	2.3
MW-196	01/22/2013 14:13	0.48	-335	7.77	2.72	43.17837	7.81	2
MW-196	01/22/2013 14:16	0.45	-342	7.75	2.73	43.31047	7.79	2.5
MW-196	01/22/2013 14:20	0.44	-348	7.74	2.73	43.39668	7.53	1.7
MW-196	01/22/2013 14:23	0.42	-353	7.73	2.7	42.9546	7.51	1.4
MW-196	01/22/2013 14:25	0.42	-353	7.73	2.70	42.950	7.65	1.37
MW-196	01/22/2013 15:54	8.13	-263	7.82	2.84	44.100	14.05	105.00
MW-196	01/23/2013 10:50	0.19	-432	7.35	3.17	47.960	13.89	10.50
MW-196	04/15/2013 13:57	1.15	-320	7.93	3.6	54.58	13.49	1.88
MW-196	04/15/2013 15:33	3.7	-283	7.44	3.82	57.35	14.68	9.1
MW-196	04/16/2013 10:38	0.53	-308	7.25	2.72	42.61	12.01	31.4
MW-196	07/17/2013 14:18	0.76	-286	7.88	2.22	34.900	21.95	2.26
MW-196	07/17/2013 15:15	1.10	-232	6.73	1.33	21.800	27.53	14.30
MW-196	07/18/2013 10:45	-0.03	-314.00	7.40	3.42	51.780	16.60	6.80
MW-196	03/03/2014 13:23	0.89	-289	7.96	3.87	59.160	7.59	5.09
MW-196	03/03/2014 14:54	6.71	-242	7.37	3.68	57.010	6.77	153.30
MW-196	03/04/2014 11:16	0.98	-311	7.17	3.21	49.390	12.51	7.80
MW-196	04/23/2014 13:30	0.79	-303	7.74	2.38	48.390	13.29	4.57
MW-196	04/23/2014 15:14	1.60	-325	7.62	3.71	55.550	17.64	33.40
MW-196	04/24/2014 13:22	1.19	-280	7.26	2.93	46.580	11.65	5.50
MW-196	07/21/2014 10:33	0.29	-326	7.72	1.76	28.490	17.08	4.45
MW-196	07/21/2014 11:48	1.20	-138	7.50	1.50	242.800	24.44	72.40
MW-196	07/22/2014 09:26	0.11	-394	7.30	1.69	27.390	16.46	23.20
MW-196	10/13/2014 09:07	0.75	-350	7.56	3.30	50.140	17.10	6.53
MW-196	10/13/2014 10:42	1.26	-273	7.48	0.75	12.910	16.29	142.70
MW-196	10/14/2014 09:04	-0.72	-371	7.26	3.40	51.370	17.85	26.20
MW-196	03/30/2015 14:01	2.49	-156	7.97	3.37	51.540	13.31	7.00
MW-196	03/30/2015 15:41	5.40	-147	7.75	3.30	50.450	14.01	87.20
MW-196	03/31/2015 10:48	3.06	-240	7.14	3.50	53.460	11.98	16.90
MW-196	05/07/2015 10:35	1.55	-330	7.23	3.91	58.99	11.79	12.5
MW-196	05/07/2015 11:22	0.31	-151	7.73	1.37	22.47	18.44	126.8
MW-196	07/17/2015 09:38	0.53	-254	7.32	6.75	94.55	13.7	24
MW-196	07/17/2015 11:28	0.84	-270	6.95	0.67	11.59	21.45	148.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-196	10/13/2015 12:55	1.79	-124	7.14	3.5	52.64	19.1	34.4
MW-196	03/09/2016 10:23	0.12	-306	7.09	3.60	54.640	13.06	14.90
MW-196	03/09/2016 11:18	0.52	-200	7.86	3.55	53.670	15.07	103.50
MW-196	03/23/2017 09:24	8.64	-247	7.47	2.28	36.140	13.30	41.20
MW-196	03/23/2017 11:53	6.45	-170	6.58	3.59	54.470	13.28	20.00
MW-196	04/25/2018 12:13	4.37	-128	7.07	3.8132	0.0576	12.73	5
MW-196	04/25/2018 12:17	1.68	-180	7.44	3.8167	0.0576	12.7	3.9
MW-196	04/25/2018 12:21	1.11	-207	7.68	3.8086	0.0575	12.79	3.3
MW-196	04/25/2018 12:25	0.87	-223	7.85	3.8174	0.0576	12.7	3.5
MW-196	04/25/2018 12:29	0.91	-233	7.98	3.8181	0.0577	12.69	3.8
MW-196	04/25/2018 12:32	0.85	-240	8.09	3.8084	0.0575	12.79	4.4
MW-196	04/25/2018 12:36	0.8	-245	8.17	3.7974	0.0573	12.91	3.6
MW-196	04/25/2018 12:40	0.84	-248	8.25	3.7907	0.0572	12.99	3.2
MW-196	04/25/2018 12:44	0.81	-251	8.31	3.7975	0.0573	12.93	3.8
MW-196	04/25/2018 12:48	0.68	-253	8.36	3.7913	0.0572	13	3.5
MW-196	04/25/2018 12:52	0.68	-254	8.41	3.7816	0.0571	13.11	3.5
MW-196	04/25/2018 12:56	0.66	-256	8.45	3.7826	0.0571	13.11	3.6
MW-196	04/26/2018 10:30	3.32	-325.00	7.32	3.91	58.770	13.32	17.10
MW-196	04/26/2018 12:56	0.66	-256.00	8.45	3.78	57.270	12.99	3.63
MW-196	05/31/2019 09:40	0.21	-123.4	8.88	NM	34.29	16.62	9.3
MW-196	05/31/2019 11:10	2.82	-123.1	8.89	21.58	34.29	16.51	3.5
MW-196	06/16/2020 10:20	2.68	100.3	8.04	19.06	30.52	18.23	0
MW-196	06/16/2020 10:25	1.59	56	8.01	19.74	31.54	18.38	0
MW-196	06/16/2020 10:30	1.07	84.2	7.99	20.43	32.57	19.85	0
MW-196	06/16/2020 10:35	1	148.2	7.98	21.02	33.45	21.44	0
MW-196	06/16/2020 10:40	0.82	238.1	7.88	21.79	34.53	23.16	0
MW-196	06/16/2020 10:45	0.61	305.4	7.83	22.18	35.27	24.98	0
MW-196	06/16/2020 10:50	0.66	355	7.79	22.25	35.33	27.02	0
MW-196	06/16/2020 10:55	0.89	287.3	7.44	22.43	35.64	23.57	0
MW-196	06/16/2020 11:00	0.9	272.2	7.13	22.29	35.36	22.44	0
MW-196	06/16/2020 11:05	0.87	284.6	6.94	22.27	35.3	22.24	0
MW-196	06/17/2020 08:55	2.4	260.6	8.02	20.61	32.82	17.86	6.7
MW-196	06/17/2020 09:10	3.56	-12.2	7.47	21.43	33.97	15.43	1.2
MW-196	06/17/2020 11:05	0.87	284.6	6.94	22.27	35.3	22.24	0
MW-196	05/28/2021 09:40	0.81	-147.5	8.36	23.78	37.6	15.21	5
MW-196	05/28/2021 09:45	0.73	-171.2	8.36	23.46	37	14.63	2.2
MW-196	05/28/2021 09:50	0.44	-201.1	8.34	22.97	36.37	13.93	1.9
MW-196	05/28/2021 09:55	0.3	-215.2	8.34	22.95	36.31	13.78	2.1
MW-196	05/28/2021 10:00	0.21	-222.3	8.34	20.89	36.28	14.28	1.8
MW-196	05/28/2021 10:05	0.25	-223.9	8.34	22.94	36.25	14.33	1.9
MW-196	05/28/2021 10:10	0.25	-227.8	8.34	21.07	36.15	14.9	1.8
MW-196	05/28/2021 10:15	0.21	-230.8	8.34	22.94	36.24	15.45	2.1
MW-196	05/28/2021 10:20	0.18	-231.4	8.35	21.27	36.32	15.42	1.8
MW-196	05/28/2021 10:25	0.15	-233.9	8.35	23	36.37	15.21	1.7
MW-197	01/25/2012 09:22	0.13	-274	8.05	0.02	0.30149	9.33	270.4
MW-197	01/25/2012 09:24	0.14	-265	8.01	0.02	0.2543	8.33	99.3
MW-197	01/25/2012 09:26	0.13	-261	7.97	0.02	0.25735	8.73	80.9
MW-197	01/25/2012 09:28	0.13	-257	7.93	0.02	0.26659	8.89	76.5
MW-197	01/25/2012 09:30	0.12	-254	7.89	0.02	0.26571	9.16	79.3
MW-197	01/25/2012 09:32	0.13	-252	7.87	0.02	0.26601	9.14	49.3
MW-197	01/25/2012 09:34	0.13	-249	7.84	0.02	0.2665	9.14	48.2
MW-197	01/25/2012 09:36	0.13	-246	7.82	0.02	0.26628	8.98	30
MW-197	01/25/2012 09:38	0.14	-244	7.8	0.02	0.26322	8.81	224
MW-197	01/25/2012 09:40	0.14	-240	7.79	0.02	0.2596	8.58	38.8
MW-197	01/25/2012 09:42	0.14	-238	7.78	0.02	0.25754	8.57	30.7
MW-197	01/25/2012 09:44	0.14	-237	7.77	0.02	0.25986	8.87	91.3
MW-197	01/25/2012 09:46	0.13	-235	7.75	0.02	0.26421	9.13	43.7
MW-197	01/25/2012 09:49	0.13	-234	7.74	0.02	0.265	9.28	25.3
MW-197	01/25/2012 09:51	0.14	-233	7.73	0.02	0.26618	9.36	26.5
MW-197	01/25/2012 09:53	0.13	-231	7.72	0.02	0.2653	9.37	49.1
MW-197	01/25/2012 09:55	0.14	-229	7.71	0.02	0.2656	9.43	16.1
MW-197	01/25/2012 09:57	0.15	-228	7.7	0.02	0.26554	9.34	18.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-197	01/25/2012 09:59	0.15	-227	7.7	0.02	0.26593	9.43	61.1
MW-197	01/25/2012 10:01	0.14	-226	7.69	0.02	0.26453	9.39	21.7
MW-197	01/25/2012 10:03	0.15	-224	7.68	0.02	0.26408	9.13	46.7
MW-197	01/25/2012 10:05	0.15	-223	7.68	0.02	0.26366	9.12	20.9
MW-197	01/25/2012 10:07	0.15	-222	7.67	0.02	0.26453	9.29	37.9
MW-197	01/25/2012 10:09	0.15	-221	7.66	0.02	0.26507	9.27	32.1
MW-197	01/25/2012 10:11	0.15	-220	7.66	0.02	0.26237	9.18	15.1
MW-197	01/25/2012 10:12	0.15	-220	7.66	0.02	0.262	9.18	15.06
MW-197	01/25/2012 11:20	12.52	-189	7.37	0.02	0.333	9.80	18.60
MW-197	01/26/2012 09:45	1.70	-200	6.84	0.0000	0.517	11.10	13.70
MW-197	04/11/2012 08:17	3.02	213	6.13	0	0.35	11.5	5.1
MW-197	04/11/2012 08:19	2.61	209	6.2	0	0.34	11.3	4.2
MW-197	04/11/2012 08:21	2.36	204	6.26	0	0.32	11.2	3.5
MW-197	04/11/2012 08:23	2.15	201	6.28	0	0.32	11.2	3.5
MW-197	04/11/2012 08:25	2	198	6.29	0	0.31	11.2	3.3
MW-197	04/11/2012 08:27	1.9	196	6.29	0	0.31	11.2	3.1
MW-197	04/11/2012 08:29	1.8	193	6.29	0	0.31	11.2	3.6
MW-197	04/11/2012 08:31	1.72	187	6.28	0	0.31	11.3	4.3
MW-197	04/11/2012 08:33	1.7	183	6.28	0	0.31	11.4	3.3
MW-197	04/11/2012 08:35	1.67	179	6.27	0	0.3	11.6	3.1
MW-197	04/11/2012 08:37	1.69	178	6.26	0	0.3	11.6	2.8
MW-197	04/11/2012 08:39	1.66	174	6.27	0	0.301	11.7	3
MW-197	04/11/2012 09:51	3.32	-228	9.32	0	0.673	11.76	20.4
MW-197	04/12/2012 09:19	3	16	5.87	0	0.371	11.06	66.8
MW-197	07/02/2012 14:09	0.4	-235	8.13	0.03	0.59016	22.68	4.9
MW-197	07/02/2012 14:11	0.36	-235	8.1	0.03	0.58025	21.59	5.6
MW-197	07/02/2012 14:12	0.32	-235	9.2	0.03	0.57347	22.27	5
MW-197	07/02/2012 14:14	0.28	-235	8.93	0.03	0.57244	22.81	5.3
MW-197	07/02/2012 14:16	0.27	-234	8.76	0.03	0.55993	22.41	5.7
MW-197	07/02/2012 14:18	0.23	-233	8.56	0.03	0.55824	22.42	5.2
MW-197	07/02/2012 14:20	0.22	-232	8.45	0.03	0.55309	22.58	5.2
MW-197	07/02/2012 14:22	0.22	-231	8.02	0.03	0.54648	22.69	5.6
MW-197	07/02/2012 15:20	3.32	180	7.48	0.08	1.659	17.57	88.40
MW-197	07/03/2012 10:05	3.20	-258	6.46	0.10	1.710	16.32	54.70
MW-197	10/08/2012 09:45	1.5	-265	7.07	0.02	0.47138	18.02	6.3
MW-197	10/08/2012 09:48	1.67	-260	6.97	0.02	0.41916	17.02	2.5
MW-197	10/08/2012 09:50	1.14	-254	6.76	0.02	0.40588	18.86	1.9
MW-197	10/08/2012 09:52	1.01	-272	7.1	0.02	0.41805	19.07	3.1
MW-197	10/08/2012 09:54	0.99	-272	7.11	0.02	0.41796	18.97	1.8
MW-197	10/08/2012 09:56	0.96	-274	7.1	0.02	0.41656	19	1.9
MW-197	10/08/2012 09:58	0.93	-274	7.08	0.02	0.41515	18.89	2
MW-197	10/08/2012 10:01	0.9	-275	7.06	0.02	0.40923	19.01	2.1
MW-197	10/08/2012 10:03	0.89	-272	7.01	0.02	0.411	19.13	2.10
MW-197	10/08/2012 10:55	3.10	-207	10.70	0.15	2.824	20.76	125.20
MW-197	10/09/2012 09:25	1.02	-134	7.35	0.05	0.984	20.26	14.90
MW-197	01/22/2013 10:32	2	-224	7.1	0.13	2.55247	7.22	126.6
MW-197	01/22/2013 10:35	1.46	-231	7.01	0.12	2.42695	7.43	249.9
MW-197	01/22/2013 10:37	1.16	-237	6.99	0.12	2.37651	7.27	53.7
MW-197	01/22/2013 10:40	0.96	-242	6.95	0.12	2.29615	7.68	35.4
MW-197	01/22/2013 10:42	0.86	-247	6.94	0.12	2.30714	7.28	34.2
MW-197	01/22/2013 10:44	0.64	-250	6.92	0.12	2.26934	7.7	27.3
MW-197	01/22/2013 10:47	0.57	-255	6.91	0.12	2.26989	7.72	27.6
MW-197	01/22/2013 10:49	0.54	-257	6.9	0.11	2.25159	7.92	30.2
MW-197	01/22/2013 10:51	0.5	-261	6.89	0.11	2.26064	7.76	30.6
MW-197	01/22/2013 10:54	0.47	-265	6.88	0.12	2.2654	7.43	18.4
MW-197	01/22/2013 10:56	0.42	-268	6.87	0.11	2.22868	7.71	18.6
MW-197	01/22/2013 10:58	0.39	-269	6.87	0.11	2.24046	7.75	16.1
MW-197	01/22/2013 11:01	0.38	-270	6.86	0.11	2.24345	7.72	12.3
MW-197	01/22/2013 11:03	0.37	-272	6.86	0.11	2.24079	7.74	17.7
MW-197	01/22/2013 11:05	0.35	-273	6.86	0.11	2.24635	7.67	17.7
MW-197	01/22/2013 11:08	0.34	-274	6.85	0.11	2.22868	7.65	23.2
MW-197	01/22/2013 11:10	0.32	-275	6.85	0.11	2.22036	7.67	14.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-197	01/22/2013 11:12	0.31	-276	6.84	0.11	2.23975	7.77	13.8
MW-197	01/22/2013 11:15	2.55	-276	6.84	0.11	2.236	7.83	14.30
MW-197	01/22/2013 12:00	7.33	-59	6.49	0.14	2.671	9.86	358.50
MW-197	01/23/2013 09:30	1.22	-234	6.46	0.13	2.448	10.86	5.30
MW-197	04/15/2013 10:43	2.46	-215	7	0.04	0.841	11.36	29.4
MW-197	04/15/2013 11:24	3.58	-98	6.54	0.04	1.389	10.06	84.3
MW-197	04/16/2013 00:00	0.74	-238	6.58	0.04	1.51	9.61	15.8
MW-197	07/18/2013 09:32	0.90	-158	6.44	0.09	1.736	22.85	4.30
MW-197	07/18/2013 10:24	1.98	-163	7.15	0.09	1.745	23.28	11.00
MW-197	07/19/2013 10:31	0.06	-166.00	6.22	0.06	1.132	16.88	21.90
MW-197	02/26/2014 11:12	0.69	-236	7.16	0.03	0.701	2.62	0.89
MW-197	02/26/2014 11:54	5.46	-154	7.54	0.04	0.824	8.04	134.30
MW-197	02/27/2014 10:37	2.26	-78	6.44	0.04	0.895	8.52	18.10
MW-197	04/23/2014 09:59	1.03	-404	6.40	0.07	1.342	10.49	7.95
MW-197	04/23/2014 10:40	2.97	-165	6.74	0.05	0.927	10.07	8.00
MW-197	04/24/2014 13:08	1.70	-325	7.50	0.03	0.646	9.73	11.40
MW-197	07/21/2014 12:54	0.72	-29	5.95	0.05	1.093	24.03	10.45
MW-197	07/21/2014 14:46	2.04	-203	7.26	0.05	0.986	18.19	5.00
MW-197	07/22/2014 10:20	0.49	-236	6.10	0.02	0.433	18.23	9.20
MW-197	10/13/2014 13:00	0.76	-24	5.58	0.15	2.879	20.19	14.04
MW-197	10/13/2014 13:56	2.01	-169	7.10	0.20	3.741	19.87	21.70
MW-197	10/14/2014 09:59	-0.08	-93	5.89	0.18	3.380	19.70	14.70
MW-197	04/01/2015 13:59	0.91	47	6.67	0.02	0.489	8.69	3.03
MW-197	04/01/2015 15:12	4.45	-211	7.22	0.02	0.880	7.95	57.90
MW-197	04/02/2015 10:44	-0.05	-22	6.40	0.03	0.717	7.65	108.00
MW-197	05/07/2015 10:40	0.35	-50	6.25	0.08	1.554	9.98	26.8
MW-197	05/07/2015 14:34	6.84	-94	6.57	0.04	0.763	10.52	63.5
MW-197	07/17/2015 10:42	0.34	-61	6.17	0.1	2.012	16.84	25.5
MW-197	07/17/2015 15:01	1.52	-181	6.67	0.04	0.856	20.26	37.7
MW-197	10/13/2015 13:25	2.44	-102	6.16	0.13	2.527	20.58	16
MW-197	10/13/2015 14:46	5.59	-63	6.67	0.18	3.327	21.72	27.1
MW-197	03/09/2016 09:43	1.92	-87	6.59	0.05	0.926	9.18	6.40
MW-197	03/09/2016 15:08	4.55	-167	7.31	0.07	1.352	9.40	12.60
MW-197	03/23/2017 10:55	1.35	100	6.66	0.06	1.256	9.17	19.30
MW-197	03/23/2017 13:16	11.46	-255	8.08	0.07	1.357	8.41	270.10
MW-197	04/25/2018 09:58	3.8	-236	9.52	0.0830	1.6424	11.27	8.1
MW-197	04/25/2018 10:00	1.81	-231	9.48	0.0957	1.8844	10.85	3.4
MW-197	04/25/2018 10:03	1.26	-229	9.3	0.0742	1.4773	10.64	2.4
MW-197	04/25/2018 10:05	1.08	-229	9.15	0.0409	0.8339	10.63	3.3
MW-197	04/25/2018 10:07	0.96	-227	8.99	0.0398	0.8127	10.68	2.1
MW-197	04/25/2018 10:09	0.94	-225	8.84	0.0398	0.8119	10.67	2.2
MW-197	04/25/2018 10:11	0.86	-223	8.7	0.0396	0.8090	10.67	4.1
MW-197	04/25/2018 10:14	0.87	-222	8.58	0.0397	0.8094	10.65	1.9
MW-197	04/25/2018 10:16	0.87	-218	8.43	0.0399	0.8148	10.71	2.9
MW-197	04/25/2018 10:18	0.87	-217	8.35	0.0400	0.8159	10.72	2.1
MW-197	04/25/2018 10:20	0.85	-215	8.26	0.0397	0.8106	10.7	2.3
MW-197	04/25/2018 10:22	0.83	-215	8.18	0.0399	0.8134	10.7	2.5
MW-197	04/25/2018 10:24	0.83	-213	8.09	0.0399	0.8145	10.7	3.3
MW-197	04/25/2018 10:27	0.81	-213	8.02	0.0401	0.8187	10.69	2.2
MW-197	04/25/2018 10:29	0.76	-211	7.96	0.0396	0.8077	10.72	3.2
MW-197	04/25/2018 10:31	0.8	-212	7.92	0.0399	0.8129	10.73	2.5
MW-197	04/26/2018 09:50	4.59	-168.00	6.91	0.04	0.813	10.26	12.40
MW-197	04/26/2018 10:31	0.80	-212.00	7.92	0.04	0.816	10.61	2.52
MW-197	04/26/2018 11:13	2.43	-188.00	8.02	0.04	0.852	10.12	16.30
MW-197	03/29/2019 12:45	0.47	-247.5	7.48	NM	0.67	8.89	31.1
MW-197	03/29/2019 13:50	1.45	-227.9	7.12	0.24	0.488	8.5	25.1
MW-197	05/27/2021 11:50	2.91	17.4	6.66	0.23	0.481	17.52	11.5
MW-197	05/27/2021 11:55	1.74	13.9	6.57	0.23	0.472	16.53	9.9
MW-197	05/27/2021 12:00	1.39	10.1	6.5	0.23	0.466	16.61	8
MW-197	05/27/2021 12:05	0.73	5.7	6.42	0.22	0.454	16.2	6.2
MW-197	05/27/2021 12:10	0.79	10.6	6.42	0.22	0.451	16.96	6.1
MW-197	05/27/2021 12:15	0.85	15.5	6.4	0.22	0.45	17.35	6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-197	05/27/2021 12:20	0.81	20.7	6.38	0.22	0.449	17.98	5.6
MW-197	05/27/2021 12:25	0.85	23.5	6.37	0.21	0.445	19.3	5.4
MW-197	05/27/2021 12:30	0.85	24.9	6.37	0.21	0.443	20.38	5.3
MW-197	05/27/2021 12:35	0.86	26.1	6.37	0.21	0.442	20.66	5.1
MW-198	01/25/2012 08:14	2.09	-187	7.3	1.9	22.747	11.33	3.3
MW-198	01/25/2012 08:17	0.12	-229	7.18	1.88	22.75665	11.74	0
MW-198	01/25/2012 08:21	0.99	-257	7.18	1.88	22.76371	11.87	1.9
MW-198	01/25/2012 08:25	0.85	-275	7.2	1.88	22.76826	11.71	1.7
MW-198	01/25/2012 08:29	0.83	-289	7.25	1.89	22.77199	11.65	5.2
MW-198	01/25/2012 08:33	0.82	-298	7.34	1.9	22.77461	11.43	4.8
MW-198	01/25/2012 08:36	0.85	-304	7.33	1.9	22.7768	11.31	8.1
MW-198	01/25/2012 08:40	0.84	-308	7.33	1.91	22.77904	11.25	17.4
MW-198	01/25/2012 08:44	0.86	-312	7.33	1.9	22.78097	11.33	39.4
MW-198	01/25/2012 08:48	0.88	-315	7.34	1.9	22.78209	11.41	55.6
MW-198	01/25/2012 08:52	0.86	-318	7.35	1.9	22.78271	11.38	85.3
MW-198	01/25/2012 08:55	0.87	-320	7.35	1.9	22.78302	11.46	114.7
MW-198	01/25/2012 08:59	0.88	-323	7.37	1.89	22.7824	11.63	87.8
MW-198	01/25/2012 09:03	0.89	-324	7.37	1.89	22.78168	11.5	79.2
MW-198	01/25/2012 09:04	0.89	-324	7.37	1.89	22.780	11.50	79.15
MW-198	01/25/2012 10:25	6.85	-270	7.46	1.82	22.740	12.94	8.00
MW-198	01/26/2012 09:13	0.0000	-345	7.34	3.10	48.200	11.90	149.00
MW-198	04/11/2012 09:08	1.83	-207	7.5	2.7	41.6	13.3	0
MW-198	04/11/2012 09:10	1.64	-236	7.57	2.7	41.8	13.1	0
MW-198	04/11/2012 09:12	1.56	-248	7.6	2.7	41.7	13.1	0
MW-198	04/11/2012 09:14	1.48	-264	7.63	2.6	41.7	13.1	0
MW-198	04/11/2012 09:16	1.41	-283	7.66	2.6	41.7	13.1	0
MW-198	04/11/2012 09:18	1.37	-292	7.68	2.6	41.6	13.1	0
MW-198	04/11/2012 09:20	1.33	-304	7.69	2.6	41.6	13.2	0
MW-198	04/11/2012 09:22	1.3	-312	7.7	2.6	41.6	13.2	0
MW-198	04/11/2012 09:24	1.27	-319	7.71	2.7	41.7	13.1	0
MW-198	04/11/2012 09:26	1.24	-325	7.72	2.6	41.6	13.3	0
MW-198	04/11/2012 09:28	1.21	-329	7.72	2.6	41.6	13.4	0
MW-198	04/11/2012 09:30	1.2	-332	7.72	2.7	41.6	13.4	0
MW-198	04/11/2012 10:40	2.19	-245	7.21	2.6	41.2	13.23	0
MW-198	04/12/2012 09:45	1.04	-326	7.38	2.6	40.4	12.39	0
MW-198	07/02/2012 12:53	0.41	-308	8.12	1.51	24.4385	25.79	4.4
MW-198	07/02/2012 12:57	0.36	-327	8.28	1.67	26.91853	20.89	3.6
MW-198	07/02/2012 13:01	0.29	-334	8.31	1.68	27.10688	20.55	4.8
MW-198	07/02/2012 13:04	0.25	-339	9.15	1.67	26.98962	20.76	3.5
MW-198	07/02/2012 13:08	0.23	-342	9.05	1.7	27.37062	20.09	2
MW-198	07/02/2012 13:12	0.2	-345	8.69	1.7	27.3774	20.1	1.7
MW-198	07/02/2012 13:15	0.19	-347	8.61	1.69	27.17225	20.47	1.9
MW-198	07/02/2012 13:19	0.17	-349	8.54	1.68	27.11424	20.59	1.5
MW-198	07/02/2012 13:23	0.18	-351	8.54	1.71	27.52959	19.87	1.3
MW-198	07/02/2012 13:26	0.17	-352	8.44	1.7	27.45067	20.02	1.6
MW-198	07/02/2012 13:30	0.16	-353	8.43	1.69	27.18432	20.49	1.7
MW-198	07/02/2012 13:34	0.17	-355	8.38	1.69	27.23132	20.41	1.3
MW-198	07/02/2012 13:38	0.16	-356	8.4	1.7	27.40606	20.1	1.9
MW-198	07/02/2012 13:41	0.16	-357	8.4	1.71	27.46236	20.00	1.9
MW-198	07/02/2012 14:48	0.82	-295	8.31	1.86	29.820	16.35	7.10
MW-198	07/03/2012 09:35	2.70	-396	7.72	3.30	5.060	17.45	38.10
MW-198	10/08/2012 08:35	2.61	-276	10.93	1.76	28.33122	16.48	6.4
MW-198	10/08/2012 08:39	0.74	-298	8.65	1.74	28.0419	16.95	2.6
MW-198	10/08/2012 08:43	0.56	-311	7.51	1.74	28.14026	16.8	1.4
MW-198	10/08/2012 08:47	0.5	-318	10.43	1.74	28.06761	16.92	2.1
MW-198	10/08/2012 08:51	0.48	-326	11.23	1.73	27.95204	17.1	1.5
MW-198	10/08/2012 08:55	0.48	-331	11.37	1.72	27.71747	17.47	1.6
MW-198	10/08/2012 08:59	0.5	-329	11.07	1.73	27.87595	17.21	1.8
MW-198	10/08/2012 09:02	0.5	-331	9.84	1.72	27.82538	17.29	0.8
MW-198	10/08/2012 09:06	0.48	-337	10	1.72	27.77076	17.37	0.8
MW-198	10/08/2012 09:10	0.53	-337	10.12	1.72	27.78098	17.35	0.6
MW-198	10/08/2012 09:11	0.53	-337	10.12	1.72	27.780	17.35	0.60

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-198	10/08/2012 10:26	0.79	-340	12.30	1.74	28.100	17.08	3.20
MW-198	10/09/2012 08:55	0.40	-288	8.57	1.60	25.950	20.40	137.50
MW-198	01/22/2013 09:14	1.73	-281	7.39	3.39	33.93524	9.11	24.4
MW-198	01/22/2013 09:18	0.5	-332	7.28	5.34	53.40118	10.05	15.1
MW-198	01/22/2013 09:22	0.36	-321	7.29	5.42	54.16012	9.4	10
MW-198	01/22/2013 09:25	0.31	-312	7.3	5.43	54.32302	9.28	10.3
MW-198	01/22/2013 09:29	0.26	-307	7.3	5.44	54.35432	9.26	10.3
MW-198	01/22/2013 09:33	0.26	-303	7.3	5.45	54.4843	9.04	7.3
MW-198	01/22/2013 09:37	0.23	-302	7.3	5.45	54.52925	9.1	7.1
MW-198	01/22/2013 09:40	0.24	-302	7.29	5.46	54.58065	9.46	4.8
MW-198	01/22/2013 09:44	0.19	-305	7.29	5.42	54.21913	9.68	28.2
MW-198	01/22/2013 09:48	0.19	-311	7.29	5.48	54.78632	9.54	18.3
MW-198	01/22/2013 09:51	0.16	-310	7.3	5.46	54.55738	9.2	7.8
MW-198	01/22/2013 09:55	0.14	-314	7.3	5.47	54.6571	8.95	7.9
MW-198	01/22/2013 09:59	0.17	-315	7.3	5.46	54.56096	9.08	2.2
MW-198	01/22/2013 10:03	0.18	-320	7.3	5.47	54.65658	8.86	2.3
MW-198	01/22/2013 10:04	0.18	-320	7.30	3.55	54.660	8.86	2.33
MW-198	01/22/2013 11:23	1.04	-358	7.31	3.71	56.010	13.94	3.20
MW-198	01/23/2013 09:59	0.32	-465	7.31	4.03	60.300	14.00	6.80
MW-198	04/15/2013 09:37	1.42	-301	7.27	4.49	66.64	12.16	1.36
MW-198	04/15/2013 10:52	0.4	-326	7.25	4.47	66.43	11.88	8.6
MW-198	04/16/2013 09:23	-0.41	-370	7.27	4.47	66.54	11.62	4.2
MW-198	07/18/2013 10:06	1.01	-288	7.51	4.76	68.960	20.91	0.83
MW-198	07/18/2013 10:50	1.45	-230	6.05	3.98	59.540	14.50	2.00
MW-198	07/19/2013 10:04	-0.03	-309.00	7.42	3.07	47.460	17.32	7.00
MW-198	02/26/2014 10:08	0.59	-330	7.31	4.03	61.430	7.26	4.06
MW-198	02/26/2014 11:22	2.07	-317	7.41	3.55	54.140	11.81	10.50
MW-198	02/27/2014 10:01	0.31	-287	7.71	3.52	53.860	11.56	6.70
MW-198	04/23/2014 09:18	0.78	-322	7.35	3.09	47.490	13.23	87.47
MW-198	04/23/2014 10:42	2.11	-334	7.27	5.01	73.040	13.98	95.10
MW-198	04/24/2014 12:55	1.43	-296	7.64	3.85	58.340	11.13	4.70
MW-198	07/21/2014 14:06	0.45	-338	7.18	1.64	26.550	20.04	0.27
MW-198	07/21/2014 15:06	3.23	-129	7.22	1.87	30.180	14.30	4.50
MW-198	07/22/2014 10:58	0.05	-411	7.67	1.63	26.460	17.99	99.60
MW-198	10/13/2014 13:40	0.53	-349	7.11	3.23	49.030	18.13	10.64
MW-198	10/13/2014 14:22	1.20	-233	7.34	3.33	50.590	16.75	36.00
MW-198	10/14/2014 10:27	-0.27	-242	7.58	3.29	49.800	19.17	134.80
MW-198	04/01/2015 15:03	2.45	-306	7.32	2.65	54.520	12.53	13.76
MW-198	04/01/2015 15:42	8.96	-168	7.75	3.59	54.620	12.32	8.47
MW-198	04/02/2015 11:09	0.52	-231	7.73	3.56	54.870	10.67	7.20
MW-198	05/07/2015 11:24	2.13	-336	7.34	4.05	60.97	11.41	3.3
MW-198	05/07/2015 15:01	0.41	-278	7.47	3.67	55.72	12.55	8.4
MW-198	07/17/2015 11:08	0.5	-218	6.97	12.16	151.8	17.4	53.7
MW-198	07/17/2015 15:29	1.98	-167	7.09	5.96	84.51	15.8	6.2
MW-198	10/13/2015 13:15	2.78	-187	7.19	3.36	50.62	20.93	126.8
MW-198	10/13/2015 14:22	5.97	-306	7.13	3.55	53.41	17.85	7.1
MW-198	03/09/2016 09:17	0.11	-265	7.48	3.71	56.340	11.85	3.90
MW-198	03/09/2016 14:57	0.71	-190	7.70	4.50	66.532	13.31	7.70
MW-198	03/23/2017 11:23	0.85	-324	7.43	3.07	47.420	12.08	0.80
MW-198	03/23/2017 14:49	10.87	-388	6.90	3.71	56.366	11.68	11.10
MW-198	04/25/2018 08:52	1.06	-185	7.25	3.6138	0.0545	15.38	2.9
MW-198	04/25/2018 08:53	1.09	-188	7.26	3.6088	0.0545	15.43	3
MW-198	04/25/2018 08:56	0.95	-214	7.42	3.8687	0.0584	12.49	4.3
MW-198	04/25/2018 09:00	0.87	-249	7.49	3.8504	0.0581	12.6	3.1
MW-198	04/25/2018 09:04	0.86	-266	7.53	3.8479	0.0581	12.56	3
MW-198	04/25/2018 09:08	0.88	-277	7.56	3.8456	0.0580	12.53	1.7
MW-198	04/25/2018 09:12	0.73	-286	7.58	3.8417	0.0580	12.53	1.6
MW-198	04/25/2018 09:16	0.89	-293	7.59	3.8339	0.0579	12.58	1.9
MW-198	04/25/2018 09:20	0.91	-298	7.6	3.8315	0.0578	12.58	1.3
MW-198	04/25/2018 09:23	0.89	-303	7.61	3.8279	0.0578	12.6	1.1
MW-198	04/25/2018 09:27	0.73	-307	7.61	3.8304	0.0578	12.56	1.6
MW-198	04/25/2018 09:31	0.72	-310	7.62	3.8265	0.0578	12.59	1.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-198	04/25/2018 09:35	0.85	-313	7.62	3.8305	0.0578	12.54	0.8
MW-198	04/25/2018 09:39	0.84	-315	7.63	3.8279	0.0578	12.56	0.6
MW-198	04/25/2018 09:43	0.66	-316	7.64	3.8292	0.0578	12.54	0.6
MW-198	04/26/2018 09:23	1.95	-310.00	7.35	4.07	61.160	11.77	7.20
MW-198	04/26/2018 09:43	0.66	-316.00	7.64	3.83	58.010	12.42	0.61
MW-198	04/26/2018 10:43	1.28	-302.00	6.90	3.85	58.180	12.3	5.80
MW-198	03/29/2019 10:20	0.29	-339.5	7.4	NM	68.56	11.95	8.1
MW-198	03/29/2019 11:40	0.61	-336.5	7.35	48.5	72	13.62	8.8
MW-198	03/27/2020 10:50	1.42	259.9	7.45	NM	45.17	15.47	NM
MW-198	03/27/2020 12:25	1.09	-298.3	7.59	28.11	44.83	14.89	0
MW-198	05/28/2021 08:25	4.93	-158.6	7.13	32.14	48.95	15.73	8.5
MW-198	05/28/2021 08:30	3.09	-190.3	7.22	32.1	49.36	14.76	6
MW-198	05/28/2021 08:35	2.69	-212.9	7.24	30.25	49.23	14.33	4.8
MW-198	05/28/2021 08:40	0.94	-257.4	7.31	32.11	49.18	13.63	2.8
MW-198	05/28/2021 08:45	0.43	-274.3	7.32	32.12	49.18	13.78	2.4
MW-198	05/28/2021 08:50	0.13	-285.2	7.32	32.03	49.01	13.95	2.1
MW-198	05/28/2021 08:55	0.03	-293.1	7.31	32	48.97	14.1	1.8
MW-198	05/28/2021 09:00	0.03	-296.1	7.31	32.06	49.07	14.18	1.7
MW-198	05/28/2021 09:05	0.03	-302.7	7.31	32.07	49.09	13.97	1.7
MW-198	02/04/2022 08:55	0.11	-342.7	7.12	30.8	47.3	12.86	1.8
MW-198	02/04/2022 09:00	-1.39	-346.7	7.12	31.14	47.69	12.93	1.9
MW-198	02/04/2022 09:05	-0.44	-355.6	7.12	32.68	49.87	12.88	2.6
MW-198	02/04/2022 09:10	-0.37	-358.2	7.11	34.21	52	12.94	2.9
MW-198	02/04/2022 09:15	-0.49	-360.9	7.12	35.17	53.26	12.84	3.9
MW-198	02/04/2022 09:20	0.22	-360.8	7.12	35.5	53.8	12.85	3.4
MW-198	02/04/2022 09:25	-0.24	-364.8	7.13	36.02	54.57	12.77	3.2
MW-198	02/04/2022 09:30	-0.24	-360.7	7.14	36.42	55.08	12.92	3.6
MW-198	02/04/2022 09:35	0.07	-361.2	7.14	36.42	55.08	12.86	3.6
MW-198	02/04/2022 09:40	-0.66	-362.4	7.15	36.48	55.16	12.79	3.6
MW-199	02/01/2012 08:46	0.2	-18	6.89	0.19	3.58436	11.33	188.4
MW-199	02/01/2012 08:49	0.22	-31	6.93	0.19	3.62431	9.25	6.2
MW-199	02/01/2012 08:51	0.21	-39	6.95	0.19	3.62423	9.28	71.7
MW-199	02/01/2012 08:53	0.19	-44	6.96	0.19	3.63343	9.21	698.7
MW-199	02/01/2012 08:56	0.18	-48	6.97	0.19	3.63537	9.29	25.2
MW-199	02/01/2012 08:58	0.16	-51	6.99	0.19	3.63968	9.21	14.7
MW-199	02/01/2012 09:00	0.15	-54	7	0.19	3.6327	9.27	21.4
MW-199	02/01/2012 09:03	0.14	-56	7	0.19	3.64082	9.29	28
MW-199	02/01/2012 09:05	0.13	-58	7.01	0.19	3.63799	9.31	28
MW-199	02/01/2012 09:07	0.13	-59	7.01	0.19	3.63542	9.26	24.1
MW-199	02/01/2012 09:10	0.12	-61	7.01	0.19	3.63579	9.33	20.6
MW-199	02/01/2012 09:12	0.12	-62	7.02	0.19	3.63722	9.35	19.2
MW-199	02/01/2012 09:14	0.11	-63	7.02	0.19	3.63777	9.33	23.5
MW-199	02/01/2012 09:17	0.11	-64	7.02	0.19	3.63507	9.32	19.8
MW-199	02/01/2012 09:19	0.11	-65	7.02	0.19	3.63142	9.35	22.2
MW-199	02/01/2012 09:22	0.11	-66	7.03	0.19	3.63742	9.39	173.8
MW-199	02/01/2012 09:24	0.11	-67	7.03	0.19	3.63593	9.34	1738
MW-199	02/01/2012 09:26	0.11	-67	7.03	0.19	3.63232	9.29	2431.1
MW-199	02/01/2012 09:29	0.11	-68	7.03	0.19	3.6352	9.27	33.6
MW-199	02/01/2012 09:31	0.11	-68	7.03	0.19	3.63315	9.31	37.4
MW-199	02/01/2012 09:33	0.11	-69	7.03	0.19	3.63161	9.37	2467
MW-199	02/01/2012 09:36	0.11	-69	7.03	0.19	3.63587	9.38	41.2
MW-199	02/01/2012 09:38	0.11	-69	7.03	0.19	3.636	9.38	41.22
MW-199	02/01/2012 11:05	3.40	-107	7.14	0.41	7.459	12.61	33.10
MW-199	02/02/2012 09:20	2.07	-17	7.05	0.19	3.521	12.09	13.00
MW-199	04/04/2012 12:57	1.18	-78	6.84	0.16	2.99634	18.19	20.6
MW-199	04/04/2012 12:59	0.6	-77	6.8	0.16	2.99072	15.27	7.1
MW-199	04/04/2012 13:02	0.39	-77	6.8	0.16	3.00261	14.35	7.4
MW-199	04/04/2012 13:05	0.35	-77	6.81	0.16	3.0118	13.64	8.7
MW-199	04/04/2012 13:07	0.32	-77	6.81	0.16	3.01813	13.54	8.6
MW-199	04/04/2012 13:10	0.32	-78	6.81	0.16	3.00961	13.99	11.2
MW-199	04/04/2012 13:12	0.33	-79	6.82	0.16	3.00278	13.99	16.8
MW-199	04/04/2012 13:15	0.34	-78	6.82	0.16	3.00574	13.76	11.8

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-199	04/04/2012 13:18	0.35	-79	6.82	0.16	3.01328	13.76	9
MW-199	04/04/2012 13:20	0.36	-80	6.83	0.16	3.0035	14.02	9.3
MW-199	04/04/2012 13:23	0.36	-80	6.84	0.16	3.00863	13.88	11
MW-199	04/04/2012 13:26	0.36	-81	6.84	0.16	3.00223	13.82	8.6
MW-199	04/04/2012 13:28	0.36	-81	6.84	0.16	3.0097	13.76	9.7
MW-199	04/04/2012 13:31	0.36	-82	6.84	0.16	3.01095	13.8	9.3
MW-199	04/04/2012 13:34	0.35	-82	6.85	0.16	3.00748	13.91	10.2
MW-199	04/04/2012 15:16	4.86	-89	7.03	0.39	7.042	13.44	78
MW-199	04/05/2012 10:33	1.2	-30	6.86	0.17	3.181	11.16	18.1
MW-199	07/10/2012 12:48	1.44	-103	6.4	0.15	2.80106	29.81	19.6
MW-199	07/10/2012 12:50	1.01	-122	6.47	0.15	2.87989	26.23	9.2
MW-199	07/10/2012 12:53	0.71	-129	6.51	0.15	2.8489	24.56	10
MW-199	07/10/2012 12:55	0.53	-134	6.51	0.15	2.81761	24.47	11.7
MW-199	07/10/2012 12:57	0.42	-137	6.51	0.15	2.80972	24.33	13.1
MW-199	07/10/2012 13:00	0.37	-139	6.51	0.15	2.78982	24.34	13.1
MW-199	07/10/2012 13:02	0.32	-141	6.52	0.15	2.78	24.27	14.8
MW-199	07/10/2012 13:04	0.29	-143	6.53	0.14	2.75319	23.96	14
MW-199	07/10/2012 13:07	0.27	-144	6.52	0.14	2.72694	24.04	14.1
MW-199	07/10/2012 13:09	0.24	-145	6.53	0.14	2.70191	24.07	14.7
MW-199	07/10/2012 13:11	0.23	-146	6.54	0.14	2.66261	24.09	15.1
MW-199	07/10/2012 13:14	0.22	-146	6.54	0.14	2.63359	24.12	14.9
MW-199	07/10/2012 13:16	0.21	-147	6.69	0.14	2.66137	24.00	14
MW-199	07/10/2012 14:38	2.28	-177	7.27	0.67	10.450	16.35	92.30
MW-199	07/11/2012 10:35	2.73	-164	6.75	0.60	10.500	14.62	411.00
MW-199	10/17/2012 08:44	6.00	-96	6.50	0.3	5.20	17.3	9.2
MW-199	10/17/2012 08:46	5.50	-108	6.53	0.3	5.21	17.1	9.9
MW-199	10/17/2012 08:48	5.18	-114	6.59	0.3	5.19	17.2	11.2
MW-199	10/17/2012 08:50	4.68	-120	6.63	0.3	5.16	17.4	15.4
MW-199	10/17/2012 08:52	4.54	-123	6.64	0.3	5.11	17.3	17.5
MW-199	10/17/2012 08:54	4.49	-125	6.67	0.3	5.08	17.1	20.9
MW-199	10/17/2012 08:56	4.42	-127	6.68	0.3	5.03	17.3	21.1
MW-199	10/17/2012 08:58	4.38	-128	6.69	0.30	5.040	17.37	21.80
MW-199	10/17/2012 10:10	5.48	-141	6.99	0.40	7.580	18.32	27.00
MW-199	10/18/2012 09:25	4.47	-89	6.66	0.20	4.530	18.43	17.10
MW-199	01/28/2013 09:02	5.49	-160	6.69	0.28	5.33091	6.3	10.7
MW-199	01/28/2013 09:04	0.98	-195	6.8	0.28	5.25872	6.44	5.9
MW-199	01/28/2013 09:07	0.76	-238	6.82	0.28	5.22682	6.13	6
MW-199	01/28/2013 09:09	0.93	-269	6.83	0.28	5.21453	6.09	6.1
MW-199	01/28/2013 09:12	0.88	-290	6.84	0.28	5.21284	6.17	5.8
MW-199	01/28/2013 09:14	0.76	-296	6.85	0.28	5.21953	6.19	6.1
MW-199	01/28/2013 09:17	0.69	-296	6.85	0.28	5.20922	6.27	7.7
MW-199	01/28/2013 09:20	0.63	-299	6.85	0.28	5.20991	6.26	6.6
MW-199	01/28/2013 09:22	0.59	-295	6.86	0.28	5.21475	6.33	12.2
MW-199	01/28/2013 09:25	0.55	-296	6.86	0.28	5.209	6.27	8.5
MW-199	01/28/2013 09:27	0.53	-295	6.86	0.28	5.2108	6.26	10
MW-199	01/28/2013 09:30	0.5	-296	6.87	0.28	5.21024	6.2	8
MW-199	01/28/2013 09:32	0.46	-292	6.87	0.28	5.21141	6.22	10.5
MW-199	01/28/2013 09:35	0.44	-292	6.87	0.28	5.20385	6.3	8.8
MW-199	01/28/2013 09:37	0.45	-292	6.87	0.28	5.20922	6.15	8.4
MW-199	01/28/2013 09:40	0.44	-291	6.87	0.28	5.20445	6.48	7.1
MW-199	01/28/2013 09:42	0.45	-289	6.87	0.28	5.20871	6.46	7
MW-199	01/28/2013 09:45	0.4	-286	6.87	0.28	5.22436	6.27	6.9
MW-199	01/28/2013 09:48	0.38	-284	6.87	0.28	5.21081	6.41	7.2
MW-199	01/28/2013 09:50	0.36	-281	6.87	0.28	5207.000	6.75	6.79
MW-199	01/28/2013 11:24	4.60	-147	6.77	0.57	10270.000	8.89	8.40
MW-199	01/29/2013 09:42	0.55	-274	6.61	0.39	7102.000	12.70	29.10
MW-199	04/17/2013 09:56	1.78	-232	6.69	0.28	5.24	11.71	14.15
MW-199	04/17/2013 11:06	5.34	-132	6.64	0.37	6.783	9.89	33
MW-199	04/18/2013 10:16	0.19	-193	6.7	0.29	5.375	9.48	13.5
MW-199	07/18/2013 13:35	1.36	-155	6.58	0.22	4.085	28.22	12.61
MW-199	07/18/2013 15:11	1.44	-133	6.65	0.72	12.980	16.00	79.10
MW-199	07/19/2013 11:07	-0.06	-166.00	6.71	0.29	5.418	15.36	16.30

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-199	02/19/2014 10:36	0.49	-128	6.79	0.34	6.420	5.98	5.39
MW-199	02/19/2014 11:30	6.80	-121	6.70	0.53	9.591	9.54	60.60
MW-199	02/20/2014 11:15	0.38	-127	6.43	1.06	17.980	11.40	16.70
MW-199	04/24/2014 10:59	1.59	-349	6.62	0.42	7.529	11.69	8.90
MW-199	04/24/2014 12:12	3.10	-204	6.79	0.90	15.520	11.64	89.80
MW-199	04/25/2014 10:04	3.09	-245	6.66	0.65	11.440	12.40	66.40
MW-199	07/16/2014 14:13	1.46	-4	6.24	0.22	4.045	23.88	12.46
MW-199	07/16/2014 15:36	2.17	-129	7.38	0.24	4.417	17.41	18.10
MW-199	07/17/2014 14:04	0.58	-29	6.53	0.24	4.507	17.08	10.10
MW-199	10/14/2014 09:07	1.02	-102	6.53	0.23	4.251	19.11	15.88
MW-199	10/14/2014 10:23	0.80	-116	6.71	1.09	18.290	17.76	47.70
MW-199	10/15/2014 09:35	-0.37	-137	6.49	0.99	16.660	16.98	57.10
MW-199	01/22/2015 11:15	-1.01	-202	6.79	0.18	3.410	5.74	9.81
MW-199	01/22/2015 11:52	1.31	-131	6.67	0.0000	0.937	9.52	110.20
MW-199	01/23/2015 10:03	-0.13	-315	6.51	0.50	9.016	12.50	68.50
MW-199	04/24/2015 09:49	1.29	-109	6.55	0.41	7.473	9.31	53.5
MW-199	04/24/2015 11:05	1.37	-94	6.73	0.49	8.904	9.43	152.9
MW-199	07/30/2015 10:45	0.24	-83	6.67	1.87	30.13	15.47	14.5
MW-199	07/30/2015 16:10	2.24	-68	7.47	4.14	61.33	17.26	137
MW-199	10/15/2015 12:36	2.36	-122	6.77	0.4	7.276	18.25	12.9
MW-199	10/15/2015 16:30	6.52	-81	6.85	0.85	14.57	18.28	14.7
MW-199	04/05/2016 11:23	1.67	-82	6.69	0.78	13.510	10.70	17.20
MW-199	04/05/2016 13:18	0.52	-157	7.23	0.01	0.260	11.45	23.30
MW-199	09/29/2016 08:51	0.67	-143	6.64	0.49	8.634	17.83	2.40
MW-199	09/29/2016 11:04	2.01	-109	7.53	0.44	7.856	20.14	14.80
MW-199	02/01/2017 09:32	0.05	330	4.67	0.62	10.900	12.32	7.40
MW-199	02/01/2017 11:07	1.27	-107	6.60	0.41	7.388	11.97	16.90
MW-199	02/08/2018 11:31	9.73	-32	7.48	0.337	6.2942	5.89	18.1
MW-199	02/08/2018 11:33	3.66	-39	7.17	0.343	6.3891	6.08	13.9
MW-199	02/08/2018 11:36	2.35	-40	7.03	0.336	6.2737	6.29	12
MW-199	02/08/2018 11:38	1.79	-39	6.96	0.335	6.2507	6.07	11.2
MW-199	02/08/2018 11:40	1.47	-37	6.89	0.334	6.2371	6.23	11.1
MW-199	02/08/2018 11:43	1.36	-35	6.87	0.334	6.2545	5.43	11.2
MW-199	02/08/2018 11:45	1.19	-33	6.82	0.331	6.1973	5.89	11.9
MW-199	02/08/2018 11:48	1.1	-32	6.8	0.333	6.2110	6.39	11.3
MW-199	02/08/2018 11:50	1.09	-31	6.78	0.334	6.2335	6.42	11.2
MW-199	02/09/2018 09:36	0.67	-19.00	6.75	0.33	6.065	9.18	9.80
MW-199	02/09/2018 11:50	1.09	-31.00	6.78	0.33	6.255	6.38	11.16
MW-199	02/09/2018 14:08	4.59	20.00	7.07	0.33	6.148	7.89	11.20
MW-199	07/31/2018 10:22	4.52	-49	7.65	0.222	4.1290	28.64	19.42
MW-199	07/31/2018 10:24	1.15	-124	7.04	0.245	4.5290	24.14	9.515
MW-199	07/31/2018 10:27	0.89	-133	6.89	0.244	4.5200	23.73	8.401
MW-199	07/31/2018 10:30	0.79	-138	6.82	0.241	4.4650	23.59	10.54
MW-199	07/31/2018 10:32	0.75	-141	6.77	0.238	4.4170	23.5	7.467
MW-199	07/31/2018 10:35	0.74	-142	6.73	0.236	4.3710	23.67	7.485
MW-199	07/31/2018 10:38	0.71	-144	6.78	0.234	4.3320	23.89	5.701
MW-199	07/31/2018 10:41	0.69	-146	6.68	0.230	4.2690	24.14	5.872
MW-199	07/31/2018 10:44	0.65	-147	6.68	0.231	4.2820	24.03	5.916
MW-199	08/01/2018 09:02	1.96	-114.00	6.44	0.22	4.098	17.56	22.20
MW-199	08/01/2018 10:44	0.65	-147.00	6.68	0.23	4.282	24.03	5.92
MW-199	08/01/2018 11:54	0.83	-200.00	7.62	0.24	4.425	18.94	22.10
MW-199	02/08/2019 10:30	0.53	-96	6.73	NM	3.446	7.37	20.7
MW-199	02/08/2019 10:40	0.53	-96.00	6.73	1.81	3.446	7.37	20.70
MW-199	02/08/2019 11:30	0.66	-96.20	6.75	1.81	3.440	8.05	4.60
MW-199	02/08/2019 11:45	4.58	-86.20	6.77	1.85	3.501	8.43	6.30
MW-199	07/23/2019 10:05	0.85	-72.4	7	NM	4.347	22.13	18
MW-199	07/23/2019 10:10	0.72	-73.3	6.78	NM	3.814	22.34	14.1
MW-199	07/23/2019 10:15	0.73	-70.7	6.54	NM	2.872	22.09	13.5
MW-199	07/23/2019 10:20	0.78	-68	6.45	NM	2.608	21.84	11
MW-199	07/23/2019 10:25	0.82	-65.1	6.39	NM	2.442	21.78	11.8
MW-199	07/23/2019 10:30	0.91	-64.4	6.36	NM	2.37	21.94	11.8
MW-199	07/23/2019 10:35	1.06	-64.9	6.35	NM	2.278	22.17	12.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-199	07/23/2019 10:40	1.26	-63.4	6.35	NM	2.209	22.23	12.9
MW-199	07/23/2019 10:45	1.1	-68.1	6.37	NM	2.154	22.22	17
MW-199	07/23/2019 10:50	1.17	-70.8	6.4	NM	2.098	22.19	21.8
MW-199	07/23/2019 13:25	1.17	-70.8	6.4	NM	2.098	22.19	21.8
MW-199	07/23/2019 14:19	1.82	-75.7	6.58	1.32	2.547	22.05	25.9
MW-199	07/23/2019 14:30	1.56	-82.3	6.64	1.31	2.546	22.69	46.3
MW-199	02/06/2020 10:25	2.39	-4.6	6.47	NM	1.005	7.91	162.3
MW-199	02/07/2020 08:00	8.25	-88.3	8.2	4.42	7.935	9.36	54.3
MW-199	03/17/2021 12:55	1.16	17.3	6.52	2.65	4.94	8.43	205.6
MW-199	03/17/2021 13:00	0.09	6.2	6.6	2.68	4.985	8.15	85.6
MW-199	03/17/2021 13:05	0.07	4.7	6.62	2.69	5.003	8.14	90
MW-199	03/17/2021 13:10	0.07	4.6	6.63	2.69	5.004	8.14	97.9
MW-199	03/17/2021 13:15	0.07	4.7	6.65	2.7	5.003	8.2	100
MW-199	03/17/2021 13:20	0.07	4.8	6.65	2.7	5.014	8.2	96.8
MW-199	03/17/2021 13:25	0.07	5.4	6.66	2.7	5.014	8.19	89.5
MW-199	03/17/2021 13:30	0.07	4.6	6.66	2.7	5.002	8.21	78.7
MW-199	03/17/2021 13:35	0.07	-0.4	6.66	2.71	5.052	8.41	61.8
MW-199	03/17/2021 13:40	0.08	-2.2	6.66	2.72	5.054	8.46	60.8
MW-199	03/18/2021 13:15	7.3	-9.4	6.49	1.39	2.682	8.56	26.1
MW-199	03/18/2021 13:25	7.6	-6	6.62	1.31	2.531	8.56	32.7
MW-199	03/18/2021 13:40	0.08	-2.2	6.66	2.72	5.054	8.46	60.8
MW-199	09/09/2021 12:30	1.72	-82.1	6.53	0.92	1.817	23.74	34.9
MW-199	09/09/2021 12:35	1.27	84.7	6.5	0.93	1.827	23.64	31
MW-199	09/09/2021 12:40	1.48	-83.7	6.46	0.94	1.842	23.3	28.1
MW-199	09/09/2021 12:45	1.6	-81.1	6.41	0.95	1.878	23.07	24.6
MW-199	09/09/2021 12:50	1.36	-80.7	6.38	0.98	1.924	22.91	21
MW-199	09/09/2021 12:55	1.42	-80.5	6.37	0.99	1.94	22.88	20.2
MW-199	09/09/2021 13:00	2.42	-71.1	6.38	0.99	1.939	23.03	24.2
MW-199	01/31/2022 11:40	0.47	-150.4	6.97	4.2	7.605	10.22	20.5
MW-199	01/31/2022 11:45	0.43	-149.2	6.95	4.12	7.503	10.15	39.9
MW-199	01/31/2022 11:50	0.32	-143.7	6.87	3.59	6.785	9.87	120.4
MW-199	01/31/2022 11:55	0.25	-142.7	6.83	3.37	6.213	9.66	366.3
MW-199	01/31/2022 12:00	0.25	-142.5	6.84	3.33	6.08	9.52	352.5
MW-199	01/31/2022 12:05	0.19	-126.5	6.82	1.93	3.671	8.65	139.6
MW-199	01/31/2022 12:10	0.1	-127.7	6.82	1.91	3.651	8.54	205.1
MW-199	01/31/2022 12:15	0.13	-128.6	6.82	1.9	3.63	8.48	198.4
MW-199	01/31/2022 12:20	0.12	-124	6.76	1.74	3.302	8.41	113
MW-199	01/31/2022 12:25	0.11	-124.5	6.76	1.73	3.299	8.44	97
MW-2	03/15/2012 12:29	1.94	102	6.45	0.03	0.54801	10.95	5.6
MW-2	03/15/2012 12:31	3.67	112	6.42	0.03	0.54713	10.78	1.7
MW-2	03/15/2012 12:34	2.42	118	6.41	0.03	0.54826	11.34	1.8
MW-2	03/15/2012 12:37	2.31	123	6.4	0.03	0.54931	11.27	2.7
MW-2	03/15/2012 12:40	2.78	126	6.39	0.03	0.54872	11.4	2.1
MW-2	03/15/2012 12:42	1.88	129	6.39	0.03	0.54934	11.28	1.8
MW-2	03/15/2012 12:45	2.03	131	6.39	0.03	0.54881	11.27	4.5
MW-2	03/15/2012 12:48	3.76	133	6.39	0.03	0.54949	11.48	1.7
MW-2	03/15/2012 12:51	3.44	135	6.39	0.03	0.54935	11.46	1.5
MW-2	03/15/2012 12:53	1.81	137	6.39	0.03	0.54947	11.36	1.7
MW-2	03/15/2012 12:56	1.82	138	6.39	0.03	0.54955	11.21	1.6
MW-2	03/15/2012 12:59	3.4	139	6.39	0.03	0.54929	11.37	1.9
MW-2	03/15/2012 13:02	3.97	141	6.39	0.03	0.54931	11.24	2
MW-2	03/15/2012 13:04	2	142	6.39	0.03	0.5492	11.29	1.5
MW-2	03/15/2012 13:07	2.34	142	6.39	0.03	0.5493	11.45	1.3
MW-2	03/15/2012 13:10	2.01	143	6.38	0.03	0.54873	11.51	3
MW-2	03/15/2012 13:12	1.89	144	6.38	0.03	0.54957	11.61	3.7
MW-2	03/15/2012 13:15	2.46	146	6.38	0.03	0.54912	11.65	6
MW-2	03/15/2012 13:18	1.91	146	6.38	0.03	0.54914	11.77	6.8
MW-2	03/15/2012 14:11	1.14	132	6.46	0.02	0.505	13.09	34.50
MW-2	03/16/2012 10:55	3.21	99	6.41	0.03	0.534	12.34	7.00
MW-2	02/25/2013 08:59	3.13	-150	6.19	0.05	1.0433	11.39	11.1
MW-2	02/25/2013 09:01	2.22	-167	6.1	0.05	0.95157	9.36	6.6
MW-2	02/25/2013 09:04	1.77	-174	6.08	0.05	0.98082	10.03	8.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-2	02/25/2013 09:07	1.63	-179	6.07	0.05	0.98566	9.83	5.7
MW-2	02/25/2013 09:10	1.5	-182	6.07	0.05	0.99084	10.17	2.7
MW-2	02/25/2013 09:12	1.44	-185	6.08	0.05	0.99755	9.98	3
MW-2	02/25/2013 09:15	1.39	-188	6.07	0.05	0.98802	9.84	1.6
MW-2	02/25/2013 09:18	1.4	-189	6.08	0.05	0.98974	9.81	1.6
MW-2	02/25/2013 09:21	1.36	-191	6.09	0.05	1.00087	9.95	2
MW-2	02/25/2013 09:23	1.35	-192	6.09	0.05	0.99961	9.93	1.7
MW-2	02/25/2013 09:26	1.35	-192	6.09	0.05	0.99407	10.2	1.6
MW-2	02/25/2013 09:29	1.36	-193	6.09	0.05	1.002	10.30	1.72
MW-2	02/25/2013 10:31	1.65	-189	6.15	0.04	0.891	13.33	25.40
MW-2	02/26/2013 09:56	1.28	149	6.11	0.03	607.500	53.62	7.10
MW-2	03/31/2014 14:04	2.07	-248	6.09	0.08	1.627	11.90	2.42
MW-2	03/31/2014 15:43	5.49	-106	6.18	0.06	1.198	13.33	190.20
MW-2	04/01/2014 10:50	3.68	-176	6.09	0.09	1.718	11.28	15.60
MW-2	12/10/2015 09:25	2.64	319	6.63	0.04	0.818	16	10.1
MW-2	12/10/2015 10:35	4.65	276	7.69	0.04	0.743	15.18	189.1
MW-2	09/09/2016 10:05	1.61	10	6.15	NM	3.177	21.63	16.60
MW-2	09/09/2016 11:08	1.62	-4	6.97	NM	2.636	19.75	57.20
MW-2	02/08/2017 09:59	1.64	1203	6.81	0.03	0.553	12.58	9.00
MW-2	02/08/2017 12:04	9.42	1214	7.10	0.03	0.677	13.54	125.40
MW-2	03/05/2018 10:11	7.95	130	6.61	0.0481	0.9787	8.79	13.3
MW-2	03/05/2018 10:14	2.32	127	6.21	0.0575	1.1597	9.54	5.3
MW-2	03/05/2018 10:16	1.74	129	6.14	0.0654	1.3110	10.04	5.4
MW-2	03/05/2018 10:19	1.51	136	6.14	0.0758	1.5104	9.83	4.2
MW-2	03/05/2018 10:22	1.43	144	6.15	0.0810	1.6082	10.06	4.9
MW-2	03/05/2018 10:24	1.41	149	6.16	0.0841	1.6680	9.92	4.5
MW-2	03/05/2018 10:27	1.43	154	6.17	0.0878	1.7395	9.72	5.9
MW-2	03/05/2018 10:30	1.39	159	6.18	0.0888	1.7575	9.94	4.6
MW-2	03/05/2018 10:32	1.34	163	6.19	0.0910	1.7998	9.78	6.3
MW-2	03/05/2018 10:35	1.31	167	6.19	0.0912	1.8030	9.91	8.3
MW-2	03/05/2018 10:38	1.33	171	6.2	0.0937	1.8505	9.69	7.2
MW-2	03/05/2018 10:40	1.27	173	6.2	0.0949	1.8735	9.6	5.7
MW-2	03/05/2018 10:43	1.24	176	6.2	0.0954	1.8840	9.66	5.7
MW-2	03/05/2018 10:46	1.23	178	6.2	0.0958	1.8895	9.77	6.6
MW-2	03/05/2018 10:48	1.17	181	6.21	0.0956	1.8855	9.92	6.6
MW-2	03/05/2018 10:51	1.19	183	6.21	0.0954	1.8827	9.97	6
MW-2	03/05/2018 10:54	1.17	186	6.21	0.0972	1.9160	9.81	7.3
MW-2	03/05/2018 10:56	1.16	188	6.22	0.0971	1.9140	9.89	8.7
MW-2	03/05/2018 10:59	1.16	189	6.22	0.0966	1.9043	10.13	6.2
MW-2	03/05/2018 11:02	1.15	191	6.22	0.0975	1.9205	9.97	7.8
MW-2	03/06/2018 10:23	2.99	186.00	6.16	0.10	1.949	11.53	17.30
MW-2	03/06/2018 11:02	1.15	191.00	6.22	0.10	1.928	9.83	7.85
MW-2	03/06/2018 12:00	5.60	250.00	6.24	0.06	1.212	13.37	1947.60
MW-2	03/11/2019 14:20	5.83	174.5	6.43	0.43	0.861	11.91	4
MW-2	10/15/2019 08:25	0.9	75.9	6.45	NM	0.996	17.02	2
MW-2	10/15/2019 08:30	0.77	86.2	6.27	NM	0.982	17.07	1
MW-2	10/15/2019 08:35	0.7	93.1	6.15	NM	0.966	17.09	0.1
MW-2	10/15/2019 08:40	0.53	95.4	6.1	NM	0.962	17.09	0.2
MW-2	10/15/2019 08:45	0.49	98	6.11	NM	0.959	17.24	0.4
MW-2	10/15/2019 08:50	0.43	100.4	6.09	NM	0.955	17.3	1.4
MW-2	10/15/2019 08:55	0.43	101.7	6.08	NM	0.955	17.19	3
MW-2	10/15/2019 09:00	0.42	104	6.08	NM	0.955	17.23	2.8
MW-2	10/15/2019 09:05	0.41	104.1	6.09	NM	0.952	17.31	2.7
MW-2	10/15/2019 09:10	0.42	106.6	6.07	NM	0.953	17.28	1.8
MW-2	10/15/2019 11:15	2.89	-24.9	6.79	0.47	0.959	19.24	2.7
MW-2	10/15/2019 11:30	4.47	12.2	6.38	0.46	0.929	17.56	77.2
MW-2	03/05/2020 12:50	6.87	136.5	6.16	NM	0.707	12.77	NM
MW-2	03/05/2020 13:40	6.67	130.3	6.2	0.36	0.703	12.22	0
MW-20	03/01/2013 09:25	2.86	-163	6.64	0.14	2065.000	11.82	23.00
MW-20	08/25/2014 13:48	1.57	279	6.25	0.08	1.514	19.33	251.00
MW-20	08/26/2014 11:30	1.07	-374	7.12	0.06	1.267	23.37	4.90
MW-20	03/09/2017 13:25	4.14	30.1	7.31	0.68	1.361	16.33	2.00

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-20	03/09/2017 13:35	8.28	19.9	7.33	0.68	1.343	13.10	19.60
MW-20	06/11/2018 12:50	3.57	-129	6.76	0.0676	1.3381	19.95	9.2
MW-20	06/11/2018 12:52	1.73	-129	6.68	0.0683	1.3518	18.21	6.6
MW-20	06/11/2018 12:54	1.38	-129	6.68	0.0683	1.3519	18.14	9
MW-20	06/11/2018 12:57	1.3	-129	6.68	0.0684	1.3533	18.03	8.8
MW-20	06/11/2018 12:59	1.29	-129	6.68	0.0685	1.3552	17.81	6.4
MW-20	06/11/2018 13:01	1.24	-129	6.69	0.0683	1.3522	17.89	7.2
MW-20	06/11/2018 13:02	1.19	-129	6.69	0.0683	1.3511	17.99	7
MW-20	06/11/2018 13:05	1.18	-130	6.7	0.0683	1.3522	18	13
MW-20	06/11/2018 13:07	1.2	-130	6.7	0.0686	1.3571	18.07	7
MW-20	06/11/2018 13:09	1.15	-130	6.7	0.0685	1.3563	18.1	8.1
MW-20	06/11/2018 13:12	1.21	-131	6.71	0.0687	1.3592	18.04	6.7
MW-20	06/11/2018 13:14	1.14	-131	6.71	0.0682	1.3500	18.01	8.9
MW-20	06/11/2018 13:17	1.14	-131	6.71	0.0684	1.3539	17.84	6.2
MW-20	06/11/2018 13:19	1.12	-131	6.71	0.0682	1.3507	17.78	6.4
MW-20	06/11/2018 13:21	1.08	-131	6.71	0.0683	1.3521	17.77	6.8
MW-20	06/12/2018 13:20	1.29	-129.00	7.37	0.06	1.277	19.32	7.70
MW-20	06/12/2018 13:21	1.08	-131.00	6.71	0.07	1.347	17.95	6.79
MW-20	06/12/2018 14:15	2.29	-122.00	6.80	0.07	1.315	15.94	12.90
MW-20	09/20/2018 13:35	4.13	-39.50	6.68	0.63	1.254	22.06	7.80
MW-20	09/20/2018 13:45	2.97	-40.60	6.84	0.63	1.361	20.01	3.60
MW-20	09/20/2018 14:55	5.12	-31.10	6.79	0.63	1.299	19.87	12.90
MW-20	12/13/2018 14:35	0.35	48.20	6.44	0.68	1.356	15.84	4.00
MW-20	12/13/2018 15:25	0.35	-53.20	6.48	0.69	1.361	15.7	4.30
MW-20	12/13/2018 15:35	0.35	-56.70	6.50	0.69	1.364	15.69	1.00
MW-20	03/20/2019 09:45	1.1	18.1	6.7	NM	1.163	10.74	21.6
MW-20	03/20/2019 11:43	4.25	-71.4	6.86	0.56	1.031	11.75	38
MW-20	06/19/2019 09:30	4.52	-20.7	6.6	NM	1.357	16.04	2
MW-20	06/19/2019 11:18	2.12	-76.2	6.9	0.68	1.356	17.87	3.7
MW-20	06/19/2019 11:30	2.05	-57.6	6.61	0.71	1.408	17.05	2.7
MW-20	09/04/2019 09:10	1.88	-137.7	8.67	NM	1.443	23.37	4.1
MW-20	09/04/2019 09:15	0.54	-131.2	6.96	NM	1.315	23.39	3.2
MW-20	09/04/2019 09:20	0.49	-136.1	6.79	NM	1.303	23.79	3.1
MW-20	09/04/2019 09:25	0.48	-138.8	6.73	NM	1.302	23.96	2.7
MW-20	09/04/2019 09:30	0.46	-131	6.72	NM	1.305	24.38	2.1
MW-20	09/04/2019 09:35	0.46	-126.8	6.71	NM	1.302	24.4	1.9
MW-20	09/04/2019 09:40	0.46	-128.7	6.72	NM	1.305	24.4	2.1
MW-20	09/04/2019 09:45	0.46	-132.8	6.74	NM	1.301	24.57	1.2
MW-20	09/04/2019 09:50	0.46	-122.3	6.75	NM	1.303	24.84	1.7
MW-20	09/04/2019 09:55	0.48	-116.6	6.7	NM	1.318	24.43	1.6
MW-20	09/04/2019 12:00	2.24	-165.6	6.94	1.01	1.98	23.12	17.6
MW-20	09/04/2019 12:15	3.35	-85.9	6.56	0.41	0.839	21.09	91.8
MW-20	12/10/2019 08:25	6.07	175.4	7.03	NM	0.628	16.13	60
MW-20	12/10/2019 08:30	1.84	64.4	6.52	NM	0.602	16.43	37.7
MW-20	12/10/2019 08:35	1.89	72	6.52	NM	0.602	16.47	41.7
MW-20	12/10/2019 08:40	1.99	70.6	6.53	NM	0.601	16.39	45.4
MW-20	12/10/2019 08:45	2.11	67.9	6.53	NM	0.602	16.42	46.2
MW-20	12/10/2019 08:50	2.34	63.3	6.53	NM	0.602	16.42	43.1
MW-20	12/10/2019 08:55	2.31	51	6.55	NM	0.603	16.41	47.1
MW-20	12/10/2019 09:00	2.55	40.2	6.53	NM	0.604	16.44	45.1
MW-20	12/10/2019 09:05	2.53	31.6	6.54	NM	0.605	16.43	42.4
MW-20	12/10/2019 09:10	2.5	23.9	6.54	NM	0.606	16.44	43.7
MW-20	12/10/2019 10:55	4.62	-102.6	6.6	0.33	0.664	16.43	6.2
MW-20	12/10/2019 11:05	5.44	-60.5	6.73	0.32	0.645	16.37	11.4
MW-20	09/03/2020 08:20	1.8	140.3	7.29	0.66	1.353	23.67	0.3
MW-20	09/03/2020 08:30	3.23	127.2	7.44	0.64	1.288	22.67	1.8
MW-20	09/03/2020 11:15	2.21	-136.6	6.5	0.61	1.202	23.16	3.3
MW-20	12/18/2020 08:30	2.87	81.1	6.77	0.89	1.755	10.25	37.3
MW-20	12/18/2020 08:35	1.05	76.9	6.63	0.74	1.458	10.49	40.2
MW-20	12/18/2020 08:40	0.79	76.2	6.59	0.69	1.377	10.79	38.4
MW-20	12/18/2020 08:45	0.64	64	6.58	0.68	1.357	11.16	40.2
MW-20	12/18/2020 08:50	0.63	63.4	6.58	0.68	1.358	11.12	46

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-20	12/18/2020 08:55	0.58	55.1	6.57	0.68	1.351	11.05	39.8
MW-20	12/18/2020 09:00	0.57	48.9	6.57	0.68	1.351	10.91	38.5
MW-20	12/18/2020 09:05	0.53	39.8	6.57	0.68	1.347	11.3	35.3
MW-20	12/18/2020 09:10	0.53	40.1	6.57	0.68	1.348	11.4	38.5
MW-20	12/18/2020 09:15	0.51	30.1	6.57	0.68	1.349	11.49	36.3
MW-20	12/18/2020 10:45	8.13	-79.4	7.15	0.74	1.468	11.67	19.3
MW-20	12/18/2020 10:55	3.38	-36.4	6.8	0.76	1.504	11.63	18.7
MW-20	03/10/2021 08:45	8.61	-46.2	6.63	0.71	1.419	11.24	36.1
MW-20	03/10/2021 08:50	4.95	-69.9	6.45	0.69	1.375	11.15	17.7
MW-20	03/10/2021 08:55	1.81	-79.5	6.4	0.68	1.347	11.11	6.3
MW-20	03/10/2021 09:00	0.58	-91.1	6.53	0.67	1.326	11	1.9
MW-20	03/10/2021 09:05	0.51	-90	6.57	0.66	1.319	10.67	1.7
MW-20	03/10/2021 09:10	0.5	-89.6	6.58	0.66	1.318	10.64	1
MW-20	03/10/2021 09:15	0.46	-90	6.61	0.66	1.317	11.02	1.2
MW-20	03/10/2021 09:20	0.43	-86.8	6.62	0.66	1.313	10.8	1.2
MW-20	03/10/2021 09:25	0.43	-86.5	6.61	0.66	1.313	10.76	1.5
MW-20	03/10/2021 09:30	0.42	-84.7	6.65	0.66	1.313	11.11	1
MW-20	03/10/2021 10:58	7.16	-104.2	7.08	0.7	1.384	13.1	30
MW-20	03/10/2021 11:11	5.09	-82.9	6.73	0.73	1.441	12.58	710
MW-20	05/19/2021 13:25	2.2	-69	5.76	0.54	1.08	17.02	6
MW-20	05/19/2021 13:30	1.82	-60.4	6.68	0.52	1.056	16.38	5
MW-20	05/19/2021 13:35	0.98	-33.8	5.48	0.52	1.039	16.11	5.2
MW-20	05/19/2021 13:40	0.86	-20.7	6.28	0.52	1.045	15.94	5.2
MW-20	05/19/2021 13:45	0.72	12.9	6.11	0.52	1.052	15.87	6.3
MW-20	05/19/2021 13:50	0.55	26.6	6.01	0.53	1.059	15.73	5.7
MW-20	05/19/2021 13:55	0.33	34.6	5.95	0.53	1.067	15.6	6.6
MW-20	05/19/2021 14:00	0.59	33.6	5.93	0.53	1.069	15.5	5.3
MW-20	05/19/2021 14:05	0.6	37.7	5.89	0.54	1.079	15.52	5.3
MW-20	05/19/2021 14:10	0.58	37.7	5.9	0.54	1.08	15.52	5.9
MW-20	02/04/2022 08:50	7.37	200.4	6.18	0.5	1.014	10.7	83.8
MW-20	02/04/2022 08:55	6.73	181.6	6.19	0.52	1.05	10.57	85.4
MW-20	02/04/2022 09:00	5.02	110.6	6.27	0.56	1.121	9.67	79.4
MW-20	02/04/2022 09:05	3.48	86.4	6.3	0.57	1.146	9.26	72.8
MW-20	02/04/2022 09:10	2.86	84.9	6.33	0.57	1.142	9.21	63.6
MW-20	02/04/2022 09:15	2.16	88.7	6.36	0.57	1.136	9.06	55.3
MW-20	02/04/2022 09:20	1.62	99.6	6.36	0.56	1.129	9.1	44.7
MW-20	02/04/2022 09:25	1.28	107.9	6.4	0.56	1.124	9.11	37.8
MW-20	02/04/2022 09:30	1.16	111.4	6.4	0.56	1.124	9.06	38.4
MW-20	02/04/2022 09:35	1.03	115.3	6.41	0.56	1.121	9.07	38.9
MW-20	05/03/2022 12:30	0.98	-87.5	6.53	0.51	1.022	14.66	31.9
MW-20	05/03/2022 12:35	0.76	-88.5	6.47	0.51	1.023	14.65	44
MW-20	05/03/2022 12:40	0.68	-84.8	6.46	0.51	1.022	14.6	46.9
MW-20	05/03/2022 12:45	0.59	-84.4	6.45	0.51	1.023	14.54	51.3
MW-20	05/03/2022 12:50	0.41	-82.6	6.43	0.51	1.016	14.21	17.2
MW-20	05/03/2022 12:55	0.4	-82.5	6.44	0.5	1.015	14.34	33.4
MW-20	05/03/2022 13:00	0.34	-83.1	6.48	0.5	1.015	14.19	37.4
MW-20	05/03/2022 13:05	0.32	-82.9	6.48	0.5	1.012	14.14	26.7
MW-20	05/03/2022 13:10	0.31	-82.5	6.48	0.5	1.012	14.1	22.7
MW-20	05/03/2022 13:15	0.28	-87.4	6.55	0.51	1.017	14.09	10.6
MW-20	03/15/2012 15:03	1.38	14	6.68	0.05	0.934	12.21	30.90
MW-20	03/16/2012 11:09	2.62	-19	6.89	0.04	0.878	12.10	7.00
MW-20	02/28/2013 09:41	2.57	-189	6.13	0.10	2.042	13.36	33.00
MW-200	02/01/2012 10:10	2.95	-14	7.68	1.77	28.59806	14.22	49.9
MW-200	02/01/2012 10:14	1.48	-96	7.49	1.82	29.50204	12.94	7.9
MW-200	02/01/2012 10:19	1.34	-108	7.46	1.81	29.3762	13.1	6.8
MW-200	02/01/2012 10:23	1.27	-114	7.44	1.81	29.29029	13.21	7
MW-200	02/01/2012 10:28	1.19	-117	7.43	1.8	29.23228	13.29	6.3
MW-200	02/01/2012 10:32	1.13	-120	7.42	1.79	29.06246	13.52	5.7
MW-200	02/01/2012 10:37	1.09	-121	7.4	1.8	29.08259	13.49	5.2
MW-200	02/01/2012 10:42	1.06	-122	7.4	1.8	29.10026	13.46	5.2
MW-200	02/01/2012 10:43	1.06	-122	7.40	1.80	29.092	13.46	5.20
MW-200	02/01/2012 12:02	3.27	-83	7.41	1.76	28.470	14.37	2.20

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-200	02/02/2012 09:50	1.05	-105	7.38	1.84	29.777	12.61	16.30
MW-200	04/04/2012 14:15	1.2	-106	7.36	1.76	28.29309	21.44	28.7
MW-200	04/04/2012 14:20	0.93	-113	7.41	1.97	31.52051	16.46	6.4
MW-200	04/04/2012 14:24	0.63	-116	7.42	1.98	31.61851	16.33	5.8
MW-200	04/04/2012 14:29	0.54	-118	7.42	1.99	31.7481	16.16	6.8
MW-200	04/04/2012 14:33	0.53	-119	7.42	1.99	31.74401	16.17	8.2
MW-200	04/04/2012 14:37	0.52	-119	7.42	1.98	31.66878	16.28	10.4
MW-200	04/04/2012 14:42	0.51	-120	7.42	1.99	31.75304	16.17	16
MW-200	04/04/2012 14:46	0.49	-120	7.42	2	31.99137	15.84	16.3
MW-200	04/04/2012 14:51	0.47	-120	7.42	2	31.91706	15.94	18.9
MW-200	04/04/2012 14:55	0.46	-120	7.42	1.98	31.663	16.29	24.5
MW-200	04/04/2012 14:59	0.45	-120	7.42	1.98	31.62025	16.35	26.7
MW-200	04/04/2012 15:04	0.45	-120	7.42	1.98	31.60583	16.37	24.9
MW-200	04/04/2012 15:59	0.87	103	7.39	2.17	34.28	18.02	39.4
MW-200	04/05/2012 11:10	0.02	-129	7.4	2.21	35.33	11.91	16.1
MW-200	07/10/2012 13:35	2.58	-122	6.89	1.49	24.17463	25.96	59.5
MW-200	07/10/2012 13:40	0.61	-166	7.03	1.62	26.166	21.9	2.7
MW-200	07/10/2012 13:44	0.39	-176	7.19	1.59	25.71321	22.76	2.6
MW-200	07/10/2012 13:49	0.34	-180	7.17	1.58	25.57576	23.02	3.8
MW-200	07/10/2012 13:53	0.3	-182	7.13	1.57	25.42672	23.32	3.2
MW-200	07/10/2012 13:58	0.29	-184	7.12	1.57	25.4534	23.26	3.3
MW-200	07/10/2012 14:03	0.28	-184	7.12	1.58	25.53078	23.11	3.6
MW-200	07/10/2012 14:07	0.26	-185	7.09	1.55	25.12977	23.91	3.1
MW-200	07/10/2012 14:12	0.25	-186	7.09	1.55	25.04111	24.08	13.9
MW-200	07/10/2012 14:16	0.26	-186	7.09	1.54	24.96592	24.24	3.4
MW-200	07/10/2012 14:21	0.28	-186	7.1	1.54	25.00534	24.15	4.1
MW-200	07/10/2012 14:25	0.27	-186	7.1	1.54	24.89724	24.37	6.2
MW-200	07/10/2012 15:16	6.35	-111	7.16	1.89	30.390	15.43	82.40
MW-200	07/11/2012 11:05	2.26	-220	7.56	2.70	42.200	16.19	267.00
MW-200	10/17/2012 09:25	5.99	-192	7.39	2.8	42.90	15.5	32.2
MW-200	10/17/2012 09:27	5.30	-194	7.41	2.8	42.90	15.3	26.3
MW-200	10/17/2012 09:29	4.63	-196	7.42	2.8	43.10	15.8	18.8
MW-200	10/17/2012 09:31	4.26	-198	7.43	2.8	43.00	16.0	13.7
MW-200	10/17/2012 09:33	4.07	-199	7.44	2.8	42.90	16.1	10.9
MW-200	10/17/2012 09:35	3.99	-199	7.45	2.8	42.90	16.1	9.4
MW-200	10/17/2012 09:37	3.87	-200	7.45	2.8	42.90	16.3	8.3
MW-200	10/17/2012 09:39	3.81	-202	7.45	2.7	42.80	16.2	6.5
MW-200	10/17/2012 09:41	3.73	-203	7.45	2.8	42.80	16.3	5.4
MW-200	10/17/2012 09:43	3.70	-204	7.45	2.7	42.80	16.2	4.8
MW-200	10/17/2012 09:45	3.68	-204	7.45	2.7	42.80	16.1	4.4
MW-200	10/17/2012 09:47	3.67	-204	7.46	2.7	42.80	16.1	4.3
MW-200	10/17/2012 09:49	3.63	-205	7.47	2.70	42.800	16.07	4.10
MW-200	10/17/2012 11:04	4.50	-187	7.42	2.70	42.300	17.45	74.70
MW-200	10/18/2012 09:52	3.15	-198	7.50	2.80	43.000	19.00	54.80
MW-200	01/28/2013 10:13	2.99	-173	7.52	3.39	53.2138	5.8	21
MW-200	01/28/2013 10:17	1.07	-191	7.55	3.48	54.1887	6.68	5.4
MW-200	01/28/2013 10:22	0.6	-208	7.56	3.5	54.18524	7.85	4.6
MW-200	01/28/2013 10:26	0.61	-217	7.56	3.51	54.4393	7.69	5
MW-200	01/28/2013 10:31	0.48	-222	7.57	3.52	54.37964	8.14	4.9
MW-200	01/28/2013 10:35	0.42	-226	7.57	3.52	54.36064	8.25	4.8
MW-200	01/28/2013 10:40	0.38	-231	7.58	3.53	54.65824	7.81	5.1
MW-200	01/28/2013 10:44	0.34	-236	7.58	3.53	54.54602	8.16	5.2
MW-200	01/28/2013 10:49	0.32	-240	7.58	3.53	54.60576	8.15	5.6
MW-200	01/28/2013 10:53	0.3	-242	7.58	3.53	54.59111	8.15	5.3
MW-200	01/28/2013 10:58	0.3	-244	7.58	3.54	54.69195	7.98	5
MW-200	01/28/2013 11:02	0.3	-244	7.59	3.54	54.84282	7.66	6.9
MW-200	01/28/2013 11:03	0.30	-244	7.59	0.54	54.840	7.80	6.94
MW-200	01/28/2013 12:05	2.12	-235	7.44	3.58	54.450	13.02	13.70
MW-200	01/29/2013 10:12	2.60	-274	7.19	3.54	53.880	12.64	11.40
MW-200	04/17/2013 09:22	1.47	-213	7.36	4.17	62.39	12.46	23.63
MW-200	04/17/2013 10:10	2.88	-167	7.14	4.25	63.41	12.93	35
MW-200	04/18/2013 09:50	2.89	-163	7.1	3.14	48.65	11.21	9.2

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-200	07/18/2013 14:16	0.63	-198	7.31	4.94	71.020	23.79	42.70
MW-200	07/18/2013 15:18	0.38	-180	7.38	4.10	61.150	14.45	45.60
MW-200	07/19/2013 11:33	-0.12	-207.00	7.39	2.85	43.950	16.15	36.50
MW-200	02/19/2014 09:40	0.52	-166	7.29	3.65	56.210	9.45	13.02
MW-200	02/19/2014 10:51	1.23	-174	7.24	3.42	52.300	12.20	25.80
MW-200	02/20/2014 11:30	0.40	-176	7.30	3.54	54.100	11.33	9.70
MW-200	04/24/2014 10:11	1.30	-354	7.34	2.59	40.550	11.96	5.66
MW-200	04/24/2014 11:19	3.69	-199	7.26	3.24	49.700	13.83	101.40
MW-200	04/25/2014 09:18	2.38	-281	7.29	1.99	32.010	12.08	91.30
MW-200	07/16/2014 15:19	1.11	-92	7.21	3.80	51.020	18.06	23.51
MW-200	07/16/2014 16:12	2.84	103	6.92	4.23	62.910	14.10	39.00
MW-200	07/17/2014 16:30	0.44	-65	7.10	4.17	61.920	15.33	7.40
MW-200	10/14/2014 10:08	0.77	-185	7.11	3.26	49.330	19.68	11.29
MW-200	10/14/2014 11:03	1.56	-147	7.24	3.53	53.320	16.16	55.80
MW-200	10/15/2014 10:03	-0.10	-61	7.33	3.00	54.040	18.13	53.30
MW-200	01/22/2015 10:03	-0.34	-20.3	7.22	3.40	52.920	7.83	4.86
MW-200	01/22/2015 11:29	0.77	-151	7.19	3.35	51.270	13.05	34.50
MW-200	01/23/2015 09:37	0.0000	-280	7.29	3.07	47.420	12.35	15.60
MW-200	04/24/2015 10:17	0.64	-173	7.2	2.64	41.62	10.87	8.6
MW-200	04/24/2015 11:40	1.38	-169	7.26	3.37	51.77	11.46	21
MW-200	07/30/2015 10:19	0.51	-163	7.29	11.66	146.9	17.23	32.3
MW-200	07/30/2015 15:31	2.1	-123	5.92	29.53	288.33	15.05	40.2
MW-200	10/15/2015 12:26	1.97	-141	7.02	3.46	52	18.92	30.6
MW-200	10/15/2015 16:38	1.7	-134	7.01	3.66	54.91	17.31	47.5
MW-200	04/05/2016 10:55	-0.19	-141	6.81	3.58	54.440	12.26	34.50
MW-200	04/05/2016 13:17	0.53	-157	7.23	1.79	29.160	11.44	12.30
MW-200	09/29/2016 09:19	0.62	-174	7.34	1.10	18.420	19.31	7.80
MW-200	09/29/2016 11:39	2.16	-28	6.51	0.82	14.080	17.51	63.10
MW-200	02/01/2017 09:59	0.29	305	5.90	2.55	40.100	12.70	15.80
MW-200	02/01/2017 11:42	5.05	-167	6.83	1.73	28.190	12.58	39.60
MW-200	02/08/2018 10:28	5.97	-22	6.55	4.062	62.3304	6.64	22.4
MW-200	02/08/2018 10:32	2.45	-50	6.81	3.883	59.4256	8.29	18.2
MW-200	02/08/2018 10:37	1.7	-58	6.95	3.833	58.6225	8.78	20.5
MW-200	02/08/2018 10:41	1.5	-62	7.02	3.826	58.4929	8.88	18.4
MW-200	02/08/2018 10:46	1.39	-66	7.05	3.799	58.0579	9.17	14.9
MW-200	02/08/2018 10:50	1.35	-67	7.08	3.855	58.9577	8.63	13.3
MW-200	02/08/2018 10:55	1.24	-69	7.09	3.809	58.2211	9.1	14.2
MW-200	02/08/2018 11:00	1.14	-71	7.1	3.776	57.6917	9.46	12.8
MW-200	02/08/2018 11:04	1.14	-72	7.11	3.806	58.1569	9.18	13.1
MW-200	02/08/2018 11:09	1.17	-74	7.12	3.817	58.3353	9.08	11.7
MW-200	02/08/2018 11:13	1.12	-74	7.12	3.827	58.4944	8.98	12.2
MW-200	02/08/2018 11:18	1.11	-75	7.13	3.822	58.4039	9.05	9
MW-200	02/09/2018 09:09	0.55	-57.00	7.14	3.52	52.720	22.55	69.60
MW-200	02/09/2018 11:18	1.11	-75.00	7.13	3.82	58.600	8.93	8.97
MW-200	02/09/2018 12:13	2.83	-54.00	6.51	3.42	52.120	13.26	42.20
MW-200	07/31/2018 10:56	1.39	-110	6.13	1.389	22.6800	26.62	58.6
MW-200	07/31/2018 11:01	0.67	-146	6.72	1.419	23.1300	25.55	18.42
MW-200	07/31/2018 11:05	0.54	-161	6.94	1.459	23.7400	24.18	12.08
MW-200	07/31/2018 11:10	0.49	-169	7.06	1.453	23.6600	24.33	11.76
MW-200	07/31/2018 11:15	0.5	-173	7.12	1.403	22.9000	26.05	16.64
MW-200	07/31/2018 11:20	0.43	-175	7.17	1.372	22.4200	27.18	15.34
MW-200	07/31/2018 11:25	0.45	-178	7.21	1.359	22.2300	27.66	15.81
MW-200	07/31/2018 11:30	0.39	-180	7.23	1.349	22.0700	28.04	12.98
MW-200	07/31/2018 11:35	0.39	-182	7.25	1.341	21.9600	28.33	14.58
MW-200	07/31/2018 11:39	0.32	-184	7.27	1.338	21.9100	28.45	10.01
MW-200	07/31/2018 11:44	0.34	-188	7.31	1.408	22.9700	25.86	8.312
MW-200	08/01/2018 09:27	1.60	-166.00	7.15	1.66	26.910	17.83	17.20
MW-200	08/01/2018 11:44	0.34	-188.00	7.31	1.41	22.970	25.86	8.31
MW-200	08/01/2018 13:50	1.84	-141.00	6.62	1.73	27.940	16.36	29.60
MW-200	02/13/2019 10:15	1.88	-19.6	7.5	NM	41.49	10.38	11
MW-200	02/13/2019 10:25	1.88	-19.60	7.50	26.48	41.490	10.38	11.00
MW-200	02/13/2019 12:05	2.84	-79.80	7.65	26.52	41.470	11.36	59.80

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-200	02/13/2019 12:15	7.73	-79.40	7.72	26.52	41.470	11.32	67.80
MW-200	07/23/2019 09:55	1.09	12.4	7.5	NM	37.09	20.02	49.7
MW-200	07/23/2019 10:05	1.13	32.9	7.46	NM	33.47	19.31	65.9
MW-200	07/23/2019 10:10	0.73	-10	7.43	NM	34.68	19.44	58.4
MW-200	07/23/2019 10:15	0.54	-18.4	7.42	NM	35.59	19.44	59.8
MW-200	07/23/2019 10:20	0.47	-20.5	7.43	NM	36.01	19.38	60.8
MW-200	07/23/2019 10:25	0.37	-28.9	7.42	NM	36.34	19.38	56.1
MW-200	07/23/2019 10:30	0.28	-23.7	7.44	NM	36.48	19.54	58.4
MW-200	07/23/2019 10:35	0.27	-12	7.46	NM	36.67	19.62	52.1
MW-200	07/23/2019 10:40	0.85	5.4	7.49	NM	36.86	19.72	54.5
MW-200	07/23/2019 10:45	1.07	9.4	7.48	NM	36.95	19.78	49.3
MW-200	07/23/2019 10:50	1.09	12.4	7.5	NM	37.09	20.02	49.7
MW-200	07/23/2019 11:41	1.32	-88.3	7.46	23.38	36.84	18.44	47.1
MW-200	07/23/2019 11:55	0.17	-154.8	7.26	23.55	37.1	17.01	12
MW-200	02/06/2020 13:10	0.14	-158.3	7.38	NM	44.38	9.65	11.3
MW-200	02/06/2020 14:32	0.98	-137.8	7.28	28.73	44.96	9.75	14.8
MW-200	10/02/2020 14:40	NM	NM	NM	NM	NM	NM	22.4
MW-200	10/12/2020 09:30	0.75	-198.7	7.15	27.57	43.08	15.57	2.6
MW-200	10/12/2020 09:35	0.26	-263.4	7.37	28.09	43.58	13.95	1.5
MW-200	10/12/2020 09:40	0.23	-282.9	7.45	28.12	43.64	13.21	1.2
MW-200	10/12/2020 09:45	0.13	-290.8	7.51	28.04	43.54	12.89	1.4
MW-200	10/12/2020 09:50	0.12	-303.2	7.61	28.04	42.17	12.61	1.8
MW-200	10/12/2020 09:55	0.09	-303	7.62	27.91	43.56	11.94	1.4
MW-200	10/12/2020 10:00	0.09	-308.4	7.6	27.56	42.87	13.01	1.2
MW-200	10/12/2020 10:05	0.07	-315.3	7.6	27.58	42.86	13.52	0.8
MW-200	10/12/2020 10:10	0.07	-320	7.6	27.68	43	13.57	0.7
MW-200	10/12/2020 10:15	0.06	-325.6	7.6	27.69	43.02	13.59	0.6
MW-200	10/12/2020 14:20	0.52	-154.8	7.66	27.79	43.01	14.94	6.7
MW-200	10/12/2020 14:40	0.72	-141.7	7.72	27.89	43.24	14.57	NM
MW-200	03/18/2021 13:35	6.59	-101.1	7.02	16.17	25.68	10.58	7.8
MW-200	03/18/2021 13:40	3.08	-128.6	7.28	17.29	28.13	11.04	10.3
MW-200	03/18/2021 13:45	1.51	-156.3	7.48	17.96	29.09	11.32	15
MW-200	03/18/2021 13:50	1.31	-165.7	7.53	18.14	29.36	11.5	5.7
MW-200	03/18/2021 13:55	1.24	-176.4	7.58	18.26	29.55	10.99	6.4
MW-200	03/18/2021 14:00	1.19	-184.4	7.61	18.39	29.74	11.1	4.8
MW-200	03/18/2021 14:05	1.2	-190.2	7.6	18.51	29.91	11.13	5
MW-200	03/18/2021 14:10	1.19	-191.3	7.64	18.59	30.05	11.13	5.1
MW-200	03/18/2021 15:50	0.63	-26.9	7.4	19.31	30.98	12.53	2.6
MW-200	03/18/2021 16:00	0.54	-211.7	7.4	19.28	31	12.27	32.9
MW-200	01/31/2022 10:20	0.98	-170.9	7.22	24.45	38.39	12.55	34.8
MW-200	01/31/2022 10:25	0.46	-195.5	7.36	24.75	38.59	12.75	33.8
MW-200	01/31/2022 10:30	0.17	-214.3	7.42	24.78	38.94	12.92	22.9
MW-200	01/31/2022 10:35	0.23	-216.5	7.43	24.79	38.77	12.94	16.8
MW-200	01/31/2022 10:40	0.17	-218.2	7.43	24.83	38.99	12.99	14.4
MW-200	01/31/2022 10:45	0.15	-220.3	7.42	24.77	38.88	13.01	15.3
MW-200	01/31/2022 10:50	0.12	-222.4	7.41	24.77	38.91	12.89	11
MW-200	01/31/2022 10:55	0.12	-218.4	7.43	24.94	28.71	9.03	15.9
MW-200	01/31/2022 11:00	0.13	-215.2	7.43	24.3	38.99	9.84	17.4
MW-200	01/31/2022 11:05	0.15	-213.7	7.43	24.23	38.05	11.43	16.1
MW-201	01/30/2012 08:30	0.23	23	6.96	0.05	0.68089	7.07	0.8
MW-201	01/30/2012 08:32	0.19	9	7	0.05	0.64282	6.73	0.3
MW-201	01/30/2012 08:34	0.2	1	7.07	0.05	0.65649	7.32	0.2
MW-201	01/30/2012 08:36	0.14	-6	7.05	0.05	0.65167	7.06	0.1
MW-201	01/30/2012 08:39	0.12	-12	7.06	0.05	0.65385	7.19	0
MW-201	01/30/2012 08:41	0.11	-16	7.06	0.05	0.65702	7.11	0.3
MW-201	01/30/2012 08:43	0.1	-20	7.07	0.05	0.65453	7.1	2.1
MW-201	01/30/2012 08:45	0.1	-23	7.07	0.05	0.65452	6.91	0.1
MW-201	01/30/2012 08:48	0.11	-26	7.08	0.05	0.65069	7.08	2
MW-201	01/30/2012 08:50	0.08	-28	7.08	0.05	0.65423	7.09	7
MW-201	01/30/2012 08:52	0.08	-31	7.09	0.05	0.65478	6.98	7.3
MW-201	01/30/2012 08:54	0.07	-33	7.09	0.05	0.65094	7	8.2
MW-201	01/30/2012 08:57	0.07	-35	7.09	0.05	0.65436	7.2	9.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-201	01/30/2012 08:59	0.08	-36	7.1	0.05	0.66131	7.29	9.4
MW-201	01/30/2012 09:01	0.06	-38	7.1	0.05	0.65977	7.15	9
MW-201	01/30/2012 09:03	0.06	-39	7.1	0.05	0.65533	7.06	9.5
MW-201	01/30/2012 09:06	0.06	-39	7.10	0.05	0.655	7.10	9.54
MW-201	01/30/2012 10:23	0.15	-134	7.76	0.07	0.889	6.18	29.00
MW-201	01/31/2012 09:34	5.12	268	5.76	0.0000	0.117	9.30	18.40
MW-201	04/10/2012 09:08	3.56	185	6.33	0	0.5	11	7.6
MW-201	04/10/2012 09:10	2.59	81	6.42	0	0.5	10.7	7.9
MW-201	04/10/2012 09:12	2.23	41	6.46	0	0.5	10.8	7.6
MW-201	04/10/2012 09:14	2.03	20	6.49	0	0.5	10.8	7.8
MW-201	04/10/2012 09:16	1.89	5	6.51	0	0.5	10.9	7.8
MW-201	04/10/2012 09:18	1.75	-4	6.53	0	0.5	10.7	7.9
MW-201	04/10/2012 09:20	1.69	-8	6.53	0	0.5	10.7	7.8
MW-201	04/10/2012 09:22	1.64	-11	6.54	0	0.5	10.7	8
MW-201	04/10/2012 09:24	1.56	-16	6.54	0	0.496	10.77	7.9
MW-201	04/10/2012 10:31	3.55	-112	8.01	0	0.909	11	94.9
MW-201	04/11/2012 11:30	6.02	74	5.69	0	0.044	9.82	6.2
MW-201	07/09/2012 08:35	1.34	-76	6.21	0.02	0.4893	22.19	7.2
MW-201	07/09/2012 08:37	0.95	-89	6.21	0.03	0.51802	22.35	2.9
MW-201	07/09/2012 08:39	0.6	-100	6.24	0.02	0.50748	21.05	2.6
MW-201	07/09/2012 08:41	0.42	-104	6.27	0.02	0.49595	20.96	2.9
MW-201	07/09/2012 08:43	0.32	-108	6.31	0.02	0.48344	20.96	3.2
MW-201	07/09/2012 08:44	0.27	-112	6.33	0.02	0.46909	20.82	3.6
MW-201	07/09/2012 08:46	0.22	-115	6.31	0.02	0.45501	20.85	4
MW-201	07/09/2012 08:48	0.2	-117	6.34	0.02	0.44324	20.82	5
MW-201	07/09/2012 08:50	0.18	-119	6.35	0.02	0.42498	20.91	5.2
MW-201	07/09/2012 08:52	0.16	-122	6.37	0.02	0.4074	20.78	5.8
MW-201	07/09/2012 08:54	0.14	-123	6.37	0.02	0.39387	20.89	6.7
MW-201	07/09/2012 08:56	0.14	-125	6.38	0.02	0.38099	20.82	6.6
MW-201	07/09/2012 08:57	0.13	-127	6.4	0.02	0.37009	20.84	7.3
MW-201	07/09/2012 08:59	0.12	-128	6.4	0.02	0.35913	20.84	7.7
MW-201	07/09/2012 09:01	0.1	-130	6.38	0.02	0.34752	20.86	8
MW-201	07/09/2012 09:03	0.1	-131	6.39	0.02	0.33059	20.97	8.2
MW-201	07/09/2012 09:05	0.10	-132	6.40	0.02	0.317	21.13	8.17
MW-201	07/09/2012 10:36	9.78	-174	7.97	0.11	2.127	15.83	242.10
MW-201	07/10/2012 08:50	4.09	198	5.65	0.08	0.116	20.70	15.70
MW-201	10/15/2012 09:20	6.53	-62	6.40	0.00	1.03	19.6	0.00
MW-201	10/15/2012 09:22	8.55	-83	6.49	0.00	1.03	19.2	0.00
MW-201	10/15/2012 09:24	9.08	-97	6.50	0.00	0.99	19.2	0.00
MW-201	10/15/2012 09:26	9.27	-109	6.50	0.00	0.96	19.2	2.0
MW-201	10/15/2012 09:28	9.21	-114	6.51	0.00	0.94	19.3	3.0
MW-201	10/15/2012 09:30	9.22	-118	6.51	0.00	0.94	19.2	3.7
MW-201	10/15/2012 09:32	9.21	-123	6.51	0.00	0.91	19.2	4.6
MW-201	10/15/2012 09:34	9.46	-129	6.52	0.00	0.87	19.2	6.3
MW-201	10/15/2012 09:36	9.43	-131	6.52	0.00	0.86	19.3	7.0
MW-201	10/15/2012 09:38	9.40	-132	6.53	0.00	0.85	19.3	7.5
MW-201	10/15/2012 09:40	9.35	-133	6.53	0.00	0.83	19.3	8.8
MW-201	10/15/2012 09:42	9.28	-135	6.54	0.00	0.81	19.4	9.9
MW-201	10/15/2012 09:44	9.24	-136	6.55	0.00	0.78	19.4	12.1
MW-201	10/15/2012 09:46	9.19	-136	6.58	0.00	0.74	19.4	19.7
MW-201	10/15/2012 09:48	6.88	-132	6.54	0.00	0.64	19.4	29.6
MW-201	10/15/2012 09:50	5.91	-130	6.63	0.00	0.59	19.4	34.1
MW-201	10/15/2012 09:52	5.61	-125	6.64	0.00	0.55	19.5	34.2
MW-201	10/15/2012 09:54	5.43	-122	6.65	0.0000	0.516	19.45	34.90
MW-201	10/15/2012 11:00	6.43	-160	7.18	0.10	2.330	18.80	30.10
MW-201	10/16/2012 09:27	4.33	159	5.58	0.0000	0.099	17.85	10.20
MW-201	01/30/2013 09:04	2.67	-256	6.54	0.08	1.50382	10.05	38.4
MW-201	01/30/2013 09:07	0.79	-285	6.61	0.07	1.38203	8.71	37.4
MW-201	01/30/2013 09:09	0.48	-289	6.64	0.07	1.39989	8.72	36.7
MW-201	01/30/2013 09:11	0.39	-290	6.66	0.07	1.38611	8.69	36.4
MW-201	01/30/2013 09:13	0.32	-292	6.68	0.07	1.40301	8.65	37.7
MW-201	01/30/2013 09:16	0.32	-292	6.69	0.07	1.3925	8.66	36.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-201	01/30/2013 09:18	0.30	-292	6.70	0.07	1.388	8.79	36.50
MW-201	01/30/2013 10:46	1.83	-289	7.43	0.07	1.495	9.75	17.70
MW-201	01/31/2013 10:04	3.61	-232	7.67	0.02	0.520	7.34	0.10
MW-201	04/22/2013 09:22	0.18	-267	6.7	0.03	0.632	9.55	14.23
MW-201	04/22/2013 10:50	1.67	-194	7.24	0.04	0.745	9.51	23
MW-201	04/23/2013 09:03	7.69	-112	6.55	0.01	0.142	10.01	10.9
MW-201	07/22/2013 14:26	0.34	-221	6.62	0.06	1.261	35.27	38.72
MW-201	07/22/2013 15:52	2.10	-185	7.18	0.18	3.332	16.29	73.10
MW-201	07/23/2013 10:52	1.20	-178.00	6.22	0.01	0.219	20.55	6.40
MW-201	03/17/2014 15:27	0.56	-111	7.57	0.03	0.723	5.59	12.39
MW-201	03/17/2014 16:07	5.68	-96	7.60	0.07	1.408	6.44	712.30
MW-201	03/18/2014 10:59	6.17	-35	8.28	0.01	0.171	6.30	12.20
MW-201	05/14/2014 09:22	1.37	-370	6.85	0.04	736.900	13.19	10.54
MW-201	05/14/2014 10:35	2.91	-183	7.90	0.50	8.974	15.72	71.30
MW-201	05/15/2014 12:20	5.95	-205	7.73	0.41	73.420	13.37	6.20
MW-201	07/17/2014 09:42	0.57	24	6.12	0.07	1.308	20.11	3.70
MW-201	07/17/2014 11:21	3.30	-101	7.33	0.23	4.308	26.44	42.30
MW-201	07/18/2014 09:05	2.28	186	5.99	0.01	0.220	19.86	5.40
MW-201	10/09/2014 10:01	0.94	-123	6.63	0.03	0.553	18.31	13.96
MW-201	10/09/2014 11:20	1.48	-96	6.81	0.14	2.752	18.62	9.80
MW-201	10/10/2014 08:52	1.83	75	6.23	0.01	0.179	18.01	4.30
MW-201	01/20/2015 09:33	-1.08	-342	6.82	0.03	0.538	6.50	26.72
MW-201	01/20/2015 11:02	0.42	-165	7.47	0.07	1.400	9.13	64.80
MW-201	01/21/2015 09:11	3.06	-75	6.86	0.01	0.136	7.74	11.10
MW-201	04/24/2015 11:06	6.75	92	6.63	0.01	0.115	9.14	6.3
MW-201	04/24/2015 15:11	8.93	-83	7.94	0.04	0.909	8.42	65.3
MW-201	07/30/2015 09:26	1.18	166	6.39	0.02	0.411	21.41	3.3
MW-201	07/30/2015 11:10	1.48	-134	8.23	0.76	13.02	18.18	126.7
MW-201	10/14/2015 12:33	5.38	-89	6.98	0.18	3.344	19.98	32.5
MW-201	10/14/2015 13:24	1.5	165	8.55	0.01	0.216	18.16	4.6
MW-201	04/01/2016 09:38	4.80	70	7.08	0.0000	0.060	9.33	6.10
MW-201	04/01/2016 11:50	0.48	-161	7.11	0.09	1.846	10.41	24.50
MW-201	09/29/2016 10:07	0.91	58	6.57	0.04	0.856	20.49	2.50
MW-201	09/29/2016 14:52	1.69	-148	8.03	0.21	3.981	20.16	9.90
MW-201	02/02/2017 10:07	1.65	363	7.87	0.01	0.222	7.94	4.70
MW-201	02/02/2017 11:37	0.17	-138	7.55	0.08	1.553	9.95	15.40
MW-201	02/14/2018 11:05	5.22	337.00	7.12	0.04	0.893	7.1	5.70
MW-201	02/14/2018 13:37	0.64	95.00	6.69	0.04	0.868	7.84	33.98
MW-201	02/14/2018 15:09	5.50	-6.00	7.66	0.04	0.754	8.1	14.70
MW-201	07/30/2018 08:22	1.85	-68	7.38	0.050	0.9950	23.36	12.34
MW-201	07/30/2018 08:24	0.61	-105	6.83	0.052	1.0330	21.95	12.06
MW-201	07/30/2018 08:27	0.36	-116	6.71	0.052	1.0320	22.10	15.19
MW-201	07/30/2018 08:29	0.28	-121	6.67	0.052	1.0300	22.02	17.55
MW-201	07/30/2018 08:31	0.26	-125	6.64	0.051	1.0250	21.86	17.46
MW-201	07/30/2018 08:34	0.28	-128	6.62	0.051	1.0220	22.07	16.05
MW-201	07/31/2018 08:34	0.28	-128.00	6.62	0.05	1.022	22.07	16.05
MW-201	07/31/2018 09:00	2.15	-99.00	7.39	0.0000	0.078	23.21	7.50
MW-201	07/31/2018 09:45	1.66	-270.00	8.98	0.05	1.007	18.86	27.50
MW-201	02/06/2019 14:05	0.50	-14.30	6.97	0.45	0.916	8.39	100.60
MW-201	02/06/2019 15:25	10.04	-37.60	6.80	0.70	1.392	8.63	1574.10
MW-201	02/06/2019 15:45	10.03	-34.40	6.81	0.68	1.361	8.64	967.20
MW-201	02/13/2019 13:55	0.5	-14.3	6.97	NM	0.916	8.39	100.6
MW-201	02/13/2019 15:25	10.04	-37.6	6.8	0.7	1.392	8.63	1574.1
MW-201	07/25/2019 10:05	1.41	-63.2	7.22	NM	0.939	22.2	0.1
MW-201	07/25/2019 10:10	1.19	-65.3	7.13	NM	0.938	22.11	0.3
MW-201	07/25/2019 10:15	0.61	-73.5	6.7	NM	0.922	23.24	1.4
MW-201	07/25/2019 10:20	0.49	-77.3	6.69	NM	0.884	23.25	1.2
MW-201	07/25/2019 10:25	0.44	-78.8	6.67	NM	0.849	23.31	1.4
MW-201	07/25/2019 10:30	0.42	-78.8	6.67	NM	0.831	23.19	1.5
MW-201	07/25/2019 10:35	0.39	-78.3	6.67	NM	0.812	23.3	1.2
MW-201	07/25/2019 10:40	0.39	-76.9	6.67	NM	0.787	23.34	1.1
MW-201	07/25/2019 10:45	0.38	-76.3	6.66	NM	0.769	23.52	1.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-201	07/25/2019 10:50	0.37	-75.7	6.65	NM	0.751	23.35	1.4
MW-201	07/25/2019 10:55	0.37	-75.7	6.65	NM	0.751	23.35	1.4
MW-201	07/25/2019 11:38	0.54	-59	6.69	0.3	0.624	21.46	2.9
MW-201	07/25/2019 11:50	0.5	-63.4	6.69	0.34	0.704	23.69	0.6
MW-201	02/04/2020 10:20	3.28	106.9	6.61	NM	0.956	6.64	98.3
MW-201	02/04/2020 11:35	4.05	-51.4	6.79	0.64	1.275	8.11	15.4
MW-201	03/17/2021 11:15	3.38	-36.8	7.03	0.68	1.359	7.35	25.5
MW-201	03/17/2021 11:20	0.24	-48.7	6.83	0.69	1.37	7.54	11.5
MW-201	03/17/2021 11:25	0.18	-49.6	6.75	0.69	1.371	7.45	15.9
MW-201	03/17/2021 11:30	0.18	-50.3	6.72	0.69	1.368	7.38	15.1
MW-201	03/17/2021 11:35	0.14	-51.8	6.71	0.69	1.369	7.49	12.7
MW-201	03/17/2021 11:40	0.11	-52.6	6.7	0.69	1.37	7.56	9.9
MW-201	03/17/2021 11:45	0.12	-54.7	6.71	0.69	1.365	7.48	8.7
MW-201	03/17/2021 11:50	0.11	-56.5	6.7	0.68	1.361	7.46	8.3
MW-201	03/17/2021 11:55	7.48	-62.2	6.71	0.68	1.358	7.49	5.1
MW-201	03/17/2021 12:00	0.14	-64.3	6.73	0.68	1.355	7.51	5.9
MW-201	03/18/2021 09:00	9.18	187	6.78	0.11	0.237	8.43	2
MW-201	03/18/2021 09:10	6.77	11	6.3	0.26	0.53	8.78	5
MW-201	03/18/2021 12:00	0.14	-64.3	6.73	0.68	1.355	7.51	5.9
MW-201	02/01/2022 09:20	9.01	24.9	8.86	0.52	1.046	7.18	133.7
MW-201	02/01/2022 09:25	0.69	47.4	6.82	0.48	0.975	8.16	116.2
MW-201	02/01/2022 09:30	0.67	48.2	6.79	0.48	0.974	8.12	64.6
MW-201	02/01/2022 09:35	0.61	53.2	6.5	0.48	0.972	8.01	66.8
MW-201	02/01/2022 09:40	0.62	52.8	6.49	0.48	0.974	7.98	88.2
MW-201	02/01/2022 09:45	0.61	52.3	6.48	0.48	0.973	7.97	87.5
MW-201	02/01/2022 09:50	0.63	52.6	6.46	0.48	0.971	7.86	65.7
MW-201	02/01/2022 09:55	0.64	-13.5	6.38	0.47	0.94	8.36	34.1
MW-201	02/01/2022 10:00	0.64	-13.6	6.41	0.47	0.94	8.39	32.8
MW-201	02/01/2022 10:05	0.64	-13.9	6.42	0.47	0.94	8.44	33.5
MW-202	01/30/2012 09:45	1.95	-20	7.76	1.94	22.77571	10.63	29.4
MW-202	01/30/2012 09:50	0.09	-51	7.78	2	22.77865	9.37	7.7
MW-202	01/30/2012 09:54	0.07	-67	7.78	2	22.78094	9.3	8.5
MW-202	01/30/2012 09:59	0.06	-75	7.78	2.02	22.78558	9.08	8.9
MW-202	01/30/2012 10:03	0.04	-79	7.78	2.02	22.78729	9.05	11
MW-202	01/30/2012 10:08	0.05	-82	7.79	2.01	22.78768	9.2	10.4
MW-202	01/30/2012 10:12	0.06	-85	7.79	2.02	22.78743	9	11.1
MW-202	01/30/2012 10:15	0.06	-85	7.79	2.01	22.790	9.00	11.13
MW-202	01/30/2012 11:38	-0.04	-37	7.41	1.81	22.790	13.27	19.60
MW-202	01/31/2012 10:03	0.15	-165	6.80	2.80	43.800	14.10	61.60
MW-202	04/10/2012 09:52	3.29	-35	7.49	2.2	35.4	13.2	1.1
MW-202	04/10/2012 09:54	2.47	-43	7.6	2.2	35.85	12.7	0.6
MW-202	04/10/2012 09:56	2	-57	7.65	2.2	35.2	12.8	0
MW-202	04/10/2012 09:58	3.3	-67	7.66	2.2	35.1	12.9	1.5
MW-202	04/10/2012 10:00	2.09	-78	7.67	2.2	35.1	12.9	2.2
MW-202	04/10/2012 10:02	1.86	-85	7.69	2.2	35.1	12.9	6.7
MW-202	04/10/2012 10:04	1.66	-99	7.68	2.2	35.1	12.9	8.7
MW-202	04/10/2012 10:06	1.59	-108	7.68	2.2	35.2	12.8	10
MW-202	04/10/2012 10:08	1.48	-115	7.7	2.2	35.1	12.9	10.9
MW-202	04/10/2012 10:10	1.41	-120	7.7	2.2	35.1	13	5.8
MW-202	04/10/2012 10:12	1.38	-123	7.7	2.2	35.1	13	5.5
MW-202	04/10/2012 10:14	1.37	-126	7.69	2.2	35.1	12.9	0.6
MW-202	04/10/2012 10:16	1.33	-129	7.7	2.2	35.1	12.9	0.7
MW-202	04/10/2012 10:18	1.31	-131	7.72	2.2	35.1	12.9	0.5
MW-202	04/10/2012 11:37	4.34	48	6.81	2.2	35.2	14.27	5.8
MW-202	04/11/2012 12:00	1.11	-141	7.02	2.2	35.2	11.94	3.9
MW-202	07/09/2012 09:30	0.75	-134	6.93	1.57	25.41102	23.55	57.3
MW-202	07/09/2012 09:36	0.38	-162	7.05	1.7	27.32743	19.97	14.1
MW-202	07/09/2012 09:41	0.2	-175	7.08	1.71	27.49629	19.67	15.6
MW-202	07/09/2012 09:46	0.11	-182	7.09	1.72	27.71703	19.3	20.4
MW-202	07/09/2012 09:51	0.07	-186	7.11	1.73	27.82348	19.13	15
MW-202	07/09/2012 09:56	0.05	-188	7.11	1.71	27.50697	19.67	16.6
MW-202	07/09/2012 10:01	0.03	-189	7.12	1.7	27.45582	19.76	17.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-202	07/09/2012 10:06	0.03	-190	7.13	1.71	27.5681	19.57	12.3
MW-202	07/09/2012 10:11	0.03	-191	7.13	1.7	27.34492	19.96	13.8
MW-202	07/09/2012 10:16	0.02	-192	7.16	1.7	27.31699	20.01	10.5
MW-202	07/09/2012 10:21	0.01	-192	7.15	1.67	26.91493	20.72	13.5
MW-202	07/09/2012 10:22	0.01	-192	7.15	1.67	26.910	20.72	13.49
MW-202	07/09/2012 11:28	1.82	-96	7.66	1.94	30.940	17.78	31.80
MW-202	07/10/2012 09:23	2.54	-232	7.80	26.00	42.700	15.67	44.50
MW-202	10/15/2012 10:27	7.88	-176	7.65	2.8	42.90	18.1	21.6
MW-202	10/15/2012 10:29	5.36	-196	7.69	2.8	43.00	18.7	35.3
MW-202	10/15/2012 10:31	4.80	-200	7.70	2.8	42.80	19.2	40.1
MW-202	10/15/2012 10:35	4.38	-218	7.71	2.7	42.60	19.5	24.5
MW-202	10/15/2012 10:37	4.25	-221	7.72	2.8	42.60	19.6	27.2
MW-202	10/15/2012 10:39	4.17	-223	7.72	2.8	42.70	19.6	15.1
MW-202	10/15/2012 10:41	4.12	-225	7.72	2.8	42.80	19.8	18.5
MW-202	10/15/2012 10:43	4.08	-226	7.72	2.8	42.80	19.6	18.7
MW-202	10/15/2012 10:45	4.05	-227	7.72	2.80	42.700	19.64	19.90
MW-202	10/15/2012 12:03	5.58	-212	7.60	2.80	43.100	16.98	41.00
MW-202	10/16/2012 09:59	3.57	-200	7.18	2.70	42.600	14.41	6.70
MW-202	01/30/2013 09:50	2.23	-243	7.59	3.85	58.29451	11.41	74.9
MW-202	01/30/2013 09:55	0.92	-261	7.6	3.96	59.57493	12.16	21.6
MW-202	01/30/2013 09:59	1.11	-269	7.61	4	60.17256	11.91	21.5
MW-202	01/30/2013 10:04	0.94	-273	7.62	4.02	60.40442	11.92	25.9
MW-202	01/30/2013 10:08	0.82	-280	7.62	4.03	60.62481	11.8	28.3
MW-202	01/30/2013 10:12	0.73	-284	7.63	4.04	60.83756	11.64	26.9
MW-202	01/30/2013 10:17	0.65	-286	7.63	4.05	60.85964	11.78	26.6
MW-202	01/30/2013 10:21	0.59	-291	7.63	4.06	60.96098	11.83	39.4
MW-202	01/30/2013 10:26	0.54	-290	7.63	4.06	61.02507	11.86	30.7
MW-202	01/30/2013 10:30	0.48	-296	7.62	4.08	61.24655	11.96	35
MW-202	01/30/2013 10:34	0.41	-298	7.62	4.09	61.29533	12.22	33.3
MW-202	01/30/2013 10:38	0.41	-300	7.62	4.10	61.470	12.51	30.42
MW-202	01/30/2013 10:39	0.41	-300	7.62	4.1	61.46714	12.4	30.4
MW-202	01/30/2013 11:32	4.91	-190	7.08	3.97	59.380	14.28	15.20
MW-202	01/31/2013 10:12	0.91	-262	7.05	3.96	59.560	13.04	25.00
MW-202	07/22/2013 15:35	0.10	-206	7.49	4.06	59.720	23.47	4.64
MW-202	07/22/2013 16:30	0.79	-178	7.60	2.28	36.100	14.40	64.90
MW-202	07/23/2013 11:18	0.36	-239.00	7.48	2.71	42.160	15.33	22.10
MW-202	03/17/2014 14:37	0.84	-167	7.57	3.88	59.450	7.03	19.66
MW-202	03/17/2014 15:38	5.18	-103	6.96	3.55	54.570	9.92	59.99
MW-202	03/18/2014 10:32	0.88	-177	7.36	3.40	52.180	11.54	26.50
MW-202	05/14/2014 10:32	1.34	-291	7.38	3.00	46.000	15.09	93.78
MW-202	05/14/2014 11:47	1.60	-189	7.11	3.31	50.180	17.42	39.80
MW-202	05/15/2014 12:37	1.74	-288	7.19	1.57	25.670	15.16	2821.80
MW-202	07/17/2014 11:04	2.07	-92	1.35	3.47	52.320	21.83	9.58
MW-202	07/17/2014 12:04	1.92	112	7.02	4.22	62.820	13.83	43.70
MW-202	07/18/2014 09:05	0.74	42	7.20	4.35	64.580	13.61	14.20
MW-202	10/09/2014 10:53	0.84	-208	7.36	3.58	53.870	17.97	12.22
MW-202	10/09/2014 12:01	2.51	-213	7.30	3.83	57.410	15.19	50.70
MW-202	10/10/2014 09:32	0.63	-202	7.38	3.61	54.260	16.95	25.10
MW-202	01/20/2015 10:45	-0.71	-217	7.42	3.97	60.610	9.01	12.67
MW-202	01/20/2015 11:46	0.42	-169	7.71	3.26	49.900	13.43	23.10
MW-202	01/21/2015 09:51	-0.26	-209	7.71	3.19	49.060	12.69	35.30
MW-202	04/24/2015 11:37	0.59	-64	7.54	2.64	41.61	10.72	21.4
MW-202	04/24/2015 15:39	1.95	11	7.56	2.92	45.52	11.54	529
MW-202	07/30/2015 09:51	-0.48	-152	7.45	10.35	134	16.02	22.4
MW-202	07/30/2015 12:00	3.44	-68	6.75	14.13	171.2	15.83	23.8
MW-202	10/14/2015 11:56	2.78	-152	7.24	3.66	54.95	17.28	48.2
MW-202	10/14/2015 13:14	1.6	132	7.33	3.64	54.71	17.49	19.2
MW-202	04/01/2016 09:10	0.56	-108	7.16	1.38	22.890	11.87	8.80
MW-202	04/01/2016 11:31	0.21	-167	7.75	5.03	73.600	12.54	138.20
MW-202	09/29/2016 10:35	0.65	-122	7.95	1.10	18.390	17.96	24.50
MW-202	09/29/2016 15:27	3.73	-15	6.13	0.87	14.850	16.95	27.00
MW-202	02/02/2017 10:35	4.71	390	7.39	2.60	40.780	12.96	16.50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-202	02/02/2017 12:19	6.34	-93	6.57	3.38	51.610	13.38	19.70
MW-202	02/14/2018 11:47	1.22	171.00	7.28	1.74	28.300	12.04	51.70
MW-202	02/14/2018 14:42	0.46	-96.00	7.58	2.00	32.560	9.04	24.05
MW-202	02/14/2018 15:32	6.42	3.00	6.69	1.85	29.930	12.04	26.50
MW-202	07/30/2018 08:50	1.76	-110	6.72	1.607	26.0200	19.83	36.78
MW-202	07/30/2018 08:56	0.71	-167	7.19	1.596	25.8600	20.10	20.14
MW-202	07/30/2018 09:01	0.54	-180	7.39	1.578	25.5700	20.62	15.44
MW-202	07/30/2018 09:06	0.57	-190	7.5	1.581	25.6300	20.49	16.37
MW-202	07/30/2018 09:12	0.64	-196	7.57	1.596	25.8500	20.05	12.08
MW-202	07/30/2018 09:17	0.83	-200	7.6	1.588	25.7300	20.28	10.51
MW-202	07/30/2018 09:22	0.95	-202	7.64	1.575	25.5300	20.63	9.162
MW-202	07/30/2018 09:27	0.09	-205	7.66	1.602	25.9500	19.88	12.44
MW-202	07/30/2018 09:33	1.17	-207	7.68	1.608	26.0400	19.73	8.334
MW-202	07/30/2018 09:38	1.21	-208	7.69	1.598	25.8900	20.00	11.34
MW-202	07/31/2018 09:26	1.01	-148.00	7.16	1.73	28.010	16.79	32.90
MW-202	07/31/2018 09:38	1.21	-208.00	7.67	1.60	25.890	20	11.34
MW-202	07/31/2018 10:38	3.65	-48.00	6.58	1.73	27.930	16.44	29.10
MW-202	02/06/2019 10:25	0.27	112.40	7.96	23.01	36.640	12.74	0.0000
MW-202	02/06/2019 12:25	0.62	-163.00	7.18	22.32	35.400	13.9	14.60
MW-202	02/06/2019 12:45	0.16	-160.60	7.06	22.05	35.490	13.86	0.0000
MW-202	02/13/2019 10:15	0.27	112.4	7.96	NM	36.64	12.74	NM
MW-202	07/25/2019 10:05	1.65	-141.5	7.36	NM	26.09	21.49	1
MW-202	07/25/2019 10:10	0.6	-179.4	7.55	NM	29.75	22.11	1.5
MW-202	07/25/2019 10:15	0.43	-189	7.59	NM	32.8	22.02	1.8
MW-202	07/25/2019 10:20	0.32	-195	7.6	NM	34.2	22.71	2.7
MW-202	07/25/2019 10:25	0.27	-200.6	7.61	NM	34.52	21.54	1.7
MW-202	07/25/2019 10:30	0.26	-204.1	7.62	NM	34.53	21.53	1.7
MW-202	07/25/2019 10:35	0.25	-205	7.62	NM	34.55	21.52	1.8
MW-202	07/25/2019 10:40	0.15	-167.8	7.36	21.29	33.85	16.54	NM
MW-202	07/25/2019 10:45	0.14	-167	7.33	20.71	33.06	NM	4.4
MW-202	07/25/2019 10:50	NM	NM	NM	NM	NM	20.61	0.5
MW-202	07/25/2019 13:30	0.25	-205	7.62	NM	34.55	21.52	1.8
MW-202	07/25/2019 15:34	0.15	-167.8	7.36	21.29	33.85	16.54	4.4
MW-202	02/13/2020 09:50	0.14	150.7	7.98	NM	13.92	10.92	12.4
MW-202	02/13/2020 12:05	0.1	-147.3	6.83	7.76	13.4	12.98	53.4
MW-202	03/19/2021 10:55	6.87	172.1	7.43	18.84	30.63	9.6	12.8
MW-202	03/19/2021 11:00	4.27	157.7	7.91	23.1	36.75	10.83	2.7
MW-202	03/19/2021 11:05	3.48	150.8	7.98	23.88	37.82	10.53	4.4
MW-202	03/19/2021 11:10	3.04	145.2	8.04	24.44	38.7	11.01	8.5
MW-202	03/19/2021 11:15	2.44	136.8	8.1	25.05	38.37	11.42	7.7
MW-202	03/19/2021 11:20	1.39	86	8.08	25.44	39.97	11.55	5.3
MW-202	03/19/2021 11:25	1.01	-38.7	8.09	25.64	40.25	8.96	3.9
MW-202	03/19/2021 11:30	0.97	-120.2	8.05	25.75	40.41	11	3.7
MW-202	03/19/2021 11:35	0.95	-137.8	8.05	25.77	40.45	11.12	2.4
MW-202	03/19/2021 11:40	0.76	-142.9	8	40.53	40.49	11.03	5.4
MW-202	03/19/2021 13:20	1.5	-151.2	7.29	25.75	40.3	13.03	39.9
MW-202	03/19/2021 13:35	1.52	-145.6	7.29	25.78	40.35	13.06	24.9
MW-202	01/28/2022 12:05	5.37	141.3	7.33	22.18	35.23	11.58	29.9
MW-202	01/28/2022 12:10	1.64	128.5	7.79	22.57	35.79	12.5	18
MW-202	01/28/2022 12:15	0.3	65.1	8.21	22.76	36.02	13.21	35.7
MW-202	01/28/2022 12:20	0.31	58.4	8.28	22.75	36.01	13.27	35.8
MW-202	01/28/2022 12:25	0.25	-41	8.24	22.76	36.01	13.24	49.9
MW-202	01/28/2022 12:30	0.25	-50.6	8.24	22.77	36.05	13.21	49.1
MW-202	01/28/2022 12:35	0.15	-175.7	7.84	22.78	36.06	13.22	128
MW-202	01/28/2022 12:40	0.14	-177.3	7.86	22.78	36.05	13.18	119.2
MW-202	01/28/2022 12:45	0.14	-177.6	7.87	22.78	36.06	13.17	145.2
MW-202	01/28/2022 12:50	0.14	-177.6	7.86	22.78	36.04	13.21	150.2
MW-203	01/30/2012 13:34	0.07	-73	2.47	0.27	1.145	9.24	7.41
MW-203	01/30/2012 14:08	8.44	-53	31.40	0.35	1.303	9.85	7.46
MW-203	01/31/2012 10:37	0.93	11	36.20	0.0000	0.825	8.80	7.41
MW-203	04/10/2012 13:11	3.64	80	7.35	0	0.69	13.9	14.7
MW-203	04/10/2012 13:13	3.39	58	7.3	0	0.68	14.1	13.7

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-203	04/10/2012 13:15	2.92	31	7.27	0	0.65	14.4	12.7
MW-203	04/10/2012 13:17	2.7	5	7.31	0	0.65	14.7	11.6
MW-203	04/10/2012 13:19	2.61	-13	7.31	0	0.65	15	10.2
MW-203	04/10/2012 13:21	2.23	-27	7.29	0	0.65	15.2	10.3
MW-203	04/10/2012 13:23	2.1	-34	7.32	0	0.64	15.5	9.9
MW-203	04/10/2012 13:25	2.04	-40	7.32	0	0.63	15.6	8.5
MW-203	04/10/2012 13:27	1.86	-46	7.31	0	0.62	15.6	7.4
MW-203	04/10/2012 13:29	1.79	-50	7.31	0	0.62	15.8	7.5
MW-203	04/10/2012 13:31	1.64	-52	7.27	0	0.613	15.81	7
MW-203	04/10/2012 14:35	2.37	-74	7.28	0	0.802	11.27	11.9
MW-203	04/11/2012 12:30	1.62	-111	7.57	0	0.487	11.37	9.1
MW-203	07/09/2012 12:53	1.5	-65	7.12	0.06	1.24686	28.55	45.2
MW-203	07/09/2012 12:56	0.81	-90	7.07	0.06	1.19327	27.38	4.1
MW-203	07/09/2012 12:58	0.6	-104	7.03	0.06	1.12995	27.21	4.6
MW-203	07/09/2012 13:00	0.52	-114	7.02	0.05	1.03221	27.45	3.8
MW-203	07/09/2012 13:02	0.45	-122	7.02	0.05	0.93649	27.24	3.9
MW-203	07/09/2012 13:04	0.39	-129	7	0.04	0.87362	27.06	6.6
MW-203	07/09/2012 13:06	0.34	-131	6.99	0.04	0.84736	27.02	6.1
MW-203	07/09/2012 13:09	0.31	-134	6.99	0.04	0.83658	27.04	5.7
MW-203	07/09/2012 13:11	0.28	-135	6.99	0.04	0.83805	26.94	5.7
MW-203	07/09/2012 13:13	0.27	-138	6.98	0.04	0.83085	27.26	6.4
MW-203	07/09/2012 13:15	0.25	-139	6.99	0.04	0.83761	27.05	9.2
MW-203	07/09/2012 13:17	0.23	-141	7	0.04	0.83438	26.84	9
MW-203	07/09/2012 13:19	0.22	-142	6.99	0.04	0.84096	26.92	8.7
MW-203	07/09/2012 13:22	0.21	-142	6.99	0.04	0.849	22.16	8.61
MW-203	07/09/2012 14:33	3.10	-110	7.29	0.03	0.627	22.50	46.90
MW-203	07/10/2012 10:02	1.91	-102	7.34	0.38	0.534	25.19	24.00
MW-203	10/15/2012 13:35	6.49	-18	7.48	0.1	1.35	20.0	21.4
MW-203	10/15/2012 13:37	5.80	-26	7.39	0.1	1.36	20.2	26.6
MW-203	10/15/2012 13:39	5.53	-31	7.35	0.1	1.34	20.2	17.0
MW-203	10/15/2012 13:41	5.46	-33	7.34	0.1	1.34	20.2	14.4
MW-203	10/15/2012 13:43	5.32	-35	7.31	0.1	1.32	20.3	13.6
MW-203	10/15/2012 13:45	5.15	-38	7.30	0.1	1.29	20.4	13.8
MW-203	10/15/2012 13:47	5.03	-41	7.30	0.1	1.29	20.5	12.0
MW-203	10/15/2012 13:49	4.91	-42	7.29	0.1	1.27	20.5	12.1
MW-203	10/15/2012 13:51	4.88	-43	7.29	0.10	1.260	20.59	12.20
MW-203	10/15/2012 14:39	6.13	-163	7.43	0.10	1.970	19.41	114.00
MW-203	10/16/2012 10:52	4.11	-89	7.37	0.0000	0.712	18.23	21.40
MW-203	01/30/2013 13:06	2.79	-217	6.94	0.17	3.24474	11.7	78.9
MW-203	01/30/2013 13:08	0.95	-272	7	0.16	3.02495	11.5	199.6
MW-203	01/30/2013 13:10	0.7	-288	7.03	0.15	2.95785	11.83	953.9
MW-203	01/30/2013 13:13	0.66	-296	7.05	0.15	2.95464	11.64	504.6
MW-203	01/30/2013 13:15	0.64	-297	7.06	0.15	2.95073	11.68	2439.2
MW-203	01/30/2013 13:17	0.62	-298	7.07	0.15	2.94233	11.76	2439.2
MW-203	01/30/2013 13:20	0.57	-300	7.08	0.15	2.9415	11.75	2281.8
MW-203	01/30/2013 13:22	0.52	-301	7.09	0.15	2.94515	11.84	1611.4
MW-203	01/30/2013 13:24	0.48	-302	7.09	0.15	2.94691	11.78	1817.6
MW-203	01/30/2013 13:27	0.44	-302	7.09	0.15	2.94639	12.02	989
MW-203	01/30/2013 13:29	0.42	-303	7.1	0.15	2.94387	12.03	2216.2
MW-203	01/30/2013 13:32	0.41	-304	7.1	0.15	2.94996	11.89	1059.2
MW-203	01/30/2013 13:34	0.38	-307	7.1	0.15	2.9488	12.06	277
MW-203	01/30/2013 13:36	0.38	-307	7.1	0.15	2.94471	11.93	1293.3
MW-203	01/30/2013 13:39	0.36	-310	7.11	0.15	2.95062	11.93	1075.6
MW-203	01/30/2013 13:41	0.35	-312	7.11	0.15	2.92708	12.03	2439.2
MW-203	01/30/2013 13:43	0.34	-315	7.11	0.15	2.95047	11.81	1603.4
MW-203	01/30/2013 13:46	0.33	-316	7.11	0.15	2.94836	11.91	701.3
MW-203	01/30/2013 13:48	0.32	-318	7.11	0.15	2.93739	12.1	2439.2
MW-203	01/30/2013 13:50	0.31	-319	7.11	0.15	2.94514	12.24	196.2
MW-203	01/30/2013 13:53	0.3	-322	7.11	0.15	2.94859	11.92	2210.5
MW-203	01/30/2013 13:55	0.29	-322	7.11	0.15	2.948	12.42	24.39
MW-203	01/30/2013 14:41	2.43	-253	7.19	0.20	3.741	10.73	361.90
MW-203	01/31/2013 10:20	0.97	-328	7.47	0.08	1.690	5.46	13.10

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-203	04/22/2013 14:12	0.17	-312	7.3	0.05	0.947	12.54	2.12
MW-203	04/22/2013 14:45	4.39	-170	7.75	0.05	1.158	11.68	40.7
MW-203	04/23/2013 10:14	1.25	-214	7.5	0.05	1.418	11.24	24.9
MW-203	07/22/2013 10:37	0.25	-238	7.03	0.07	1.330	27.83	4.30
MW-203	07/22/2013 11:48	0.22	-157	7.03	0.21	3.954	20.38	521.00
MW-203	07/23/2013 10:03	-0.11	-301.00	7.30	0.06	1.142	20.43	32.60
MW-203	03/17/2014 11:18	0.60	-262	7.12	0.10	1.961	2.81	7.85
MW-203	03/17/2014 11:50	5.95	-90	7.41	0.13	2.475	7.75	840.70
MW-203	03/18/2014 09:48	2.21	-132	7.88	0.04	0.915	6.01	15.90
MW-203	04/21/2014 11:07	1.29	-441	7.41	0.04	0.893	14.12	10.30
MW-203	04/21/2014 12:06	4.28	-341	7.24	0.08	1.518	11.25	157.70
MW-203	04/22/2014 10:26	3.86	-279	7.37	0.05	1.030	14.65	32.40
MW-203	07/17/2014 13:15	0.73	6	7.05	0.05	0.901	25.13	7.12
MW-203	07/17/2014 13:56	3.02	162	7.04	0.26	4.773	19.33	703.50
MW-203	07/18/2014 10:14	0.62	98	7.11	0.07	1.332	21.10	19.00
MW-203	10/09/2014 14:01	1.11	-112	6.96	0.09	1.834	20.16	10.34
MW-203	10/09/2014 15:03	4.12	-120	8.48	0.08	1.547	19.74	20.30
MW-203	10/10/2014 10:16	0.72	-118	7.15	0.07	1.411	19.33	16.00
MW-203	01/20/2015 14:15	-1.30	-314	7.33	0.07	1.480	6.76	5.50
MW-203	01/20/2015 15:34	1.01	-208	8.22	0.07	1.505	6.79	36.40
MW-203	01/21/2015 10:33	-0.96	-279	7.39	0.07	1.466	7.23	11.10
MW-203	04/29/2015 09:51	3.54	8	7.14	0.01	0.305	12.22	26.5
MW-203	04/29/2015 11:22	8.36	-131	6.96	0.07	1.316	10.39	1511.9
MW-203	07/28/2015 10:44	0.13	-51	7.02	0.06	1.174	22.83	18.8
MW-203	07/28/2015 15:26	2.11	-145	8.59	0.12	2.303	21.14	47.2
MW-203	10/14/2015 13:04	0.69	-99	7.76	0.06	1.165	19.59	13.7
MW-203	10/14/2015 16:42	3.03	-121	7.52	0.2	3.686	19.79	120.1
MW-203	04/01/2016 10:42	0.62	-48	7.08	0.01	0.278	11.57	16.60
MW-203	04/01/2016 15:56	6.85	-86	7.16	0.08	1.654	11.57	246.90
MW-203	09/30/2016 10:51	0.10	-140.00	7.85	0.14	2.655	21.87	11.00
MW-203	09/30/2016 13:59	3.37	-139	8.72	0.13	2.547	22.19	92.20
MW-203	02/02/2017 11:16	1.05	344	7.97	0.17	3.235	8.48	6.70
MW-203	02/02/2017 14:39	2.26	-171	8.34	0.04	0.922	8.82	39.30
MW-203	02/14/2018 10:13	5.03	263.00	7.42	0.02	0.333	6.9	36.60
MW-203	02/14/2018 11:10	1.95	91.00	7.49	0.01	0.265	6.62	22.48
MW-203	02/14/2018 11:40	5.40	107.00	7.89	0.03	0.648	8.44	124.90
MW-203	07/26/2018 08:26	2.93	-44	7.64	0.110	2.1270	24.63	19.66
MW-203	07/26/2018 08:29	0.54	-91	7	0.113	2.1870	23.50	15.83
MW-203	07/26/2018 08:31	0.38	-104	6.88	0.110	2.1250	23.30	9.959
MW-203	07/26/2018 08:34	0.3	-114	6.86	0.106	2.0570	23.30	8.79
MW-203	07/26/2018 08:36	0.29	-119	6.85	0.103	1.9930	23.43	9.47
MW-203	07/26/2018 08:38	0.27	-124	6.85	0.099	1.9220	23.45	10.37
MW-203	07/26/2018 08:41	0.24	-128	6.86	0.095	1.8540	23.46	8.352
MW-203	07/26/2018 08:43	0.24	-132	6.88	0.088	1.7230	23.51	7.151
MW-203	07/26/2018 08:46	0.19	-136	6.92	0.080	1.5700	23.51	9.686
MW-203	07/26/2018 08:48	0.21	-140	6.96	0.071	1.4040	23.53	8.146
MW-203	07/26/2018 08:50	0.19	-144	7.01	0.063	1.2410	23.56	9.082
MW-203	07/26/2018 08:53	0.19	-149	7.11	0.050	1.0010	23.60	7.806
MW-203	07/26/2018 08:55	0.22	-152	7.16	0.044	0.8877	23.69	8.618
MW-203	07/26/2018 08:58	0.23	-154	7.2	0.040	0.8014	24.08	9.778
MW-203	07/26/2018 09:00	0.23	-155	7.21	0.038	0.7758	24.23	8.643
MW-203	07/26/2018 09:03	0.23	-155	7.19	0.038	0.7684	24.27	7.368
MW-203	07/26/2018 09:05	0.22	-156	7.19	0.037	0.7582	24.34	8.106
MW-203	07/26/2018 09:07	0.21	-156	7.18	0.037	0.7571	24.31	8.238
MW-203	07/26/2018 09:10	0.23	-157	7.17	0.037	0.7521	24.34	7.601
MW-203	07/27/2018 09:10	0.23	-157.00	7.17	0.04	0.752	24.34	7.60
MW-203	07/27/2018 10:11	0.0000	-135.00	6.93	0.05	0.995	24.97	12.10
MW-203	07/27/2018 10:22	1.33	-225.00	8.65	0.05	0.915	24.42	44.80
MW-203	02/11/2019 14:15	1.65	59.8	8.4	NM	0.586	8.15	161
MW-203	02/11/2019 14:25	1.65	59.80	8.40	0.29	0.586	8.15	161.00
MW-203	02/11/2019 15:05	1.22	31.30	7.93	0.19	0.398	7.13	0.80
MW-203	02/11/2019 15:20	1.13	11.80	7.84	0.18	0.379	7.06	4.70

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-203	07/24/2019 10:05	3.09	-112	7.81	NM	5.128	24.14	40.6
MW-203	07/24/2019 10:10	2.33	-120.4	7.18	NM	3.848	24.02	8.2
MW-203	07/24/2019 10:15	3.58	-108.4	6.89	NM	2.976	25.83	0.6
MW-203	07/24/2019 10:20	4.02	-99.6	6.77	NM	2.669	26.57	1.1
MW-203	07/24/2019 10:25	5.26	-95.1	6.69	NM	2.577	27.56	1.9
MW-203	07/24/2019 10:30	6.97	-87.8	6.63	NM	2.463	26.67	1
MW-203	07/24/2019 10:35	8.16	-76.2	6.54	NM	2.345	26.18	0.5
MW-203	07/24/2019 10:40	9.46	-67.4	6.46	NM	2.247	26.77	1.1
MW-203	07/24/2019 10:45	9.79	-60.8	6.41	NM	2.054	26.4	1.9
MW-203	07/24/2019 10:50	10.38	-55.3	6.36	NM	1.898	26.06	0.4
MW-203	07/24/2019 13:50	10.38	-55.3	6.36	NM	1.898	26.06	0.4
MW-203	07/24/2019 14:30	6.18	-108.4	7.31	0.2	0.411	22.76	1.8
MW-203	07/24/2019 14:45	5.17	-107	7.33	0.19	0.404	22.43	0.2
MW-203	02/05/2020 09:35	0.35	-79.6	6.72	NM	0.164	8.51	4.9
MW-203	02/05/2020 10:40	0.2	-102.1	7	0.08	0.163	8.8	7.8
MW-203	03/17/2021 08:55	10.29	52.2	7.39	0.47	0.939	7.62	257.8
MW-203	03/17/2021 09:00	8	-11.5	6.93	0.36	0.735	7.71	387.5
MW-203	03/17/2021 09:05	6.45	-17.8	6.91	0.34	0.7	7.79	271.6
MW-203	03/17/2021 09:10	5.04	-22.6	6.91	0.34	0.69	7.6	102.3
MW-203	03/17/2021 09:15	3.93	-37.3	6.95	0.33	0.682	7.5	36.9
MW-203	03/17/2021 09:20	4.29	-42.1	6.97	0.33	0.675	7.44	25
MW-203	03/17/2021 09:25	4.32	-19.9	7.03	0.33	0.678	7.22	66.4
MW-203	03/17/2021 09:30	3.68	-27.3	7.01	0.33	0.669	7.23	26.9
MW-203	03/17/2021 09:35	3.96	-30.9	7.06	0.33	0.672	7.12	20.3
MW-203	03/17/2021 09:40	3.55	-40.3	7.09	0.33	0.671	7.27	39.4
MW-203	03/17/2021 10:40	1.58	-97.7	7.26	0.31	0.642	7.81	10.9
MW-203	03/17/2021 10:45	0.92	-98.9	7.18	0.35	0.718	7.88	25.2
MW-203	01/28/2022 10:30	9.93	104.9	7.44	0.23	0.479	6.25	820
MW-203	01/28/2022 10:35	8.47	55.1	7.32	0.22	0.461	7.09	41.7
MW-203	01/28/2022 10:40	10.62	52.4	7.31	0.22	0.461	7.18	38.4
MW-203	01/28/2022 10:45	11.35	38	7.28	0.22	0.457	7.18	34.6
MW-203	01/28/2022 10:50	11.13	11.1	7.25	0.21	0.441	7.06	17.1
MW-203	01/28/2022 10:55	11.29	9.8	7.23	0.21	0.443	7.09	18
MW-203	01/28/2022 11:00	6.35	-6.7	7.26	0.21	0.427	6.99	13.8
MW-203	01/28/2022 11:05	5.95	-8.9	7.25	0.21	0.426	6.97	13.3
MW-203	01/28/2022 11:10	10.27	-20.2	7.26	0.2	0.49	6.92	9.2
MW-203	01/28/2022 11:15	10.08	-20.6	7.26	0.2	0.418	6.95	11.2
MW-204	01/30/2012 14:15	9.99	8	7.51	1.8	21.641	11.24	65.9
MW-204	01/30/2012 14:19	4.14	-6	7.57	1.85	22.28135	11.58	36.4
MW-204	01/30/2012 14:23	3.17	-13	7.56	1.85	22.42642	11.82	17.1
MW-204	01/30/2012 14:27	2.84	-17	7.56	1.85	22.45133	11.82	15.2
MW-204	01/30/2012 14:31	2.54	-19	7.57	1.85	22.49196	11.87	19.3
MW-204	01/30/2012 14:35	2.31	-21	7.57	1.85	22.65776	12.16	36.9
MW-204	01/30/2012 14:39	2.2	-22	7.57	1.86	22.61728	11.97	21.5
MW-204	01/30/2012 14:43	2.05	-22	7.57	1.85	22.53485	11.89	25.7
MW-204	01/30/2012 14:47	1.93	-22	7.57	1.86	22.4771	11.73	28.1
MW-204	01/30/2012 14:51	1.79	-22	7.58	1.86	22.44147	11.67	48.7
MW-204	01/30/2012 14:55	1.68	-22	7.58	1.86	22.44933	11.67	17.9
MW-204	01/30/2012 14:59	1.59	-22	7.58	1.86	22.32856	11.45	12.6
MW-204	01/30/2012 15:03	1.48	-23	7.58	1.86	22.560	11.87	14.05
MW-204	01/30/2012 16:14	-0.02	40	4.68	1.83	22.780	12.94	17.90
MW-204	01/31/2012 11:10	0.27	-107	6.79	2.00	31.600	13.70	22.40
MW-204	04/10/2012 13:50	2.35	-32	7.5	1.5	23.7	18.9	7
MW-204	04/10/2012 13:52	2.36	-28	7.54	1.5	25.2	16.4	2.9
MW-204	04/10/2012 13:54	2.02	-25	7.55	1.5	24.6	17	3.5
MW-204	04/10/2012 13:56	1.95	-22	7.56	1.5	25	16.6	3
MW-204	04/10/2012 13:58	1.85	-21	7.57	1.5	24.9	16.6	3
MW-204	04/10/2012 14:00	1.74	-18	7.58	1.5	24.7	16.9	2.7
MW-204	04/10/2012 14:02	1.69	-15	7.58	1.5	24.8	17	2.8
MW-204	04/10/2012 14:04	1.62	-13	7.56	1.5	24.9	16.8	2.9
MW-204	04/10/2012 14:06	1.57	-11	7.56	1.5	25.2	16.2	3
MW-204	04/10/2012 14:08	1.48	-11	7.59	1.5	24.9	16.5	3.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-204	04/10/2012 14:10	1.47	-8	7.6	1.5	24.6	17.1	2.9
MW-204	04/10/2012 14:12	1.49	-7	7.6	1.5	24.7	17.4	2.8
MW-204	04/10/2012 14:14	1.51	-5	7.6	1.5	24.9	17.2	2.7
MW-204	04/10/2012 14:16	1.5	-5	7.56	1.5	25.1	17	3.2
MW-204	04/10/2012 14:18	1.43	-1	7.52	1.5	25.3	16.29	2.8
MW-204	04/10/2012 15:30	5.45	14	7.42	1.5	25.1	13.67	7.3
MW-204	04/11/2012 13:00	1.23	-113	7.41	1.5	25.2	11.82	3.1
MW-204	07/09/2012 13:35	5.05	-58	7.3	0	0.00548	38.65	5.6
MW-204	07/09/2012 13:40	0.7	-86	7.08	1.62	26.18201	21.8	5.2
MW-204	07/09/2012 13:45	0.4	-101	6.65	1.64	26.42738	21.36	5.1
MW-204	07/09/2012 13:50	0.28	-106	6.63	1.65	26.57909	21.09	4.6
MW-204	07/09/2012 13:55	0.25	-109	7.47	1.64	26.54577	21.15	4.1
MW-204	07/09/2012 14:00	0.24	-112	7.58	1.64	26.43496	21.36	4.9
MW-204	07/09/2012 14:05	0.22	-115	6.94	1.65	26.61391	21.04	8.8
MW-204	07/09/2012 14:10	0.21	-118	7.48	1.65	26.63537	21.01	4
MW-204	07/09/2012 14:15	0.2	-123	7.3	1.65	26.60935	21.06	3.1
MW-204	07/09/2012 14:20	0.17	-125	7.09	1.64	26.47363	21.31	6.5
MW-204	07/09/2012 14:25	0.17	-124	6.58	1.66	26.750	20.81	6.45
MW-204	07/09/2012 15:28	2.33	132	5.59	1.86	29.640	29.11	20.10
MW-204	07/10/2012 10:28	2.23	-33	7.47	14.00	30.300	17.41	21.80
MW-204	10/15/2012 14:18	5.83	-137	7.14	2.0	31.60	18.9	1.7
MW-204	10/15/2012 14:20	5.33	-142	7.11	2.0	31.20	19.1	2.8
MW-204	10/15/2012 14:22	4.87	-147	7.11	1.9	31.10	19.5	4.9
MW-204	10/15/2012 14:24	4.64	-135	7.11	1.9	31.20	19.5	5.9
MW-204	10/15/2012 14:26	4.52	-158	7.11	2.0	31.20	19.6	2.6
MW-204	10/15/2012 14:28	4.43	-162	7.10	2.0	31.30	19.6	2.6
MW-204	10/15/2012 14:30	4.38	-166	7.10	2.00	31.300	19.58	2.40
MW-204	10/15/2012 16:10	6.16	-40	7.52	1.90	30.900	18.86	24.40
MW-204	10/16/2012 11:22	3.96	-43	7.59	1.90	30.400	19.57	36.40
MW-204	01/31/2013 08:56	2.33	-209	7.46	2.54	40.15231	11.35	29.5
MW-204	01/31/2013 09:01	1.81	-272	7.5	2.58	40.89855	10.07	5.7
MW-204	01/31/2013 09:05	1.49	-300	7.51	2.61	41.35729	9.76	7.1
MW-204	01/31/2013 09:10	1.13	-313	7.52	2.6	41.17054	9.73	25.8
MW-204	01/31/2013 09:15	0.91	-319	7.52	2.62	41.37329	9.85	23.7
MW-204	01/31/2013 09:19	0.8	-322	7.52	2.61	41.32104	10.01	7.2
MW-204	01/31/2013 09:24	0.72	-324	7.53	2.63	41.58616	9.88	13.6
MW-204	01/31/2013 09:29	0.64	-324	7.53	2.62	41.45382	10.11	13.5
MW-204	01/31/2013 09:33	0.59	-325	7.53	2.62	41.42855	10.26	10.1
MW-204	01/31/2013 09:38	0.55	-325	7.53	2.63	41.52088	10.39	20.3
MW-204	01/31/2013 09:43	0.52	-324	7.53	2.64	41.63242	10.43	10.1
MW-204	01/31/2013 09:44	0.52	-324	7.53	2.64	41.630	10.57	10.11
MW-204	01/31/2013 10:44	2.03	-274	7.44	2.65	41.460	13.70	11.10
MW-204	02/01/2013 11:01	0.90	-278	7.47	2.77	43.210	13.34	11.50
MW-204	04/22/2013 15:28	0.27	-200	7.41	2.09	33.34	13.69	2.69
MW-204	04/22/2013 16:18	3.57	-108	7.39	2.15	34.34	12.51	41.4
MW-204	04/23/2013 10:40	0.44	-276	6.99	3.25	50.01	11.98	7.4
MW-204	07/22/2013 09:56	0.17	-206	7.09	2.88	44.070	21.83	24.03
MW-204	07/22/2013 11:31	1.04	-137	7.23	3.00	46.100	16.67	30.80
MW-204	07/23/2013 09:36	0.03	-193.00	7.11	2.20	34.760	17.12	26.60
MW-204	03/17/2014 10:17	0.72	-204	6.72	3.67	56.630	6.85	7.11
MW-204	03/17/2014 11:25	3.06	-123	6.87	3.13	48.470	11.52	12.60
MW-204	03/18/2014 09:21	0.82	-174	7.08	3.19	49.160	11.94	6.10
MW-204	04/21/2014 10:28	1.35	-380	7.19	2.56	39.970	14.19	12.65
MW-204	04/21/2014 11:45	3.03	-351	6.90	3.01	46.250	16.51	17.10
MW-204	04/22/2014 09:45	3.49	-273	7.08	1.87	30.130	13.60	12.50
MW-204	07/22/2014 15:03	1.20	-46	7.02	3.48	52.410	21.92	8.92
MW-204	07/22/2014 15:59	2.47	197	6.93	4.12	61.380	14.81	3.30
MW-204	07/23/2014 11:14	0.26	-336	7.08	1.67	27.050	17.03	24.40
MW-204	10/09/2014 14:46	0.91	-154	6.90	3.44	51.730	19.86	11.58
MW-204	10/09/2014 15:41	1.82	-116	6.96	3.69	55.330	16.80	13.40
MW-204	10/10/2014 10:55	0.61	-118	6.98	3.45	52.060	18.83	26.00
MW-204	01/20/2015 15:12	-0.69	-237	6.95	3.84	58.620	9.76	6.14

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-204	01/20/2015 15:55	1.61	-137	7.33	3.24	49.750	13.26	16.70
MW-204	01/21/2015 11:11	-0.43	-265	7.23	2.84	44.160	12.96	20.30
MW-204	02/11/2015 11:10	1.60	167.70	8.39	17.67	28.650	11.52	0.0000
MW-204	02/11/2015 13:10	2.43	164.50	8.43	17.66	28.590	12.59	36.60
MW-204	02/11/2015 13:25	1.69	165.80	8.42	17.54	28.490	11.55	0.0000
MW-204	04/29/2015 09:25	2.83	-133	7.36	2.36	37.48	11.42	8.2
MW-204	04/29/2015 11:01	2.22	-102	7.67	2.43	38.38	12.19	6.3
MW-204	07/28/2015 11:10	0.56	-65	7.37	10.4	134.5	16.47	33.8
MW-204	07/28/2015 16:16	1.51	-53	7.1	35.34	322.4	15.72	12
MW-204	10/14/2015 12:54	1.77	-96	7.36	3.48	52.39	19.61	17.2
MW-204	10/14/2015 16:37	1.77	-67	7.09	3.5	52.66	19.12	20.7
MW-204	04/01/2016 10:16	0.23	-77	6.98	1.36	22.550	12.46	5.80
MW-204	04/01/2016 15:40	5.39	-60	7.55	5.39	77.960	13.63	18.90
MW-204	09/30/2016 11:18	0.21	-131.00	7.60	0.92	15.650	19.10	15.80
MW-204	09/30/2016 14:33	1.82	-30	6.65	0.81	13.930	19.09	14.10
MW-204	02/02/2017 11:42	0.70	289	7.03	2.33	36.840	13.33	9.90
MW-204	02/02/2017 15:21	8.16	-93	6.55	3.35	51.130	13.77	16.60
MW-204	02/14/2018 09:34	10.88	228.00	7.08	1.72	27.930	12.61	15.40
MW-204	02/14/2018 10:06	2.29	2.00	6.74	2.08	33.880	7.63	52.06
MW-204	02/14/2018 11:25	6.07	234.00	6.86	1.75	28.400	12.58	18.00
MW-204	07/23/2018 09:23	2.66	-77	6.7	3.513	52.5800	23.16	26.58
MW-204	07/23/2018 09:29	2.72	-117	6.69	3.684	54.9800	20.96	15.52
MW-204	07/23/2018 09:36	3.75	-123	6.66	3.667	54.7400	21.17	16.89
MW-204	07/23/2018 09:41	3.04	-128	6.67	3.657	54.6000	21.28	16.27
MW-204	07/23/2018 09:46	2.21	-132	6.67	3.629	54.2000	21.62	17.2
MW-204	07/23/2018 09:52	1.69	-136	6.68	3.619	54.0700	21.72	17.8
MW-204	07/23/2018 09:57	1.32	-139	6.69	3.617	54.0400	21.71	13.14
MW-204	07/23/2018 10:02	1.13	-142	6.7	3.621	54.1000	21.66	12.4
MW-204	07/23/2018 10:07	0.95	-143	6.71	3.618	54.0600	21.71	12.25
MW-204	07/23/2018 10:13	0.82	-144	6.71	3.594	53.7100	22.04	13.84
MW-204	07/27/2018 10:13	0.82	-144.00	6.71	3.59	53.710	22.04	13.84
MW-204	07/27/2018 10:38	0.32	-163.00	7.57	3.84	57.180	19.25	17.20
MW-204	07/27/2018 11:08	4.05	-50.00	6.70	3.88	57.830	18.45	15.30
MW-204	02/11/2019 11:00	1.6	167.7	8.39	NM	28.65	11.52	NM
MW-204	02/11/2019 13:10	2.43	164.5	8.43	17.66	28.59	12.59	36.6
MW-204	07/24/2019 09:55	1.19	-106.6	6.85	NM	31.73	23.67	3.1
MW-204	07/24/2019 10:05	2.98	39.1	6.78	NM	25.19	21.92	1.4
MW-204	07/24/2019 10:10	1.39	-84.9	6.83	NM	27.91	21.73	2.9
MW-204	07/24/2019 10:15	1.28	-94.6	6.85	NM	30.51	23.33	2.8
MW-204	07/24/2019 10:20	1.23	-99.7	6.85	NM	31.38	23.55	3
MW-204	07/24/2019 10:25	1.18	-102.9	6.85	NM	31.46	23.59	3
MW-204	07/24/2019 10:30	1.19	-105.3	6.85	NM	31.68	23.45	3.1
MW-204	07/24/2019 10:35	1.19	-106.6	6.85	NM	31.73	23.67	3.1
MW-204	07/24/2019 10:40	1.55	-115.4	6.83	18.82	30.25	18.23	NM
MW-204	07/24/2019 10:45	1.66	-117.1	6.83	18.98	30.49	NM	1.9
MW-204	07/24/2019 10:50	NM	NM	NM	NM	NM	18.47	2.1
MW-204	07/24/2019 11:59	1.55	-115.4	6.83	18.82	30.25	18.23	1.9
MW-204	02/05/2020 09:40	8.37	79.3	7.31	NM	35.88	9.72	9.9
MW-204	02/05/2020 11:25	17.76	-97.7	7.03	22.78	36.47	6.76	38.6
MW-204	03/16/2021 13:25	4	35.5	7.99	20.9	33.35	10.77	23
MW-204	03/16/2021 13:30	2.36	35.9	7.92	20.94	33.47	10.75	18.1
MW-204	03/16/2021 13:35	1.34	35.8	7.86	20.95	33.49	10.77	19.8
MW-204	03/16/2021 13:40	0.92	35.3	7.82	20.92	33.46	10.78	16
MW-204	03/16/2021 13:45	0.8	34.7	7.8	20.9	33.42	10.73	11.2
MW-204	03/16/2021 13:50	0.49	32.4	7.72	20.8	33.3	10.53	5
MW-204	03/16/2021 13:55	0.5	31.7	7.7	20.68	33.15	10.6	3.3
MW-204	03/16/2021 14:00	0.44	31.5	7.67	20.77	33.22	10.79	2.3
MW-204	03/16/2021 14:05	0.45	31.4	7.67	20.5	33.24	10.8	2
MW-204	03/16/2021 14:10	0.43	32	7.66	20.72	33.16	10.83	2.2
MW-204	03/16/2021 15:40	1.4	-84.3	7.5	23.04	32.67	11.86	0.7
MW-204	03/16/2021 15:53	2.97	-77.6	7.75	20.99	33.5	11.94	9.6
MW-204	01/31/2022 13:00	1.23	-17.9	7.62	18.35	29.65	11.24	10.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-204	01/31/2022 13:05	0.86	-20.4	7.35	18.31	29.61	11.27	8.3
MW-204	01/31/2022 13:10	0.71	-20.6	7.19	18.45	29.88	9.96	6.7
MW-204	01/31/2022 13:15	0.51	-20.2	7.05	18.35	29.72	9.56	3
MW-204	01/31/2022 13:20	0.48	-20.2	7.03	18.36	29.81	9.25	3.4
MW-204	01/31/2022 13:25	0.47	-20.3	7.01	18.3	29.73	9.22	3.3
MW-204	01/31/2022 13:30	0.46	-20.6	6.98	18.28	29.59	9.2	3.3
MW-205	01/31/2012 10:24	1.74	-144	7.84	0.04	0.81183	14.02	117.8
MW-205	01/31/2012 10:26	1.61	-132	7.72	0.02	0.47747	10.74	122.1
MW-205	01/31/2012 10:29	1.26	-126	7.65	0.02	0.46791	10.54	62.7
MW-205	01/31/2012 10:31	0.22	-122	7.59	0.02	0.46374	10.51	66.6
MW-205	01/31/2012 10:34	0.21	-118	7.55	0.02	0.47444	10.52	48.9
MW-205	01/31/2012 10:36	0.19	-114	7.52	0.02	0.46685	10.43	42.8
MW-205	01/31/2012 10:38	0.18	-112	7.51	0.02	0.46745	10.63	35.8
MW-205	01/31/2012 10:41	0.22	-110	7.49	0.02	0.46951	10.71	33.4
MW-205	01/31/2012 10:43	1.47	-109	7.48	0.02	0.47048	10.7	40.9
MW-205	01/31/2012 10:45	1.08	-108	7.46	0.02	0.47167	10.87	48.2
MW-205	01/31/2012 10:48	0.99	-107	7.46	0.02	0.47407	10.94	34.8
MW-205	01/31/2012 10:50	0.94	-106	7.45	0.02	0.47398	11.01	39.8
MW-205	01/31/2012 10:52	0.91	-105	7.44	0.02	0.4821	10.85	32.2
MW-205	01/31/2012 10:55	0.92	-104	7.43	0.02	0.48778	11.11	33.9
MW-205	01/31/2012 10:57	0.92	-103	7.43	0.02	0.48404	11.1	35.9
MW-205	01/31/2012 10:59	0.9	-102	7.41	0.02	0.48736	11.28	36.7
MW-205	01/31/2012 11:01	0.90	-102	7.41	0.02	0.487	11.28	36.74
MW-205	01/31/2012 12:19	2.68	-52	7.53	0.04	0.911	11.86	2377.60
MW-205	02/01/2012 10:05	0.0000	-111	7.07	0.10	1.620	10.60	41.20
MW-205	04/04/2012 09:27	1.4	-84	7.55	0.11	2.1383	17.19	314.5
MW-205	04/04/2012 09:30	0.74	-79	7.39	0.1	2.02774	14.58	265.4
MW-205	04/04/2012 09:32	0.42	-75	7.33	0.1	2.00856	14.35	251.8
MW-205	04/04/2012 09:35	0.39	-73	7.3	0.1	2.01285	14.3	246.9
MW-205	04/04/2012 09:37	0.4	-72	7.29	0.1	2.01678	13.98	304.1
MW-205	04/04/2012 09:40	0.42	-70	7.27	0.1	2.0147	13.94	242.5
MW-205	04/04/2012 09:43	0.44	-68	7.25	0.1	2.01837	13.73	235.4
MW-205	04/04/2012 09:45	0.46	-67	7.25	0.1	2.02048	13.79	242
MW-205	04/05/2012 09:32	-0.58	-84	7.19	0.15	2.931	11.56	20.60
MW-205	07/11/2012 09:47	1.27	-132	8.34	0.2	3.66912	26.17	257.4
MW-205	07/11/2012 09:49	0.75	-133	7.21	0.17	3.29302	25.93	167
MW-205	07/11/2012 09:52	0.37	-136	7.08	0.17	3.25196	25.09	167.8
MW-205	07/11/2012 09:54	0.26	-138	7.01	0.17	3.25382	25.02	160.2
MW-205	07/11/2012 09:56	0.24	-139	6.99	0.17	3.24844	25.08	163.8
MW-205	07/11/2012 09:59	0.21	-140	6.96	0.17	3.24948	25.4	160.2
MW-205	07/11/2012 10:01	0.18	-141	6.95	0.17	3.25676	25.48	159.8
MW-205	07/11/2012 10:03	0.19	-142	6.93	0.17	3.25994	25.59	175
MW-205	07/11/2012 10:06	0.15	-143	6.93	0.17	3.25868	25.65	163
MW-205	07/11/2012 10:08	0.15	-144	6.92	0.17	3.26446	25.57	175.8
MW-205	07/11/2012 10:11	0.15	-144	6.92	0.17	3.262	25.76	165.00
MW-205	07/11/2012 11:42	3.12	-123	6.93	0.61	10.610	22.20	2022.80
MW-205	07/12/2012 09:15	0.04	-101	6.85	0.17	3.250	21.64	17.10
MW-205	10/10/2012 13:33	1.94	-110	10.4	0.16	3.08081	22.18	211.5
MW-205	10/10/2012 13:35	1.28	-100	10.36	0.16	3.1212	21.34	125
MW-205	10/10/2012 13:37	0.82	-102	10.22	0.16	3.11781	21.68	100.1
MW-205	10/10/2012 13:40	0.74	-103	10.08	0.17	3.12731	21.58	103.5
MW-205	10/10/2012 13:42	0.75	-103	10.19	0.16	3.11354	21.31	97.4
MW-205	10/10/2012 13:44	0.76	-102	10.19	0.17	3.1256	21.53	94.2
MW-205	10/10/2012 13:47	0.75	-104	10.22	0.16	3.12115	21.29	107.9
MW-205	10/10/2012 13:49	0.8	-106	10.06	0.16	3.1228	21.06	233.1
MW-205	10/10/2012 13:51	0.81	-106	10.02	0.16	3.10655	20.92	104.9
MW-205	10/10/2012 13:54	0.79	-113	9.9	0.16	3.12296	21.22	114.4
MW-205	10/10/2012 13:56	0.8	-113	9.95	0.17	3.12778	21.24	105.5
MW-205	10/10/2012 13:58	0.83	-115	9.89	0.16	3.11915	20.8	156.7
MW-205	10/10/2012 14:01	0.86	-111	9.79	0.16	3.1114	20.61	186.3
MW-205	10/10/2012 14:03	0.81	-117	9.57	0.16	3.11985	21.34	110.8
MW-205	10/10/2012 14:05	0.79	-122	9.34	0.17	3.13287	21.8	106.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-205	10/10/2012 14:08	0.8	-146	9.1	0.17	3.12968	21.87	106.5
MW-205	10/10/2012 14:10	0.8	-138	9.1	0.17	3.13111	22.15	108.2
MW-205	10/10/2012 14:12	0.79	-136	9.07	0.17	3.12362	22.2	105
MW-205	10/10/2012 14:13	0.79	-136	9.07	0.17	3124.000	22.20	105.00
MW-205	02/04/2013 10:14	2.64	-244	7.4	0.34	6.30243	5.29	266.7
MW-205	02/04/2013 10:17	1.23	-280	7.46	0.14	2.74532	5.31	81.5
MW-205	02/04/2013 10:19	0.71	-286	7.26	0.11	2.1341	5.52	34.8
MW-205	02/04/2013 10:22	0.57	-289	7.17	0.1	1.90801	5.56	47.1
MW-205	02/04/2013 10:24	0.5	-293	7.12	0.09	1.78526	4.77	25.3
MW-205	02/04/2013 10:27	0.47	-298	7.11	0.08	1.66701	4.68	53.9
MW-205	02/04/2013 10:29	0.43	-296	7.09	0.08	1.62774	4.88	29.7
MW-205	02/04/2013 10:32	0.39	-298	7.08	0.08	1.69448	4.61	50.5
MW-205	02/04/2013 10:35	0.39	-297	7.07	0.08	1.63126	4.8	69.5
MW-205	02/04/2013 10:37	0.38	-303	7.07	0.08	1.63645	4.69	17.5
MW-205	02/04/2013 10:40	0.4	-300	7.06	0.08	1.65096	5.35	120.2
MW-205	02/04/2013 10:42	0.4	-299	7.06	0.08	1.6639	5.36	32.1
MW-205	02/04/2013 10:45	0.4	-300	7.06	0.08	1.66803	5.28	52.7
MW-205	02/04/2013 10:47	0.4	-299	7.05	0.08	1.6617	5.14	14.7
MW-205	02/04/2013 10:50	0.41	-296	7.05	0.08	1.65741	5.26	27.8
MW-205	02/04/2013 10:52	0.42	-296	7.05	0.08	1.66293	5.23	17.8
MW-205	02/04/2013 10:55	0.4	-297	7.05	0.08	1.67671	5.04	27.5
MW-205	02/04/2013 10:58	0.4	-298	7.04	0.08	1.67043	4.86	18
MW-205	02/04/2013 11:00	0.39	-300	7.05	0.08	1.64915	5.03	94.6
MW-205	02/04/2013 11:02	0.39	-298	7.05	0.08	1.658	5.06	51.20
MW-205	02/04/2013 11:03	0.39	-298	7.05	0.08	1.65779	4.92	51.2
MW-205	02/05/2013 09:43	0.11	-311	7.14	0.16	3.012	9.12	10.00
MW-205	07/24/2013 10:46	0.06	-216	7.18	0.29	5.295	25.45	248.70
MW-205	07/24/2013 12:20	0.68	-150	7.12	0.26	4.777	22.37	208.80
MW-205	07/25/2013 10:16	-0.08	-187	7.09	0.20	3.821	20.91	11.30
MW-205	02/20/2014 10:41	0.41	-146	7.32	0.09	1.811	7.52	42.91
MW-205	02/20/2014 12:04	1.80	-143	7.33	0.11	2.078	8.41	151.10
MW-205	02/20/2014 14:39	0.87	-159	7.39	0.08	1.587	7.50	24.70
MW-205	05/01/2014 11:17	1.44	-290	7.06	0.83	2.715	14.50	26.62
MW-205	05/01/2014 13:07	3.51	-188	7.03	0.16	2.975	14.44	37.20
MW-205	05/02/2014 10:34	2.86	-248	7.02	0.10	1.978	15.02	53.10
MW-205	07/22/2014 09:04	0.44	-55	6.96	0.37	6.641	23.45	24.39
MW-205	07/22/2014 11:01	1.93	94	6.88	0.35	6.294	21.56	196.90
MW-205	07/23/2014 09:42	0.20	-353	6.91	0.17	3.134	21.08	12.70
MW-205	09/30/2014 10:44	0.18	204	7.11	0.39	6.993	21.61	351.50
MW-205	09/30/2014 12:41	1.55	241	7.24	0.40	7.261	22.04	151.00
MW-205	10/01/2014 11:37	0.50	-194	7.03	0.39	7.043	20.05	56.30
MW-205	01/14/2015 11:24	-0.19	-258	7.23	0.02	0.472	6.15	41.49
MW-205	01/14/2015 12:54	2.87	-155	7.25	0.07	1.454	9.01	47.30
MW-205	01/15/2015 12:27	1.96	-173	7.18	0.06	1.244	8.21	38.60
MW-205	04/29/2015 11:00	1.25	-127	7.13	0.13	2.589	10.26	5
MW-205	04/29/2015 16:01	4.44	-140	7.18	0.06	1.183	13.29	8.2
MW-205	07/28/2015 10:04	0.44	-159	7.03	1.1	18.456	18.57	30.8
MW-205	07/28/2015 12:47	1.69	-105	6.09	2.06	32.55	22.05	793.9
MW-205	10/15/2015 12:15	2.05	-123	7.05	0.37	6.636	20.26	12.8
MW-205	10/15/2015 12:38	3.52	-55	7.13	0.39	6.933	20.99	327.2
MW-205	03/31/2016 09:51	0.21	-129	6.82	0.10	1.945	10.50	42.60
MW-205	03/31/2016 11:25	6.32	-131	6.85	0.10	1.991	11.23	12.60
MW-205	09/30/2016 09:30	0.20	-95.00	7.26	0.49	8.622	21.23	611.20
MW-205	09/30/2016 10:18	0.05	-152	7.79	0.45	8.052	21.54	118.80
MW-205	02/01/2017 10:50	-0.18	244	6.98	0.50	8.954	10.53	32.40
MW-205	02/01/2017 15:21	1.15	-143	7.32	0.11	2.232	10.13	355.90
MW-205	02/07/2018 09:20	4.24	21	7.12	0.095	1.8885	6.29	65.1
MW-205	02/07/2018 09:21	4.15	20	7.11	0.095	1.8865	6.34	91.1
MW-205	02/07/2018 09:24	8.6	50	6.69	0.000000	0.0033	6.98	1.9
MW-205	02/07/2018 09:27	9.97	43	6.84	0.090	1.8038	5.96	36.4
MW-205	02/07/2018 09:31	2.01	30	6.75	0.090	1.8064	5.52	27.3
MW-205	02/07/2018 09:34	1.31	29	6.73	0.090	1.8062	5.27	26.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-205	02/07/2018 09:36	1.06	29	6.7	0.090	1.8047	5.22	29.7
MW-205	02/07/2018 09:39	0.9	29	6.7	0.090	1.8044	5.01	30.3
MW-205	02/07/2018 09:42	0.81	29	6.7	0.090	1.8036	4.84	33.6
MW-205	02/07/2018 09:45	0.75	29	6.69	0.090	1.8027	4.86	43.7
MW-205	02/07/2018 09:47	0.74	27	6.72	0.090	1.8039	4.46	65
MW-205	02/07/2018 09:50	0.69	28	6.7	0.090	1.8054	4.5	92.8
MW-205	02/07/2018 09:53	0.7	28	6.71	0.090	1.8073	4.39	53.5
MW-205	02/07/2018 09:55	0.76	25	6.72	0.090	1.8066	4.12	85.9
MW-205	02/07/2018 09:58	0.76	26	6.72	0.090	1.8071	4	38.7
MW-205	02/07/2018 10:01	0.72	25	6.72	0.089	1.8060	3.83	52.8
MW-205	02/07/2018 10:04	0.74	27	6.69	0.090	1.8073	4.18	59.4
MW-205	02/07/2018 10:06	0.74	27	6.69	0.090	1.8076	4.15	45.8
MW-205	02/07/2018 10:09	0.73	27	6.68	0.090	1.8078	4.47	62.3
MW-205	02/08/2018 09:22	0.38	128.00	6.14	0.03	0.588	8.27	8.50
MW-205	02/08/2018 10:09	0.73	27.00	6.68	0.09	1.815	4.35	62.33
MW-205	02/08/2018 11:23	5.41	-17.00	7.20	0.10	1.879	8.89	781.60
MW-205	07/26/2018 12:12	1.84	-102	7.45	0.302	5.5120	26.57	103.4
MW-205	07/26/2018 12:15	0.88	-126	7.23	0.308	5.6180	26.16	84.91
MW-205	07/26/2018 12:18	0.74	-133	7.16	0.307	5.5970	26.66	110.6
MW-205	07/26/2018 12:20	0.64	-138	7.3	0.302	5.5170	26.89	129.5
MW-205	07/26/2018 12:23	0.57	-143	7.12	0.301	5.4950	26.93	138
MW-205	07/26/2018 12:26	0.59	-146	7.22	0.301	5.4890	26.77	133.1
MW-205	07/26/2018 12:29	0.4	-150	7.1	0.300	5.4860	26.31	130.7
MW-205	07/26/2018 12:31	0.3	-153	7.1	0.301	5.4900	26.39	129.2
MW-205	07/26/2018 12:34	0.26	-155	7.1	0.301	5.4950	26.56	118.8
MW-205	07/26/2018 12:36	0.24	-157	7.1	0.301	5.5020	26.93	116.9
MW-205	07/26/2018 12:39	0.24	-159	7.1	0.302	5.5100	27.22	101.5
MW-205	07/26/2018 12:42	0.25	-161	7.11	0.302	5.5170	27.17	115.4
MW-205	07/26/2018 12:44	0.26	-162	7.11	0.302	5.5110	27.05	117.6
MW-205	07/26/2018 12:47	0.26	-164	7.11	0.302	5.5170	27.01	109.4
MW-205	07/27/2018 11:23	1.79	-154.00	7.04	0.32	5.820	22.31	8.30
MW-205	07/27/2018 12:47	0.26	-164.00	7.11	0.30	5.517	27.01	109.40
MW-205	07/27/2018 14:10	2.13	-156.00	7.34	0.32	5.742	23.56	136.60
MW-205	02/07/2019 09:30	0.43	-35.5	7.03	NM	0.485	7.03	94.2
MW-205	02/07/2019 09:40	0.43	-35.50	7.03	0.24	0.485	7.03	94.20
MW-205	02/07/2019 10:40	5.15	-10.60	7.02	0.33	0.678	8.25	15.10
MW-205	02/07/2019 10:55	0.65	-77.90	7.77	0.33	0.671	8.01	189.30
MW-205	07/22/2019 10:05	4.05	2.16	7.2	NM	2.176	24.01	20.3
MW-205	07/22/2019 10:10	1.11	-140.8	6.96	NM	2.149	25.2	12.5
MW-205	07/22/2019 10:15	1.05	-145.1	6.98	NM	2.159	25.8	11
MW-205	07/22/2019 10:20	1.03	-147.8	6.98	NM	2.148	25.71	11.1
MW-205	07/22/2019 10:25	1.02	-149.6	6.99	NM	2.134	25.64	10.5
MW-205	07/22/2019 10:30	1.03	-151.2	6.99	NM	2.123	25.62	10.3
MW-205	07/22/2019 10:35	1.03	-152.8	6.99	NM	2.105	25.57	10.2
MW-205	07/22/2019 10:40	1.08	-119	6.98	0.99	1.941	22.21	NM
MW-205	07/22/2019 10:45	1.34	-119.4	6.97	0.99	1.946	NM	14
MW-205	07/22/2019 10:50	NM	NM	NM	NM	NM	23.2	33.4
MW-205	07/22/2019 13:35	1.03	-152.8	6.99	NM	2.105	25.57	10.2
MW-205	07/22/2019 14:33	1.08	-119	6.98	0.99	1.941	22.21	14
MW-205	02/05/2020 13:10	4.19	-200.7	7.19	NM	0.644	9.02	8.4
MW-205	02/06/2020 08:50	3.78	-167.7	6.72	0.3	0.64	10.07	20.1
MW-205	03/16/2021 08:45	10.67	-84.4	6.78	0.75	1.529	7.47	2.9
MW-205	03/16/2021 08:50	4.29	-104.5	7.07	0.73	1.447	7.65	745.1
MW-205	03/16/2021 08:55	1.62	-120	5.78	0.72	1.425	7.68	473.1
MW-205	03/16/2021 09:00	0.6	-130.7	6.9	0.71	1.418	7.39	528.9
MW-205	03/16/2021 09:05	0.45	-145.1	7.02	0.71	1.405	7.1	67.7
MW-205	03/16/2021 09:10	0.41	-140.4	7.16	0.71	1.403	6.82	34.3
MW-205	03/16/2021 09:15	0.37	-139.8	7.21	0.7	1.397	6.82	31.1
MW-205	03/16/2021 09:20	0.38	-136.3	7.2	0.7	1.393	6.75	31.8
MW-205	03/16/2021 09:44	2.92	-101.5	7.3	0.49	0.99	6.04	1.6
MW-205	03/16/2021 09:58	2.13	-109	6.98	0.52	1.039	6.97	1190.6
MW-205	01/31/2022 09:50	5.28	13.1	8.56	0.48	0.976	5.12	79.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-205	01/31/2022 09:55	3.5	2.2	7.63	0.47	0.956	5.62	19.1
MW-205	01/31/2022 10:00	1.5	-5.2	7.5	0.46	0.94	5.32	18.2
MW-205	01/31/2022 10:05	3.85	-8.6	7.44	0.46	0.936	6.47	19.9
MW-205	01/31/2022 10:10	3.84	-15.4	7.47	0.47	0.952	6.21	18.2
MW-205	01/31/2022 10:15	4.24	-20.3	7.44	0.48	0.969	5.92	6.6
MW-205	01/31/2022 10:20	2.96	-19.2	7.38	0.48	0.974	5.46	14.8
MW-205	01/31/2022 10:25	2.9	-14.3	7.37	0.48	0.978	5.4	14.6
MW-205	01/31/2022 10:30	2.83	-13.9	7.35	0.48	0.975	5.38	14.1
MW-206	01/31/2012 09:12	3.19	-25	7.35	1.84	29.7712	12.61	89.7
MW-206	01/31/2012 09:16	1.78	-80	7.11	1.87	30.24309	12	2.9
MW-206	01/31/2012 09:20	1.24	-93	7.11	1.86	30.07625	12.22	4.5
MW-206	01/31/2012 09:24	1.09	-100	7.11	1.86	30.05885	12.25	11.2
MW-206	01/31/2012 09:28	1.04	-104	7.12	1.87	30.21357	12.05	69.8
MW-206	01/31/2012 09:32	1.01	-107	7.13	1.87	30.25295	12.01	52.7
MW-206	01/31/2012 09:36	1	-110	7.16	1.88	30.44365	11.77	83.2
MW-206	01/31/2012 09:40	0.96	-113	7.18	1.87	30.29674	11.96	54.1
MW-206	01/31/2012 09:45	0.91	-115	7.2	1.86	30.18965	12.1	47.8
MW-206	01/31/2012 09:49	0.89	-117	7.2	1.86	30.07548	12.25	36
MW-206	01/31/2012 09:53	0.88	-118	7.2	1.85	29.90655	12.48	38.5
MW-206	01/31/2012 09:57	0.88	-119	7.2	1.83	29.67593	12.78	41.7
MW-206	01/31/2012 10:01	0.87	-120	7.21	1.83	29.57939	12.90	53.3
MW-206	01/31/2012 13:15	1.07	-84	7.17	1.73	27.987	15.11	51.80
MW-206	02/01/2012 09:28	0.11	-158	6.69	2.40	39.200	14.30	21.90
MW-206	04/04/2012 08:23	1.85	-107	7.16	1.92	30.71282	17.69	39.7
MW-206	04/04/2012 08:27	1.06	-111	7.18	2.1	33.5501	13.88	9
MW-206	04/04/2012 08:31	0.91	-113	7.16	2.1	33.5973	13.83	8
MW-206	04/04/2012 08:35	0.92	-114	7.15	2.1	33.55499	13.89	8.4
MW-206	04/04/2012 08:39	0.88	-115	7.15	2.1	33.4937	13.97	7.6
MW-206	04/04/2012 08:43	0.84	-116	7.15	2.07	33.04697	14.53	8.8
MW-206	04/04/2012 08:47	0.82	-116	7.15	2.09	33.37967	14.11	8.9
MW-206	04/04/2012 08:51	0.78	-117	7.15	2.08	33.21814	14.32	9.4
MW-206	04/04/2012 11:34	0.28	-113	7.08	2.06	32.89	14.59	61.6
MW-206	04/05/2012 09:00	-0.52	-111	7.06	2.14	34.23	13.14	32.2
MW-206	07/11/2012 08:38	1.18	-133	6.54	1.56	25.31301	23.76	12.2
MW-206	07/11/2012 08:42	1.07	-141	6.54	1.69	27.23685	20.13	3
MW-206	07/11/2012 08:46	0.69	-145	6.57	1.7	27.38661	19.86	2.6
MW-206	07/11/2012 08:49	0.49	-148	6.58	1.71	27.60793	19.47	2.6
MW-206	07/11/2012 08:53	0.38	-150	6.6	1.73	27.80762	19.13	2.3
MW-206	07/11/2012 08:57	0.29	-151	6.61	1.73	27.88227	19.01	3
MW-206	07/11/2012 09:01	0.26	-153	6.62	1.73	27.83328	19.09	2.9
MW-206	07/11/2012 09:04	0.23	-153	6.63	1.73	27.81613	19.13	2.5
MW-206	07/11/2012 09:08	0.21	-154	6.63	1.75	28.19902	18.5	3.1
MW-206	07/11/2012 09:12	0.19	-154	6.65	1.74	28.0292	18.78	3.9
MW-206	07/11/2012 09:15	0.19	-155	6.65	1.72	27.70871	19.32	3.5
MW-206	07/11/2012 09:19	0.19	-155	6.63	1.72	27.64231	19.42	3.6
MW-206	07/11/2012 09:23	0.18	-156	6.65	1.73	27.8348	19.1	21.2
MW-206	07/11/2012 09:27	0.17	-156	6.65	1.72	27.6781	19.36	5.1
MW-206	07/11/2012 11:17	2.03	-127	7.36	1.89	30.350	15.42	59.60
MW-206	07/12/2012 08:45	0.05	-131	6.82	1.79	28.760	17.77	26.00
MW-206	10/10/2012 12:28	8.14	-122	11.17	0	0.00134	22.35	1.9
MW-206	10/10/2012 12:32	1.45	-147	11.57	1.66	26.85033	18.82	4.7
MW-206	10/10/2012 12:36	1.16	-153	11.72	1.65	26.62942	19.19	8.5
MW-206	10/10/2012 12:40	1.12	-148	11.73	1.62	26.14717	20.03	11.9
MW-206	10/10/2012 12:44	1.18	-148	11.42	1.61	26.02709	20.24	14.2
MW-206	10/10/2012 12:48	1.22	-148	11.42	1.63	26.34926	19.66	18.1
MW-206	10/10/2012 12:52	1.2	-146	11.76	1.63	26.40405	19.56	21
MW-206	10/10/2012 12:56	1.21	-147	10.92	1.64	26.4859	19.42	25.8
MW-206	10/10/2012 13:00	1.19	-147	11.71	1.64	26.49343	19.41	26.7
MW-206	10/10/2012 13:04	1.17	-148	11.60	1.63	26.400	19.58	25.21
MW-206	10/10/2012 15:41	1.30	-275	13.30	1.78	28.700	15.72	51.80
MW-206	10/11/2012 10:17	1.50	-334	9.36	1.65	26.600	19.25	13.60
MW-206	02/04/2013 09:09	1.67	-211	7.28	3.43	53.19952	7.84	58.2

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-206	02/04/2013 09:12	1.03	-223	7.29	3.42	53.07336	7.89	23.6
MW-206	02/04/2013 09:17	1.31	-225	7.3	3.44	53.24921	8.8	142.3
MW-206	02/04/2013 09:21	1.06	-226	7.31	3.47	53.76132	8.31	177.2
MW-206	02/04/2013 09:25	0.96	-229	7.31	3.48	53.96575	8.02	941.4
MW-206	02/04/2013 09:29	0.85	-228	7.31	3.47	53.68307	8.56	231.6
MW-206	02/04/2013 09:33	0.76	-232	7.31	3.48	54.04178	7.8	146
MW-206	02/04/2013 09:37	0.7	-230	7.32	3.48	54.01474	7.7	277.9
MW-206	02/04/2013 09:41	0.64	-230	7.32	3.48	54.04374	7.59	30.3
MW-206	02/04/2013 09:45	0.62	-231	7.33	3.5	54.46246	6.83	40
MW-206	02/04/2013 09:49	0.56	-232	7.33	3.49	54.3402	6.94	640.6
MW-206	02/04/2013 09:53	0.52	-230	7.33	3.45	53.64318	7.34	41.5
MW-206	02/04/2013 09:56	0.50	-229	7.34	3.53	54.930	7.03	26.07
MW-206	02/04/2013 09:57	0.5	-229	7.34	3.53	54.92745	6.89	26.1
MW-206	02/04/2013 13:11	2.02	-200	6.81	3.47	52.670	15.19	46.80
MW-206	02/05/2013 09:15	0.32	-262	6.83	3.51	53.380	13.86	19.80
MW-206	07/24/2013 09:44	0.31	-170	6.93	3.70	55.010	23.15	3.26
MW-206	07/24/2013 11:30	0.41	-158	7.00	2.38	37.530	14.83	42.10
MW-206	07/25/2013 09:50	-0.01	-165.00	6.99	1.42	23.360	16.42	13.40
MW-206	02/20/2014 09:54	1.00	-103	7.18	3.61	55.010	10.72	19.97
MW-206	02/20/2014 11:43	1.26	-142	6.90	3.25	49.690	14.76	74.40
MW-206	02/20/2014 14:12	0.73	-166	6.82	3.23	49.330	14.91	24.60
MW-206	05/01/2014 09:24	1.60	-277	6.86	2.29	36.090	15.38	21.11
MW-206	05/01/2014 11:40	1.23	-280	6.84	2.38	37.280	19.58	111.00
MW-206	05/02/2014 09:44	1.79	-191	6.89	1.53	25.010	15.33	175.30
MW-206	07/22/2014 11:52	3.38	-78	6.84	3.27	49.520	24.72	5.35
MW-206	07/22/2014 13:34	3.80	178	6.79	4.09	60.990	14.73	21.50
MW-206	07/23/2014 10:20	0.30	-321	6.85	1.68	27.120	16.93	18.90
MW-206	09/30/2014 09:47	0.34	93	6.81	3.58	53.870	19.62	8.85
MW-206	09/30/2014 11:33	0.58	266	6.78	3.68	53.730	19.24	146.00
MW-206	10/01/2014 10:55	0.62	-187	6.80	3.58	53.470	19.17	9.60
MW-206	01/14/2015 10:08	0.10	-108	7.24	2.76	43.600	9.04	32.18
MW-206	01/14/2015 11:39	1.19	-166	6.98	4.26	64.810	7.12	409.80
MW-206	01/15/2015 12:15	0.55	-152	7.01	4.10	62.719	7.01	45.21
MW-206	04/29/2015 10:34	2.97	-173	6.84	3.04	47.22	13.42	7.6
MW-206	04/29/2015 15:39	1.97	-151	6.91	1.54	25.13	17.91	74.8
MW-206	07/28/2015 09:37	0.46	-152	6.8	12.22	153.2	15.32	8.4
MW-206	07/28/2015 11:06	2.17	-133	6.75	0.1	1.985	19.01	84.2
MW-206	10/15/2015 11:48	2.39	-151	6.66	3.68	55.21	17.14	357
MW-206	10/15/2015 12:05	2.56	-91	6.53	3.48	52.39	18.65	9.2
MW-206	03/31/2016 09:25	0.22	-147	6.59	1.30	21.730	12.75	14.00
MW-206	03/31/2016 10:57	3.46	-151	6.66	1.27	21.120	14.47	62.60
MW-206	09/30/2016 09:58	0.22	-113.00	7.11	0.99	16.730	19.02	14.40
MW-206	09/30/2016 11:20	4.04	-24	7.19	0.83	14.270	16.45	79.80
MW-206	02/01/2017 11:17	1.27	234	6.62	2.56	40.100	13.93	13.60
MW-206	02/06/2018 14:12	8.11	-7	6.49	3.862	59.4443	7.12	27.3
MW-206	02/06/2018 14:16	8.91	-40	6.68	3.796	58.3640	7.74	18.2
MW-206	02/06/2018 14:21	1.89	-51	6.75	3.619	55.5242	9.53	7.5
MW-206	02/06/2018 14:25	1.25	-55	6.81	3.623	55.5790	9.5	6.7
MW-206	02/06/2018 14:30	1.12	-57	6.86	3.610	55.3710	9.65	9.1
MW-206	02/06/2018 14:35	1.02	-59	6.88	3.599	55.1946	9.78	9.7
MW-206	02/06/2018 14:39	0.92	-60	6.91	3.571	54.7494	10.09	13.6
MW-206	02/06/2018 14:44	0.88	-61	6.94	3.543	54.2980	10.41	23
MW-206	02/06/2018 14:48	0.93	-62	6.95	3.561	54.5905	10.21	28.3
MW-206	02/06/2018 14:53	0.92	-62	6.98	3.555	54.4902	10.28	44.6
MW-206	02/06/2018 14:57	0.88	-60	7.01	3.562	54.6098	10.2	44.9
MW-206	02/06/2018 15:02	0.89	-58	7.06	3.569	54.7182	10.13	40.7
MW-206	02/08/2018 09:48	1.51	-39.00	6.75	3.43	52.290	13.59	67.40
MW-206	02/08/2018 10:44	0.81	-25.00	6.70	3.22	49.230	14.87	36.20
MW-206	02/08/2018 15:02	0.89	-58.00	7.06	3.57	54.900	10.01	40.68
MW-206	07/30/2018 10:52	2.41	-44	6.55	1.305	25.1800	21.47	15.87
MW-206	07/30/2018 10:57	2.67	-123	6.74	1.245	25.6400	20.58	5.517
MW-206	07/30/2018 11:00	1.34	-161	6.95	1.216	25.8600	20.15	7.342

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-206	07/30/2018 11:01	2.78	-136	6.83	1.234	25.7200	20.42	6.239
MW-206	07/30/2018 11:05	2.42	-144	6.88	1.221	25.8200	20.23	6.144
MW-206	07/30/2018 11:09	2.08	-149	6.9	1.219	25.8400	20.19	6.205
MW-206	07/30/2018 11:14	1.88	-152	6.92	1.220	25.8300	20.21	5.476
MW-206	07/30/2018 11:18	1.75	-155	6.93	1.215	25.8700	20.13	5.545
MW-206	07/30/2018 11:22	1.57	-157	6.94	1.209	25.9200	20.04	6.275
MW-206	07/30/2018 11:26	1.48	-159	6.94	1.216	25.8600	20.15	5.554
MW-206	07/30/2018 11:34	1.27	-161	6.95	1.233	25.7200	20.41	6.752
MW-206	07/30/2018 11:39	1.21	-163	6.96	1.213	25.8900	20.11	5.944
MW-206	07/30/2018 11:43	1.1	-164	6.96	1.217	25.8500	20.17	7.064
MW-206	07/31/2018 10:01	1.34	-140.00	6.85	1.13	26.760	18.79	26.70
MW-206	07/31/2018 11:43	1.10	-164.00	6.96	1.22	25.850	20.17	7.06
MW-206	02/07/2019 13:25	0.27	-101.90	7.42	42.31	63.070	11.8	71.30
MW-206	02/07/2019 14:55	6.03	-49.60	7.88	42.13	62.050	12.21	38.70
MW-206	02/07/2019 15:10	6.23	-37.10	7.93	42.19	63.100	11.97	40.10
MW-206	02/08/2019 13:15	0.27	-101.9	7.42	NM	63.07	11.8	71.3
MW-206	02/08/2019 14:55	6.03	-49.6	7.88	42.13	62.05	12.21	38.7
MW-206	07/26/2019 09:15	0.41	-102.2	6.98	NM	36.01	18.89	0.1
MW-206	07/26/2019 10:05	1.68	23.1	7.43	NM	36.45	18.45	5.4
MW-206	07/26/2019 10:10	0.63	-79.2	7.12	NM	36.14	19.2	1
MW-206	07/26/2019 10:15	0.54	-90	7.04	NM	36.2	19.38	1.4
MW-206	07/26/2019 10:20	0.46	-94.7	7	NM	36.07	19.14	0.2
MW-206	07/26/2019 10:25	0.43	-98.2	6.99	NM	36.13	19.4	0.2
MW-206	07/26/2019 10:30	0.42	-100.6	6.98	NM	36.13	19.34	0.2
MW-206	07/26/2019 10:35	0.41	-102.2	6.98	NM	36.01	18.89	0.1
MW-206	07/26/2019 10:40	0.29	-105.9	6.87	21.86	34.68	16.22	NM
MW-206	07/26/2019 10:44	0.29	-105.9	6.87	21.86	34.68	16.22	8.4
MW-206	07/26/2019 10:45	0.29	-103.1	6.84	21.88	34.7	NM	8.4
MW-206	07/26/2019 10:50	NM	NM	NM	NM	NM	16.24	8.4
MW-206	02/06/2020 09:35	0.36	-91	7.41	NM	39.27	8.48	43.1
MW-206	02/06/2020 10:53	3.95	-127.2	7.2	22.73	39.2	7.6	363.2
MW-206	03/16/2021 10:20	2.94	-76	686	19.3	30.88	9.4	1211.8
MW-206	03/16/2021 10:25	1.51	-92.5	7.07	20.7	32.77	9.74	583
MW-206	03/16/2021 10:30	1.12	-102.8	7.19	21.37	34.02	9.78	590.6
MW-206	03/16/2021 10:35	1.05	-109.5	7.37	22.87	36.09	9	107.8
MW-206	03/16/2021 10:40	1.01	-109.7	7.44	22.73	36.18	9.05	168.3
MW-206	03/16/2021 10:45	0.98	-106.4	7.48	23.1	36.78	8.21	57.7
MW-206	03/16/2021 10:50	0.96	-104.3	7.52	23.22	36.66	8.21	51.4
MW-206	03/16/2021 10:55	2.23	-88.7	7.48	23.34	37.24	7.01	87.7
MW-206	03/16/2021 11:00	2.42	-85.7	7.58	22.5	37.15	7.04	66.5
MW-206	03/16/2021 11:05	2.46	-83.4	7.59	23.35	37	7.04	67.7
MW-206	03/16/2021 12:10	3.78	-105.6	7.62	23.4	37.22	8.88	52.4
MW-206	03/16/2021 12:20	2.89	-105.4	7.37	23.98	35.86	11.6	15.5
MW-206	09/09/2021 12:55	2.75	-117.9	7.02	21.2	33.79	19.19	8.8
MW-206	09/09/2021 13:00	1.07	-128.2	7.11	21.12	33.62	19.48	12.8
MW-206	09/09/2021 13:05	0.76	-130.7	7.12	21.1	33.59	20.27	15.6
MW-206	09/09/2021 13:10	0.68	-131	7.12	21.15	33.66	20.49	15.8
MW-206	09/09/2021 13:15	0.58	-136.6	7.13	21.21	33.76	20.84	14.4
MW-206	09/09/2021 13:20	0.57	-138.2	7.13	21.23	33.79	20.85	14.1
MW-206	09/09/2021 13:25	0.51	-141.7	7.13	21.29	20.7	20.69	10.3
MW-206	09/09/2021 13:30	0.49	-142.8	7.13	21.26	33.84	20.33	8.7
MW-206	09/09/2021 13:35	0.46	-143.9	7.14	21.31	33.97	20.06	6.7
MW-206	09/09/2021 13:40	0.43	-145.4	7.14	21.27	33.83	19.92	5.3
MW-206	01/31/2022 11:30	0.88	-17.9	7.47	20.28	32.88	5.61	3
MW-206	01/31/2022 11:35	0.58	-13.9	7.47	20.21	32.69	6.23	8.1
MW-206	01/31/2022 11:40	0.41	-15.7	7.49	20.32	32.78	7.53	74.6
MW-206	01/31/2022 11:45	0.35	-18.3	7.54	20.57	33.12	7.59	86.4
MW-206	01/31/2022 11:50	0.26	-19.3	7.57	20.57	33.16	7.46	60.4
MW-206	01/31/2022 11:55	0.26	-18.8	7.58	20.49	33.01	7.8	34.8
MW-206	01/31/2022 12:00	0.25	-18	7.59	20.56	33.07	7.83	33.8
MW-206	01/31/2022 12:05	0.25	-17.5	7.59	20.52	33.01	7.88	33.5
MW-207	02/12/2018 09:15	1.46	-80.10	7.26	2.86	3.341	2.86	25.40

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-207	02/12/2018 11:10	5.12	-110.90	7.28	0.94	1.849	5.91	30.20
MW-207	02/12/2018 11:20	5.13	-112.40	7.31	0.95	1.861	6.12	64.10
MW-207	05/22/2018 09:58	5.83	-91	6.98	0.169	3.2148	16.41	Z
MW-207	05/22/2018 10:00	1.57	-124	6.97	0.169	3.2001	15.57	5.6
MW-207	05/22/2018 10:03	0.93	-132	6.98	0.168	3.1908	15.48	4.8
MW-207	05/22/2018 10:06	0.66	-135	6.99	0.167	3.1770	15.45	4.8
MW-207	05/22/2018 10:08	0.42	-137	7.01	0.167	3.1663	15.29	5.8
MW-207	05/22/2018 10:11	0.3	-138	7.02	0.166	3.1521	15.25	5.6
MW-207	05/22/2018 10:13	0.24	-139	7.03	0.165	3.1349	15.13	5.2
MW-207	05/22/2018 10:16	0.21	-140	7.04	0.164	3.1124	15.16	5.8
MW-207	05/22/2018 10:18	0.17	-141	7.05	0.163	3.0969	15.05	5.5
MW-207	05/22/2018 10:21	0.06	-142	7.05	0.162	3.0845	15.08	5.3
MW-207	05/22/2018 10:23	0.09	-142	7.06	0.161	3.0717	15.16	5.5
MW-207	05/22/2018 10:26	0.06	-143	7.06	0.161	3.0664	15.26	6.6
MW-207	05/22/2018 10:28	-0.01	-143	7.07	0.160	3.0508	15.22	7.5
MW-207	05/22/2018 10:31	0.03	-144	7.07	0.161	3.0654	15.22	7.4
MW-207	05/22/2018 10:34	0	-144	7.07	0.161	3.0579	15.32	11.8
MW-207	05/22/2018 10:36	-0.01	-145	7.08	0.160	3.0484	15.31	13
MW-207	05/22/2018 10:39	-0.07	-145	7.08	0.159	3.0367	15.34	12.5
MW-207	05/22/2018 10:41	-0.09	-145	7.08	0.159	3.0270	15.32	13.3
MW-207	05/22/2018 10:44	-0.05	-145	7.09	0.158	3.0175	15.25	22.1
MW-207	05/22/2018 10:46	-0.05	-146	7.09	0.158	3.0086	15.22	14.4
MW-207	05/23/2018 10:46	-0.05	-146.00	7.09	0.16	2.996	15.4	14.43
MW-207	05/23/2018 11:24	5.20	-112.00	7.01	0.22	4.130	14.62	690.00
MW-207	08/18/2021 14:45	1.37	-145.1	7.06	2.45	4.597	23.69	81.4
MW-207	08/18/2021 14:50	0.3	-132.5	6.83	2.45	4.598	24.09	11.5
MW-207	08/18/2021 14:55	0.3	-123.6	6.74	2.46	4.593	24.28	5.6
MW-207	08/18/2021 15:00	0.37	-118.5	6.69	2.45	4.601	24.68	5.4
MW-207	08/18/2021 15:05	0.4	-110.9	6.65	2.45	4.605	25.11	9.3
MW-207	08/18/2021 15:10	0.5	-104.4	6.58	2.45	4.598	24.45	7.2
MW-207	08/18/2021 15:15	0.55	6.5	6.54	2.45	4.588	24.49	6.9
MW-207	08/18/2021 15:20	0.58	-95.8	6.53	2.45	4.59	24.54	6.4
MW-207	08/18/2021 15:25	0.55	-92.4	6.5	2.45	4.602	24.15	6.6
MW-207	08/18/2021 15:30	0.75	-83.6	6.43	2.44	4.579	23.92	7.5
MW-207	03/17/2022 09:45	4.82	-68.1	7.34	2.53	4.709	8.87	6.1
MW-207	03/17/2022 09:50	2.21	-89.6	6.78	2.59	4.81	8.66	5
MW-207	03/17/2022 09:55	1	-76.1	6.53	2.61	4.854	7.99	5.1
MW-207	03/17/2022 10:00	0.95	-73.2	6.5	2.62	4.887	7.96	4.6
MW-207	03/17/2022 10:05	0.54	-78.5	6.55	2.6	4.847	7.86	3.6
MW-207	03/17/2022 10:10	0.5	-79.5	6.55	2.6	4.845	7.83	3.4
MW-207	03/17/2022 10:15	0.45	-79.6	6.56	2.59	4.829	7.85	3.1
MW-207	03/17/2022 10:20	0.44	-80.5	6.55	2.59	4.825	7.83	3
MW-207	03/17/2022 10:25	0.43	-80.9	6.55	2.59	4.82	7.8	3
MW-21	09/05/2018 13:08	2.70	-82.00	6.75	1.21	2.352	23.88	25.80
MW-21	09/05/2018 14:15	1.96	-76.10	6.77	1.23	2.387	23.27	12.50
MW-21	09/05/2018 14:20	3.80	-66.10	6.77	1.22	2.372	21.17	17.50
MW-21	12/11/2018 09:15	4.62	-66.90	6.82	0.92	1.798	12.85	35.90
MW-21	12/11/2018 10:35	4.75	-55.20	6.78	1.07	2.090	7.88	18.80
MW-21	12/11/2018 10:45	7.29	-48.60	0.67	1.15	2.234	14.45	7.10
MW-21	02/22/2019 11:15	5.16	84.30	7.74	1.09	2.116	9.56	40.70
MW-21	02/22/2019 12:10	6.16	28.80	7.44	0.96	1.872	9.44	10.60
MW-21	02/22/2019 12:20	2.66	-27.90	7.16	1.11	2.161	11.22	12.00
MW-21	06/07/2019 10:05	0.4	-7	6.58	NM	2.313	16.97	0
MW-21	06/07/2019 10:10	0.32	-19.6	6.6	NM	2.314	17.01	0
MW-21	06/07/2019 10:15	0.16	-50.1	6.64	NM	2.323	16.72	0
MW-21	06/07/2019 10:20	0.1	-55.2	6.67	NM	2.23	16.93	0
MW-21	06/07/2019 10:25	0.16	-66.3	6.69	NM	2.315	17.01	0
MW-21	06/07/2019 10:30	0.12	69.8	6.7	NM	2.317	16.83	0
MW-21	06/07/2019 10:35	0.05	-73.2	6.7	NM	2.316	17.43	0
MW-21	06/07/2019 10:40	0.06	-72.8	6.69	NM	2.425	17.63	0
MW-21	06/07/2019 10:45	0.06	-72.4	6.68	NM	2.406	17.64	0
MW-21	06/07/2019 10:50	0.07	-69.1	6.65	NM	2.393	17.37	0

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-21	06/07/2019 13:00	0.07	-69.1	6.65	NM	2.393	17.37	NM
MW-21	06/07/2019 14:20	0.92	-6.4	6.74	1.35	2.602	18.87	2.4
MW-21	06/07/2019 14:22	0.92	-6.4	6.74	1.35	2.602	18.87	2.4
MW-21	06/07/2019 14:30	1.58	-35.5	6.81	1.26	2.426	15.92	2.6
MW-21	09/11/2019 09:15	2.65	-106.4	6.44	NM	2.024	20.72	13.9
MW-21	09/11/2019 14:28	5.34	-115.7	6.65	1.34	2.588	24.02	14.2
MW-21	09/11/2019 14:48	5.67	-115.3	6.76	1.34	2.598	23.9	16.6
MW-21	12/09/2019 09:50	4.78	14	6.7	NM	1.803	12.87	200.7
MW-21	12/09/2019 09:55	2.51	-62.7	6.5	NM	1.813	12.6	103.7
MW-21	12/09/2019 10:00	2.55	-75.6	6.49	NM	1.821	12.36	111.1
MW-21	12/09/2019 10:05	2.67	-78	6.49	NM	1.827	12.11	112.4
MW-21	12/09/2019 10:10	2.94	-78.8	6.48	NM	1.822	11.71	98
MW-21	12/09/2019 10:15	2.34	-78.9	6.49	NM	1.821	11.73	98.18
MW-21	12/09/2019 10:20	2.39	-79	6.5	NM	1.825	12.12	99.13
MW-21	12/09/2019 10:25	2.54	-83.2	6.47	NM	1.823	12.01	100.01
MW-21	12/09/2019 10:30	6.82	-100.8	6.67	NM	1.824	14.75	67.02
MW-21	12/09/2019 10:35	3.53	-92	6.48	NM	1.818	14.12	45.9
MW-21	12/09/2019 11:15	4.36	-22.5	6.78	0.92	1.8	14.9	6.1
MW-21	12/09/2019 11:30	4.45	-56.7	6.66	0.92	1.799	15.33	24
MW-21	06/18/2020 08:30	12.17	-101.6	7.19	1.17	2.269	17.71	8.2
MW-21	06/18/2020 08:35	0.87	-98.6	6.74	1.15	2.223	16.87	1.3
MW-21	06/18/2020 08:40	0.83	-98.3	6.71	1.14	2.214	16.83	0.6
MW-21	06/18/2020 08:45	0.78	-97.2	6.68	1.13	2.203	16.67	0.2
MW-21	06/18/2020 08:50	0.67	-96.2	6.68	1.13	2.199	16.6	0
MW-21	06/18/2020 08:55	0.64	-95.1	6.68	1.13	2.202	16.65	0
MW-21	06/18/2020 09:00	0.66	-94.5	6.67	1.13	2.195	16.64	0
MW-21	06/18/2020 09:05	0.66	-90.8	6.68	1.13	2.202	16.6	0
MW-21	06/18/2020 09:40	6.65	-41.9	6.9	1.23	2.372	16.57	2.8
MW-21	06/18/2020 09:50	4.09	-72.2	6.76	1.23	2.379	17.22	4
MW-21	09/29/2020 14:30	NM	NM	NM	NM	NM	NM	72.8
MW-21	10/02/2020 14:15	4.02	65.87	6.98	1.23	1.654	20.67	34.56
MW-21	10/02/2020 14:30	3.81	34.3	6.84	1.14	2.223	20.57	NM
MW-21	12/18/2020 12:45	4.28	71.6	7.09	15.32	2.248	15.25	17.2
MW-21	12/18/2020 13:00	3.45	37.4	6.81	1.15	2.237	14.33	19.4
MW-21	03/12/2021 09:20	1.16	-78.3	6.53	1.12	2.18	12.74	29.3
MW-21	03/12/2021 09:25	0.68	-91.3	6.54	1.12	2.17	12.74	15.2
MW-21	03/12/2021 09:30	0.52	-98.1	6.56	1.11	2.16	13.12	3.4
MW-21	03/12/2021 09:35	0.44	-100.7	6.56	0.44	2.166	13.2	0
MW-21	03/12/2021 09:40	0.55	-95.2	6.57	1.11	2.164	13.09	0
MW-21	03/12/2021 09:45	0.4	-99.7	6.56	1.11	2.153	13.23	0
MW-21	03/12/2021 09:50	0.41	-100.1	6.57	1.11	2.153	13.03	0
MW-21	03/12/2021 09:55	0.4	-99.8	6.55	1.1	2.142	13.06	0
MW-21	03/12/2021 11:10	3.31	-77.2	6.6	1.15	2.241	14.25	1.7
MW-21	03/12/2021 11:25	3.52	-58.9	6.55	1.08	2.101	13.75	12.4
Mw-21	02/17/2022 12:55	5.9	-50.6	6.73	1.06	1.96	15.48	32
Mw-21	02/17/2022 13:00	6.67	-66.5	6.72	0.95	2.074	14.31	21.5
Mw-21	02/17/2022 13:05	8.09	-63.8	6.7	1.09	2.114	14.79	15.7
Mw-21	02/17/2022 13:10	7.81	-63.4	6.68	0.95	2.124	14.97	22
Mw-21	02/17/2022 13:15	9.33	-63.1	6.69	0.96	2.126	14.98	23.4
Mw-21	02/17/2022 13:20	7.94	-61.9	6.7	1.08	2.067	14.86	37.5
Mw-21	02/17/2022 13:25	7.75	-60.2	6.69	1.03	1.922	14.81	14.8
Mw-21	02/17/2022 13:30	7.97	-58.1	6.66	1.1	2.116	14.76	41.9
Mw-21	02/17/2022 13:35	8.46	-58.3	6.68	1.09	2.065	14.7	14.3
Mw-21	02/17/2022 13:40	49.2	-57.5	6.66	0.89	2.141	14.77	11.5
MW-21	03/08/2017 10:35	5.44	185.7	6.96	1.23	2.385	12.83	36.80
MW-21	03/08/2017 10:45	4.91	168.3	6.91	1.24	2.389	12.90	21.10
MW-210	03/13/2012 14:57	2.82	-56	6.92	0.39	6.9619	17.63	72
MW-210	03/13/2012 14:59	2.47	-54	6.94	0.39	7.12576	12.71	29.9
MW-210	03/13/2012 15:01	2.01	-53	6.95	0.39	7.10371	12.13	31.2
MW-210	03/13/2012 15:03	1.62	-53	6.95	0.39	7.08928	12.33	38.6
MW-210	03/13/2012 15:05	1.45	-54	6.95	0.39	7.11207	12.02	29
MW-210	03/13/2012 15:07	1.3	-54	6.95	0.39	7.10378	11.96	22

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-210	03/13/2012 15:09	1.16	-54	6.95	0.39	7.08242	12.12	20.6
MW-210	03/13/2012 15:12	1.1	-54	6.94	0.39	7.09288	12.24	19.8
MW-210	03/13/2012 15:14	1.03	-54	6.94	0.39	7.08551	12.29	22.1
MW-210	03/13/2012 15:16	1.02	-54	6.94	0.39	7.08685	12.27	20.4
MW-210	03/13/2012 15:18	0.96	-54	6.94	0.39	7.08541	12.10	20.5
MW-210	03/13/2012 16:11	1.82	-75	6.97	0.39	7.109	11.14	8.50
MW-210	03/14/2012 11:32	0.54	-117	6.57	0.40	7.920	11.40	558.00
MW-211	06/26/2013 10:35	6.97	-105	6.86	1.38	2.368	19.39	74.5
MW-211	06/26/2013 11:35	0.84	-180	6.88	1.39	2.486	18.95	89.5
MW-211	06/26/2013 11:40	0.99	-115	6.94	1.41	2.956	19.25	124.00
MW-211	06/27/2013 11:40	0.99	-115	6.94	1.41	2.956	19.25	124
MW-211	05/22/2014 14:09	1.46	-199	6.79	0.73	12.640	16.77	57.72
MW-211	07/01/2014 11:05	0.34	-147.8	6.96	1.89	3.653	25.82	16.80
MW-211	07/01/2014 12:35	0.58	-128.2	6.96	2.01	3.796	20.04	405.10
MW-211	07/02/2014 09:48	2.79	-45.2	6.57	2.14	4.023	20.82	56.20
MW-211	08/05/2014 09:55	0.14	-90.5	6.92	1.86	3.537	20.61	69.40
MW-211	08/05/2014 11:05	1.46	-89.8	6.63	2.02	3.838	22.61	204.50
MW-211	08/05/2014 12:15	1.36	-91.1	6.63	1.99	3.031	21.11	190.10
MW-211	09/26/2014 12:26	0.27	108	6.79	0.22	4.115	21.63	14.15
MW-211	09/26/2014 13:00	0.22	-30	6.94	0.22	4.053	20.02	14.90
MW-211	10/30/2014 11:03	1.57	-285	6.59	0.23	4.363	17.54	10.45
MW-211	10/30/2014 11:35	1.77	-182	6.80	0.24	4.478	18.70	45.00
MW-211	03/12/2015 11:35	4.57	18	6.36	0.70	1.320	8.32	69.50
MW-211	03/24/2015 13:06	8.73	-53	6.65	0.19	3.390	9.84	69.11
MW-211	03/24/2015 14:00	7.16	-61	6.79	0.19	3.601	9.46	21.20
MW-211	09/16/2015 11:47	3.1	-74	6.84	0.64	11.17	17.02	18.4
MW-211	11/16/2015 12:51	0.66	-192	6.61	0.6373	11078.7293	21.97	31.7
MW-211	11/16/2015 12:55	0.22	-170	6.7	0.6262	10926.0988	18.64	15.9
MW-211	11/16/2015 12:58	0.21	-168	6.71	0.6246	10900.5583	18.58	10.8
MW-211	11/16/2015 13:02	0.2	-166	6.72	0.6282	10950.6977	19.33	9.1
MW-211	11/16/2015 13:06	0.23	-163	6.72	0.6369	11088.4794	19.76	13.2
MW-211	11/16/2015 13:10	0.27	-157	6.73	0.6361	11075.6762	19.8	10.9
MW-211	11/16/2015 13:14	0.29	-152	6.73	0.6354	11064.1998	19.82	17.4
MW-211	11/16/2015 13:18	0.27	-149	6.73	0.6343	11045.2286	19.98	9.6
MW-211	11/16/2015 13:21	0.26	-147	6.74	0.6340	11038.2132	20.14	9.5
MW-211	11/16/2015 13:25	0.25	-145	6.74	0.6343	11044.1412	20.1	8
MW-211	11/16/2015 13:29	0.24	-144	6.74	0.6317	11000.0870	20.21	9.4
MW-211	11/16/2015 13:33	0.23	-143	6.74	0.6342	11040.8701	20.31	7.7
MW-211	11/16/2015 13:37	0.22	-142	6.74	0.6336	11030.6934	20.23	10.9
MW-211	11/16/2015 13:40	0.22	-141	6.74	0.6334	11028.1897	20.27	8.9
MW-211	11/16/2015 14:07	1.32	-172	6.63	1.57	25.560	18.04	15.60
MW-211	12/16/2015 14:00	0.21	-117.8	7.41	1.7	3.799	15.82	10.3
MW-211	12/16/2015 14:35	0.11	-130	7.79	1.92	3.318	15.12	106.7
MW-211	01/14/2016 09:29	8.82	-25	7.32	0.2091	4035.6976	4.62	48.1
MW-211	01/14/2016 09:33	0.72	-58	6.98	0.5123	9164.5131	11.42	44.9
MW-211	01/14/2016 09:37	0.45	-72	6.9	0.5299	9442.6154	12.13	45.9
MW-211	01/14/2016 09:41	0.49	-81	6.87	0.3816	6944.9876	12.22	44
MW-211	01/14/2016 09:46	0.54	-87	6.87	0.2233	4208.5627	10.94	40.8
MW-211	01/14/2016 09:50	0.52	-91	6.88	0.2234	4211.0688	10.84	39.8
MW-211	01/14/2016 09:54	0.56	-95	6.89	0.2284	4311.9791	9.59	36
MW-211	01/14/2016 09:59	2.08	-98	6.92	0.2655	5034.6231	5.7	41.5
MW-211	01/14/2016 10:03	6.48	-101	6.95	0.2828	5373.3350	4.38	577.7
MW-211	01/14/2016 10:07	7.24	-105	6.94	0.2650	4991.3330	7.56	52.4
MW-211	01/14/2016 10:11	0.71	-102	6.9	0.2229	4195.0330	11.55	36.9
MW-211	01/14/2016 10:16	0.57	-102	6.91	0.2361	4451.7712	9.35	36.7
MW-211	01/14/2016 10:20	4.31	-105	6.94	0.2750	5192.0570	6.3	44.8
MW-211	01/14/2016 10:47	6.73	-64	6.92	0.32	5.962	5.51	98.90
MW-211	04/08/2016 08:58	6.33	4	6.74	0.3709	6792.3057	10.3	35.5
MW-211	04/08/2016 09:03	0.66	-41	6.68	0.4142	7524.6506	10.71	31.7
MW-211	04/08/2016 09:07	0.56	-63	6.69	0.4147	7537.5004	10.49	47.5
MW-211	04/08/2016 09:12	0.72	-76	6.69	0.4147	7539.6592	10.42	46.5
MW-211	04/08/2016 09:16	0.53	-84	6.7	0.4215	7655.3880	10.37	35.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-211	04/08/2016 09:21	0.42	-91	6.7	0.4193	7614.9167	10.51	32.8
MW-211	04/08/2016 09:26	0.36	-97	6.71	0.4273	7754.8334	10.31	37.4
MW-211	04/08/2016 09:30	0.31	-101	6.71	0.4280	7767.5531	10.28	38.6
MW-211	04/08/2016 09:35	0.28	-105	6.72	0.4236	7689.4573	10.44	32.3
MW-211	04/08/2016 09:39	0.25	-108	6.72	0.4267	7744.4568	10.37	47.1
MW-211	04/08/2016 09:44	0.22	-111	6.72	0.4316	7826.3305	10.4	31.6
MW-211	04/08/2016 09:48	0.2	-113	6.72	0.4314	7821.4485	10.53	27.5
MW-211	04/08/2016 10:20	4.14	-97	6.66	0.54	9.615	11.82	67.00
MW-211	07/22/2016 10:52	6.59	-73	6.65	NM	8328.96	24.08	18.6
MW-211	07/22/2016 10:54	5.74	-86	6.62	NM	8874.48	24.82	15.4
MW-211	07/22/2016 10:56	5.17	-99	6.63	NM	9091.7	25.73	16.2
MW-211	07/22/2016 10:58	4.69	-108	6.64	NM	9510.44	26.24	15.8
MW-211	07/22/2016 11:00	4.31	-113	6.64	NM	9483.29	26.46	12.2
MW-211	07/22/2016 11:02	4	-117	6.65	NM	9750.51	26.51	10.7
MW-211	07/22/2016 11:04	3.74	-119	6.65	NM	9843.2	26.53	8.9
MW-211	07/22/2016 11:06	3.54	-121	6.65	NM	10024.76	26.49	8.8
MW-211	07/22/2016 11:08	3.28	-122	6.65	NM	10046.92	26.68	8.8
MW-211	07/22/2016 11:10	3.14	-123	6.66	NM	10036.42	26.62	10.2
MW-211	07/22/2016 11:12	2.99	-124	6.66	NM	10053.69	26.51	9.6
MW-211	07/22/2016 11:14	2.84	-125	6.66	NM	10048.17	26.49	8.3
MW-211	07/22/2016 11:16	2.69	-126	6.66	NM	10017.46	26.35	7.8
MW-211	07/22/2016 11:18	2.53	-127	6.66	NM	10052.07	26.31	10.9
MW-211	07/22/2016 11:20	2.39	-127	6.66	NM	10032.25	26.34	6.6
MW-211	07/22/2016 11:22	2.26	-128	6.66	NM	10011.97	26.36	8
MW-211	07/22/2016 11:24	2.13	-129	6.66	NM	9996.64	26.5	8.3
MW-211	07/22/2016 11:26	2	-129	6.66	NM	9934.16	26.67	7.1
MW-211	07/22/2016 11:28	1.89	-130	6.67	NM	9904.67	26.72	7.3
MW-211	07/22/2016 11:30	1.8	-130	6.67	NM	9824.43	26.68	6.9
MW-211	07/22/2016 11:32	1.71	-131	6.67	NM	9832.49	26.84	8
MW-211	07/22/2016 11:34	1.62	-131	6.67	NM	9841.49	26.96	7.4
MW-211	07/22/2016 11:36	1.55	-132	6.67	NM	9798.83	27.05	6.8
MW-211	07/22/2016 11:38	1.48	-132	6.67	NM	9777.07	27.03	6.2
MW-211	07/22/2016 11:40	1.41	-132	6.67	NM	9757.77	27.18	6.6
MW-211	07/22/2016 12:10	1.26	-110	6.88	0.77	13.340	15.07	8.40
MW-211	12/08/2016 08:55	5.56	-95	6.89	0.1027	2011.3788	11.8	526
MW-211	12/08/2016 08:58	2.38	-114	6.87	0.1018	1996.0049	11.54	638.9
MW-211	12/08/2016 09:00	1.31	-121	6.87	0.1029	2016.0480	11.5	645.9
MW-211	12/08/2016 09:03	0.98	-126	6.89	0.1038	2033.8654	11.26	662.1
MW-211	12/08/2016 09:05	0.8	-129	6.9	0.1044	2045.8873	11.17	635.5
MW-211	12/08/2016 09:08	0.69	-130	6.91	0.1047	2048.9983	11.47	620.8
MW-211	12/08/2016 09:11	0.61	-133	6.92	0.1060	2075.1732	11.06	587
MW-211	12/08/2016 09:13	0.58	-135	6.93	0.1056	2069.4717	10.63	587.9
MW-211	12/08/2016 09:16	0.55	-136	6.94	0.1048	2054.2034	10.79	583.6
MW-211	12/08/2016 09:19	0.44	-136	6.94	0.1066	2087.2518	11.08	606.1
MW-211	12/08/2016 09:21	0.41	-137	6.94	0.1070	2094.9362	10.98	562.1
MW-211	12/08/2016 09:24	0.38	-138	6.95	0.1077	2107.0054	10.95	556.4
MW-211	12/08/2016 09:27	0.35	-138	6.95	0.1078	2107.9772	11.48	540.4
MW-211	12/08/2016 09:29	0.3	-139	6.95	0.1085	2120.8388	11.44	554.1
MW-211	12/08/2016 09:32	0.28	-139	6.95	0.1088	2124.5768	11.63	520.7
MW-211	12/08/2016 09:35	0.27	-140	6.95	0.1094	2136.6262	11.59	528.3
MW-211	12/08/2016 09:37	0.23	-140	6.95	0.1094	2137.5983	11.55	551
MW-211	12/08/2016 09:40	0.21	-141	6.95	0.1093	2134.3480	11.57	519
MW-211	12/08/2016 09:43	0.2	-141	6.96	0.1099	2146.4258	11.48	518.9
MW-211	12/08/2016 09:45	0.2	-142	6.96	0.1099	2146.1572	11.57	501.1
MW-211	01/19/2017 13:22	5.04	2	6.83	0.2151	4065.6939	10.5	144.1
MW-211	01/19/2017 13:24	3.35	-14	6.82	0.2129	4051.3599	8.28	137
MW-211	01/19/2017 13:26	1.63	-22	6.78	0.2129	4054.5996	8.02	128.8
MW-211	01/19/2017 13:28	0.93	-24	6.76	0.2128	4054.2609	7.88	119.6
MW-211	01/19/2017 13:30	0.6	-26	6.74	0.2126	4050.7089	7.8	114.5
MW-211	01/19/2017 13:32	0.39	-26	6.73	0.2126	4050.7756	7.76	114.3
MW-211	01/19/2017 13:35	0.28	-26	6.72	0.2128	4055.9025	7.72	118
MW-211	01/19/2017 13:37	0.18	-25	6.71	0.2126	4051.8542	7.7	115.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-211	01/19/2017 13:39	0.11	-24	6.71	0.2125	4051.7521	7.67	111.8
MW-211	01/19/2017 13:41	0.08	-24	6.7	0.2126	4052.2185	7.69	108.4
MW-211	01/19/2017 13:43	0.06	-23	6.7	0.2126	4053.3964	7.67	108
MW-211	01/19/2017 13:45	0.04	-23	6.7	0.2126	4052.0692	7.69	113.3
MW-211	01/19/2017 13:48	0.03	-24	6.7	0.2126	4052.6102	7.66	111.1
MW-211	01/19/2017 13:50	0.01	-26	6.7	0.2123	4047.8806	7.67	108.9
MW-211	01/19/2017 13:52	0.01	-31	6.7	0.2122	4046.2855	7.66	108.3
MW-211	01/19/2017 13:54	0.01	-33	6.7	0.2122	4045.4970	7.65	107.7
MW-211	01/19/2017 13:56	0.15	-36	6.7	0.2124	4047.8950	7.83	105.3
MW-211	01/19/2017 13:58	2.01	-42	6.76	0.2125	4047.3999	7.97	113
MW-211	01/19/2017 14:01	4.09	-46	6.81	0.2123	4041.9780	8.16	112.3
MW-211	01/19/2017 14:03	5.8	-50	6.85	0.2120	4035.3513	8.23	135.9
MW-211	01/19/2017 14:05	7.02	-55	6.88	0.2120	4036.7035	8.14	105.3
MW-211	01/19/2017 14:07	7.67	-57	6.9	0.2120	4035.0833	8.26	106.3
MW-211	01/19/2017 14:09	8.04	-60	6.89	0.2116	4029.9616	8.11	100.7
MW-211	01/19/2017 14:11	8.03	-64	6.89	0.2120	4035.9461	8.18	105
MW-211	04/20/2017 08:43	5.37	229	6.84	0.1986	0.0374	14.73	211.7
MW-211	04/20/2017 08:46	1.03	49	6.83	0.1991	0.0376	13.4	202.5
MW-211	04/20/2017 08:48	0.25	-38	6.85	0.1990	0.0376	13.01	191
MW-211	04/20/2017 08:50	0.08	-59	6.86	0.1991	0.0376	12.91	204.8
MW-211	04/20/2017 08:52	-0.04	-69	6.87	0.1982	0.0375	12.92	178.1
MW-211	04/20/2017 08:54	-0.07	-74	6.87	0.1992	0.0376	12.97	175.9
MW-211	04/20/2017 08:56	-0.1	-78	6.88	0.1981	0.0374	13.09	182.9
MW-211	04/20/2017 08:59	-0.13	-80	6.89	0.1983	0.0374	13.15	181.2
MW-211	04/20/2017 09:01	-0.13	-81	6.89	0.1975	0.0373	13.23	187.5
MW-211	04/20/2017 09:03	-0.15	-81	6.9	0.1979	0.0374	13.33	187.7
MW-211	04/20/2017 09:05	-0.15	-81	6.9	0.1976	0.0373	13.36	197.6
MW-211	04/20/2017 09:07	-0.14	-81.00	6.90	0.20	3.768	13.01	197.60
MW-212	03/19/2012 12:14	1.92	37	7.23	0.04	0.85924	20.65	23.7
MW-212	03/19/2012 12:17	1.08	38	7.26	0.04	0.86056	18.03	10.7
MW-212	03/19/2012 12:20	4.25	39	7.27	0.04	0.85438	16.6	12.2
MW-212	03/19/2012 12:23	2.35	39	7.27	0.04	0.8551	16.62	11.3
MW-212	03/19/2012 12:25	1.32	39	7.28	0.04	0.8554	16	13.2
MW-212	03/19/2012 12:28	-0.13	39	7.29	0.04	0.85172	15.97	15.2
MW-212	03/19/2012 12:31	-0.22	39	7.29	0.04	0.85374	16.58	15.3
MW-212	03/19/2012 12:34	-0.41	40	7.29	0.04	0.85477	15.94	15.2
MW-212	03/19/2012 12:36	-0.4	40	7.28	0.04	0.8541	15.81	16
MW-212	03/19/2012 12:39	-0.58	41	7.29	0.04	0.85421	16.15	17.8
MW-212	03/19/2012 12:42	-0.62	41	7.29	0.04	0.85791	16.89	16.7
MW-212	03/19/2012 12:45	-0.65	41	7.29	0.04	0.85546	16.17	16.4
MW-212	03/19/2012 12:46	-0.65	41	7.29	0.04	0.8555	16.17	16.41
MW-212	03/19/2012 13:08	13.86	-67	7.42	0.04	0.8502	14.65	1381
MW-212	03/20/2012 10:50	0.36	-98	6.86	0	0.89	11.8	556
MW-212	08/13/2012 10:20	2.17	-195	9.67	0.04	0.86	26.87	109.7
MW-212	08/13/2012 10:23	1.57	-218	9.96	0.04	0.854	23.98	25.7
MW-212	08/13/2012 10:26	1.51	-213	9.57	0.04	0.856	24.81	17.7
MW-212	08/13/2012 10:29	1.59	-220	9.87	0.04	0.858	25.1	18.4
MW-212	08/13/2012 10:32	1.59	-222	9.96	0.04	0.858	25.49	18.8
MW-212	08/13/2012 10:33	1.59	-222	9.96	0.04	0.858	25.49	18.80
MW-212	08/13/2012 11:01	6.10	-184	9.03	0.05	1.090	23.95	851.20
MW-212	08/14/2012 10:29	5.18	-126	7.02	0.04	0.818	21.25	222.00
MW-212	02/26/2013 09:08	2.29	-209	6.99	0.08	1.64244	9.06	24.5
MW-212	02/26/2013 09:10	1.32	-241	7.03	0.07	1.45177	8.02	13
MW-212	02/26/2013 09:13	1.04	-257	7.04	0.07	1.4714	8.09	12.6
MW-212	02/26/2013 09:16	0.9	-264	7.05	0.08	1.58436	8.1	14.6
MW-212	02/26/2013 09:18	0.81	-270	7.06	0.08	1.62448	8.09	12
MW-212	02/26/2013 09:21	0.75	-275	7.08	0.08	1.64697	8.04	13.7
MW-212	02/26/2013 09:24	0.71	-279	7.09	0.08	1.67309	7.97	13.5
MW-212	02/26/2013 09:26	0.68	-282	7.09	0.08	1.69179	7.84	14.4
MW-212	02/26/2013 09:29	0.65	-286	7.10	0.09	1.705	8.03	14.03
MW-212	02/26/2013 10:00	4.08	-218	7.27	0.09	1.803	9.84	539.70
MW-212	02/27/2013 09:16	1.40	-269	7.09	0.09	1.731	9.84	151.40

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-212	05/07/2013 12:15	2.24	-37	6.97	0.4	0.78	15.4	66.8
MW-212	05/07/2013 12:25	1.44	-35.1	6.88	0.4	0.77	15	62.6
MW-212	05/07/2013 12:35	1.65	-32.1	6.89	0.4	0.77	14.9	64.3
MW-212	05/07/2013 12:45	1.88	-13.8	6.81	0.4	0.77	14.7	62.1
MW-212	05/07/2013 12:55	2.04	-10	6.85	0.4	0.77	14.4	72.3
MW-212	05/07/2013 13:05	2.54	-1.3	6.81	0.4	0.77	15.1	44.3
MW-212	05/07/2013 13:15	3.85	0.7	6.79	0.38	0.772	15.38	21.7
MW-212	05/07/2013 13:55	5.62	-47.4	6.97	0.39	0.785	11.42	51.3
MW-212	05/08/2013 14:10	4.28	-74.4	6.88	0.38	0.778	13.3	864.3
MW-212	06/18/2013 10:05	0.12	-33	6.93	0.36	0.675	20.54	101.90
MW-212	06/18/2013 10:35	0.13	-33	6.65	0.36	0.626	16.03	296.80
MW-212	06/18/2013 10:55	-0.17	-62	6.99	0.36	0.743	22.38	117.10
MW-212	06/19/2013 10:55	-0.17	-62	6.99	0.36	0.743	22.38	117.10
MW-212	03/31/2014 09:04	1.29	-344	7.04	0.10	1.924	6.94	7.83
MW-212	03/31/2014 09:51	5.13	-205	6.79	0.09	1.339	8.29	1950.80
MW-212	04/01/2014 09:05	1.49	-329	7.02	0.08	1.686	8.09	247.20
MW-212	06/26/2014 09:55	1.36	7.5	6.63	0.34	0.690	21.09	110.30
MW-212	06/26/2014 11:45	3.11	-39.1	6.61	0.33	0.676	19.64	309.60
MW-212	06/26/2014 11:57	3.08	-33.9	6.69	0.33	0.684	22.03	119.20
MW-212	07/29/2014 10:10	1.23	-59.3	7.23	0.35	0.719	20.50	57.50
MW-212	07/29/2014 10:50	0.42	-82.9	7.01	0.35	0.726	21.31	88.10
MW-212	07/29/2014 11:55	0.44	-83.4	7.02	0.35	0.721	21.22	81.00
MW-212	01/20/2015 09:40	0.99	223.7	6.65	0.31	0.629	8.41	33.70
MW-212	01/20/2015 10:10	0.99	223.6	6.65	0.31	0.631	8.41	33.80
MW-212	01/20/2015 10:25	0.97	227.9	6.64	0.31	0.624	8.41	48.90
MW-212	08/07/2015 09:53	0.64	-5	6.88	0.07	1.443	21.05	119.8
MW-212	08/07/2015 10:36	4.2	3	7.24	0.07	1.445	21.73	1968.7
MW-212	12/15/2015 13:35	2.16	33	7.31	0.30	0.647	17.82	450.00
MW-212	12/15/2015 14:30	3.49	-2	7.74	0.30	0.650	17.43	0.0000
MW-212	02/17/2016 11:53	0.72	-95	6.56	0.02	0.482	10.14	149.60
MW-212	02/17/2016 13:53	2.73	-53	6.66	0.04	0.777	11.79	828.50
MW-212	12/13/2016 10:25	1.73	6.1	6.99	0.44	0.88	13.64	162.1
MW-212	12/13/2016 11:20	4.46	-45.6	6.99	0.29	0.588	15.71	1232.9
MW-212	02/16/2017 09:48	2.88	280	7.87	0.10	1.933	10.70	67.40
MW-212	02/16/2017 10:07	7.00	-29	7.17	0.03	0.638	10.26	224.70
MW-212	03/05/2018 08:22	2.24	76	6.26	0.024	0.4933	8.86	536.4
MW-212	03/05/2018 08:24	0.81	63	6.08	0.028	0.5875	8.46	232
MW-212	03/05/2018 08:27	0.51	53	6.07	0.031	0.6395	8.62	204.2
MW-212	03/05/2018 08:29	0.38	47	6.09	0.033	0.6823	8.43	191.9
MW-212	03/05/2018 08:32	0.32	50	6.12	0.034	0.7024	8.78	59.2
MW-212	03/05/2018 08:34	0.37	54	6.14	0.036	0.7334	9.52	50.1
MW-212	03/05/2018 08:36	0.41	57	6.15	0.037	0.7620	10.1	51.2
MW-212	03/05/2018 08:39	0.42	60	6.16	0.037	0.7634	10.54	47.2
MW-212	03/05/2018 08:41	0.45	64	6.17	0.037	0.7612	10.93	46.2
MW-212	03/05/2018 08:44	0.5	67	6.18	0.037	0.7621	11.28	45
MW-212	03/05/2018 08:46	0.54	71	6.19	0.038	0.7850	11.59	48.1
MW-212	03/05/2018 08:48	0.5	10	6.2	0.039	0.8001	9.22	38.4
MW-212	03/05/2018 08:51	0.45	-2	6.2	0.041	0.8463	8.99	37.5
MW-212	03/05/2018 08:53	0.41	-6	6.21	0.042	0.8670	9.02	27
MW-212	03/05/2018 08:56	0.38	-9	6.21	0.043	0.8778	9.07	24
MW-212	03/05/2018 08:58	0.37	-10	6.22	0.044	0.9073	8.79	25.3
MW-212	03/05/2018 09:00	0.33	-12	6.23	0.045	0.9218	8.79	21.8
MW-212	03/05/2018 09:03	0.32	-13	6.24	0.046	0.9335	8.91	20.1
MW-212	03/05/2018 09:05	0.3	-14	6.25	0.047	0.9481	8.86	19.9
MW-212	03/05/2018 09:08	0.29	-15	6.25	0.047	0.9521	9.08	19.1
MW-212	03/05/2018 09:10	0.26	-16	6.27	0.048	0.9667	8.98	15.7
MW-212	03/06/2018 09:10	0.26	-16.00	6.27	0.05	0.971	8.84	15.65
MW-212	03/06/2018 09:52	10.15	140.00	6.15	0.04	0.783	9.67	47.30
MW-212	03/06/2018 09:56	9.27	-63.00	6.55	0.04	0.731	11.07	240.30
MW-212	12/12/2018 10:20	0.28	-40.80	6.58	0.22	0.446	12.34	13.90
MW-212	12/12/2018 10:28	0.24	-60.90	6.64	0.24	0.502	12.83	27.70
MW-212	12/12/2018 10:35	0.48	-67.90	6.67	0.25	0.508	13.3	71.40

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-212	03/11/2019 15:00	9.42	-44.1	6.26	0.06	0.137	11.21	371.4
MW-212	10/10/2019 12:30	1.45	-104.2	6.55	NM	0.441	20.27	17.6
MW-212	10/10/2019 12:35	1.4	-98.5	6.59	NM	0.435	20.42	13.8
MW-212	10/10/2019 12:40	1.46	-96.3	6.52	NM	0.432	20.51	19.7
MW-212	10/10/2019 12:45	1.49	-98.7	6.52	NM	0.434	20.43	18
MW-212	10/10/2019 12:50	1.55	-102.4	6.53	NM	0.438	20.31	10.9
MW-212	10/10/2019 12:55	1.56	-107.5	6.55	NM	0.444	20.41	0.8
MW-212	10/10/2019 13:00	1.53	-110.9	6.53	NM	0.447	20.33	7.2
MW-212	10/10/2019 13:05	1.49	-110.9	6.53	NM	0.451	20.15	5.1
MW-212	10/10/2019 13:10	1.55	-103.7	6.53	NM	0.452	20.5	0
MW-212	10/10/2019 13:15	1.53	-108.1	6.53	NM	0.454	20.59	0.2
MW-212	10/10/2019 13:40	4.52	-71.1	6.6	0.23	0.468	21.29	42.4
MW-212	10/10/2019 13:55	3.16	-71	6.59	0.22	0.455	19.45	1331.5
MW-212	12/17/2019 13:20	0.96	-9.2	6.65	NM	0.09	7.89	163.3
MW-212	12/17/2019 13:25	0.86	5.5	6.57	NM	0.087	8.08	56.8
MW-212	12/17/2019 13:30	0.52	8.7	6.54	NM	0.075	9.09	88
MW-212	12/17/2019 13:35	0.18	11.5	6.52	NM	0.078	9.27	53.1
MW-212	12/17/2019 13:40	0.12	12.3	6.51	NM	0.074	9.61	45.9
MW-212	12/17/2019 13:45	0.08	12.1	6.5	NM	0.8	9.57	47.4
MW-212	12/17/2019 13:50	0.06	10.5	6.5	NM	0.08	9.76	47.2
MW-212	12/17/2019 13:55	0.08	9.3	6.5	NM	0.079	9.9	49.8
MW-212	12/17/2019 14:00	0.08	7.2	6.5	NM	0.082	9.95	51.4
MW-212	12/17/2019 14:05	0.06	5.3	6.51	NM	0.08	10.2	51.1
MW-212	12/17/2019 14:30	0.14	-8.2	6.51	0.04	0.077	10	12.3
MW-212	12/17/2019 14:50	0.69	-9.7	6.51	0.04	0.082	9.1	42.8
MW-212	03/05/2020 09:20	0.38	-37.3	6.44	NM	0.218	10.11	94.6
MW-212	03/05/2020 09:45	0.39	-63.3	6.59	0.1	0.422	10.11	23.3
MW-212	09/28/2020 11:25	NM	NM	NM	NM	NM	NM	58.2
MW-212	09/29/2020 09:45	11.35	-24.7	6.54	0.22	0.452	20.97	9
MW-212	09/29/2020 09:50	10.09	-41	6.3	0.2	0.424	20.81	7
MW-212	09/29/2020 09:55	9.28	-51.4	6.24	0.19	0.402	20.74	7.9
MW-212	09/29/2020 10:00	9.34	-59.2	6.25	0.19	0.395	20.7	10.5
MW-212	09/29/2020 10:05	9.39	-63.4	6.31	0.19	0.392	20.97	7.7
MW-212	09/29/2020 10:10	9.42	-69.5	6.34	0.19	0.39	21.25	6.9
MW-212	09/29/2020 10:15	9.15	-77.1	6.39	0.19	0.39	21.89	6.8
MW-212	09/29/2020 10:20	9.12	-80.1	6.4	0.19	0.39	21.82	6.5
MW-212	09/29/2020 10:25	9.03	-81.5	6.39	0.19	0.39	21.73	6.5
MW-212	09/29/2020 11:10	2.66	-27.3	6.31	0.19	0.401	20.74	25.1
MW-212	09/29/2020 11:25	3.9	-29.2	6.5	0.19	0.396	19.44	NM
MW-212	12/04/2020 12:30	3.25	-80.1	7.01	0.22	0.445	13.84	50.7
MW-212	12/04/2020 12:35	1.87	-80.4	6.8	0.21	0.442	13.42	46.2
MW-212	12/04/2020 12:40	1.28	-80.6	6.72	0.21	0.441	13.16	40.4
MW-212	12/04/2020 12:45	1.12	-87.4	6.65	0.21	0.431	12.84	30
MW-212	12/04/2020 12:50	0.9	-96	6.61	0.21	0.426	12.83	23.7
MW-212	12/04/2020 12:55	0.82	-100.4	6.59	0.21	0.425	12.8	19.5
MW-212	12/04/2020 13:00	0.76	-105.9	6.59	0.2	0.422	12.77	16
MW-212	12/04/2020 13:05	0.7	-110.1	6.57	0.2	0.419	12.67	12
MW-212	12/04/2020 13:10	0.67	-113.6	6.56	0.2	0.417	12.64	9
MW-212	12/04/2020 13:15	0.64	-116.7	6.58	0.2	0.416	12.61	8
MW-212	12/04/2020 14:00	3.05	-83.4	6.7	0.21	0.431	13.07	119.8
MW-212	12/04/2020 14:20	4.65	-76.5	6.73	0.2	0.414	13.95	266.4
MW-212	03/24/2021 09:20	1.11	44.8	6.41	0.17	0.351	9.74	141.9
MW-212	03/24/2021 09:25	1.21	30.2	6.4	0.17	0.349	9.8	210.9
MW-212	03/24/2021 09:30	1.23	26.6	6.3	0.17	0.349	9.45	83
MW-212	03/24/2021 09:35	1.28	15.6	6.39	0.17	0.345	9.56	65.1
MW-212	03/24/2021 09:40	1.3	11.8	6.42	0.17	0.345	9.8	35.9
MW-212	03/24/2021 09:45	1.06	4.6	6.44	0.17	0.347	9.89	20.4
MW-212	03/24/2021 09:50	1.24	8.7	6.46	0.17	0.347	10.26	18.4
MW-212	03/24/2021 09:55	1.11	0.3	6.48	0.17	0.347	10.06	23.6
MW-212	03/24/2021 10:00	1.03	-4.2	6.46	0.17	0.345	9.71	23.6
MW-212	03/24/2021 10:05	1.06	-7.2	6.46	0.17	0.346	9.72	11.9
MW-212	03/24/2021 10:30	3.94	-2.8	6.55	0.17	0.35	10.88	41.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-212	03/24/2021 10:45	5.6	-1.7	6.62	0.17	0.346	10.66	483.5
MW-233	03/20/2012 09:04	34.05	-15	6.72	0.05	1.07967	13.76	6.1
MW-233	03/20/2012 09:06	31.38	-30	6.76	0.05	1.08899	12.12	3.2
MW-233	03/20/2012 09:09	22.95	-37	6.77	0.05	1.0901	11.77	3.4
MW-233	03/20/2012 09:11	13.48	-41	6.77	0.05	1.08932	11.76	3.1
MW-233	03/20/2012 09:13	9.73	-45	6.77	0.05	1.08713	11.68	3.5
MW-233	03/20/2012 09:15	7.79	-47	6.77	0.05	1.08762	11.65	3.2
MW-233	03/20/2012 09:17	6.44	-49	6.77	0.05	1.08618	11.62	3
MW-233	03/20/2012 09:19	5.66	-51	6.77	0.05	1.08769	11.61	4.5
MW-233	03/20/2012 09:21	5.17	-52	6.77	0.05	1.08804	11.67	3.2
MW-233	03/20/2012 09:23	4.67	-54	6.77	0.05	1.08751	11.69	3.3
MW-233	03/20/2012 09:25	4.53	-55	6.78	0.05	1.08651	11.65	3.6
MW-233	03/20/2012 09:27	4.32	-56	6.78	0.05	1.08849	11.66	3.6
MW-233	05/10/2012 11:50	4.13	-159	7.39	0.0000	1.080	18.45	29.90
MW-233	05/10/2012 12:50	0.0000	-197	6.08	0.0000	1.010	15.31	89.20
MW-233	05/11/2012 13:05	5.54	-153	6.59	0.0000	0.918	15.48	10.20
MW-233	05/24/2012 10:32	1.71	-22	6.4	0.05	1.09502	18.7	2.2
MW-233	05/24/2012 10:33	1.71	-26	6.38	0.06	1.10725	18.13	2.4
MW-233	05/24/2012 10:35	1.68	-29	6.37	0.06	1.11111	17.64	3.2
MW-233	05/24/2012 10:36	1.48	-32	6.37	0.06	1.10897	17.47	2.7
MW-233	05/24/2012 10:37	1.19	-35	6.37	0.06	1.10946	17.42	2.7
MW-233	05/24/2012 10:38	1.04	-37	6.37	0.06	1.10938	17.41	3.4
MW-233	05/24/2012 10:40	0.84	-39	6.37	0.06	1.10951	17.36	2.6
MW-233	05/24/2012 10:41	0.58	-41	6.38	0.06	1.11008	17.3	2.6
MW-233	05/24/2012 10:42	0.41	-42	6.38	0.06	1.10985	17.25	2.9
MW-233	05/24/2012 10:43	0.3	-44	6.39	0.06	1.10902	17.24	3.3
MW-233	05/24/2012 10:44	0.21	-45	6.39	0.06	1.1087	17.21	3.6
MW-233	05/24/2012 10:46	0.15	-46	6.4	0.06	1.1089	17.19	3.8
MW-233	05/24/2012 10:47	0.1	-48	6.4	0.06	1.10901	17.19	3.6
MW-233	05/24/2012 10:48	0.06	-49	6.4	0.06	1.10745	17.2	3.6
MW-233	05/24/2012 10:49	0.04	-50	6.41	0.06	1.10719	17.16	3.4
MW-233	05/24/2012 10:51	0.01	-51	6.41	0.06	1.10677	17.11	3.6
MW-233	05/24/2012 10:52	-0.01	-53	6.41	0.06	1.10679	17.09	3.6
MW-233	05/24/2012 10:53	-0.02	-54	6.42	0.06	1.10609	17.06	4.2
MW-233	05/24/2012 10:54	-0.04	-55	6.42	0.06	1.10544	17.03	4.6
MW-233	05/24/2012 10:55	-0.05	-56	6.42	0.06	1.10544	16.99	3.2
MW-233	05/24/2012 10:57	-0.06	-57	6.43	0.06	1.10678	16.96	3.1
MW-233	05/24/2012 10:58	-0.07	-58	6.43	0.06	1.10669	16.93	3.4
MW-233	05/24/2012 10:59	-0.08	-58	6.43	0.06	1.10735	16.95	3.1
MW-233	05/24/2012 11:00	-0.08	-59	6.44	0.06	1.10715	16.91	3.5
MW-233	05/24/2012 11:02	-0.09	-60	6.44	0.06	1.10788	16.87	3.7
MW-233	05/24/2012 11:03	-0.09	-61	6.45	0.06	1.10791	16.89	3.8
MW-233	05/24/2012 11:04	-0.1	-62	6.45	0.06	1.108	16.89	2.8
MW-233	05/24/2012 11:05	-0.1	-63	6.46	0.06	1.10785	16.88	3
MW-233	05/24/2012 11:07	-0.1	-64	6.46	0.06	1.10833	16.87	4.9
MW-233	05/24/2012 11:08	-0.11	-64	6.46	0.06	1.10896	16.86	5.5
MW-233	05/24/2012 11:09	-0.11	-65	6.46	0.06	1.10998	16.85	4.2
MW-233	05/24/2012 11:10	-0.11	-66	6.47	0.06	1.11119	16.8	4.7
MW-233	05/24/2012 11:11	-0.11	-67	6.47	0.06	1.11118	16.78	5.3
MW-233	05/24/2012 11:13	-0.12	-68	6.48	0.06	1.11174	16.78	5.5
MW-233	05/24/2012 11:14	-0.12	-68	6.48	0.06	1.11266	16.75	4.3
MW-233	05/24/2012 11:15	-0.12	-69	6.49	0.06	1.11276	16.72	4.6
MW-233	05/24/2012 11:16	-0.12	-70	6.49	0.06	1.11424	16.74	4.8
MW-233	07/25/2012 11:14	1.13	-99	6.58	0.08	1.541	29.92	1.4
MW-233	07/25/2012 11:16	1.32	-99	6.58	0.08	1.542	26.9	2.3
MW-233	07/25/2012 11:17	1.06	-99	7.12	0.08	1.53	25.13	2.1
MW-233	07/25/2012 11:18	0.92	-100	7.17	0.08	1.523	23.45	1.6
MW-233	07/25/2012 11:19	0.82	-102	7.16	0.08	1.515	22.97	1.2
MW-233	07/25/2012 11:20	0.73	-103	7.13	0.08	1.515	23.05	1.3
MW-233	07/25/2012 11:22	0.67	-104	7.14	0.08	1.516	22.6	1.3
MW-233	07/25/2012 11:23	0.59	-105	7.15	0.08	1.513	23.01	1.4
MW-233	07/25/2012 11:24	0.53	-106	7.14	0.08	1.506	22.95	1.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	07/25/2012 11:25	0.48	-107	7.12	0.08	1.514	22.83	1.5
MW-233	07/25/2012 11:27	0.45	-108	7.12	0.08	1.507	23.06	1.6
MW-233	07/25/2012 11:28	0.42	-109	7.11	0.08	1.511	22.85	1.5
MW-233	07/25/2012 11:29	0.4	-110	7.08	0.08	1.516	22.7	2.2
MW-233	07/25/2012 11:30	0.37	-111	7.08	0.08	1.514	22.97	2.2
MW-233	07/25/2012 11:31	0.34	-112	7.1	0.08	1.514	23.1	1.9
MW-233	07/25/2012 11:33	0.32	-112	7.08	0.08	1.52	22.84	1.9
MW-233	07/25/2012 11:34	0.3	-113	7.12	0.08	1.514	23.03	2
MW-233	07/25/2012 11:35	0.28	-114	7.1	0.08	1.511	23.09	2.8
MW-233	07/25/2012 11:36	0.27	-114	7.11	0.08	1.51	22.99	2.3
MW-233	07/25/2012 11:38	0.26	-115	7.1	0.08	1.509	23.1	2.4
MW-233	07/25/2012 11:39	0.26	-115	7.1	0.08	1.512	23.04	2.7
MW-233	07/25/2012 11:40	0.25	-115	7.09	0.08	1.51	23.07	3
MW-233	07/25/2012 11:41	0.23	-116	7.08	0.08	1.509	23.18	3.1
MW-233	07/25/2012 11:42	0.23	-116	7.08	0.08	1.511	23.25	3.4
MW-233	07/25/2012 11:44	0.22	-117	7.05	0.08	1.512	23.09	3.8
MW-233	07/25/2012 11:45	0.22	-117	7.05	0.80	1.514	23.02	3.79
MW-233	07/25/2012 12:54	1.63	-83	6.54	0.70	1.361	21.92	9.40
MW-233	04/25/2013 09:00	2.49	4.4	5.62	1.6	2.34	11.7	30.1
MW-233	04/25/2013 09:05	2.31	-39.4	6.11	1.6	2.34	11.8	31.1
MW-233	04/25/2013 09:10	2.4	-48.2	6.13	1.6	2.35	11.9	31.4
MW-233	04/25/2013 09:15	2.7	-39.8	6.26	1.6	2.35	12.3	38.6
MW-233	04/25/2013 09:20	1.28	-56.4	6.17	2.3	3.23	11.6	16.4
MW-233	04/25/2013 09:25	1.16	-56.5	6.2	2.3	3.26	11.7	15.5
MW-233	04/25/2013 09:30	1.12	-58.6	6.23	2.3	3.15	11.7	13.1
MW-233	04/25/2013 09:35	1.1	-62	6.19	2.1	3.21	11.8	14.3
MW-233	04/25/2013 09:40	1.09	-62.1	6.29	2.2	3.22	11.8	14.7
MW-233	04/25/2013 09:45	1.07	-62	6.15	2.49	3.369	11.82	14.9
MW-233	04/25/2013 10:55	3.04	-12	6.29	2.06	3.961	12.56	1.8
MW-233	04/26/2013 11:08	4	-14.7	6.37	1.38	2.067	13.31	35.3
MW-233	06/17/2013 14:38	0.55	-127	6.51	0.23	3.858	20.93	11.46
MW-233	06/25/2013 11:20	4.43	-87	6.45	2.24	4.108	22.04	9.6
MW-233	06/25/2013 12:10	4.85	-76	6.54	2.08	5.132	22	43.1
MW-233	06/25/2013 12:15	4.45	-89	6.47	2.09	4.872	21.75	58.70
MW-233	06/26/2013 12:15	4.45	-89	6.47	2.09	4.872	21.75	58.7
MW-233	09/10/2013 10:35	0.75	-166	6.49	0.22	4.074	23.11	-0.79
MW-233	11/12/2013 14:24	0.87	-244	6.62	0.20	3.754	14.56	8.43
MW-233	03/14/2014 11:46	0.74	-142	6.51	0.34	6.356	6.61	6.38
MW-233	05/23/2014 14:16	1.47	-326	6.67	0.92	15.640	17.74	9.72
MW-233	07/02/2014 11:25	0.13	-302.8	7.73	28.82	44.560	23.60	-0.70
MW-233	07/02/2014 12:35	0.40	-158.3	6.70	16.68	24.130	23.39	-9.90
MW-233	07/02/2014 12:54	0.27	-128.9	6.70	15.22	25.210	26.45	-9.50
MW-233	08/04/2014 09:15	0.33	-179.9	6.61	16.85	10.900	24.36	28.10
MW-233	08/04/2014 09:45	0.43	-225.1	6.50	17.64	19.200	24.21	28.31
MW-233	08/04/2014 11:15	0.45	-220.7	6.55	18.11	20.100	24.32	28.52
MW-233	08/08/2014 10:23	1.57	-477	6.78	0.66	11.500	25.11	15.75
MW-233	08/08/2014 11:05	1.64	-353	7.08	0.44	7.866	26.69	26.10
MW-233	10/31/2014 08:48	1.38	-327	1.38	4.07	60.690	15.50	80.47
MW-233	01/16/2015 10:15	-0.15	-306.7	7.17	7.56	12.770	6.69	1.00
MW-233	01/16/2015 11:10	0.0000	-494.5	7.27	23.69	37.510	9.50	0.0000
MW-233	01/16/2015 11:40	0.44	-406.4	7.28	19.90	32.880	9.80	3.90
MW-233	03/11/2015 10:32	4.28	-252	7.11	1.80	29.870	6.97	12.64
MW-233	11/19/2015 12:39	2.12	-143	7.46	0.5073	9004.9040	16.16	10.6
MW-233	11/19/2015 12:41	1.31	-145	7.5	0.4764	8491.5961	16.26	14
MW-233	11/19/2015 12:43	0.6	-145	7.52	0.4658	8317.5325	15.99	13.4
MW-233	11/19/2015 12:45	0.33	-146	7.52	0.4704	8396.4931	15.85	9.9
MW-233	11/19/2015 12:47	0.23	-146	7.53	0.4666	8333.5354	15.82	10
MW-233	11/19/2015 12:49	0.2	-146	7.53	0.1779	3368.3416	15.81	11.9
MW-233	11/19/2015 12:50	0.19	-146	7.53	0.1788	3383.4013	15.8	13.5
MW-233	11/19/2015 12:52	0.17	-146	7.53	0.1804	3411.9696	15.81	8.7
MW-233	11/19/2015 12:54	0.18	-146	7.53	0.1825	3450.8773	15.79	11.5
MW-233	11/19/2015 12:56	0.19	-147	7.53	0.1851	3496.2405	15.76	9.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	11/19/2015 12:58	0.2	-147	7.52	0.1873	3535.8828	15.73	9.8
MW-233	11/19/2015 13:00	0.21	-148	7.52	0.1894	3573.8901	15.7	10.3
MW-233	12/11/2015 11:40	1.36	-276.1	7.60	12.50	20.740	13.87	-1.90
MW-233	12/11/2015 12:15	2.72	-324.5	7.42	12.49	20.800	13.81	-0.80
MW-233	01/14/2016 11:20	4.65	-84	7.32	0.1979	3795.7634	6.94	11.7
MW-233	01/14/2016 11:22	2.33	-97	7.37	0.1999	3832.2947	6.94	6.6
MW-233	01/14/2016 11:24	0.61	-105	7.44	0.1991	3811.1116	7.44	8.8
MW-233	01/14/2016 11:26	0.29	-109	7.47	0.1994	3823.5761	6.98	7.2
MW-233	01/14/2016 11:29	0.2	-112	7.49	0.1953	3748.1678	6.97	6.7
MW-233	01/14/2016 11:31	0.17	-115	7.51	0.1893	3639.9494	7.01	6.6
MW-233	01/14/2016 11:33	0.17	-118	7.52	0.1782	3436.1693	7.12	6.8
MW-233	01/14/2016 11:35	0.16	-120	7.53	0.1650	3191.7636	7.41	6
MW-233	01/14/2016 11:37	0.17	-121	7.53	0.1471	2862.9249	7.35	6.4
MW-233	01/14/2016 11:39	0.16	-123	7.53	0.1297	2538.0685	7.46	6.4
MW-233	01/14/2016 11:41	0.16	-124	7.54	0.0375	772.6031	7.42	5.8
MW-233	01/14/2016 11:44	0.15	-126	7.54	0.0348	719.0506	7.68	7.2
MW-233	01/14/2016 11:46	0.14	-126	7.54	0.0330	681.7214	7.69	5.6
MW-233	01/14/2016 11:48	0.14	-128	7.54	0.0312	646.2224	7.93	7.8
MW-233	01/14/2016 11:50	0.13	-128	7.55	0.0305	632.6411	7.61	5.4
MW-233	01/14/2016 11:52	0.13	-129	7.54	0.0294	610.6012	7.76	6
MW-233	01/14/2016 11:55	0.11	-131	7.55	0.0284	589.7745	8.02	5.7
MW-233	01/14/2016 11:57	0.11	-133	7.54	0.0288	596.7569	7.95	6.1
MW-233	01/14/2016 11:59	0.11	-133	7.54	0.0304	630.6741	7.69	6.1
MW-233	01/14/2016 12:01	0.09	-136	7.54	0.0304	630.1569	8.14	5.8
MW-233	01/14/2016 12:03	0.1	-138	7.55	0.0311	642.7218	8	6.3
MW-233	01/14/2016 12:05	0.09	-139	7.54	0.0320	662.3257	7.91	5.7
MW-233	01/14/2016 12:07	0.08	-142	7.54	0.0326	674.4593	8.02	5.2
MW-233	01/14/2016 12:10	0.09	-145	7.54	0.0343	708.8223	7.41	5.4
MW-233	04/14/2016 11:24	2.35	-143	7.63	0.4339	7805.4699	14.11	9.3
MW-233	04/14/2016 11:25	0.67	-153	7.72	0.4560	8194.6240	12.93	6.6
MW-233	04/14/2016 11:27	0.35	-157	7.73	0.4641	8331.9531	12.79	7.5
MW-233	04/14/2016 11:29	0.22	-161	7.74	0.4663	8369.2066	12.76	9.3
MW-233	04/14/2016 11:31	0.15	-164	7.75	0.4716	8460.3103	12.65	8.9
MW-233	04/14/2016 11:33	0.09	-168	7.74	0.4798	8595.4636	12.75	6.7
MW-233	04/14/2016 11:35	0.04	-172	7.72	0.4867	8712.8160	12.69	6.6
MW-233	04/14/2016 11:37	0.01	-176	7.71	0.4966	8874.3513	12.9	6.8
MW-233	04/14/2016 11:39	-0.01	-180	7.69	0.5081	9067.6785	12.81	6.3
MW-233	04/14/2016 11:41	-0.02	-185	7.66	0.5415	9623.9013	12.69	5.7
MW-233	04/14/2016 11:43	-0.04	-190	7.64	0.5679	10060.1141	12.69	5.1
MW-233	04/14/2016 11:45	-0.05	-195	7.63	0.6035	10645.5011	12.75	5.1
MW-233	04/14/2016 11:47	-0.05	-201	7.62	1.4299	23640.8240	12.82	4.9
MW-233	04/14/2016 11:48	-0.05	-206	7.61	1.4107	23354.8564	12.7	4.3
MW-233	04/14/2016 11:50	-0.05	-212	7.6	1.3972	23146.0166	12.78	3.4
MW-233	04/14/2016 11:52	-0.05	-216	7.6	1.7303	28161.0538	12.76	3.8
MW-233	04/14/2016 11:54	-0.05	-222	7.6	1.9164	30905.7395	12.92	3.3
MW-233	04/14/2016 11:56	-0.05	-227	7.6	1.9047	30736.0351	12.9	3.4
MW-233	04/14/2016 11:58	-0.05	-232	7.6	1.7444	28358.1936	12.96	3.4
MW-233	04/14/2016 12:00	-0.05	-239	7.61	1.8006	29195.5251	12.92	2.9
MW-233	04/14/2016 12:02	-0.05	-248	7.61	1.6117	26377.8375	12.93	3.2
MW-233	04/14/2016 12:04	-0.06	-256	7.62	1.5727	25790.4695	12.96	26.5
MW-233	04/14/2016 12:06	-0.05	-263	7.62	1.2527	20927.6989	12.93	2.7
MW-233	04/14/2016 12:08	-0.05	-268	7.62	1.5977	26167.3401	12.93	2.4
MW-233	04/14/2016 12:09	-0.05	-271	7.63	1.6714	27271.3209	12.95	2.7
MW-233	04/14/2016 12:11	-0.05	-275	7.63	1.6242	26564.0827	12.96	2.5
MW-233	04/14/2016 12:13	-0.06	-278	7.64	1.5017	24726.8584	12.85	2.5
MW-233	07/26/2016 09:02	0.68	-153	7.34	NM	7868.11	28.35	5.5
MW-233	07/26/2016 09:03	0.35	-170	7.43	NM	7962.25	28.45	5.3
MW-233	07/26/2016 09:04	0.34	-221	7.5	NM	7940.15	28.55	4.6
MW-233	07/26/2016 09:06	0.37	-278	7.55	NM	8021.35	28.53	3.6
MW-233	07/26/2016 09:07	0.38	-302	7.56	NM	7793.6	28.51	3.3
MW-233	07/26/2016 09:08	0.41	-312	7.56	NM	7593.79	28.52	2.4
MW-233	07/26/2016 09:09	0.43	-318	7.55	NM	7275.72	28.53	2.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	07/26/2016 09:11	0.45	-323	7.54	NM	7205.68	28.49	1.4
MW-233	07/26/2016 09:12	0.47	-326	7.52	NM	7350.3	28.47	1
MW-233	07/26/2016 09:13	0.49	-329	7.52	NM	7435.98	28.47	0.6
MW-233	07/26/2016 09:15	0.51	-330	7.51	NM	7532.45	28.42	0.4
MW-233	07/26/2016 09:16	0.52	-332	7.5	NM	7597.15	28.39	0.5
MW-233	07/26/2016 09:17	0.54	-334	7.49	NM	7465.49	28.38	0.2
MW-233	07/26/2016 09:19	0.56	-336	7.49	NM	7380.25	28.33	0
MW-233	07/26/2016 09:20	0.58	-337	7.48	NM	7297.75	28.32	-0.2
MW-233	07/26/2016 09:21	0.6	-339	7.48	NM	7174.93	28.29	-0.1
MW-233	07/26/2016 09:23	0.62	-340	7.47	NM	7059.5	28.28	-0.4
MW-233	07/26/2016 09:24	0.62	-342	7.47	NM	6956.1	28.23	-0.3
MW-233	07/26/2016 09:25	0.63	-343	7.47	NM	6983.21	28.22	-0.5
MW-233	07/26/2016 09:27	0.63	-345	7.46	NM	7075.76	28.24	-0.4
MW-233	07/26/2016 09:28	0.62	-346	7.46	NM	7206.74	28.22	-0.5
MW-233	07/26/2016 09:29	0.62	-348	7.45	NM	7710.54	28.18	-0.6
MW-233	07/26/2016 09:31	0.64	-349	7.45	NM	7735.13	28.2	-0.6
MW-233	07/26/2016 09:32	0.64	-350	7.44	NM	7682.76	28.14	-0.7
MW-233	07/26/2016 09:33	0.64	-351	7.44	NM	7723.63	28.12	-0.7
MW-233	07/26/2016 09:35	0.63	-352	7.43	NM	7759.61	28.09	-0.7
MW-233	12/08/2016 10:42	5.28	-155	7.31	0.1042	2046.6471	9.86	22.5
MW-233	12/08/2016 10:45	2.04	-166	7.41	0.1072	2098.0620	10.86	12.7
MW-233	12/08/2016 10:47	1.37	-170	7.46	0.1087	2125.4436	11	11
MW-233	12/08/2016 10:49	1.21	-173	7.5	0.1094	2138.6316	11.01	10.7
MW-233	12/08/2016 10:51	1.13	-179	7.54	0.1098	2147.2432	10.97	9.8
MW-233	12/08/2016 10:53	1.04	-194	7.56	0.1097	2144.8971	11.05	9.9
MW-233	12/08/2016 10:55	1.01	-217	7.59	0.1101	2151.3229	11.12	9.7
MW-233	12/08/2016 10:58	0.93	-237	7.61	0.1105	2159.2569	11.2	9.8
MW-233	12/08/2016 11:00	0.84	-255	7.63	0.1108	2165.2608	11.14	9.1
MW-233	12/08/2016 11:02	0.79	-269	7.65	0.1108	2163.6746	11.19	10
MW-233	12/08/2016 11:04	0.79	-280	7.67	0.1109	2166.5302	11.21	11.8
MW-233	12/08/2016 11:06	0.77	-288	7.69	0.1110	2167.5185	11.14	13.3
MW-233	12/08/2016 11:08	0.71	-293	7.7	0.1111	2169.9799	11.23	15.2
MW-233	12/08/2016 11:11	0.67	-298	7.71	0.1114	2175.2136	11.29	17.3
MW-233	12/08/2016 11:13	0.69	-300	7.72	0.1118	2182.4701	11.31	19.1
MW-233	12/08/2016 11:15	0.67	-302	7.73	0.1121	2187.5360	11.27	20.9
MW-233	12/08/2016 11:17	0.66	-303	7.74	0.1120	2185.9027	11.29	22.3
MW-233	12/08/2016 11:19	0.63	-304	7.75	0.1123	2190.6949	11.4	24.9
MW-233	12/08/2016 11:21	0.67	-304	7.76	0.1124	2193.1190	11.35	25.3
MW-233	12/08/2016 11:24	0.71	-304	7.77	0.1127	2198.0995	11.47	26.6
MW-233	12/08/2016 11:26	0.72	-303	7.78	0.1130	2204.4771	11.38	28
MW-233	01/23/2017 11:17	11.36	-167	6.88	0.2689	5064.9884	7.33	11.2
MW-233	01/23/2017 11:19	5.02	-206	7	0.4308	7855.0796	8.46	7.5
MW-233	01/23/2017 11:21	2.39	-248	7.05	0.4867	8798.6263	8.7	7.5
MW-233	01/23/2017 11:23	1.26	-299	7.07	0.5420	9722.9232	8.89	6.5
MW-233	01/23/2017 11:26	0.72	-321	7.1	0.5796	10347.2850	9.04	6.1
MW-233	01/23/2017 11:28	0.44	-333	7.12	0.5998	10680.1567	9.09	5.6
MW-233	01/23/2017 11:30	0.26	-340	7.14	0.6216	11037.0222	9.25	5.6
MW-233	01/23/2017 11:32	0.14	-347	7.16	0.6436	11399.7573	9.27	4.3
MW-233	01/23/2017 11:34	0.08	-352	7.17	0.6640	11734.1922	9.3	3.6
MW-233	01/23/2017 11:36	0.02	-356	7.17	0.6714	11853.1592	9.37	3
MW-233	01/23/2017 11:39	-0.01	-360	7.16	0.6745	11904.1613	9.38	2.6
MW-233	01/23/2017 11:41	-0.02	-364	7.16	0.6819	12023.0961	9.44	2.2
MW-233	01/23/2017 11:43	-0.04	-367	7.15	0.6877	12119.6086	9.4	1.8
MW-233	01/23/2017 11:45	-0.06	-370	7.15	0.6937	12217.3038	9.44	1.5
MW-233	01/23/2017 11:47	-0.08	-373	7.14	0.6987	12297.8873	9.48	1.3
MW-233	01/23/2017 11:49	-0.07	-374	7.14	0.7214	12665.9184	9.54	1.2
MW-233	01/23/2017 11:52	-0.07	-377	7.14	0.7422	13002.9802	9.59	5.1
MW-233	01/23/2017 11:54	-0.07	-378	7.14	0.7506	13138.8242	9.61	0.8
MW-233	01/23/2017 11:56	-0.08	-379	7.14	0.7575	13251.5528	9.59	0.6
MW-233	01/23/2017 11:58	-0.08	-380	7.14	0.7602	13295.8519	9.6	0.4
MW-233	01/23/2017 12:00	-0.08	-381	7.13	0.7748	13533.0876	9.61	0.4
MW-233	01/23/2017 12:02	-0.06	-382	7.13	0.7919	13807.4988	9.64	0.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	01/23/2017 12:05	-0.09	-383	7.13	0.8003	13943.4415	9.67	0
MW-233	01/23/2017 12:07	-0.09	-384	7.13	0.8080	14068.1083	9.65	0
MW-233	04/28/2017 09:50	2.95	-94	7.39	0.2317	0.0431	17.47	18
MW-233	04/28/2017 09:52	0.63	-96	7.57	0.2386	0.0444	15.68	14.9
MW-233	04/28/2017 09:53	0.12	-96	7.62	0.2477	0.0461	15.39	12.4
MW-233	04/28/2017 09:55	-0.06	-97	7.64	0.2584	0.0479	15.41	13.4
MW-233	04/28/2017 09:57	-0.13	-100	7.65	0.2731	0.0505	15.34	12.5
MW-233	04/28/2017 09:59	-0.16	-111	7.67	0.2880	0.0531	15.32	10.4
MW-233	04/28/2017 10:01	-0.18	-141	7.7	0.3103	0.0569	15.32	9.6
MW-233	04/28/2017 10:03	-0.18	-189	7.73	0.3313	0.0605	15.42	8.6
MW-233	04/28/2017 10:05	-0.18	-231	7.77	0.3511	0.0639	15.42	6.2
MW-233	04/28/2017 10:07	-0.17	-256	7.79	0.3712	0.0673	15.54	6.7
MW-233	04/28/2017 10:09	-0.16	-271	7.81	0.3850	0.0697	15.5	3.8
MW-233	04/28/2017 10:11	-0.16	-283	7.82	0.3949	0.0713	15.52	2.8
MW-233	04/28/2017 10:13	-0.15	-290	7.81	0.4023	0.0726	15.63	2.3
MW-233	04/28/2017 10:15	-0.14	-294	7.81	0.4100	0.0739	15.71	1.6
MW-233	04/28/2017 10:17	-0.14	-297	7.81	0.4155	0.0748	15.78	1
MW-233	04/28/2017 10:19	-0.13	-300	7.8	0.4199	0.0755	15.83	1
MW-233	04/28/2017 10:21	-0.13	-302	7.79	0.4251	0.0764	15.81	0.4
MW-233	04/28/2017 10:23	-0.13	-306	7.78	0.4279	0.0769	15.93	0.2
MW-233	04/28/2017 10:25	-0.12	-309	7.77	0.4318	0.0775	15.91	14.6
MW-233	04/28/2017 10:27	-0.11	-313	7.76	0.4345	0.0780	16.04	0.1
MW-233	04/28/2017 10:29	-0.11	-317	7.75	0.4371	0.0784	16.22	-0.2
MW-233	04/28/2017 10:31	-0.1	-321	7.74	0.4406	0.0789	16.33	-0.2
MW-233	04/28/2017 10:33	-0.1	-324	7.73	0.4430	0.0793	16.44	-0.2
MW-233	04/28/2017 10:35	-0.09	-327	7.72	0.4461	0.0798	16.53	-0.3
MW-233	04/28/2017 10:37	-0.09	-330	7.71	0.4505	0.0806	16.45	-0.4
MW-233	04/28/2017 10:39	-0.09	-333.00	7.70	0.45	8.166	16.15	-0.47
MW-233	05/09/2017 13:45	0.33	-189.40	7.56	2.84	5.201	11.98	5.50
MW-233	01/26/2018 10:09	6.29	119	7.62	1.1202	0.1926	6.38	10.4
MW-233	01/26/2018 10:12	1.34	119	7.61	1.2710	0.2167	6.08	25.8
MW-233	01/26/2018 10:14	0.61	118	7.62	1.3192	0.2243	6.05	11.8
MW-233	01/26/2018 10:16	0.76	116	7.64	1.3308	0.2263	5.94	13.5
MW-233	01/26/2018 10:18	0.94	115	7.66	1.3370	0.2272	5.94	13
MW-233	01/26/2018 10:20	0.98	113	7.69	1.3380	0.2275	5.89	14.7
MW-233	01/26/2018 10:22	0.87	111	7.71	1.3395	0.2276	6	12.4
MW-233	01/26/2018 10:25	0.59	111	7.68	1.3708	0.2322	6.23	9.5
MW-233	01/26/2018 10:27	0.45	112	7.62	1.4673	0.2469	6.57	11.6
MW-233	01/26/2018 10:29	0.31	111	7.57	1.5893	0.2654	6.85	8.4
MW-233	01/26/2018 10:31	0.23	110	7.54	1.6386	0.2728	7.03	9.5
MW-233	01/26/2018 10:33	0.19	107	7.55	1.5930	0.2657	7.13	12.8
MW-233	01/26/2018 10:35	0.18	103	7.57	1.5409	0.2577	7.09	8.5
MW-233	01/26/2018 10:38	0.16	99	7.6	1.4642	0.2459	7.06	7.6
MW-233	01/26/2018 10:40	0.15	94	7.63	1.3846	0.2334	7.23	11
MW-233	01/26/2018 10:42	0.14	88	7.66	1.3437	0.2271	7.22	7.8
MW-233	01/26/2018 10:44	0.14	81	7.69	1.2942	0.2192	7.4	6.7
MW-233	01/26/2018 10:46	0.13	73	7.73	1.2627	0.2142	7.5	7
MW-233	01/26/2018 10:48	0.13	65	7.76	1.2555	0.2131	7.43	4.7
MW-233	01/26/2018 10:51	0.13	56	7.79	1.2419	0.2109	7.52	4.2
MW-233	01/26/2018 10:53	0.14	48	7.83	1.2172	0.2070	7.57	4.2
MW-233	01/26/2018 10:55	0.15	39	7.86	1.2053	0.2051	7.56	3.7
MW-233	01/26/2018 10:57	0.16	30	7.89	1.1784	0.2009	7.57	4.3
MW-233	01/26/2018 10:59	0.16	22	7.91	1.1817	0.2014	7.62	3.4
MW-233	04/16/2018 13:31	3.85	94	7.47	0.3690	0.0067	13.69	10.4
MW-233	04/16/2018 13:32	1.42	55	7.48	0.3600	0.0066	12.36	7.9
MW-233	04/16/2018 13:34	0.36	-12	7.51	0.4147	0.0075	11.79	7.4
MW-233	04/16/2018 13:36	0.07	-64	7.54	0.4955	0.0089	11.72	6.7
MW-233	04/16/2018 13:38	-0.09	-118	7.58	0.5876	0.0104	11.37	5.2
MW-233	04/16/2018 13:40	-0.12	-169	7.62	0.6428	0.0113	11.45	4.1
MW-233	04/16/2018 13:42	-0.13	-216	7.67	0.6886	0.0121	11.46	3.8
MW-233	04/16/2018 13:44	-0.13	-239	7.72	0.7058	0.0124	11.31	3.1
MW-233	04/16/2018 13:46	-0.14	-249	7.76	0.7134	0.0125	11.27	2.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	04/16/2018 13:48	-0.16	-255	7.78	0.7239	0.0126	11.29	1.8
MW-233	04/16/2018 13:50	-0.17	-260	7.8	0.7397	0.0129	11.3	1.6
MW-233	04/16/2018 13:52	-0.15	-264	7.82	0.7604	0.0132	11.39	1.1
MW-233	04/16/2018 13:54	-0.18	-267	7.83	0.7732	0.0134	11.45	0.9
MW-233	04/16/2018 13:56	-0.15	-269	7.84	0.7855	0.0136	11.63	0.6
MW-233	04/16/2018 13:58	-0.2	-271	7.84	0.8024	0.0139	11.68	0.6
MW-233	04/16/2018 14:00	-0.18	-273	7.85	0.8100	0.0140	11.69	0.9
MW-233	04/16/2018 14:02	-0.14	-275	7.86	0.8281	0.0143	11.81	0.5
MW-233	04/16/2018 14:04	-0.19	-277	7.87	0.8473	0.0146	11.79	0.5
MW-233	04/16/2018 14:06	-0.1	-278	7.88	0.8641	0.0149	11.57	0.1
MW-233	04/16/2018 14:08	-0.15	-280	7.89	0.8785	0.0151	11.51	0.2
MW-233	04/16/2018 14:10	-0.21	-282	7.89	0.9018	0.0155	11.65	0.2
MW-233	04/16/2018 14:12	-0.15	-283	7.9	0.9186	0.0158	11.77	0
MW-233	04/16/2018 14:14	-0.2	-284	7.91	0.9276	0.0159	11.73	0.1
MW-233	04/16/2018 14:15	-0.21	-285	7.91	0.9346	0.0160	11.82	0.1
MW-233	04/16/2018 14:17	-0.2	-286	7.92	0.9483	0.0162	11.84	0.1
MW-233	04/16/2018 14:18	-0.20	-286.00	7.92	0.95	16.280	11.72	0.08
MW-233	07/19/2018 11:05	0.44	-380.00	7.81	1.47	24.680	22.91	-1.43
MW-233	07/19/2018 22:29	1.62	-162	7.3	0.492	8.6915	28.28	17.4
MW-233	07/19/2018 22:31	0.38	-201	7.41	0.851	14.4679	24.53	10.2
MW-233	07/19/2018 22:33	0.19	-260	7.54	0.904	15.2919	24.11	6.4
MW-233	07/19/2018 22:35	0.14	-317	7.69	1.075	17.9383	23.89	4.1
MW-233	07/19/2018 22:38	0.17	-344	7.86	1.154	19.1613	23.48	1.2
MW-233	07/19/2018 22:42	0.18	-354	7.94	1.212	20.0447	23.35	0.1
MW-233	07/19/2018 22:44	0.26	-361	7.96	1.325	21.7449	23.18	-0.1
MW-233	07/19/2018 22:48	0.29	-367	7.95	1.407	22.9843	23.12	-1.1
MW-233	07/19/2018 22:52	0.31	-371	7.91	1.463	23.8261	23.02	-1.3
MW-233	07/19/2018 22:54	0.36	-375	7.89	1.483	24.1195	23.03	-0.5
MW-233	07/19/2018 22:56	0.39	-373	7.87	1.511	24.5410	22.89	-0.6
MW-233	07/19/2018 22:58	0.36	-375	7.85	1.530	24.8109	22.85	-0.6
MW-233	07/19/2018 22:59	0.39	-376	7.84	1.550	25.1189	22.87	-0.7
MW-233	07/19/2018 23:01	0.41	-377	7.84	1.481	24.0838	22.97	-1.4
MW-233	07/19/2018 23:03	0.42	-379	7.82	1.476	24.0162	22.85	-1.5
MW-233	07/19/2018 23:05	0.44	-380	7.81	1.471	23.9483	22.73	-1.4
MW-233	10/24/2018 14:00	1.15	-346.20	7.84	14.00	23.450	18.55	18.90
MW-233	04/04/2019 10:10	0.16	-364.1	7.81	NM	19.77	9.97	0.9
MW-233	07/03/2019 10:05	3.01	-265.8	7.7	NM	19.24	21.6	0.5
MW-233	07/03/2019 10:10	1.54	-338.9	7.76	NM	20.8	18.81	15.4
MW-233	07/03/2019 10:15	1.02	-357	7.72	NM	20.46	18.5	17
MW-233	07/03/2019 10:20	0.82	-356.3	7.71	NM	20.48	18.37	14.6
MW-233	07/03/2019 10:25	0.93	-358.9	7.7	NM	20.56	18.41	10.9
MW-233	07/03/2019 10:30	0.81	-354.5	7.69	NM	20.56	18.45	13.4
MW-233	07/03/2019 10:35	0.64	-356.8	7.69	NM	20.65	18.77	14.4
MW-233	07/03/2019 10:40	0.93	-354	7.7	NM	20.71	18.49	16.9
MW-233	07/03/2019 10:45	0.75	-359.1	7.7	NM	20.73	18.58	-20.4
MW-233	07/03/2019 10:50	0.58	-355.4	7.7	NM	20.82	18.4	21.1
MW-233	07/03/2019 11:20	0.58	-355.4	7.7	NM	20.82	18.4	21.1
MW-233	10/08/2019 09:05	3.11	-314.2	8	NM	5.432	19.55	18.4
MW-233	10/08/2019 09:10	0.75	-361.6	7.82	NM	6.3	19.66	9.4
MW-233	10/08/2019 09:15	2.33	-370.9	7.79	NM	6.653	19.7	8.8
MW-233	10/08/2019 09:20	2.24	-378.8	7.77	NM	6.976	19.69	5.4
MW-233	10/08/2019 09:25	1.67	-381	7.7	NM	7.209	19.68	3.6
MW-233	10/08/2019 09:30	1.75	-375.8	7.74	NM	7.324	19.69	3.7
MW-233	10/08/2019 09:35	1.94	-375.7	7.73	NM	7.47	19.73	3.2
MW-233	10/08/2019 09:40	1.62	-379	7.71	NM	8.046	19.8	1.8
MW-233	10/08/2019 09:45	1.46	-377.7	7.7	NM	8.336	19.78	1.5
MW-233	10/08/2019 09:50	1.31	-370.4	7.69	NM	8.565	19.76	0.9
MW-233	01/07/2020 09:12	1.97	-307.5	7.64	NM	5.876	10.08	7.3
MW-233	01/07/2020 09:17	0.53	-339.1	7.66	NM	6.896	10.45	7.1
MW-233	01/07/2020 09:22	0.3	-364	7.69	NM	5.721	10.6	16
MW-233	01/07/2020 09:27	0.29	-370.9	7.74	NM	4.377	10.39	12.1
MW-233	01/07/2020 09:32	0.17	-371.4	7.75	NM	3.996	10.29	7.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	01/07/2020 09:37	0.12	-372.3	7.75	NM	3.688	10.29	4.5
MW-233	01/07/2020 09:42	0.12	-372.3	7.75	NM	3.5	10.21	3.3
MW-233	01/07/2020 09:47	0.08	-374	7.75	NM	3.411	10.24	2.8
MW-233	01/07/2020 09:52	0.08	-375.1	7.79	NM	2.983	10.08	3
MW-233	01/07/2020 09:57	0.08	-376.2	7.83	NM	2.19	9.82	4.4
MW-233	04/02/2020 11:30	0.51	-324.6	7.96	NM	3.289	11.45	0.3
MW-233	07/07/2020 09:40	2.71	231.9	8.53	2.44	4.567	23.47	4.7
MW-233	07/07/2020 09:45	0.87	-298.3	8.06	2.61	4.861	22.91	1.9
MW-233	07/07/2020 09:50	1.21	-329.3	7.98	2.92	5.403	22.5	1.3
MW-233	07/07/2020 09:55	0.76	-340.2	7.97	3.24	5.945	22.43	1.2
MW-233	07/07/2020 10:00	1.93	-345.4	7.95	3.47	6.35	22.61	1.6
MW-233	07/07/2020 10:05	1	-348.6	7.94	3.64	6.633	22.68	1.7
MW-233	07/07/2020 10:10	1.22	-350.4	7.92	3.76	6.844	22.84	1.3
MW-233	07/07/2020 10:15	1.19	-351.4	7.9	3.86	7.016	22.77	1.5
MW-233	07/07/2020 10:20	1.24	-352.2	7.87	4.01	7.252	22.94	1.1
MW-233	07/07/2020 10:25	1.17	-352.3	7.85	4.08	7.391	22.92	1.1
MW-233	09/25/2020 10:00	NM	NM	NM	NM	NM	NM	28.3
MW-233	09/28/2020 09:25	2.17	-247.9	7.57	2.46	4.597	21.52	3.6
MW-233	09/28/2020 09:30	0.18	-308.4	7.79	3.26	5.938	21.44	0.9
MW-233	09/28/2020 09:35	0.11	-339.8	7.74	3.58	6.537	21.45	0.2
MW-233	09/28/2020 09:40	0.05	-349.4	7.72	3.66	6.671	21.45	0.7
MW-233	09/28/2020 09:45	0.05	-352.9	7.71	3.78	6.877	21.48	0.2
MW-233	09/28/2020 09:50	0.05	-352.9	7.7	3.87	6.864	21.53	0.5
MW-233	09/28/2020 09:55	0.02	-353.3	7.69	3.93	6.989	21.57	0.3
MW-233	09/28/2020 10:00	0.03	-354.5	7.69	3.96	7.022	21.61	0.3
MW-233	09/28/2020 10:05	0.03	-356.4	7.68	3.96	7.185	21.68	0.8
MW-233	09/28/2020 10:10	0.02	-356.6	7.67	4.11	7.281	21.71	0.3
MW-233	09/28/2020 11:15	0.62	-322.7	7.74	7.66	13.27	22.55	4.7
MW-233	09/28/2020 11:40	1.28	-299.9	7.75	2.42	4.534	23.17	NM
MW-233	10/12/2020 09:15	8.73	-321.5	7.41	4.58	8.204	18.75	24.6
MW-233	10/12/2020 09:20	9.15	-318.7	7.41	4.41	7.923	18.66	37.3
MW-233	10/12/2020 09:25	6.39	-311.1	7.42	4.18	7.554	18.71	41.6
MW-233	10/12/2020 09:30	6.69	-309.4	7.43	4.09	7.358	18.72	37.2
MW-233	10/12/2020 09:35	7.08	-311.4	7.42	4.1	7.405	18.68	33.3
MW-233	10/12/2020 09:40	5.75	-307.2	7.42	4.06	7.373	18.73	34.2
MW-233	10/12/2020 09:45	4.95	-309.4	7.41	4.09	7.358	18.84	34.7
MW-233	10/12/2020 09:50	5.33	-308.3	7.41	4.09	7.382	18.8	28.2
MW-233	10/12/2020 09:55	4.82	-309.4	7.41	4.09	7.383	18.83	29.8
MW-233	10/12/2020 10:00	5.21	-306.8	7.41	4.09	7.393	18.81	NM
MW-233	10/12/2020 11:40	NM	NM	NM	NM	NM	NM	10.6
MW-233	12/03/2020 09:10	2.98	-142.6	8.2	2.4	4.468	11.4	5.5
MW-233	12/03/2020 09:15	0.84	-174.9	8.39	2.46	4.588	10.91	3.1
MW-233	12/03/2020 09:20	0.54	-180.4	8.44	2.51	4.662	10.78	2.7
MW-233	12/03/2020 09:25	0.38	-183.4	8.46	2.55	4.733	10.74	2.5
MW-233	12/03/2020 09:30	0.25	-187.8	8.47	2.6	4.824	10.84	2.9
MW-233	12/03/2020 09:35	0.19	-310.8	8.2	3.98	6.987	11.46	2.1
MW-233	12/03/2020 09:40	0.11	-335.3	8.16	4.1	7.361	11.43	0.2
MW-233	12/03/2020 09:45	0.05	-342.5	8.14	4.43	7.952	11.82	1.2
MW-233	12/03/2020 09:50	0.04	-344.9	8.08	4.64	8.291	11.91	0.3
MW-233	12/03/2020 09:55	0.07	-358.9	8.05	4.79	8.557	12.2	0.2
MW-233	12/03/2020 11:25	3.17	-335.9	8.19	8.62	14.75	14.46	6
MW-233	12/03/2020 11:40	2.66	-317.8	8.25	4.06	7.32	13.38	8.5
MW-233	01/05/2021 09:10	8.09	-325.5	7.83	5.02	8.96	8.7	4.8
MW-233	01/05/2021 09:15	6.68	-322.1	7.86	4.99	8.906	8.59	4.8
MW-233	01/05/2021 09:20	6.42	-320.3	7.89	4.96	8.869	8.49	4.7
MW-233	01/05/2021 09:25	5.63	-314.5	7.93	4.92	8.811	8.46	5.1
MW-233	01/05/2021 09:30	4.82	-315.9	7.91	5.13	9.157	8.52	4.9
MW-233	01/05/2021 09:35	4.78	-316.1	7.91	5.13	9.146	8.6	5.6
MW-233	01/05/2021 09:40	4.15	-313.9	7.93	5.31	9.471	8.68	7.2
MW-233	01/05/2021 09:45	3.63	-322.1	7.89	5.63	9.987	8.79	7.9
MW-233	01/05/2021 09:50	2.93	-314.9	7.97	5.39	9.623	8.81	15.5
MW-233	01/05/2021 09:55	2.36	-317	7.96	5.45	9.687	8.85	21.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-233	03/22/2021 09:25	3.61	-139.8	7.98	3.26	5.914	9.26	0
MW-233	03/22/2021 09:30	1.38	-196.5	8.02	3.31	6.043	9.41	0
MW-233	03/22/2021 09:35	0.56	-228.2	8.01	3.49	6.348	9.47	0
MW-233	03/22/2021 09:40	0.22	-323.1	7.91	4.43	7.92	9.64	0
MW-233	03/22/2021 09:45	0.12	-358.1	7.81	5.06	9.005	9.92	0.1
MW-233	03/22/2021 09:50	0.12	-377.4	7.75	5.29	9.398	10.1	0.1
MW-233	03/22/2021 09:55	0.12	-381	7.68	5.48	9.71	10.2	0.1
MW-233	03/22/2021 10:00	0.13	-379.8	7.63	5.61	9.93	10.29	0
MW-233	03/22/2021 10:05	0.12	-377	7.56	5.69	10.06	10.3	0.1
MW-233	03/22/2021 10:10	0.13	-376.7	7.51	5.82	10.26	10.41	0
MW-233	03/22/2021 11:45	1.4	-322.6	7.16	7.08	12.31	12.18	3.1
MW-233	03/22/2021 12:20	2.04	-318.2	7.4	4.75	8.486	12.76	16.6
MW-233	04/02/2021 10:40	5.12	-187.8	7.93	5.39	9.567	8.82	4.7
MW-233	04/02/2021 10:45	3	-223.1	7.9	5.47	9.701	9.25	3.5
MW-233	04/02/2021 10:50	1.83	-247.8	7.92	5.51	9.774	9.42	3.3
MW-233	04/02/2021 10:55	0.92	-268.7	7.84	5.54	9.823	8.9	3.1
MW-233	04/02/2021 11:00	0.72	-294.5	7.56	5.57	9.86	9.6	3.5
MW-233	04/02/2021 11:05	0.62	-313.5	7.75	5.73	10.14	9.71	2.4
MW-233	04/02/2021 11:10	0.69	-332.8	7.65	6.33	11.09	9.72	1.9
MW-233	04/02/2021 11:15	1	-343.1	7.61	7.49	12.99	9.92	2.4
MW-233	04/02/2021 11:20	1.23	-341.7	7.62	7.68	13.31	9.92	2.4
MW-233	04/02/2021 11:25	1.58	-344.7	7.62	7.82	13.51	9.86	2.8
MW-233	01/21/2022 13:15	1.16	-239.2	7.97	2.51	4.703	6.43	7.9
MW-233	01/21/2022 13:20	3.2	-334.8	8.02	2.97	5.484	7.28	3.9
MW-233	01/21/2022 13:25	3.21	-363.5	7.94	3.32	6.09	7.88	3.5
MW-233	01/21/2022 13:30	2.08	-374.9	7.91	3.52	6.434	8.29	3.2
MW-233	01/21/2022 13:35	0.46	-384.5	7.9	3.76	6.854	8.55	4.2
MW-233	01/21/2022 13:40	0.44	-389.7	7.87	3.77	6.859	8.58	4
MW-233	01/21/2022 13:45	0.45	-390.9	7.86	3.77	6.863	8.66	3.9
MW-234	08/01/2014 13:10	0.21	-128.6	6.63	1.11	2.174	25.92	28.00
MW-234	08/01/2014 13:35	0.15	-130.7	6.64	1.14	2.235	24.75	22.50
MW-234	08/01/2014 14:05	0.16	-143.2	6.62	1.12	2.111	26.91	32.50
MW-234R	07/26/2013 10:30	0.0000	-98	6.83	0.17	2.290	23.00	24.90
MW-234R	07/26/2013 11:02	0.0000	-93.8	6.85	1.19	2.254	23.60	3.10
MW-234R	07/26/2013 11:20	0.0000	-99.3	6.85	1.21	2.285	23.50	79.30
MW-234R	07/27/2013 11:20	0.0000	-99.3	6.85	1.21	2.285	23.50	79.30
MW-234R	07/03/2014 09:50	0.64	-136.6	6.99	1.18	2.304	23.52	8.20
MW-234R	07/03/2014 10:10	0.76	-111	6.97	1.21	2.358	21.83	15.60
MW-234R	07/03/2014 10:35	1.68	-114.8	7.04	1.10	2.168	21.84	10.10
MW-234R	08/01/2014 13:10	0.21	-128.6	6.63	1.11	2.174	25.92	28.00
MW-234R	08/01/2014 13:35	0.15	-130.7	6.64	1.14	2.235	24.75	22.50
MW-234R	08/01/2014 14:05	0.16	-143.2	6.62	1.12	2.111	26.91	32.50
MW-234R	08/28/2014 10:45	1.76	209	6.89	0.12	2.330	23.39	459.80
MW-234R	08/29/2014 09:19	0.27	172	6.86	0.12	2.329	24.80	61.90
MW-234R	01/16/2015 12:50	0.78	-100.1	7.22	1.49	2.859	5.59	21.00
MW-234R	01/16/2015 13:20	2.02	-51.8	7.18	0.0000	3.789	7.06	2.20
MW-234R	01/16/2015 13:30	3.70	-26.8	7.24	0.0000	2.154	9.78	1.90
MW-234R	09/18/2015 11:58	3.46	-100	7.15	0.29	5.259	25.84	292.4
MW-234R	11/19/2015 10:17	3.16	-87	6.99	0.0944	1846.0052	15.78	214.3
MW-234R	11/19/2015 10:19	1.46	-91	6.96	0.0911	1784.4603	15.62	382.1
MW-234R	11/19/2015 10:20	0.82	-94	6.94	0.0918	1797.3897	15.49	341.1
MW-234R	11/19/2015 10:22	0.62	-97	6.93	0.0914	1790.5638	15.42	281.5
MW-234R	11/19/2015 10:24	0.59	-99	6.92	0.0906	1775.5538	15.38	231.1
MW-234R	11/19/2015 10:26	0.64	-101	6.91	0.0912	1785.9576	15.45	232.6
MW-234R	11/19/2015 10:28	1.52	-102	6.91	0.0897	1757.4235	15.59	213.2
MW-234R	11/19/2015 10:30	2.61	-104	6.92	0.0889	1742.1842	15.7	240.8
MW-234R	11/19/2015 10:32	3.91	-106	6.93	0.0878	1721.1232	15.78	260.4
MW-234R	11/19/2015 10:33	4.58	-107	6.94	0.0879	1723.1302	15.82	261.4
MW-234R	11/19/2015 10:35	5.13	-108	6.95	0.0884	1732.3276	15.88	185.3
MW-234R	11/19/2015 10:37	8.74	-110	6.97	0.0871	1708.6292	15.66	241.4
MW-234R	11/19/2015 10:39	8.58	-108	6.95	0.0877	1720.7468	15.48	199.5
MW-234R	11/19/2015 10:41	8.08	-108	6.93	0.0878	1723.1356	15.53	208.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-234R	11/19/2015 10:43	7.62	-108	6.93	0.0881	1728.5314	15.54	157.2
MW-234R	11/19/2015 10:45	7.2	-109	6.93	0.0883	1731.2557	15.51	155.3
MW-234R	11/19/2015 10:47	6.8	-110	6.93	0.0888	1741.9950	15.5	125.3
MW-234R	11/19/2015 10:48	6.46	-111	6.94	0.0890	1745.9255	15.45	97.2
MW-234R	11/19/2015 10:50	6.14	-111	6.94	0.0896	1755.6198	15.42	94.4
MW-234R	11/19/2015 10:52	5.82	-112	6.95	0.0894	1752.6333	15.42	80.2
MW-234R	11/19/2015 10:54	5.54	-113	6.95	0.0890	1744.5430	15.42	64.1
MW-234R	11/19/2015 10:56	5.24	-113	6.95	0.0894	1751.8143	15.44	61
MW-234R	11/19/2015 10:58	4.99	-114	6.96	0.0891	1747.5890	15.45	63.7
MW-234R	11/19/2015 11:00	4.75	-114	6.96	0.0892	1749.4430	15.46	41.8
MW-234R	11/19/2015 11:01	4.53	-115	6.96	0.0877	1720.8658	15.46	36.1
MW-234R	11/19/2015 11:03	4.33	-115	6.96	0.0879	1724.9603	15.43	59.3
MW-234R	11/19/2015 11:05	4.14	-115	6.96	0.0881	1728.2033	15.41	28.5
MW-234R	11/19/2015 11:25	4.32	-116	7.16	0.11	2.077	15.34	314.30
MW-234R	12/15/2015 11:35	1.79	-20	7.10	1.10	2.150	15.86	6.40
MW-234R	12/15/2015 12:05	1.85	-74	6.98	1.10	2.140	16.20	0.0000
MW-234R	01/13/2016 10:29	10.37	75	7.69	0.0419	874.0063	3.29	452.6
MW-234R	01/13/2016 10:31	2.55	68	7.53	0.1589	3104.3122	5.12	444.1
MW-234R	01/13/2016 10:33	1.27	64	7.44	0.1614	3145.7042	5.54	403
MW-234R	01/13/2016 10:35	0.9	61	7.39	0.1601	3116.5190	6.03	347
MW-234R	01/13/2016 10:37	0.8	59	7.34	0.1636	3181.3290	6.02	329.6
MW-234R	01/13/2016 10:40	0.74	57	7.31	0.1638	3182.0056	6.16	279.9
MW-234R	01/13/2016 10:42	0.74	53	7.28	0.1638	3179.9943	6.36	284
MW-234R	01/13/2016 10:44	0.76	50	7.27	0.1651	3206.5198	6.23	197.4
MW-234R	01/13/2016 10:46	0.74	47	7.25	0.1662	3225.8486	6.28	137.7
MW-234R	01/13/2016 10:48	0.67	34	7.24	0.1659	3218.8392	6.37	81.9
MW-234R	01/13/2016 10:50	0.65	32	7.23	0.1694	3286.2010	6.08	59.1
MW-234R	01/13/2016 10:53	0.61	30	7.22	0.1674	3246.8597	6.38	39
MW-234R	01/13/2016 10:55	0.6	29	7.21	0.1670	3237.4726	6.51	32.4
MW-234R	01/13/2016 10:57	0.57	29	7.21	0.1655	3207.8580	6.68	25.2
MW-234R	01/13/2016 10:59	0.57	28	7.2	0.1670	3235.5157	6.63	22
MW-234R	01/13/2016 11:01	0.57	28	7.2	0.1671	3238.4028	6.59	22.6
MW-234R	01/13/2016 11:03	0.56	29	7.19	0.1662	3220.5467	6.78	19.1
MW-234R	01/13/2016 11:06	0.56	30	7.19	0.1674	3243.0849	6.69	21.6
MW-234R	01/13/2016 11:08	0.55	30	7.19	0.1674	3242.5386	6.76	22.2
MW-234R	01/13/2016 11:10	0.56	31	7.18	0.1681	3255.0481	6.81	21.1
MW-234R	01/13/2016 11:33	5.05	57	7.58	0.16	3.147	8.97	387.8
MW-234R	04/14/2016 08:57	2.75	-65	7.06	0.3078	5683.5396	11.7	180.2
MW-234R	04/14/2016 09:00	2.74	-75	7.09	0.3339	6141.9060	11.16	152.9
MW-234R	04/14/2016 09:02	3.21	-80	7.12	0.3158	5827.9871	11.18	113.2
MW-234R	04/14/2016 09:04	3.74	-83	7.15	0.3115	5752.4514	11.28	143.2
MW-234R	04/14/2016 09:06	4.49	-84	7.19	0.3097	5723.6263	11.16	119.1
MW-234R	04/14/2016 09:08	4.73	-85	7.21	0.3103	5735.3573	11.05	107.7
MW-234R	04/14/2016 09:10	4.82	-86	7.23	0.3039	5620.8946	11.23	103.2
MW-234R	04/14/2016 09:12	4.92	-88	7.24	0.3062	5661.8368	11.13	82.8
MW-234R	04/14/2016 09:15	4.94	-89	7.25	0.3063	5663.8279	11.11	76.8
MW-234R	04/14/2016 09:17	4.72	-90	7.25	0.3050	5640.7149	11.22	61.2
MW-234R	04/14/2016 09:19	4.65	-91	7.25	0.3011	5570.2346	11.45	58.5
MW-234R	04/14/2016 09:21	4.56	-92	7.25	0.3026	5597.3714	11.38	48.7
MW-234R	04/14/2016 09:23	4.61	-94	7.26	0.3027	5596.9387	11.48	50.9
MW-234R	04/14/2016 09:25	4.57	-95	7.26	0.3031	5605.2717	11.46	47.9
MW-234R	04/14/2016 09:46	9.42	-89	6.99	0.42	7.634	11.00	106.10
MW-234R	07/25/2016 12:25	1.12	-78	6.91	NM	4573.15	31.54	312.5
MW-234R	07/25/2016 12:26	0.87	-105	6.91	NM	4769.29	30.85	222.6
MW-234R	07/25/2016 12:28	0.81	-121	6.92	NM	4943.05	30.66	131.9
MW-234R	07/25/2016 12:29	0.77	-129	6.92	NM	5040.42	30.46	90.5
MW-234R	07/25/2016 12:31	0.76	-135	6.92	NM	5082.43	30.34	74.4
MW-234R	07/25/2016 12:32	0.76	-138	6.93	NM	5104.69	30.22	63.4
MW-234R	07/25/2016 12:34	0.76	-142	6.93	NM	5173.55	29.99	62
MW-234R	07/25/2016 12:35	0.75	-144	6.93	NM	5170.21	30.17	58
MW-234R	07/25/2016 12:37	0.75	-147	6.93	NM	5147.59	30.27	51.3
MW-234R	07/25/2016 12:38	0.75	-149	6.93	NM	5169.65	30.18	48.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-234R	07/25/2016 12:39	0.74	-151	6.93	NM	5185.23	30.38	52.7
MW-234R	07/25/2016 13:14	0.76	-135	6.99	0.30	5.521	27.43	148.20
MW-234R	12/07/2016 10:35	5.54	-122	6.95	0.0934	1843.9736	9.84	241.1
MW-234R	12/07/2016 10:38	2.23	-127	6.97	0.0934	1843.1913	10.21	128.5
MW-234R	12/07/2016 10:40	1.68	-130	6.97	0.0934	1843.4324	10.1	83.7
MW-234R	12/07/2016 10:42	1.41	-132	6.97	0.0938	1852.3703	10.01	92
MW-234R	12/07/2016 10:44	1.55	-133	6.95	0.0959	1894.2002	9.32	95.8
MW-234R	12/07/2016 10:46	1.52	-136	6.98	0.0953	1885.7505	8.71	86.8
MW-234R	12/07/2016 10:48	1.38	-139	6.99	0.0938	1856.9491	8.86	107.1
MW-234R	12/07/2016 10:51	1.15	-140	7	0.0935	1847.1909	9.5	182
MW-234R	12/07/2016 10:53	0.95	-141	7.01	0.0944	1862.1140	9.95	97
MW-234R	12/07/2016 10:55	0.8	-142	7.01	0.0947	1867.6700	10.13	68.7
MW-234R	12/07/2016 10:57	0.69	-142	7.02	0.0948	1868.9208	10.28	70.9
MW-234R	12/07/2016 10:59	0.62	-143	7.02	0.0949	1871.0939	10.25	53.5
MW-234R	12/07/2016 11:01	0.57	-144	7.02	0.0945	1863.4976	10.21	52.1
MW-234R	12/07/2016 11:04	0.52	-145	7.02	0.0942	1858.7310	10.25	67.8
MW-234R	12/07/2016 11:06	0.48	-145	7.02	0.0944	1860.7227	10.36	54
MW-234R	12/07/2016 11:08	0.45	-146	7.02	0.0945	1863.3332	10.41	39.4
MW-234R	12/07/2016 11:10	0.43	-147	7.03	0.0948	1868.8484	10.47	57.6
MW-234R	12/07/2016 11:12	0.42	-147	7.03	0.0949	1871.0907	10.47	39.3
MW-234R	12/07/2016 11:14	0.42	-148	7.03	0.0949	1870.1667	10.3	41.6
MW-234R	12/07/2016 11:17	0.41	-148	7.03	0.0946	1865.4425	10.36	29.9
MW-234R	12/07/2016 11:19	0.39	-149	7.03	0.0948	1868.2029	10.45	165.9
MW-234R	12/07/2016 11:21	0.37	-149	7.03	0.0949	1869.6124	10.58	35
MW-234R	12/07/2016 11:23	0.36	-149	7.03	0.0952	1874.1866	10.7	25.9
MW-234R	12/07/2016 11:25	0.35	-150	7.04	0.0956	1881.3579	10.74	22.5
MW-234R	01/23/2017 08:43	9.83	-166	6.9	0.1093	2147.2491	9.02	308.2
MW-234R	01/23/2017 08:45	4.95	-165	6.96	0.1069	2108.0222	8.01	285.7
MW-234R	01/23/2017 08:47	2.76	-159	6.96	0.1067	2108.2528	7.54	211.9
MW-234R	01/23/2017 08:49	1.7	-157	6.93	0.1067	2109.3190	7.26	263.4
MW-234R	01/23/2017 08:51	1.17	-154	6.91	0.1067	2109.9695	7.06	228.6
MW-234R	01/23/2017 08:53	0.84	-152	6.89	0.1067	2111.4902	6.97	81.1
MW-234R	01/23/2017 08:56	0.66	-150	6.88	0.1067	2111.4543	6.92	65.6
MW-234R	01/23/2017 08:58	0.59	-149	6.9	0.1067	2113.2761	6.83	125.6
MW-234R	01/23/2017 09:00	0.46	-154	6.91	0.1067	2113.5624	6.73	73.8
MW-234R	01/23/2017 09:02	0.38	-150	6.91	0.1068	2115.1383	6.74	67.5
MW-234R	01/23/2017 09:04	0.33	-148	6.92	0.1068	2115.3627	6.7	53.3
MW-234R	01/23/2017 09:06	0.27	-146	6.92	0.1067	2113.9023	6.7	50.6
MW-234R	01/23/2017 09:09	0.32	-144	6.94	0.1068	2114.5479	6.7	45.9
MW-234R	01/23/2017 09:11	0.33	-143	6.96	0.1067	2112.3129	6.74	102.6
MW-234R	01/23/2017 09:13	0.31	-143	6.97	0.1067	2114.2405	6.7	70.9
MW-234R	01/23/2017 09:15	0.56	-137	6.87	0.1066	2112.1318	6.5	134.2
MW-234R	01/23/2017 09:17	1.4	-130	6.82	0.1065	2112.7313	6.28	200.6
MW-234R	01/23/2017 09:19	2.11	-127	6.81	0.1067	2116.7183	6.23	141.1
MW-234R	01/23/2017 09:21	2.37	-124	6.8	0.1067	2117.6088	6.16	35.5
MW-234R	01/23/2017 09:24	2.9	-121	6.8	0.1066	2116.5553	6.1	203.7
MW-234R	01/23/2017 09:26	3.25	-120	6.79	0.1066	2117.3009	6.04	51
MW-234R	01/23/2017 09:28	3.49	-120	6.8	0.1070	2123.0912	6.07	19.6
MW-234R	01/23/2017 09:30	3.55	-120	6.79	0.1070	2123.5160	6.05	16
MW-234R	01/23/2017 09:32	4.05	-119	6.79	0.1070	2123.1382	6.07	59
MW-234R	03/22/2017 08:30	5.87	-87.00	5.76	0.60	1.240	9.3	21.00
MW-234R	03/22/2017 09:50	5.35	-84.00	5.47	0.60	1.310	6.66	198.00
MW-234R	03/22/2017 10:05	7.56	-108.00	6.39	0.60	1.300	6.99	409.00
MW-234R	04/28/2017 08:29	3.06	175	7	0.1178	0.0227	17.46	123
MW-234R	04/28/2017 08:31	1.11	154	7.02	0.1262	0.0243	15.36	145.4
MW-234R	04/28/2017 08:33	0.34	113	7.05	0.1320	0.0254	15.14	133.5
MW-234R	04/28/2017 08:35	0.09	61	7.07	0.1348	0.0259	15.08	93
MW-234R	04/28/2017 08:37	0.03	15	7.09	0.1372	0.0264	15.02	80.7
MW-234R	04/28/2017 08:39	0.01	-16	7.11	0.1400	0.0269	14.87	71.2
MW-234R	04/28/2017 08:41	0.02	-34	7.12	0.1423	0.0273	14.83	48.3
MW-234R	04/28/2017 08:43	0.01	-46	7.12	0.1458	0.0279	14.78	32.6
MW-234R	04/28/2017 08:45	-0.04	-54	7.12	0.1483	0.0284	14.72	24.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-234R	04/28/2017 08:47	-0.05	-61	7.12	0.1511	0.0289	14.67	21.9
MW-234R	04/28/2017 08:49	-0.04	-67	7.12	0.1536	0.0293	14.73	19.8
MW-234R	04/28/2017 08:51	-0.04	-72	7.12	0.1559	0.0298	14.59	17.1
MW-234R	04/28/2017 08:53	-0.06	-76	7.12	0.1572	0.0300	14.57	15.4
MW-234R	04/28/2017 08:55	-0.03	-80	7.13	0.1590	0.0303	14.5	17.6
MW-234R	04/28/2017 08:57	-0.03	-83	7.13	0.1623	0.0309	14.44	15.5
MW-234R	04/28/2017 08:59	0.21	-85	7.13	0.1640	0.0312	14.49	103.3
MW-234R	04/28/2017 09:01	2.1	-87	7.11	0.1672	0.0318	14.81	27.1
MW-234R	04/28/2017 09:03	3.34	-87	7.11	0.1688	0.0321	14.91	28.5
MW-234R	04/28/2017 09:04	3.73	-87	7.1	0.1705	0.0324	15.18	22.3
MW-234R	04/28/2017 09:06	4.09	-87	7.09	0.1705	0.0324	15.31	17.7
MW-234R	04/28/2017 09:08	4.42	-86	7.09	0.1717	0.0326	15.34	19.2
MW-234R	04/28/2017 09:10	4.48	-86	7.08	0.1711	0.0325	15.42	17.4
MW-234R	04/28/2017 09:11	4.48	-86.00	7.08	0.17	3.275	15.05	17.44
MW-234RR	01/26/2018 09:14	8.48	78	8.42	0.1887	0.0364	6.17	228.3
MW-234RR	01/26/2018 09:16	1.65	75	8.42	0.2717	0.0514	6.01	311.3
MW-234RR	01/26/2018 09:18	0.7	76	8.28	1.1386	0.1960	5.84	311.4
MW-234RR	01/26/2018 09:21	0.49	76	8.17	1.2002	0.2058	5.8	259.7
MW-234RR	01/26/2018 09:23	0.45	76	8.09	1.2304	0.2107	5.67	273.4
MW-234RR	01/26/2018 09:25	0.43	77	8.03	1.2850	0.2194	5.56	236.9
MW-234RR	01/26/2018 09:27	0.46	77	7.98	1.2658	0.2165	5.51	187.2
MW-234RR	01/26/2018 09:29	0.58	77	7.94	1.3494	0.2298	5.38	88.7
MW-234RR	01/26/2018 09:31	0.69	77	7.9	1.3546	0.2310	5.03	54.2
MW-234RR	01/26/2018 09:34	0.72	77	7.86	1.3937	0.2372	4.97	46.9
MW-234RR	01/26/2018 09:36	0.69	78	7.83	1.4038	0.2388	4.96	44
MW-234RR	01/26/2018 09:38	0.67	78	7.81	1.4411	0.2446	4.95	44
MW-234RR	01/26/2018 09:39	0.67	78.00	7.81	1.44	24.570	4.81	43.97
MW-234RR	04/16/2018 12:34	8.99	79	7.74	0.1959	0.0037	14.02	140.8
MW-234RR	04/16/2018 12:36	1.37	-5	7.12	0.1907	0.0036	14.25	160
MW-234RR	04/16/2018 12:39	1.25	-9	6.97	0.1954	0.0037	13.96	126.7
MW-234RR	04/16/2018 12:41	2.05	0	6.92	0.1981	0.0037	14.02	138.4
MW-234RR	04/16/2018 12:43	2.61	3	6.88	0.1940	0.0037	14.03	137
MW-234RR	04/16/2018 12:46	2.85	2	6.87	0.1997	0.0038	14.03	110.2
MW-234RR	04/16/2018 12:48	3.19	3	6.85	0.1931	0.0036	14.12	128.9
MW-234RR	04/16/2018 12:51	3.58	4	6.84	0.1961	0.0037	14.14	130.1
MW-234RR	04/16/2018 12:53	3.87	3	6.86	0.1999	0.0038	13.69	129.6
MW-234RR	04/16/2018 12:55	4.3	5	6.84	0.1947	0.0037	13.84	116.2
MW-234RR	04/16/2018 12:58	4.12	2	6.86	0.1989	0.0038	13.55	108.6
MW-234RR	04/16/2018 13:00	4.10	2.00	6.85	0.20	3.701	13.77	115.50
MW-234RR	07/19/2018 08:47	1.33	-41	7.02	0.233	4.3240	26.10	26
MW-234RR	07/19/2018 08:49	0.55	-77	6.88	0.233	4.3200	25.57	19.6
MW-234RR	07/19/2018 08:52	0.31	-94	6.86	0.232	4.3080	25.85	34.4
MW-234RR	07/19/2018 08:54	0.22	-104	6.86	0.231	4.2820	26.45	52.6
MW-234RR	07/19/2018 08:59	0.15	-116	6.87	0.231	4.2850	26.75	40.6
MW-234RR	07/19/2018 09:01	0.12	-121	6.87	0.231	4.2900	26.77	33.2
MW-234RR	07/19/2018 09:04	0.11	-124	6.87	0.232	4.3090	26.83	21.3
MW-234RR	07/19/2018 09:06	0.18	-127	6.87	0.233	4.3180	26.75	17.8
MW-234RR	07/19/2018 09:09	0.18	-130	6.87	0.232	4.3130	26.64	31.5
MW-234RR	07/19/2018 09:11	0.19	-13	6.87	0.233	4.3210	26.61	16.4
MW-234RR	07/19/2018 09:13	0.13	-134	6.87	0.234	4.3330	26.53	13.5
MW-234RR	07/19/2018 09:16	0.08	-136	6.87	0.234	4.3470	26.44	12.9
MW-234RR	07/19/2018 09:18	0.11	-138	6.87	0.235	4.3650	26.25	8.5
MW-234RR	07/19/2018 09:21	0.10	-140	6.87	0.236	4.3760	26.16	8.4
MW-234RR	07/19/2018 09:23	0.10	-141	6.87	0.237	4.3850	25.95	8.5
MW-234RR	07/19/2018 09:25	0.10	-143	6.87	0.237	4.3910	25.73	7.1
MW-234RR	07/19/2018 09:28	0.09	-145	6.89	0.238	4.4010	25.71	7.2
MW-234RR	07/19/2018 09:30	0.12	-147	6.90	0.238	4.4120	25.61	5.7
MW-234RR	07/19/2018 09:33	0.12	-148	6.89	0.238	4.4120	25.53	13
MW-234RR	07/19/2018 09:35	0.11	-149.00	6.89	0.24	4.423	25.31	6.00
MW-234RR	07/19/2018 09:57	0.21	-112	6.89	0.230	4.2750	26.67	50.8
MW-234RR	10/23/2018 10:35	5.69	-72.10	7.07	0.01	0.018	19.39	32.50
MW-234RR	04/04/2019 13:30	2.28	-146.6	7.18	NM	1.763	10.06	16.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-234RR	07/03/2019 09:00	0.86	-151	7.03	NM	2.101	22.94	15.8
MW-234RR	07/03/2019 10:05	3.34	-150	7.01	NM	2.053	22.09	712.4
MW-234RR	07/03/2019 10:10	1.54	-156.9	7.05	NM	2.027	22.26	132.8
MW-234RR	07/03/2019 10:15	1.22	-149	7.04	NM	2.035	23.51	39.5
MW-234RR	07/03/2019 10:20	1.18	-147.9	7.02	NM	2.066	23.53	18.9
MW-234RR	07/03/2019 10:25	0.84	-150	7	NM	2.099	22.94	15.2
MW-234RR	07/03/2019 10:30	0.86	-148.5	7.01	NM	2.1	22.93	15.4
MW-234RR	07/03/2019 10:35	0.86	-151	7.03	NM	2.101	22.94	15.8
MW-234RR	10/01/2019 14:10	3.45	-124.1	7	NM	1.671	26.74	31
MW-234RR	10/01/2019 14:15	2.05	-131.4	6.98	NM	1.511	25.57	23.1
MW-234RR	10/01/2019 14:20	1.86	-133.3	6.98	NM	1.499	25.41	19.8
MW-234RR	10/01/2019 14:25	1.64	-132.1	6.98	NM	1.487	25.12	26.4
MW-234RR	10/01/2019 14:30	0.63	-130.3	6.99	NM	1.488	25.12	32.6
MW-234RR	10/01/2019 14:35	0.77	-126.9	6.99	NM	1.484	25.21	36.9
MW-234RR	10/01/2019 14:40	1.52	-124.8	6.99	NM	1.485	25.24	34.8
MW-234RR	10/01/2019 14:45	1.24	-125.1	6.99	NM	1.482	25.14	30.6
MW-234RR	10/01/2019 14:50	1.38	-126.8	6.99	NM	1.483	25.02	26.7
MW-234RR	10/01/2019 14:55	2.13	-127.3	6.99	NM	1.486	25.26	24.1
MW-234RR	01/07/2020 11:30	6.67	-103	6.87	NM	0.633	8.54	228.9
MW-234RR	01/07/2020 11:35	0.82	-113.4	7.02	NM	0.628	8.65	210.4
MW-234RR	01/07/2020 11:40	0.87	-118.2	7.07	NM	0.627	8.69	156.8
MW-234RR	01/07/2020 11:45	0.87	-123.2	7.09	NM	0.628	8.65	110.8
MW-234RR	01/07/2020 11:50	0.78	-127.4	7.1	NM	0.627	8.57	93.5
MW-234RR	01/07/2020 11:55	0.87	-129.7	7.11	NM	0.627	8.51	86
MW-234RR	01/07/2020 12:00	0.79	-131.7	7.11	NM	0.626	8.54	66.8
MW-234RR	01/07/2020 12:05	0.72	-133.4	7.12	NM	0.627	8.75	61
MW-234RR	01/07/2020 12:10	0.75	-136.9	7.13	NM	0.629	8.5	39.1
MW-234RR	01/07/2020 12:15	0.71	-140.9	7.13	NM	0.631	8.51	31.2
MW-234RR	04/02/2020 09:30	0.55	-97.3	7.16	NM	0.841	10.05	12.1
MW-234RR	07/07/2020 12:40	3.04	-153.3	7.56	1.03	2.049	27.18	34.8
MW-234RR	07/07/2020 12:45	2.53	-169.9	7.08	0.99	1.959	27.02	35.9
MW-234RR	07/07/2020 12:50	2.37	-180.1	7	0.97	1.918	27.49	13.3
MW-234RR	07/07/2020 12:55	2.26	-189.9	6.99	0.96	1.894	27.57	16.6
MW-234RR	07/07/2020 13:00	2.09	-195.9	6.99	0.95	1.874	27.54	43
MW-234RR	07/07/2020 13:05	1.94	-198.7	6.99	0.94	1.866	27.41	20.7
MW-234RR	07/07/2020 13:10	2.21	-200.2	6.99	0.95	1.873	26.97	32.5
MW-234RR	07/07/2020 13:15	2.22	-199.6	6.97	0.95	1.879	27	24.4
MW-234RR	07/07/2020 13:20	2.02	-197.5	6.97	0.95	1.884	27.28	5.9
MW-234RR	07/07/2020 13:25	2.12	-197.3	6.97	0.95	1.883	27.46	2.6
MW-234RR	09/25/2020 08:25	2.07	-126.1	7.05	0.98	1.92	20.37	0
MW-234RR	09/25/2020 08:30	1.12	-134.5	6.86	0.95	1.862	20.78	0
MW-234RR	09/25/2020 08:35	0.72	-143.2	6.87	0.94	1.857	21.01	0
MW-234RR	09/25/2020 08:40	0.75	-153.9	6.88	0.94	1.856	21.16	0
MW-234RR	09/25/2020 08:45	0.66	-150.3	6.88	0.94	1.855	21.33	0
MW-234RR	09/25/2020 08:50	0.79	-149.6	6.88	0.94	1.857	21.39	0
MW-234RR	09/25/2020 08:55	0.87	-147.6	6.88	0.95	1.862	21.39	0
MW-234RR	09/25/2020 09:00	1.05	-162	6.87	0.95	1.869	21.4	0
MW-234RR	09/25/2020 09:05	1.01	-165.3	6.87	0.95	1.874	21.37	0
MW-234RR	09/25/2020 09:10	1.2	-165.8	6.87	0.96	1.881	21.44	0
MW-234RR	09/25/2020 09:30	4.39	-125.3	7.01	0.99	1.945	21.74	4.1
MW-234RR	09/25/2020 09:40	1.88	-132.9	6.93	0.99	1.943	21.48	NM
MW-234RR	10/08/2020 14:50	NM	NM	NM	NM	NM	NM	9.4
MW-234RR	10/13/2020 09:40	NM	NM	NM	NM	NM	NM	0.4
MW-234RR	10/13/2020 14:05	2.4	-156.2	7.02	0.59	1.188	18.77	76.2
MW-234RR	10/13/2020 14:10	1.17	-142.2	7.07	0.59	1.175	18.7	48.9
MW-234RR	10/13/2020 14:15	1.5	-137.7	7.08	0.59	1.172	18.66	36.6
MW-234RR	10/13/2020 14:20	1.39	-133.5	7.09	0.58	1.171	18.72	29.7
MW-234RR	10/13/2020 14:25	1.51	-129.5	7.09	0.58	1.171	18.78	21.9
MW-234RR	10/13/2020 14:30	1.18	-124.8	7.1	0.59	1.172	18.81	17.9
MW-234RR	10/13/2020 14:35	1.26	-126.8	7.1	0.59	1.172	18.89	16.7
MW-234RR	10/13/2020 14:40	1.55	-128.9	7.09	0.59	1.174	18.97	11.3
MW-234RR	10/13/2020 14:45	1.37	-128.5	7.09	0.59	1.175	18.99	10

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-234RR	10/13/2020 14:50	1.22	-128.9	7.09	0.59	1.175	19.06	NM
MW-234RR	12/03/2020 12:35	3.45	-159.8	7.8	1.13	2.196	11.97	62.4
MW-234RR	12/03/2020 12:40	1.89	-157.5	7.73	1.12	2.178	11.9	47.5
MW-234RR	12/03/2020 12:45	1.21	-157.2	7.55	1.11	2.15	11.71	38.1
MW-234RR	12/03/2020 12:50	0.82	-156.3	7.36	1.1	2.131	11.32	28.3
MW-234RR	12/03/2020 12:55	0.69	-156.2	7.31	1.09	2.12	11.12	23.3
MW-234RR	12/03/2020 13:00	0.6	-155.7	7.27	1.09	2.114	10.99	15.8
MW-234RR	12/03/2020 13:05	0.53	-153.9	7.25	1.09	2.11	11.24	15.9
MW-234RR	12/03/2020 13:10	0.49	-156.1	7.23	1.09	2.11	11.43	10.5
MW-234RR	12/03/2020 13:15	0.48	-157.2	7.22	1.08	2.109	11.35	10.2
MW-234RR	12/03/2020 13:20	0.46	-157.3	7.21	1.08	2.106	11.19	8
MW-234RR	12/03/2020 14:10	3.24	-148.3	7.35	1.12	2.181	12.66	5.3
MW-234RR	12/03/2020 14:30	4.11	-133.2	7.28	1.09	2.116	13.38	40.6
MW-234RR	01/06/2021 12:55	4.03	-113.4	7.3	1.06	2.062	8.5	762.9
MW-234RR	01/06/2021 13:00	1.29	-115.3	7.18	1.03	2.019	8.54	216.9
MW-234RR	01/06/2021 13:05	1.14	-121.1	7.17	1.03	2.013	8.87	120.2
MW-234RR	01/06/2021 13:10	0.91	-122.2	7.17	1.03	2.007	9.01	107.1
MW-234RR	01/06/2021 13:15	0.84	-124.5	7.16	1.03	2.012	8.81	96.4
MW-234RR	01/06/2021 13:20	0.86	-126.8	7.16	1.03	2.013	8.83	77.6
MW-234RR	01/06/2021 13:25	0.78	-130.1	7.17	1.03	2.012	9.01	68.8
MW-234RR	01/06/2021 13:30	0.75	-130	7.16	1.03	2.015	8.98	51.1
MW-234RR	01/06/2021 13:35	0.7	-131.2	7.18	1.03	2.012	9.08	41.1
MW-234RR	01/06/2021 13:40	0.62	-133.2	7.16	1.03	2.019	8.99	35.4
MW-234RR	03/24/2021 14:25	0.44	-122.9	7.7	0.87	1.705	9.72	68.5
MW-234RR	03/24/2021 14:30	0.09	-123.6	7.24	0.87	1.703	8.91	32.1
MW-234RR	03/24/2021 14:35	0.05	-124.4	7.24	0.87	1.708	8.95	20.3
MW-234RR	03/24/2021 14:40	0.05	-123.9	7.26	0.87	1.718	8.94	8
MW-234RR	03/24/2021 14:45	0.06	-121.5	7.27	0.88	1.732	8.86	2.7
MW-234RR	03/24/2021 14:50	0.06	-121.1	7.27	0.88	1.736	8.83	2.2
MW-234RR	03/24/2021 14:55	0.06	-120.3	7.28	0.89	1.743	8.9	0.7
MW-234RR	03/24/2021 15:00	0.07	-120.1	7.29	0.89	1.749	8.92	0.4
MW-234RR	03/24/2021 15:05	0.06	-119.9	7.29	0.89	1.749	8.91	1.3
MW-234RR	03/24/2021 15:10	0.06	-120.4	7.3	0.89	1.754	8.91	1.9
MW-234RR	03/25/2021 09:20	5.35	-96.3	7.37	0.98	1.914	9.67	4
MW-234RR	03/25/2021 09:30	3.25	-106.5	7.36	0.9	1.766	9.67	77.4
MW-234RR	04/02/2021 09:00	4.3	0.8	6.43	1.71	3.249	8.89	57.5
MW-234RR	04/02/2021 09:05	3.02	-16	6.54	1.72	3.272	8.94	57
MW-234RR	04/02/2021 09:10	1.77	-34	6.63	1.71	3.259	9.03	65
MW-234RR	04/02/2021 09:15	1.16	-49.1	6.71	1.68	3.206	8.73	75.3
MW-234RR	04/02/2021 09:20	0.98	-52.8	6.79	1.66	3.165	8.06	35.4
MW-234RR	04/02/2021 09:25	0.96	-54.7	6.77	1.66	3.162	8.09	29.9
MW-234RR	04/02/2021 09:30	0.78	-63.7	6.8	1.65	3.144	7.87	3.5
MW-234RR	04/02/2021 09:35	0.81	-63.9	6.78	1.64	3.139	7.91	3.6
MW-234RR	04/02/2021 09:40	0.67	-67.5	6.83	1.64	3.134	8.23	2.1
MW-234RR	04/02/2021 09:45	0.73	-68.5	6.83	1.64	3.133	8.22	1.9
MW-234RR	01/18/2022 08:45	2.99	-91.6	6.81	1.88	3.568	5.65	132.6
MW-234RR	01/18/2022 08:50	1.05	-102.7	7.05	1.89	3.603	5.37	117.7
MW-234RR	01/18/2022 08:55	1.12	-103.5	7.08	1.89	3.605	5.32	105.9
MW-234RR	01/18/2022 09:00	1.14	-104.2	7.1	1.89	3.594	5.42	87.2
MW-234RR	01/18/2022 09:05	1.03	-103.6	7.1	1.89	3.606	4.75	89.5
MW-234RR	01/18/2022 09:10	1.03	-99.1	7.1	1.89	3.603	4.86	69.4
MW-234RR	01/18/2022 09:15	1	-99.7	7.12	1.89	3.606	5.05	53.9
MW-234RR	01/18/2022 09:20	0.96	-99.7	7.11	1.9	3.615	4.96	38.9
MW-234RR	01/18/2022 09:25	0.96	-101.1	7.11	1.9	3.615	5.02	37.3
MW-234RR	01/18/2022 09:30	0.96	-100.6	7.11	1.9	3.628	4.97	36.5
MW-234RR	04/11/2022 09:20	0.89	-122.6	6.52	0.5	1.013	10.18	132.2
MW-234RR	04/11/2022 09:25	0.52	-125.6	6.57	0.5	1.013	10.15	97.5
MW-234RR	04/11/2022 09:30	0.44	-134.2	6.82	0.5	1.012	10.1	46.2
MW-234RR	04/11/2022 09:35	0.34	-141.3	6.88	0.51	1.02	10.16	10
MW-234RR	04/11/2022 09:40	0.34	-143.9	6.93	0.51	1.026	10.2	6.4
MW-234RR	04/11/2022 09:45	0.29	-146.7	6.97	0.51	1.031	10.19	5.1
MW-234RR	04/11/2022 09:50	0.29	-147	6.98	0.51	1.032	10.19	6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-234RR	04/11/2022 09:55	0.32	-149.7	7	0.52	1.043	10.33	11
MW-234RR	04/11/2022 10:00	0.4	-149.9	7	0.52	1.044	10.35	12.6
MW-234RR	04/11/2022 10:05	0.35	-150.2	7	0.52	1.044	10.34	10.2
MW-237	02/13/2012 09:08	-0.15	153	7.34	2.04	33.18443	8.84	48.4
MW-237	02/13/2012 09:11	-0.14	140	7.41	2.07	33.68554	8.3	3.2
MW-237	02/13/2012 09:15	-0.15	129	7.45	2.01	32.56912	9.52	5.1
MW-237	02/13/2012 09:19	-0.15	119	7.46	2	32.50694	9.59	16.2
MW-237	02/13/2012 09:22	-0.13	110	7.47	2.03	32.8709	9.18	12.8
MW-237	02/13/2012 09:26	-0.13	100	7.47	2	32.44736	9.65	13
MW-237	02/13/2012 09:30	-0.12	-78	7.34	2.02	32.69714	9.37	23.5
MW-237	02/13/2012 09:34	-0.12	-105	7.23	2.02	32.8045	9.25	18.7
MW-237	02/13/2012 09:37	-0.12	-111	7.17	2.02	32.74136	9.32	18.7
MW-237	02/13/2012 09:41	-0.12	-114	7.14	2	32.35159	9.76	21.5
MW-237	02/13/2012 09:45	-0.1	-115	7.1	2.01	32.63559	9.44	11.1
MW-237	02/13/2012 09:48	-0.12	-115	7.09	1.99	32.32269	9.79	10.7
MW-237	02/13/2012 09:52	-0.12	-114	7.08	2	32.38805	9.71	8.8
MW-237	02/13/2012 09:56	-0.12	-109	7.05	1.99	32.3258	9.78	10.6
MW-237	02/13/2012 09:57	-0.12	-109	7.05	1.99	32.328	9.78	10.63
MW-237	02/13/2012 11:22	-0.17	-72	6.95	1.79	28.941	14.09	54.50
MW-237	02/14/2012 09:44	1.18	-112	6.95	1.88	30.401	12.03	33.50
MW-237	03/04/2013 12:59	5.03	-96	7.58	4.66	69.29846	10.17	46.3
MW-237	03/04/2013 13:03	1.09	-188	7.65	4.59	68.32089	10.64	25.4
MW-237	03/04/2013 13:06	0.88	-204	7.67	4.63	68.83535	10.45	25.4
MW-237	03/04/2013 13:10	0.82	-210	7.67	4.64	69.07956	10.47	29.1
MW-237	03/04/2013 13:13	0.77	-216	7.68	4.68	69.67317	10.1	27.1
MW-237	03/04/2013 13:17	0.73	-218	7.68	4.66	69.28351	10.39	29.3
MW-237	03/04/2013 13:21	0.7	-219	7.69	4.66	69.28471	10.47	64.9
MW-237	03/04/2013 13:24	0.69	-221	7.69	4.66	69.30273	10.44	44.6
MW-237	03/04/2013 13:28	0.68	-223	7.69	4.66	69.3127	10.43	39.3
MW-237	03/04/2013 13:31	0.66	-222	7.69	4.66	69.28364	10.53	33
MW-237	03/04/2013 13:35	0.63	-224	7.41	4.7	69.76914	10.69	45.9
MW-237	03/04/2013 13:39	0.63	-222	7.3	4.72	69.99312	10.98	43.4
MW-237	03/04/2013 13:42	0.66	-223	7.28	4.76	70.49119	10.74	39.6
MW-237	03/04/2013 13:46	0.68	-226	7.23	4.76	70.53796	10.91	30.9
MW-237	03/04/2013 13:47	0.68	-226	7.23	4.76	70540.000	11.02	30.88
MW-237	03/04/2013 15:00	2.84	-228	6.93	4.80	70290.000	14.67	22.70
MW-237	03/05/2013 10:10	0.76	-286	7.00	4.98	73160.000	11.65	25.40
MW-237	06/02/2014 09:58	2.71	-212.00	7.07	NM	72.21	23.58	40.00
MW-237	06/02/2014 10:00	2.23	-222.00	7.18	NM	67.53	21.21	25.50
MW-237	06/02/2014 10:02	1.99	-230.00	7.20	NM	66.94	20.84	23.70
MW-237	06/02/2014 10:05	1.86	-237.00	7.21	NM	65.30	20.84	22.30
MW-237	06/02/2014 10:07	1.80	-247.00	7.21	NM	64.86	20.45	27.40
MW-237	06/02/2014 10:09	1.71	-251.00	7.22	NM	62.60	20.50	14.50
MW-237	06/02/2014 10:12	1.67	-255.00	7.21	NM	62.13	20.57	14.10
MW-237	06/02/2014 10:14	1.62	-265.00	7.22	NM	62.11	20.69	14.40
MW-237	06/02/2014 10:17	1.59	-265.00	7.22	NM	62.05	20.83	12.00
MW-237	06/02/2014 10:19	1.55	-270.00	7.22	NM	60.30	20.96	16.00
MW-237	06/02/2014 10:21	1.53	-275.00	7.22	NM	60.52	20.68	13.20
MW-237	06/02/2014 10:24	1.49	-277.00	7.22	NM	59.83	20.72	10.90
MW-237	06/02/2014 10:26	1.45	-284.00	7.22	NM	59.65	20.98	9.90
MW-237	06/02/2014 10:28	1.45	-292.00	7.22	NM	60.26	20.91	10.00
MW-237	06/02/2014 10:31	1.43	-297.00	7.22	NM	59.80	20.91	10.70
MW-237	06/02/2014 10:33	1.44	-284.00	7.22	NM	59.16	21.39	9.90
MW-237	06/02/2014 10:35	1.42	-290.00	7.22	NM	59.41	21.15	9.90
MW-237	06/02/2014 10:38	1.40	-301.00	7.22	NM	59.63	21.00	10.80
MW-237	06/02/2014 10:40	1.37	-306.00	7.22	NM	59.84	20.97	11.40
MW-237	06/02/2014 10:42	1.35	-310.00	7.22	NM	60.03	20.94	11.40
MW-237	06/02/2014 10:43	1.35	-310	7.22	4.47	65.070	20.94	11.36
MW-237	06/02/2014 11:31	1.81	-277	7.19	6.37	88.700	21.03	162.60
MW-237	06/03/2014 10:23	1.76	-320	7.21	1.93	30.800	20.06	156.70
MW-237	09/29/2015 14:25	3.61	-15	6.86	1.3224	0.0217	25.43	53.1
MW-237	09/29/2015 14:29	1.91	-68	6.88	1.3716	0.0224	23.65	12

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-237	09/29/2015 14:33	1.37	-99	6.87	1.3686	0.0224	23.75	7.9
MW-237	09/29/2015 14:37	1.19	-115	6.89	1.3734	0.0225	23.58	5.9
MW-237	09/29/2015 14:40	1.08	-125	6.89	1.3716	0.0224	23.64	5.5
MW-237	09/29/2015 14:44	0.98	-132	6.89	1.3650	0.0223	23.87	4.1
MW-237	09/29/2015 14:48	1.11	-135	6.94	1.4546	0.0237	20.87	9.2
MW-237	09/29/2015 14:52	0.96	-139	6.9	1.4563	0.0238	20.81	7
MW-237	09/29/2015 14:56	0.92	-143	6.91	1.4519	0.0237	20.94	6.2
MW-237	09/29/2015 15:00	0.9	-146	6.93	1.4461	0.0236	21.12	15.7
MW-237	09/29/2015 15:03	0.93	-149	6.93	1.4416	0.0235	21.26	6.3
MW-237	09/29/2015 15:07	0.95	-151	6.95	1.4481	0.0236	21.05	7.5
MW-237	09/29/2015 15:11	0.96	-154	6.96	1.4524	0.0237	20.91	8.2
MW-237	09/29/2015 15:15	1.01	-155	6.95	1.4591	0.0238	20.7	5.1
MW-237	09/30/2015 15:03	0.0000	-173	6.91	3.48	52.230	22.08	10.00
MW-237	02/15/2016 10:40	1.460	-132.000	6.960	5.533	82.475	5.390	11.900
MW-237	02/15/2016 10:44	1.160	-140.000	6.960	5.455	81.207	5.920	12.700
MW-237	02/15/2016 10:47	1.040	-146.000	6.990	5.269	78.611	6.310	19.300
MW-237	02/15/2016 10:51	0.970	-152.000	7.040	5.353	79.705	6.320	12.600
MW-237	02/15/2016 10:55	0.930	-157.000	7.150	5.318	79.169	6.520	11.700
MW-237	02/15/2016 10:58	0.890	-160.000	7.170	5.384	79.971	6.660	13.800
MW-237	02/15/2016 11:02	0.830	-161.000	7.180	5.322	79.034	6.980	11.800
MW-237	02/15/2016 11:06	0.820	-163.000	7.180	5.641	83.603	5.980	17.200
MW-237	02/15/2016 11:09	0.810	-164.000	7.160	5.920	87.379	5.610	14.600
MW-237	02/15/2016 11:13	0.790	-164.000	7.140	5.997	88.399	5.530	16.200
MW-237	02/15/2016 11:16	0.780	-165.000	7.130	6.070	89.316	5.570	14.900
MW-237	02/15/2016 11:20	0.770	-165.000	7.110	6.084	89.500	5.570	43.200
MW-237	02/15/2016 11:24	0.800	-166.000	7.110	6.192	91.047	5.230	25.200
MW-237	02/15/2016 11:27	0.790	-166.000	7.100	6.377	93.461	5.120	36.700
MW-237	02/15/2016 11:31	0.770	-166.000	7.080	6.370	93.297	5.250	5.800
MW-237	02/16/2016 11:05	-0.14	-270	7.01	4.90	71.910	12.40	5.80
MW-237	02/16/2016 12:17	1.87	-272	6.94	4.42	65.299	14.39	76.50
MW-237	03/23/2017 12:38	9.84	-91	7.14	3.7983	0.5802	9.33	53.6
MW-237	03/23/2017 12:42	4.81	-131	7.58	3.6947	0.5639	10.38	30.4
MW-237	03/23/2017 12:47	5.67	-133	7.65	3.8368	0.5864	8.91	24.5
MW-237	03/23/2017 12:51	3.99	-136	7.65	3.7474	0.5723	9.79	32.1
MW-237	03/23/2017 12:55	4.37	-138	7.65	3.7239	0.5686	10.01	32
MW-237	03/23/2017 12:59	4.04	-138	7.66	3.7056	0.5657	10.19	33.5
MW-237	03/24/2017 10:39	3.56	-169	7.06	2.99	46.230	12.41	19.70
MW-237	03/24/2017 13:49	7.55	-194	6.68	3.37	51.280	14.40	221.80
MW-237	03/30/2018 09:04	0.46	-149.00	7.54	1.71	27.980	10.81	16.80
MW-237	03/30/2018 10:09	2.28	-27.00	7.48	3.82	58.030	11.33	34.34
MW-237	03/30/2018 11:18	5.73	64.00	6.52	3.71	56.180	12.6	79.30
MW-237	03/22/2019 12:25	0.29	-122.9	7.36	NM	49.92	10.89	31.3
MW-237	03/22/2019 13:20	2.9	-117.4	7.17	32.4	49.59	12.57	64.4
MW-237	06/24/2020 09:00	2.72	-108.1	7.33	32.29	49.38	20.98	20.2
MW-237	06/24/2020 09:05	0.96	-134.5	7.11	32.53	49.6	17.93	19.8
MW-237	06/24/2020 09:10	0.92	-139.6	7.15	32.34	49.38	17.3	18.6
MW-237	06/24/2020 09:15	1.09	-140.7	7.16	32.24	49.24	17.83	15.8
MW-237	06/24/2020 09:20	1.11	-141.5	7.18	32.15	49.12	17.77	13.5
MW-237	06/24/2020 09:25	1.24	-141.9	7.2	32.21	49.12	17.99	12.9
MW-237	06/24/2020 09:30	1.28	-143.2	7.22	32.18	49.16	17.82	11
MW-237	06/24/2020 09:35	1.35	-146.2	7.21	32.2	49.06	17.74	11
MW-237	06/24/2020 09:40	1.4	-150.7	7.2	32.05	49	17.57	9.2
MW-237	06/24/2020 09:45	1.43	-152.7	7.21	31.65	48.42	17.54	9.8
MW-237	06/24/2020 10:40	0.88	-183.2	7.33	23.22	42.11	17.89	3.9
MW-237	06/24/2020 10:50	3.28	-171.5	7.14	21.17	40.99	18.42	5.8
MW-237	06/25/2021 13:00	3.37	51.8	6.63	23.86	37	22.55	19.5
MW-237	06/25/2021 13:05	0.18	-100.6	7.02	25.67	40.15	22.44	12.5
MW-237	06/25/2021 13:10	0.18	-103.7	7.05	25.7	40.19	23.21	14.6
MW-237	06/25/2021 13:15	0.16	-104	7.05	25.98	40.62	22.62	37.2
MW-237	06/25/2021 13:20	0.15	-110.4	7.05	25.91	40.45	20.24	93.4
MW-237	06/25/2021 13:25	0.13	-111.3	7.06	25.82	40.39	21.92	88.3
MW-237	06/25/2021 13:30	0.13	-109.7	7.07	25.87	40.43	22.54	69.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-237	06/25/2021 13:35	0.13	-109.8	7.07	25.86	40.42	22.59	73.2
MW-237	06/25/2021 13:40	0.13	-111.4	7.07	25.92	40.51	22.4	72
MW-238	03/06/2012 10:52	1.56	23	7.62	0.05	1.02555	10.68	1233.7
MW-238	03/06/2012 10:56	9.56	27	7.59	0.05	1.01095	9.94	72.6
MW-238	03/06/2012 11:00	-0.07	27	7.57	0.05	1.0185	9.93	37.4
MW-238	03/06/2012 11:04	-0.08	16	7.56	0.05	1.02675	9.97	36.5
MW-238	03/06/2012 11:08	-0.09	-1	7.56	0.05	1.0412	9.9	27.6
MW-238	03/06/2012 11:12	-0.11	-13	7.56	0.05	1.0563	10.41	23.5
MW-238	03/06/2012 11:17	-0.11	-23	7.56	0.05	1.0568	10.95	23
MW-238	03/06/2012 11:21	-0.1	-30	7.55	0.05	1.05536	11.08	48.1
MW-238	03/06/2012 11:25	-0.12	-36	7.55	0.05	1.03837	10.86	16.7
MW-238	03/06/2012 11:29	-0.12	-41	7.56	0.05	1.03355	10.78	76.1
MW-238	03/06/2012 11:33	-0.11	-43	7.56	0.05	1.02334	10.85	284.4
MW-238	03/06/2012 11:37	-0.12	-46	7.56	0.05	1.02337	11.08	14
MW-238	03/06/2012 11:41	-0.13	-48	7.56	0.05	1.02243	10.91	21
MW-238	03/06/2012 12:08	5.19	-11	7.58	0.05	1.062	11.09	124.10
MW-238	03/06/2012 13:04	2.62	-155	7.49	0.99	16.95234	11.61	58.6
MW-238	03/06/2012 13:06	-0.03	-177	7.55	1.01	17.4785	7.76	24.1
MW-238	03/06/2012 13:08	-0.02	-191	7.58	1	17.24911	7.59	25.7
MW-238	03/06/2012 13:10	-0.03	-201	7.59	0.98	16.90098	7.47	36.5
MW-238	03/06/2012 13:12	-0.03	-210	7.59	0.97	16.72676	7.38	25.7
MW-238	03/06/2012 13:14	-0.03	-217	7.59	0.94	16.33208	7.35	16.4
MW-238	03/06/2012 13:15	-0.04	-223	7.59	0.94	16.24281	7.43	29.1
MW-238	03/06/2012 13:17	-0.04	-230	7.58	0.94	16.31052	7.68	20.3
MW-238	03/06/2012 13:19	-0.05	-236	7.58	0.93	16.18143	7.75	16
MW-238	03/06/2012 13:21	-0.05	-241	7.59	0.9	15.70877	7.76	15.5
MW-238	03/06/2012 13:23	-0.06	-244	7.59	0.89	15.40833	7.77	14.7
MW-238	03/07/2012 10:34	0.52	-18	6.86	0.10	1.240	9.60	48.04
MW-238	04/24/2013 11:01	0.3	-330	7.22	0.12	2.41	14.41	1077
MW-238	04/24/2013 11:21	5.34	-155	7.45	0.13	2.474	14.69	216.4
MW-238	04/25/2013 10:11	1.15	-244	7.25	0.12	2.339	13.13	50.9
MW-238	05/28/2014 08:41	1.60	-388	6.96	0.11	2.093	15.23	3.55
MW-238	05/28/2014 09:09	5.98	-86	7.24	0.09	1.705	16.47	94.90
MW-238	05/29/2014 11:40	3.38	-251	7.19	0.08	1.506	21.72	33.00
MW-238	02/18/2016 11:28	1.14	-105	7.11	0.03	0.577	4.88	36.80
MW-238	02/18/2016 14:16	3.49	-108	6.78	0.04	0.906	7.84	68.50
MW-238	02/07/2017 10:58	2.83	347	8.69	0.16	3.133	6.94	22.80
MW-238	02/07/2017 15:30	4.90	117.4	7.17	0.10	1.960	12.00	54.10
MW-239	02/27/2012 09:26	-0.14	-60	7.57	0.38	6.92866	12.69	35.71
MW-239	02/27/2012 09:31	11.82	-80	7.55	0.39	6.9982	13.72	8.9
MW-239	02/27/2012 09:35	6.34	-86	7.56	0.42	7.61798	13.88	8.2
MW-239	02/27/2012 09:40	3.53	-91	7.59	0.5	8.86176	13.86	11.87
MW-239	02/27/2012 09:44	2.15	-93	7.6	0.49	8.71482	14.01	4.91
MW-239	02/27/2012 09:49	1.5	-95	7.6	0.48	8.57222	14.06	9.08
MW-239	02/27/2012 09:54	1.16	-96	7.6	0.47	8.44478	14.14	9.45
MW-239	02/27/2012 09:58	0.97	-97	7.6	0.46	8.2743	14.27	4.68
MW-239	02/27/2012 10:03	0.86	-98	7.6	0.46	8.19495	14.24	16.6
MW-239	02/27/2012 10:07	0.77	-98	7.6	0.45	8.13916	14.27	3.5
MW-239	02/27/2012 10:12	0.75	-99	7.6	0.45	8.06186	14.19	8.35
MW-239	02/27/2012 10:16	0.71	-99	7.6	0.44	7.98463	14.29	4.06
MW-239	02/27/2012 11:21	-0.08	-27	7.53	0.37	6.743	13.23	7.40
MW-239	02/28/2012 09:27	0.25	-53	6.94	0.44	7.980	11.20	45.40
MW-239	03/20/2013 11:05	1.07	-216	7.25	0.68	11940	11.04	9.18
MW-239	03/20/2013 11:37	4.24	-110	7.18	0.7	12190	13.19	28.9
MW-239	03/21/2013 10:11	0.79	-310	7.17	0.62	11030	11.16	21.6
MW-239	09/09/2014 11:21	1.15	144	7.16	0.40	7.158	22.50	12.57
MW-239	09/09/2014 12:00	2.18	148	7.12	0.39	7.000	21.49	30.20
MW-239	12/10/2015 11:30	5.05	0	7.54	1.20	6.650	19.50	0.0000
MW-239	12/10/2015 12:05	2.64	-49	7.34	3.40	6.310	21.82	0.0000
MW-239	06/09/2016 09:58	8.49	15	7.24	0.38	6.868	18.80	14.30
MW-239	06/09/2016 10:03	3.73	-4	7.24	0.66	11.460	17.91	41.20
MW-239	07/28/2016 11:45	0.06	-76.7	6.77	3.57	6.550	20.27	0.0000

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-239	07/28/2016 12:11	1.30	-71.2	6.77	3.52	4.446	20.75	101.00
MW-239	05/11/2017 09:26	0.19	-71.00	7.12	0.44	7.923	14.35	1193.00
MW-239	05/11/2017 09:47	2.98	-49.00	7.05	0.36	6.459	15.08	13.30
MW-239	05/11/2017 10:05	2.14	16.00	7.01	0.38	6.862	14.68	36.00
MW-239	06/06/2018 08:49	4.68	-43	6.91	0.359	6.5032	17.8	63.5
MW-239	06/06/2018 08:53	1.67	-89	6.93	0.359	6.5194	16.68	44.6
MW-239	06/06/2018 08:58	1.36	-95	6.98	0.359	6.5218	16.7	40.1
MW-239	06/06/2018 09:02	1.24	-98	7.02	0.359	6.5201	16.85	43.2
MW-239	06/06/2018 09:07	1.87	-99	7.05	0.360	6.5305	16.95	30
MW-239	06/06/2018 09:11	1.11	-99	7.07	0.359	6.5194	17.02	23.9
MW-239	06/06/2018 09:16	1.11	-100	7.08	0.359	6.5169	17.06	20.8
MW-239	06/06/2018 09:20	1.08	-101	7.09	0.360	6.5294	17.16	12.4
MW-239	06/06/2018 09:25	1.02	-102	7.1	0.360	6.5237	17.36	16.3
MW-239	06/06/2018 09:29	1.02	-103	7.1	0.360	6.5313	17.33	11.2
MW-239	06/06/2018 09:34	0.99	-103	7.11	0.360	6.5229	17.41	15.8
MW-239	06/06/2018 09:38	1.02	-104	7.11	0.363	6.5783	17.48	13.3
MW-239	06/07/2018 09:38	1.02	-104.00	7.11	0.36	6.551	17.66	13.30
MW-239	06/07/2018 10:15	3.62	-69.00	7.07	0.36	6.489	17.96	49.70
MW-239	06/07/2018 12:21	1.47	-133.00	7.14	0.35	6.394	18.05	22.20
MW-239	10/22/2018 09:15	4.81	-127.50	8.29	5.25	9.355	14.38	3.80
MW-239	10/22/2018 11:00	2.42	-113.20	7.49	3.63	6.556	15.22	4.30
MW-239	10/22/2018 11:10	5.38	-146.00	7.83	3.64	6.161	16.77	29.30
MW-239	01/14/2019 10:00	9.09	12.9	7.49	3.44	6.288	7.12	0.5
MW-239	06/13/2019 10:05	3.24	151.6	7.17	NM	8.868	16	65.1
MW-239	06/13/2019 10:10	1.09	97.8	6.71	NM	8.952	16.17	38.7
MW-239	06/13/2019 10:15	0.92	64.6	6.64	NM	8.97	16.23	45.2
MW-239	06/13/2019 10:20	0.89	47.3	6.62	NM	8.977	16.23	52.9
MW-239	06/13/2019 10:25	0.87	35.9	6.59	NM	8.981	16.24	43.2
MW-239	06/13/2019 10:30	0.89	27.4	6.58	NM	8.994	16.29	38.6
MW-239	06/13/2019 10:35	0.98	22.1	6.58	NM	8.987	16.28	33
MW-239	06/13/2019 10:40	1.04	11.9	6.57	NM	8.974	16.31	23.5
MW-239	06/13/2019 10:45	0.98	15.3	6.56	NM	8.977	16.28	27.7
MW-239	06/13/2019 10:50	1.04	11.9	6.57	NM	8.974	16.31	23.5
MW-239	06/13/2019 11:36	0.41	-23.8	6.48	5.51	9.745	16.09	5.5
MW-239	06/13/2019 11:55	0.36	-26.3	6.52	5.38	9.533	16.25	5.4
MW-239	09/29/2021 09:15	NM	-63.7	NM	NM	NM	NM	NM
MW-240	03/14/2012 14:23	7.18	-29	7.34	0.01	0.22553	18.98	592.6
MW-240	03/14/2012 14:27	2	-48	6.9	0.07	1.43939	15.82	1019.8
MW-240	03/14/2012 14:31	1.47	-20	6.83	0.07	1.30796	15.47	654.9
MW-240	03/14/2012 14:35	1.39	-6	6.8	0.06	1.29029	15.96	643.5
MW-240	03/14/2012 14:39	1.49	1	6.79	0.06	1.28674	15.98	860.7
MW-240	03/14/2012 14:42	1.5	3	6.79	0.07	1.29339	15.72	507.6
MW-240	03/14/2012 14:46	1.43	4	6.79	0.07	1.29552	16.1	458.9
MW-240	03/14/2012 14:50	1.37	4	6.78	0.07	1.30048	15.82	681.3
MW-240	03/14/2012 14:54	1.26	4	6.78	0.07	1.30257	15.79	396.4
MW-240	03/14/2012 14:58	1.15	2	6.79	0.07	1.30149	15.63	78.1
MW-240	03/14/2012 15:01	1	2	6.78	0.07	1.30256	15.81	169
MW-240	03/14/2012 15:05	0.91	3	6.78	0.07	1.30139	15.67	271.9
MW-240	03/14/2012 15:09	0.77	2	6.78	0.07	1.31106	15.77	364.9
MW-240	03/14/2012 15:13	0.67	0	6.78	0.07	1.31081	15.79	129.7
MW-240	03/14/2012 15:39	7.99	19	7.45	0.02	0.331	14.71	132.10
MW-240	03/15/2012 11:05	7.41	19	6.73	0.0000	0.288	11.10	143.00
MW-240	02/25/2013 13:25	8.19	-107	6.95	0.06	1.17279	10.4	109.1
MW-240	02/25/2013 13:29	1.8	-210	6.55	0.11	2.21239	11.49	57
MW-240	02/25/2013 13:33	0.98	-242	6.54	0.12	2.38877	11.36	77.7
MW-240	02/25/2013 13:36	0.84	-254	6.56	0.13	2.44658	11.44	51.6
MW-240	02/25/2013 13:40	0.82	-263	6.57	0.13	2.47943	11.5	55.8
MW-240	02/25/2013 13:44	0.77	-266	6.57	0.13	2.50246	11.5	47.9
MW-240	02/25/2013 13:48	0.75	-269	6.59	0.13	2.53261	11.43	36.1
MW-240	02/25/2013 13:51	0.73	-270	6.59	0.13	2.53543	11.62	39.1
MW-240	02/25/2013 13:55	0.69	-272	6.6	0.13	2.54	11.77	22.4
MW-240	02/25/2013 13:59	0.68	-274	6.6	0.13	2.56395	11.72	41

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-240	02/25/2013 14:02	0.67	-277	6.6	0.13	2.59366	11.46	19
MW-240	02/25/2013 14:06	0.67	-279	6.6	0.13	2.6071	11.43	24.6
MW-240	02/25/2013 14:10	0.67	-280	6.6	0.14	2.61594	11.39	18.1
MW-240	02/25/2013 14:14	0.63	-281	6.61	0.14	2.612	11.44	22.23
MW-240	02/25/2013 14:41	6.64	-165	7.35	0.08	1.664	11.18	70.90
MW-240	02/26/2013 11:15	4.65	77	6.89	0.38	7.002	8.21	41.10
MW-240	04/03/2013 09:30	10.3	116.1	6.13	0.6	0.98	13.6	127.1
MW-240	04/03/2013 09:35	11.31	100.8	6.14	0.6	0.98	13.7	112.9
MW-240	04/03/2013 09:40	12.29	91.1	6.16	0.6	0.99	13.7	115.7
MW-240	04/03/2013 09:45	12.5	84.2	6.17	0.6	1	13.8	110.7
MW-240	04/03/2013 09:50	13.3	75.5	6.19	0.6	1	13.8	104.2
MW-240	04/03/2013 09:55	13.28	78.9	6.17	0.6	1	13.9	103.7
MW-240	04/30/2013 09:55	13.28	78.9	6.17	0.63	0.998	13.87	103.7
MW-240	04/30/2013 11:35	10.37	106.7	5.95	0.67	1.105	16.21	18.2
MW-240	05/01/2013 01:51	13	111.7	6.36	0.22	0.355	14.37	124
MW-240	06/18/2013 13:15	0.0000	112	6.42	0.61	1.226	17.30	31.00
MW-240	06/18/2013 14:30	0.0000	93	6.42	0.61	1.224	15.30	0.0000
MW-240	06/19/2013 14:50	0.0000	94	6.46	0.62	1.248	17.00	0.40
MW-240	03/13/2014 09:30	1.85	77.9	6.22	0.37	0.752	4.97	39.70
MW-240	03/13/2014 10:41	0.73	83.8	6.30	0.32	0.645	13.12	2.80
MW-240	03/13/2014 10:57	1.00	85.7	6.25	0.35	0.705	10.31	2.30
MW-240	06/30/2014 08:50	1.07	113.2	6.73	0.30	6.568	22.60	1387.50
MW-240	06/30/2014 10:20	0.51	72.9	6.79	0.30	0.611	17.77	11.70
MW-240	06/30/2014 10:35	0.65	67.5	6.80	0.30	0.607	21.50	11.40
MW-240	07/30/2014 10:00	1.32	3.1	6.93	0.46	0.924	20.20	496.00
MW-240	07/30/2014 10:35	0.22	3.6	6.88	0.47	0.949	19.76	64.50
MW-240	07/30/2014 11:15	0.45	3.4	6.89	0.47	0.951	20.12	70.70
MW-240	09/10/2014 09:18	0.16	143	6.46	0.06	1.213	20.78	22.81
MW-240	09/10/2014 09:54	2.28	145	7.33	0.04	0.761	22.48	55.40
MW-240	09/11/2014 09:17	1.57	-360	7.08	0.04	6.803	23.99	42.70
MW-240	01/19/2015 10:05	1.80	-30.2	6.87	0.50	0.998	14.14	78.50
MW-240	01/19/2015 10:45	0.09	-72.7	6.88	0.49	0.982	14.93	34.20
MW-240	01/19/2015 11:10	0.91	16.9	7.37	0.40	0.776	11.78	103.80
MW-240	12/14/2015 14:10	0.37	2	7.52	0.60	1.170	17.74	25.40
MW-240	12/14/2015 14:47	4.87	-18	7.05	0.50	1.100	18.10	403.00
MW-240	12/29/2015 11:39	8	652	8.29	0.01	0.246	14.74	305.7
MW-240	12/29/2015 15:35	10.77	-141	7.87	0.03	0.531	14.22	649.3
MW-240	12/06/2016 10:01	5.1	-97	7.19	0.05	0.956	16.06	239.9
MW-240	12/06/2016 11:25	7.53	-122	7.42	0.06	1.176	15.02	790.3
MW-240	10/10/2019 08:45	2.38	-71.2	7.07	NM	0.878	17.82	231.1
MW-240	10/10/2019 08:50	2.19	-78.8	6.97	NM	0.894	17.94	220.7
MW-240	10/10/2019 08:55	1.88	-88.2	6.9	NM	0.96	18.09	359.9
MW-240	10/10/2019 09:00	1.71	-104	6.88	NM	1.05	18.17	383.2
MW-240	10/10/2019 09:05	1.56	-109.6	6.87	NM	1.095	18.19	278.3
MW-240	10/10/2019 09:10	1.61	-109.4	6.86	NM	1.111	18.31	158.6
MW-240	10/10/2019 09:15	1.56	-110.1	6.86	NM	1.158	18.32	20.7
MW-240	10/10/2019 09:20	1.59	-111.5	6.85	NM	0.59	18.39	37.6
MW-240	10/10/2019 09:25	1.7	-114.9	6.86	NM	1.188	18.87	7.2
MW-240	10/10/2019 09:30	1.69	-117.7	6.84	NM	1.201	18.62	49
MW-240	10/10/2019 11:05	2.56	-161.4	7.07	0.63	1.26	17.65	13.6
MW-240	10/10/2019 11:20	4.42	-65.2	7.23	0.26	0.542	19.67	317.4
MW-240	09/23/2020 14:00	2.27	-68.7	7.27	0.2	0.426	20.47	612.1
MW-240	09/23/2020 14:05	2.21	-25.1	7.13	0.22	0.464	21.08	702.6
MW-240	09/23/2020 14:10	2.97	-17.6	7.15	0.24	0.497	22.62	677.2
MW-240	09/23/2020 14:15	3.61	-21.4	7.19	0.23	0.472	23.49	548.2
MW-240	09/23/2020 14:20	4.94	-66.4	6.96	0.49	0.983	23.29	579
MW-240	09/23/2020 14:25	4.03	-79.7	6.91	0.57	1.147	23.14	527.4
MW-240	09/23/2020 14:30	3.14	-81.7	6.91	0.59	1.185	22.81	415.1
MW-240	09/23/2020 14:35	2.56	-81.9	6.91	0.59	1.195	22.5	372.7
MW-240	09/23/2020 14:40	1.94	-80.6	6.9	0.6	1.201	22.55	293.6
MW-240	09/23/2020 14:45	1.79	-81.6	7.06	0.39	0.795	23.04	327
MW-240	09/23/2020 15:40	1.59	-58.4	6.82	0.61	1.221	23.83	42.6

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-240	09/23/2020 15:55	4.54	-6.8	7.48	0.22	0.451	22.68	NM
MW-240	09/30/2020 15:55	NM	NM	NM	NM	NM	NM	264.8
MW-240	12/04/2020 08:50	4.14	190.8	6.83	0.32	0.668	14.97	569.4
MW-240	12/04/2020 08:55	2.38	168.4	7.11	0.22	0.458	14.29	509
MW-240	12/04/2020 09:00	2.8	163.8	7.18	0.21	0.432	13.31	559.1
MW-240	12/04/2020 09:05	3.86	147.8	7.22	0.21	0.425	13.34	779
MW-240	12/04/2020 09:10	3.53	131.6	7.27	0.2	0.424	13.68	860
MW-240	12/04/2020 09:15	3.23	120.8	7.31	0.2	0.423	13.6	580.5
MW-240	12/04/2020 09:20	3.31	116.9	7.32	0.2	0.422	13.31	455.1
MW-240	12/04/2020 09:25	3.48	114.5	7.33	0.2	0.424	13.32	403.5
MW-240	12/04/2020 09:30	2.55	107.8	7.37	0.21	0.443	13.61	398.2
MW-240	12/04/2020 09:35	1.95	102.4	7.37	0.27	0.539	13.8	473.7
MW-240	12/04/2020 11:10	2.58	-45.8	7.12	0.51	1.025	14.25	196.8
MW-240	12/04/2020 12:00	3.48	-38.7	7.17	0.43	0.878	13.94	1064.9
MW-240	03/24/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-240	03/24/2021 10:55	5.59	-35.4	11.3	0.26	0.539	13.12	66.8
MW-240	03/24/2021 11:00	5.7	-2.5	11.33	0.25	0.524	13.23	43.5
MW-240	03/24/2021 11:05	5.31	54.7	11.36	0.27	0.552	13.23	188.8
MW-240	03/24/2021 11:10	1.13	94.9	10.14	0.33	0.672	13.57	408.9
MW-240	03/24/2021 11:15	0.83	113.8	9.57	0.41	0.822	13.33	438.9
MW-240	03/24/2021 11:20	0.38	126.1	9.23	0.44	0.881	13.44	305.9
MW-240	03/24/2021 11:25	0.34	53.2	8.31	0.46	0.936	13.49	243.7
MW-240	03/24/2021 11:30	0.4	-56	7.95	0.46	0.932	13.54	131
MW-240	03/24/2021 11:35	0.39	-54.2	7.79	0.47	0.938	13.57	101.7
MW-240	03/24/2021 11:40	0.34	-51.4	7.72	0.47	0.94	13.6	81.8
MW-240	03/24/2021 13:45	0.28	3.2	7.15	0.47	0.95	14.69	204.3
MW-240	03/24/2021 14:10	1.17	66	11.01	0.26	0.534	12.44	82.2
MW-241	03/26/2012 14:41	2.82	-83	6.95	0.09	1.84044	14.89	54.3
MW-241	03/26/2012 14:44	1.82	-83	6.9	0.09	1.82226	14.53	14
MW-241	03/26/2012 14:46	1.44	-85	6.9	0.09	1.82186	14.81	12.7
MW-241	03/26/2012 14:48	1.26	-86	6.9	0.09	1.82323	14.93	19
MW-241	03/26/2012 14:51	1.17	-87	6.9	0.09	1.82081	14.79	15.9
MW-241	03/26/2012 14:53	1.13	-87	6.89	0.09	1.82053	14.73	12.5
MW-241	03/26/2012 14:55	0.98	-87	6.89	0.09	1.81961	14.67	14.7
MW-241	03/26/2012 14:58	0.9	-88	6.89	0.09	1.82001	14.72	8.2
MW-241	03/26/2012 15:00	0.81	-88	6.89	0.09	1.81879	14.68	77.4
MW-241	03/26/2012 15:03	0.78	-88	6.89	0.09	1.8169	14.69	8.8
MW-241	03/26/2012 15:05	0.77	-89	6.89	0.09	1.81891	14.79	7.3
MW-241	03/26/2012 15:07	0.7	-89	6.89	0.09	1.81732	14.78	22.9
MW-241	03/26/2012 15:10	0.68	-90	6.89	0.09	1.81579	14.84	5.8
MW-241	03/26/2012 15:12	0.71	-90	6.89	0.09	1.8173	14.95	13.4
MW-241	03/26/2012 15:14	0.58	-91	6.89	0.09	1.81405	14.83	6.6
MW-241	03/26/2012 15:17	0.56	-91	6.89	0.09	1.81424	14.75	5.6
MW-241	03/26/2012 15:19	0.53	-91	6.89	0.09	1.81423	14.7	5.8
MW-241	03/26/2012 15:21	0.53	-92	6.89	0.09	1.8114	14.80	5.8
MW-241	03/26/2012 15:51	2.20	-64	6.97	0.09	1.799	15.73	4.70
MW-241	03/27/2012 11:15	1.47	-68	6.60	0.10	1.880	14.95	17.00
MW-241	08/08/2012 14:32	9.02	-144	6.55	0.1	1.94	25.1	23.6
MW-241	08/08/2012 14:34	7.50	-170	6.79	0.1	1.98	23.9	24.6
MW-241	08/08/2012 14:36	6.93	-177	6.85	0.1	1.95	23.6	24.3
MW-241	08/08/2012 14:38	6.64	-180	6.89	0.1	1.94	23.5	22.9
MW-241	08/08/2012 14:40	6.57	-180	6.90	0.1	1.91	23.5	23.7
MW-241	08/08/2012 14:42	6.51	-180	6.90	0.1	1.91	23.4	23.8
MW-241	08/08/2012 14:44	6.37	-182	6.90	0.1	1.91	23.4	24.7
MW-241	09/25/2013 13:29	0.82	-362	6.75	0.09	1.730	20.86	8.41
MW-241	09/25/2013 14:01	0.72	-356	6.79	0.08	1.658	20.88	15.10
MW-241	09/26/2013 11:20	0.36	-234	6.84	0.31	5.696	20.18	28.60
MW-241	06/05/2014 15:40	1.36	-362	6.79	0.72	12.430	19.17	13.45
MW-241	06/05/2014 16:10	3.32	-189	7.07	0.68	11.800	17.14	14.80
MW-241	06/06/2014 11:21	1.30	-412	6.80	0.81	14.000	15.15	17.70
MW-241	06/18/2014 00:00	0.0000	26	6.77	0.30	0.630	NM	159.00
MW-241	06/18/2014 13:55	0.27	-108	6.69	0.11	2.138	23.29	16.45

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-241	06/18/2014 14:28	1.87	-77	6.68	0.11	2.122	21.14	86.20
MW-241	11/11/2014 11:59	1.95	-285	6.73	0.11	2.068	18.41	2.22
MW-241	11/11/2014 12:32	2.72	-150	6.65	0.11	2.166	18.55	11.60
MW-241	06/30/2015 11:17	0.94	-130	6.75	0.21	3.909	16.39	76.1
MW-241	06/30/2015 11:48	11.03	-96	6.54	0.2	3.742	17.54	119.6
MW-241	02/18/2016 09:42	0.27	-149	6.66	0.13	2.428	15.73	45.00
MW-241	02/18/2016 10:16	2.43	-168	6.51	0.08	1.673	13.97	122.50
MW-241	08/17/2016 09:00	0.39	-164	6.75	0.44	5.052	19.21	22.50
MW-241	08/17/2016 10:05	3.06	-90	6.96	0.46	8.160	21.20	9.60
MW-241	02/15/2017 09:14	1.54	201	7.01	0.11	2.076	16.40	116.90
MW-241	02/15/2017 09:36	6.20	-50	6.90	0.08	1.556	13.17	34.40
MW-241	03/01/2018 09:41	5.81	-139	6.53	0.058	1.1597	14.62	6
MW-241	03/01/2018 09:43	1.36	-137	6.6	0.078	1.5404	14.95	3.9
MW-241	03/01/2018 09:46	0.71	-134	6.64	0.087	1.7114	15.03	3.6
MW-241	03/01/2018 09:49	0.52	-132	6.66	0.093	1.8144	15	2.9
MW-241	03/01/2018 09:51	0.55	-131	6.68	0.097	1.8871	14.95	3.6
MW-241	03/01/2018 09:54	0.56	-130	6.69	0.099	1.9369	15.01	3
MW-241	03/01/2018 09:56	0.52	-129	6.7	0.100	1.9573	15.06	2.5
MW-241	03/01/2018 09:59	0.5	-128	6.7	0.102	1.9907	15.01	2.6
MW-241	03/01/2018 10:01	0.43	-127	6.71	0.103	2.0116	15.03	2.5
MW-241	03/01/2018 10:04	0.39	-127	6.72	0.105	2.0424	15.06	2.6
MW-241	03/01/2018 10:06	0.39	-126.00	6.72	0.11	2.068	14.88	2.60
MW-241	03/01/2018 10:30	11.28	-139.00	6.62	0.08	1.537	15.05	59.70
MW-241	03/01/2018 13:52	5.74	-150.00	6.73	0.42	7.544	15.34	30.80
MW-241	08/09/2018 08:54	0.43	-107.00	6.81	0.08	1.572	21.55	15.73
MW-241	08/09/2018 08:59	0.29	-137.00	6.81	0.07	1.393	19.48	12.00
MW-241	08/09/2018 09:31	1.44	-104.00	7.06	0.08	1.567	18.71	8.60
MW-241	03/08/2019 13:20	0.98	-83.8	6.99	NM	1.288	11.84	7
MW-241	03/08/2019 13:30	3.28	-74.50	7.02	0.68	1.358	12.82	6.70
MW-241	03/08/2019 13:40	3.81	-88.60	7.05	0.69	1.370	13.09	4.10
MW-241	03/08/2019 13:55	3.73	-97.50	7.07	0.69	1.353	13.4	70.90
MW-241	08/22/2019 12:50	0.95	-118.6	6.9	NM	1.418	23.57	1.7
MW-241	08/22/2019 12:55	0.56	-119.9	6.86	NM	1.417	23.99	5.2
MW-241	08/22/2019 13:00	0.45	-121.3	6.78	NM	1.408	23.94	0
MW-241	08/22/2019 13:05	0.4	-122.6	6.9	NM	1.4	24.15	0.9
MW-241	08/22/2019 13:10	0.37	-122.1	6.91	NM	1.391	24.25	8.3
MW-241	08/22/2019 13:15	0.35	-122.6	6.91	NM	1.388	23.7	9.6
MW-241	08/22/2019 13:20	0.36	-122.6	6.89	NM	1.417	24.93	1.3
MW-241	08/22/2019 13:25	0.34	-122.3	6.9	NM	1.43	26.38	0.7
MW-241	08/22/2019 13:30	0.34	-122.7	6.9	NM	1.437	26.42	1.6
MW-241	08/22/2019 13:35	0.34	-122.5	6.9	NM	1.431	26.73	1
MW-241	08/22/2019 13:55	4.42	-66.5	6.94	0.68	1.359	23.21	2.3
MW-241	08/22/2019 14:05	4.2	-96.5	6.91	0.65	1.31	23.82	56.3
MW-241	02/07/2020 11:50	6.26	-37.1	6.83	NM	0.568	9.41	37
MW-241	02/07/2020 12:10	8.84	-45.1	6.9	0.4	0.803	9.24	21
MW-241	08/28/2020 10:30	2.5	-98.4	6.55	0.77	1.527	23.59	0.3
MW-241	08/28/2020 10:35	1.33	-105.7	6.45	0.76	1.511	21.72	0.4
MW-241	08/28/2020 10:40	1.18	-115.6	6.51	0.74	1.472	22.13	0.4
MW-241	08/28/2020 10:45	1.15	-117.7	6.51	0.65	1.302	22.22	0.9
MW-241	08/28/2020 10:50	1.09	-116.9	6.5	0.66	1.321	22.02	0.7
MW-241	08/28/2020 10:55	1.1	-119.4	6.5	0.61	1.223	21.92	0.7
MW-241	08/28/2020 11:00	1.16	-121.7	6.5	0.62	1.215	22.16	0.8
MW-241	08/28/2020 11:05	1.16	-123.7	6.51	0.64	1.274	22.12	0.7
MW-241	08/28/2020 11:10	1.19	-124.9	6.51	0.62	1.241	22.02	0.7
MW-241	08/28/2020 11:15	1.2	-124.7	6.51	0.6	1.212	21.79	1.4
MW-241	08/28/2020 11:25	1.18	-125.2	6.53	0.75	1.48	22.12	5.4
MW-241	08/28/2020 11:40	2.04	-114.3	6.55	0.69	1.391	22.75	46.8
MW-241	01/29/2021 08:10	1.15	-79	6.48	0.58	1.151	12.62	10.9
MW-241	01/29/2021 08:15	0.9	-121.5	6.64	0.55	1.107	13.19	1.1
MW-241	01/29/2021 08:20	0.81	-132.7	6.69	0.54	1.09	12.86	0.8
MW-241	01/29/2021 08:25	0.81	-137	6.71	0.54	1.09	12.92	0.5
MW-241	01/29/2021 08:30	0.7	-140.1	6.72	0.54	1.085	13.09	0.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-241	01/29/2021 08:35	0.63	-142.6	6.73	0.54	1.083	13.15	0.3
MW-241	01/29/2021 08:40	0.61	-144.5	6.74	0.54	1.083	13.32	0.5
MW-241	01/29/2021 08:45	0.64	-145.8	6.75	0.54	1.082	13.23	0.4
MW-241	01/29/2021 08:55	0.58	-149.1	6.76	0.54	1.086	14.56	0.7
MW-241	01/29/2021 09:10	0.88	-151.8	6.78	0.55	1.047	11.98	17.6
MW-242	03/13/2012 08:38	1.88	26	6.8	0.1	1.89852	11.39	23.7
MW-242	03/13/2012 08:40	1.54	18	6.81	0.09	1.86909	10.74	5.5
MW-242	03/13/2012 08:42	1.13	12	6.84	0.09	1.78481	10.47	3.2
MW-242	03/13/2012 08:44	1.01	6	6.85	0.09	1.72959	10.25	3.6
MW-242	03/13/2012 08:46	1.02	3	6.85	0.09	1.72169	10.24	2.1
MW-242	03/13/2012 08:48	0.91	0	6.86	0.08	1.68233	10.38	1.4
MW-242	03/13/2012 08:51	0.89	-3	6.87	0.08	1.65479	10.37	4.1
MW-242	03/13/2012 08:53	0.9	-5	6.88	0.08	1.64777	10.35	1.5
MW-242	03/13/2012 08:55	0.97	-6	6.88	0.08	1.64089	10.36	1.2
MW-242	03/13/2012 08:57	0.96	-8	6.88	0.08	1.62416	10.45	1.1
MW-242	03/13/2012 08:59	1.01	-9	6.89	0.08	1.61527	10.6	1.2
MW-242	03/13/2012 09:01	1.07	-11	6.89	0.08	1.60783	10.75	1.1
MW-242	03/13/2012 09:02	1.07	-11	6.89	0.08	1.608	10.75	1.14
MW-242	03/13/2012 09:48	9.05	-13	7.11	0.08	1.619	10.16	64.30
MW-242	03/14/2012 09:02	0.59	-45	6.41	0.10	1.710	9.80	87.70
MW-242	09/25/2013 10:54	2.13	-345	6.42	0.10	1.956	20.96	8.62
MW-242	09/25/2013 11:36	0.90	-429	6.60	0.09	1.835	22.14	45.40
MW-242	09/26/2013 10:30	0.92	-262	6.50	0.36	6.479	19.76	39.20
MW-242	08/28/2014 09:15	0.68	196	6.32	0.13	2.415	23.21	32.02
MW-242	08/28/2014 10:05	4.16	201	6.88	0.12	2.303	24.79	37.20
MW-242	08/29/2014 09:32	1.97	208	6.59	0.12	2.320	24.64	75.40
MW-242	09/23/2016 09:15	1.15	18.00	6.78	0.21	3.966	24.43	48.50
MW-242	09/23/2016 10:04	3.96	-8	7.11	0.16	2.981	24.70	61.70
MW-242	02/16/2017 11:17	0.02	276	7.42	NM	3.388	5.25	85.10
MW-242	02/16/2017 13:39	8.97	370	7.31	NM	1.701	7.47	387.40
MW-242	03/19/2018 13:34	10.54	94	7.36	0.087	1.7240	9.18	741.2
MW-242	03/19/2018 13:37	4.36	102	7.06	0.089	1.7623	8.71	460.4
MW-242	03/19/2018 13:39	3.22	99	6.94	0.082	1.6286	8.69	149.1
MW-242	03/19/2018 13:41	2.93	97	6.87	0.081	1.6096	8.77	109.8
MW-242	03/19/2018 13:44	2.8	93	6.83	0.079	1.5734	8.8	87.7
MW-242	03/19/2018 13:46	2.7	91	6.79	0.077	1.5449	8.8	63.6
MW-242	03/19/2018 13:49	2.67	88	6.76	0.076	1.5234	8.72	285.4
MW-242	03/19/2018 13:51	2.59	85	6.74	0.076	1.5123	8.74	65.6
MW-242	03/19/2018 13:53	2.56	82	6.72	0.075	1.4932	9.11	73.6
MW-242	03/19/2018 13:56	2.59	80	6.71	0.075	1.4966	9.14	279.5
MW-242	03/19/2018 13:58	2.57	77	6.7	0.075	1.5050	9.31	8
MW-242	03/19/2018 14:01	2.5	75	6.69	0.074	1.4808	9.48	12.2
MW-242	03/19/2018 14:03	2.49	72	6.68	0.074	1.4864	9.62	60.3
MW-242	03/19/2018 14:05	2.51	70	6.67	0.074	1.4713	9.5	220
MW-242	03/19/2018 14:08	2.49	69	6.67	0.075	1.4877	9.62	4.5
MW-242	03/19/2018 14:10	2.45	67	6.66	0.074	1.4809	9.86	29.3
MW-242	03/19/2018 14:13	2.42	65	6.66	0.073	1.4632	9.98	7.9
MW-242	03/19/2018 14:15	2.39	63	6.65	0.073	1.4485	10.22	217.9
MW-242	03/19/2018 14:17	2.43	62	6.65	0.073	1.4605	10.08	11.7
MW-242	03/19/2018 14:20	2.38	61	6.64	0.074	1.4664	10.16	4.1
MW-242	03/19/2018 14:22	2.38	59	6.64	0.073	1.4587	10.13	4.9
MW-242	03/20/2018 12:15	11.48	-30.00	7.08	0.07	1.389	5.81	57.40
MW-242	03/20/2018 14:22	2.38	59.00	6.64	0.07	1.463	10.01	4.88
MW-242	03/20/2018 15:00	5.24	113.00	7.03	0.07	1.409	8.87	68.30
MW-242	01/10/2019 09:25	1.14	-27.2	6.83	NM	1.458	5.72	1.2
MW-242	01/10/2019 10:10	2.15	-25.8	6.89	0.73	1.455	5.52	2.5
MW-242	04/12/2019 09:00	1.09	1.468	6.87	NM	1.467	9.64	3.7
MW-242	10/08/2019 12:40	2.07	-87.4	6.72	NM	1.75	19.87	23.2
MW-242	10/08/2019 12:45	2.05	-85.1	6.65	NM	1.674	19.86	14.7
MW-242	10/08/2019 12:50	2.18	-85.5	6.64	NM	1.617	19.87	11
MW-242	10/08/2019 12:55	2.11	-86.5	6.62	NM	1.612	19.87	6.6
MW-242	10/08/2019 13:00	2.27	-86.3	6.62	NM	1.573	19.94	5.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-242	10/08/2019 13:05	1.93	-91.8	6.65	NM	1.503	19.94	6.1
MW-242	10/08/2019 13:10	1.98	-90	6.62	NM	1.565	19.95	4.4
MW-242	10/08/2019 13:15	2.13	-96.6	6.65	NM	-96.7	19.93	3.2
MW-242	10/08/2019 13:20	1.93	-98	6.65	NM	1.496	19.98	2.6
MW-242	10/08/2019 13:25	1.75	-95.6	6.62	NM	1.559	20.03	1.5
MW-242	10/08/2019 14:00	5.07	-84.4	6.89	0.77	1.535	20.12	5.3
MW-242	10/08/2019 14:15	7.64	-74.6	6.78	0.73	1.455	20.33	110.6
MW-242	06/25/2020 10:25	4.25	40.5	6.61	0.97	1.888	21.13	1193.9
MW-242	06/25/2020 10:30	1.14	4.6	6.42	0.81	1.604	18.71	27.9
MW-242	06/25/2020 10:35	0.98	-31.9	6.61	0.7	1.398	19.04	16.1
MW-242	06/25/2020 10:40	0.85	-49.4	6.7	0.66	1.319	18.93	26.6
MW-242	06/25/2020 10:45	0.89	-57	6.71	0.66	1.311	19.02	12.2
MW-242	06/25/2020 10:50	0.87	-61.2	6.73	0.66	1.306	18.88	9.6
MW-242	06/25/2020 10:55	0.83	-66	6.75	0.65	1.297	18.84	10.4
MW-242	06/25/2020 11:00	0.82	-66.8	6.74	0.65	1.294	18.91	10
MW-242	06/25/2020 11:15	0.8	-69.9	6.64	0.68	1.3	18.78	8.4
MW-242	06/25/2020 11:25	1.38	-70.9	6.68	0.64	1.222	19.32	32
MW-243	02/28/2012 10:41	-0.05	-76	7.12	0.25	4.79205	10.21	15.5
MW-243	02/28/2012 10:43	-0.05	-82	7.14	0.25	4.7706	10.16	11.3
MW-243	02/28/2012 10:45	-0.05	-85	7.14	0.25	4.74165	10.11	10.4
MW-243	02/28/2012 10:46	-0.05	-85	7.14	0.3	4.74	10.1	10.4
MW-243	02/28/2012 10:48	-0.05	-83	7.13	0.25	4.67946	10.01	9.9
MW-243	02/28/2012 10:50	-0.06	-80	7.12	0.25	4.67319	9.81	7.8
MW-243	02/28/2012 10:52	-0.06	-78	7.11	0.25	4.724	9.78	9.2
MW-243	02/28/2012 10:54	-0.06	-78	7.11	0.25	4.73996	9.73	8.5
MW-243	02/28/2012 10:55	-0.06	-78	7.11	0.3	4.74	9.7	8.5
MW-243	02/28/2012 10:56	-0.06	-78	7.11	0.25	4.76016	9.67	8.7
MW-243	02/28/2012 10:57	-0.06	-78	7.11	0.3	4.76	9.7	8.7
MW-243	03/27/2013 14:57	1.77	-228	6.73	0.28	5.273	9.05	23
MW-243	08/26/2014 09:20	0.72	180	6.61	0.30	5.543	26.06	14.80
MW-243	10/20/2015 14:22	3.74	-99	6.65	0.5	8.887	21	438
MW-243R	08/23/2016 09:18	0.64	-151	6.50	0.40	7.121	23.50	11.30
MW-243R	08/23/2016 11:13	2.43	-103	6.60	1.32	21.720	21.86	74.40
MW-243R	01/26/2017 10:21	5.66	-126	6.60	0.40	7.316	12.06	21.60
MW-243R	01/26/2017 10:47	0.44	-142	6.93	0.31	5.727	10.88	16.20
MW-243R	05/01/2017 10:02	-0.04	-105.00	6.95	0.24	4.505	14.2	5.69
MW-243R	02/01/2018 14:27	4.65	49	7.17	1.230	20.8435	8.23	11.7
MW-243R	02/01/2018 14:29	1.45	46	7.25	1.512	25.1807	8.61	4.3
MW-243R	02/01/2018 14:31	0.66	45	7.19	1.633	27.0157	8.7	3.2
MW-243R	02/01/2018 14:34	0.39	45	7.15	1.798	29.5324	8.58	3.4
MW-243R	02/01/2018 14:36	0.26	45	7.12	1.846	30.2495	8.59	3.1
MW-243R	02/01/2018 14:38	0.17	44	7.11	1.854	30.3703	8.54	3.1
MW-243R	02/01/2018 14:40	0.12	44	7.09	1.859	30.4500	8.51	3
MW-243R	02/01/2018 14:42	0.09	43	7.08	1.899	31.0477	8.49	3.2
MW-243R	02/01/2018 14:44	0.06	43	7.07	1.902	31.0960	8.47	3.1
MW-243R	02/01/2018 14:47	0.04	42	7.07	1.920	31.3719	8.42	3.2
MW-243R	02/01/2018 14:49	0.02	42	7.06	1.865	30.5565	8.38	2.8
MW-243R	02/01/2018 14:51	0.01	41	7.05	1.959	31.9567	8.43	3
MW-243R	02/01/2018 14:53	-0.01	41	7.05	1.936	31.6124	8.4	2.8
MW-243R	02/01/2018 14:55	-0.03	40	7.05	1.970	32.1289	8.37	2.9
MW-243R	02/01/2018 14:57	-0.04	40	7.05	1.923	31.4222	8.37	2.9
MW-243R	02/01/2018 15:00	-0.05	40	7.04	2.004	32.6374	8.33	3
MW-243R	02/01/2018 15:02	-0.06	39	7.04	1.965	32.0554	8.38	2.8
MW-243R	02/01/2018 15:04	-0.07	39	7.04	1.990	32.4365	8.33	2.9
MW-243R	02/01/2018 15:06	-0.06	39	7.04	1.963	32.0201	8.4	3.2
MW-243R	02/01/2018 15:08	-0.06	39	7.04	1.988	32.3929	8.37	3.2
MW-243R	02/02/2018 15:08	-0.06	39.00	7.04	1.99	32.520	8.23	3.17
MW-243R	05/07/2018 08:36	4.33	-171	6.89	0.153	2.9277	15.95	12.1
MW-243R	05/07/2018 08:38	2.59	-190	6.96	0.151	2.8861	15.32	20.5
MW-243R	05/07/2018 08:41	1.79	-196	7	0.151	2.8848	15.18	22.4
MW-243R	05/07/2018 08:43	1.69	-199	7.02	0.151	2.8852	15.17	22.1
MW-243R	05/07/2018 08:45	1.5	-201	7.04	0.151	2.8866	15.29	23.2

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-243R	05/07/2018 08:47	1.31	-203	7.05	0.151	2.8871	15.26	24.2
MW-243R	05/07/2018 08:50	1.25	-204	7.06	0.151	2.8861	15.28	23.5
MW-243R	05/07/2018 08:52	1.14	-206	7.07	0.151	2.8889	15.4	22
MW-243R	05/07/2018 08:54	1.09	-207	7.08	0.151	2.8891	15.44	21
MW-243R	05/07/2018 08:56	0.98	-208	7.08	0.151	2.8910	15.55	20.9
MW-243R	05/07/2018 08:59	0.99	-209	7.09	0.151	2.8914	15.6	19.2
MW-243R	05/07/2018 09:01	0.96	-211	7.09	0.151	2.8913	15.67	18.5
MW-243R	05/07/2018 09:03	0.92	-213.00	7.10	0.15	2.881	15.92	19.33
MW-243R	07/23/2018 11:10	1.52	-163.00	6.88	0.17	3.141	26.28	7.26
MW-243R	11/05/2018 10:45	0.05	-303.00	6.95	1.47	2.810	19.05	2.40
MW-243R	11/05/2018 10:55	0.12	-336.20	6.94	1.50	2.868	18.8	1.00
MW-243R	11/05/2018 11:05	0.17	-336.60	6.94	1.49	2.861	18.6	1.80
MW-243R	01/30/2019 10:20	0.18	-68.20	7.43	0.62	1.238	9.8	9.00
MW-243R	01/30/2019 11:00	4.17	-80.50	7.25	0.73	1.436	9.97	9.20
MW-243R	01/30/2019 11:10	3.03	-0.50	6.91	3.04	5.600	9.72	40.20
MW-243R	01/31/2019 10:20	0.18	-68.2	7.43	NM	1.238	9.8	9
MW-243R	02/05/2020 14:10	31.65	-138	7.4	NM	1.506	6.65	1.8
MW-243R	02/06/2020 12:15	5.13	58.3	7.12	0.18	0.372	8.54	1.3
MW-243R	11/18/2020 12:25	4.62	-179.6	6.79	4.44	7.96	13.7	8.1
MW-243R	11/18/2020 12:50	1.85	-168.9	6.91	2.61	4.836	15.61	4.1
MW-243R	02/24/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-243R	02/24/2021 14:20	1.72	-106.5	7.34	3.78	6.928	7.46	3.1
MW-243R	02/24/2021 14:25	2.52	-95.7	7.23	4.31	7.712	8.9	48.8
MW-243R	02/24/2021 14:30	2.24	-103.1	7.26	4.06	7.504	7.39	18.1
MW-243R	02/24/2021 14:35	1.51	-105.6	6.97	3.64	6.69	7.44	8.2
MW-243R	02/24/2021 14:40	1.09	-106.5	7.04	3.64	6.665	7.73	10.4
MW-243R	02/24/2021 14:45	1.5	-101.8	7	4.29	7.55	8.74	29.1
MW-243R	02/24/2021 14:50	2.48	-99.9	6.96	3.83	6.949	8.68	15.4
MW-243R	02/24/2021 14:55	2.96	-97.9	6.94	4.01	7.357	9.01	5.4
MW-243R	02/24/2021 15:00	2.32	-98.3	6.93	4.38	7.532	9.43	25.8
MW-243R	02/24/2021 15:05	1.72	-108.7	6.93	4.25	7.698	9.45	4.4
MW-243R	02/24/2021 15:40	1.43	-87.2	6.93	4.18	7.469	9.81	3.8
MW-243R	02/24/2021 16:10	2.12	-95.8	6.96	4.22	7.618	10.02	12.8
MW-243R	02/24/2021 16:30	2.21	-83.4	6.98	4.24	7.648	10.99	7.2
MW-243R	05/10/2021 12:25	7.76	-35.7	6.99	2.13	3.788	17.28	39.1
MW-243R	05/10/2021 12:30	4.3	-64.8	6.79	2.52	4.661	16.68	23.8
MW-243R	05/10/2021 12:35	2.04	-84.7	6.77	2.68	4.971	16.31	14.6
MW-243R	05/10/2021 12:40	1.64	-91.1	6.8	2.62	4.902	16.4	15.9
MW-243R	05/10/2021 12:45	1.62	-87.2	7	1.52	2.887	17.27	29.5
MW-243R	05/10/2021 12:50	0.9	-97.4	6.92	2.13	3.983	17.66	12.3
MW-243R	05/10/2021 12:55	0.69	-110.1	6.87	2.47	4.59	16.64	7.5
MW-243R	05/10/2021 13:00	0.52	-111.9	6.85	2.61	4.82	16.43	5.9
MW-243R	05/10/2021 13:05	0.47	-109.3	6.82	2.75	5.067	16.11	4.6
MW-243R	05/10/2021 13:10	0.77	-103.4	6.76	2.92	5.371	15.86	31.5
MW-243R	08/05/2021 13:50	0.97	-131.8	7.28	3.56	6.553	27.93	20.2
MW-243R	08/05/2021 13:55	0.76	-131.6	7.05	3.68	6.742	27.88	19.7
MW-243R	08/05/2021 14:00	0.48	-133.8	6.89	3.55	6.528	28.26	16
MW-243R	08/05/2021 14:05	0.42	-142.1	6.86	3.22	5.981	29.11	15.5
MW-243R	08/05/2021 14:10	0.39	-148.4	6.9	2.7	5.069	29.22	17.5
MW-243R	08/05/2021 14:15	0.37	-147.1	6.97	2.12	4.045	29.21	19.5
MW-243R	08/05/2021 14:20	0.45	-143	7.03	1.8	3.46	28.92	21.5
MW-243R	08/05/2021 14:25	0.5	-138.1	7.06	1.6	3.082	28.8	18.1
MW-243R	08/05/2021 14:30	0.59	-138.6	7.06	1.49	2.907	28.64	14.2
MW-243R	08/05/2021 14:35	0.83	-140.2	7.05	1.43	2.779	28.36	13.3
MW-243R	08/05/2021 14:48	1.85	-127.2	7.23	0.33	0.694	26.53	9.7
MW-243R	08/05/2021 14:53	0.42	-124.4	7.13	0.32	0.626	22.66	4.3
MW-243R	08/05/2021 14:58	0.27	-125.3	7.15	0.32	0.615	22.11	3.7
MW-243R	08/05/2021 15:03	0.21	-126.7	7.15	0.32	0.611	21.96	3.7
MW-243R	08/05/2021 15:08	0.18	-127.3	7.15	0.31	0.61	21.93	4.8
MW-243R	08/05/2021 15:13	0.16	-128.3	7.14	0.31	0.612	22.18	4.7
MW-243R	08/05/2021 15:18	0.14	-129.4	7.13	0.31	0.613	22.4	6.1
MW-243R	08/05/2021 15:23	0.14	-130.5	7.11	0.31	0.615	22.59	10.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-243R	08/05/2021 15:28	0.13	-131	7.11	31	0.619	23.04	15.6
MW-243R	08/05/2021 15:33	0.14	-131.8	7.11	0.31	0.62	22.95	15
MW-243R	02/14/2022 10:25	2.28	-96.2	6.66	8.26	13.33	10.87	17.4
MW-243R	02/14/2022 10:30	2.06	-100.2	6.67	8.35	14.37	10.63	18
MW-243R	02/14/2022 10:35	2.06	-102.6	6.73	8.81	15.11	9.26	17.3
MW-243R	02/14/2022 10:40	1.83	-102.4	6.76	8.11	14.05	8.19	15.9
MW-243R	02/14/2022 10:45	2.02	-102.6	6.78	7.31	12.75	8.1	15
MW-243R	02/14/2022 10:50	2.68	-104.4	6.85	5.72	10.17	7.87	14.2
MW-243R	02/14/2022 10:55	3.17	-105.7	6.93	4.61	8.304	7.48	12.3
MW-243R	02/14/2022 11:00	3.61	-106.9	7	4.2	7.623	6.96	8.5
MW-243R	02/14/2022 11:05	3.97	-107.9	7.01	4.08	7.414	7.16	10.8
MW-243R	02/14/2022 11:10	5.95	-108.9	7.03	4.04	7.342	7.04	10.5
MW-244	02/28/2012 09:00	-0.04	167	7.26	0.05	0.94418	12.32	141
MW-244	02/28/2012 09:05	7.53	-11	7.23	0.05	0.97463	13.08	42.9
MW-244	02/28/2012 09:10	2.04	-31	7.25	0.05	0.98145	12.93	21.08
MW-244	02/28/2012 09:14	1.45	-41	7.27	0.05	0.97654	12.97	14.76
MW-244	02/28/2012 09:19	1.11	-47	7.28	0.05	0.9784	13.02	20.16
MW-244	02/28/2012 09:24	0.94	-51	7.28	0.05	0.98114	13.12	14
MW-244	02/28/2012 09:29	0.82	-54	7.28	0.05	0.9832	13.19	11.67
MW-244	02/28/2012 09:34	0.74	-57	7.28	0.05	0.97958	13.34	12.28
MW-244	02/28/2012 09:38	0.69	-59	7.29	0.05	0.97647	13.34	12.33
MW-244	02/28/2012 09:43	0.66	-60	7.29	0.05	0.97992	13.3	12.48
MW-244	02/28/2012 09:48	0.61	-62	7.29	0.05	0.98118	13.40	10.94
MW-244	02/28/2012 10:27	0.06	1	7.48	0.05	0.959	12.64	178.30
MW-244	02/29/2012 09:02	-0.01	11	7.30	0.05	0.956	10.63	11.60
MW-244	03/11/2013 12:11	1.86	-246	6.87	0.09	1.755	13.59	20.34
MW-244	03/11/2013 12:43	6.77	-180	7.01	0.1	1.894	12.8	111.8
MW-244	03/12/2013 15:51	3.2	-249	6.97	0.11	2.213	9.44	114
MW-244	09/09/2014 09:45	1.04	111	6.54	0.05	0.993	21.71	19.65
MW-244	09/09/2014 10:18	2.84	145	7.13	0.05	1.016	22.33	101.60
MW-244	09/10/2014 09:16	1.02	-373	6.84	0.05	1.082	25.76	26.00
MW-244	06/10/2016 09:52	6.01	-18	7.81	0.03	0.617	21.20	20.10
MW-244	06/10/2016 10:14	7.99	-16	7.35	0.05	0.948	18.48	99.70
MW-244	05/09/2017 10:12	3.22	82.00	6.73	0.10	1.857	16.09	40.30
MW-244	05/09/2017 11:00	0.04	-64.00	6.77	0.07	1.386	15.08	15.85
MW-244	05/09/2017 11:46	4.86	72.00	7.16	0.07	1.413	15.63	67.30
MW-244	05/30/2018 10:27	4.6	-74	7.02	0.112	2.1671	19.22	302.3
MW-244	05/30/2018 10:32	1.99	-79	6.79	0.111	2.1549	18.3	143.8
MW-244	05/30/2018 10:37	1.54	-82	6.72	0.111	2.1433	18.31	83.3
MW-244	05/30/2018 10:41	1.39	-86	6.69	0.110	2.1377	18.02	66.2
MW-244	05/30/2018 10:46	1.2	-91	6.7	0.111	2.1528	17.74	78
MW-244	05/30/2018 10:51	1.14	-95	6.71	0.110	2.1358	17.6	98.9
MW-244	05/30/2018 10:55	1.12	-97	6.71	0.110	2.1363	17.82	150.6
MW-244	05/30/2018 11:00	1.13	-99	6.72	0.111	2.1529	17.69	91.7
MW-244	05/30/2018 11:05	0.94	-100	6.72	0.111	2.1444	17.98	36.8
MW-244	05/30/2018 11:10	0.99	-102	6.73	0.111	2.1477	17.91	41.9
MW-244	05/30/2018 11:14	1.01	-103	6.74	0.111	2.1469	18.05	36.8
MW-244	05/30/2018 11:19	0.98	-104	6.74	0.110	2.1386	17.98	39.8
MW-244	05/31/2018 09:57	2.84	3.00	6.78	0.05	0.987	20.6	31.30
MW-244	05/31/2018 11:19	0.98	-104.00	6.74	0.11	2.130	18.16	39.78
MW-244	05/31/2018 11:51	3.19	-82.00	7.04	0.11	2.130	18.07	120.90
MW-244	05/23/2019 10:20	0.44	98.3	7.48	NM	0.266	13.61	74.6
MW-244	05/23/2019 11:28	0.29	-79.3	6.96	0.43	0.865	14.03	3.4
MW-244	05/11/2020 10:05	1.15	-33.3	6.86	NM	0.742	14.84	141.4
MW-244	05/11/2020 11:00	2.13	-53.2	6.87	0.43	0.866	15.16	27.3
MW-244	11/19/2020 12:15	3.66	-43.5	7.16	0.4	0.807	13.44	6.9
MW-244	11/19/2020 12:35	3.78	-33.52	7.4	0.4	0.81	13.47	7.33
MW-244	02/24/2021 09:35	1.88	188	6.73	0.93	1.798	10.14	208.9
MW-244	02/24/2021 09:40	1.01	167.8	6.57	0.86	1.667	11.45	102.9
MW-244	02/24/2021 09:45	0.99	145.2	6.61	0.81	1.599	12.59	82.2
MW-244	02/24/2021 09:50	1.11	82.4	6.63	0.79	1.554	12.58	141.8
MW-244	02/24/2021 09:55	0.9	59.8	6.63	0.77	0.76	13.01	56.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-244	02/24/2021 10:00	0.78	31.3	6.65	0.71	1.393	13.47	39.8
MW-244	02/24/2021 10:05	0.66	9.7	6.68	0.62	1.236	13.67	74.3
MW-244	02/24/2021 10:10	0.49	-0.7	6.7	0.55	1.095	13.57	55.5
MW-244	02/24/2021 10:15	0.41	-11.5	6.72	0.52	1.035	13.71	24.1
MW-244	02/24/2021 10:20	0.36	-19.6	6.74	0.49	0.991	13.8	18.7
MW-244	02/24/2021 11:15	0.08	-49.9	6.82	0.44	0.895	14.56	6.1
MW-244	02/24/2021 11:25	0.07	-45.4	6.82	0.45	0.904	14.64	25.7
MW-244	05/10/2021 13:25	5.72	34.7	8.26	0.21	0.427	15.62	259.6
MW-244	05/10/2021 13:30	2.86	36.7	7.9	0.2	0.423	15.33	170.2
MW-244	05/10/2021 13:35	1.62	40.6	7.65	0.2	0.421	15.12	118.3
MW-244	05/10/2021 13:40	1.14	43.3	7.53	0.2	0.42	14.8	90.2
MW-244	05/10/2021 13:45	0.85	45.1	7.45	0.2	0.419	14.71	79.2
MW-244	05/10/2021 13:50	0.42	53.3	7.16	0.2	0.414	15.06	97.5
MW-244	05/10/2021 13:55	0.33	49	7.11	0.2	0.416	15.16	110.1
MW-244	05/10/2021 14:00	0.3	28.2	7.05	0.2	0.422	15.21	107.1
MW-244	05/10/2021 14:05	0.28	9.9	7	0.21	0.431	15.28	89.5
MW-244	05/10/2021 14:10	0.26	-36.8	6.83	0.33	0.672	15.44	49.7
MW-244	08/06/2021 14:28	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	08/06/2021 14:33	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	08/06/2021 14:38	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	08/06/2021 14:43	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	08/06/2021 14:48	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	08/06/2021 14:53	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	08/06/2021 14:58	3.14	-9.2	7.79	0.12	0.294	33.95	51.8
MW-244	02/10/2022 14:10	8.56	-14.5	7.75	1.9	3.584	13.07	103.9
MW-244	02/10/2022 14:15	8.3	-10.2	7.48	1.85	3.498	13.53	102.9
MW-244	02/10/2022 14:20	8.41	-8	7.34	1.85	3.493	13.68	128.1
MW-244	02/10/2022 14:25	8.12	-5.6	7.2	1.82	3.473	13.74	154
MW-244	02/10/2022 14:30	7.86	-4.7	7.11	1.79	3.388	13.74	177.4
MW-244	02/10/2022 14:35	7.59	-4.2	7.08	1.76	3.336	13.81	193
MW-244	02/10/2022 14:40	6.93	-3.5	7.01	1.7	3.231	13.88	197.5
MW-244	02/10/2022 14:45	6.65	-3.4	7	1.67	3.181	13.8	190.2
MW-244	02/10/2022 14:50	6.11	-3	6.73	1.82	3.076	13.74	165.1
MW-244	02/10/2022 14:55	5.61	-3.5	6.94	1.57	2.99	13.77	140.6
MW-258	04/25/2012 09:48	4.71	-103	7.28	0.06	1.22588	14.33	28.5
MW-258	04/25/2012 09:50	0.84	-122	7.31	0.06	1.22789	14.06	14.1
MW-258	04/25/2012 09:53	0.47	-130	7.32	0.06	1.22208	14.16	12.5
MW-258	04/25/2012 09:55	0.35	-135	7.31	0.06	1.21347	14.58	11.5
MW-258	04/25/2012 09:57	0.31	-140	7.31	0.06	1.21392	14.6	10.8
MW-258	04/25/2012 10:00	0.31	-143	7.31	0.06	1.21517	14.71	10.5
MW-258	04/25/2012 10:02	0.29	-145	7.32	0.06	1.21481	14.98	12.1
MW-258	04/25/2012 10:04	0.29	-147	7.31	0.06	1.21499	14.81	12.1
MW-258	04/25/2012 10:07	0.27	-149	7.31	0.06	1.21398	15.03	27.1
MW-258	04/25/2012 10:09	0.26	-150	7.31	0.06	1.21861	14.82	14.4
MW-258	04/25/2012 10:11	0.25	-151	7.31	0.06	1.21275	14.66	13.2
MW-258	04/25/2012 10:14	0.22	-152	7.31	0.06	1.21781	14.61	14.2
MW-258	04/25/2012 10:16	0.24	-153	7.31	0.06	1.21411	14.72	14.1
MW-258	04/25/2012 10:18	0.24	-154	7.31	0.06	1.21712	14.76	27.1
MW-258	04/25/2012 10:21	0.23	-154	7.32	0.06	1.22013	14.51	20.8
MW-258	04/25/2012 10:23	0.22	-154	7.32	0.06	1.21257	14.69	20
MW-258	04/25/2012 10:26	0.21	-155	7.32	0.06	1.21516	14.73	19.1
MW-258	04/25/2012 10:28	0.19	-155	7.32	0.06	1.21344	14.88	20.2
MW-258	04/25/2012 10:30	0.19	-156	7.32	0.06	1.20739	15.16	34.1
MW-258	04/25/2012 10:33	0.18	-156	7.32	0.06	1.21951	15	33.1
MW-258	04/25/2012 10:35	0.18	-156	7.32	0.06	1.21207	14.83	18.3
MW-258	04/25/2012 10:37	0.17	-156	7.32	0.06	1.20931	14.84	15.2
MW-258	04/25/2012 10:38	0.17	-156	7.32	0.06	1.209	14.84	15.20
MW-258	04/25/2012 11:20	2.12	-113	7.40	0.06	1.255	15.44	111.70
MW-258	04/26/2012 09:19	2.29	-134	7.30	0.06	1.220	14.28	156.30
MW-258	08/15/2012 12:28	4.90	-207	7.29	0.10	1.300	26.25	22.00
MW-258	08/15/2012 13:10	8.01	-206	7.31	0.10	1.350	23.95	134.00
MW-258	08/16/2012 10:40	4.34	-202	7.20	0.10	1.320	24.70	292.00

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-258	04/18/2013 13:31	1.39	-224	7.15	0.09	1.833	11.99	2
MW-258	04/18/2013 14:17	3.47	-197	7.36	0.1	2.038	12.05	20.2
MW-258	04/19/2013 10:32	0.68	-267	7.25	0.1	2.024	12.08	157
MW-258	08/19/2013 15:33	2.07	-100.6	7.09	0.53	1.058	20.53	829.80
MW-258	08/19/2013 16:07	0.91	-147	7.00	0.52	1.047	20.14	852.90
MW-258	08/19/2013 16:34	1.06	-137.1	6.96	0.52	1.040	20.09	495.60
MW-258	08/20/2013 16:34	1.06	-137.1	6.96	0.52	1.040	20.09	495.60
MW-258	09/23/2013 10:12	0.58	-279	7.24	0.08	1.564	19.28	15.89
MW-258	09/23/2013 10:58	0.94	-284	7.16	0.07	1.456	21.01	42.20
MW-258	09/24/2013 10:40	0.20	-226	7.21	0.11	2.132	21.08	129.70
MW-258	03/26/2014 15:15	0.84	-395	7.20	0.25	4.827	6.01	11.75
MW-258	03/26/2014 16:07	7.51	-215	6.97	0.18	3.386	7.30	34.80
MW-258	03/27/2014 13:47	0.97	-443	7.23	0.22	4.174	6.89	34.90
MW-258	09/12/2014 12:45	6.90	-153.6	7.23	0.61	1.211	21.26	18.90
MW-258	09/12/2014 13:05	6.59	NM	7.20	NM	NM	21.20	13.90
MW-258	12/05/2014 12:50	2.96	-111.2	7.04	NM	3.605	12.31	6.80
MW-258	12/05/2014 12:55	0.95	-113.6	7.04	NM	3.501	12.14	4.20
MW-258	12/05/2014 13:50	3.18	-119.6	7.04	NM	3.492	12.20	73.20
MW-258	01/13/2015 13:44	-0.62	-202	7.52	0.24	4.604	6.90	30.69
MW-258	01/13/2015 14:48	1.41	-146	7.26	0.28	5.220	9.80	83.70
MW-258	01/14/2015 14:00	2.74	-170	6.91	0.26	4.898	6.59	31.90
MW-258	03/03/2016 09:40	0.28	-157	6.54	0.10	1.919	7.29	45.10
MW-258	03/03/2016 09:55	3.56	-109	7.07	0.40	7.250	9.01	642.80
MW-258	04/06/2016 10:00	3.36	-60	6.50	0.80	1.670	9.71	10.40
MW-258	04/06/2016 10:40	4.61	-85	6.70	0.80	1.630	9.80	115.00
MW-258R	05/15/2018 09:12	2.96	-171	7.01	0.089	1.7405	17.69	44.3
MW-258R	05/15/2018 09:14	1.43	-164	7.1	0.089	1.7414	17.82	49.5
MW-258R	05/15/2018 09:17	1.12	-165	7.15	0.089	1.7439	17.59	51.2
MW-258R	05/15/2018 09:20	1.04	-165	7.16	0.089	1.7430	17.74	41.6
MW-258R	05/15/2018 09:22	0.97	-165	7.18	0.089	1.7401	17.53	42.5
MW-258R	05/15/2018 09:25	0.91	-166	7.19	0.088	1.7275	17.33	37.1
MW-258R	05/15/2018 09:28	0.88	-166	7.19	0.088	1.7262	17.43	79.2
MW-258R	05/15/2018 09:30	0.9	-166	7.2	0.088	1.7257	17.8	30.2
MW-258R	05/15/2018 09:33	0.89	-166	7.22	0.088	1.7319	17.71	36.4
MW-258R	05/15/2018 09:35	0.86	-165	7.24	0.089	1.7350	17.73	26.2
MW-258R	05/15/2018 09:38	0.86	-166	7.25	0.089	1.7396	17.64	37.7
MW-258R	05/15/2018 09:41	0.86	-165	7.26	0.089	1.7472	17.69	22.8
MW-258R	05/15/2018 09:43	0.85	-166	7.26	0.089	1.7408	17.9	29.6
MW-258R	05/15/2018 09:46	0.84	-166	7.27	0.089	1.7385	17.68	33.9
MW-258R	05/15/2018 09:49	0.81	-166	7.28	0.089	1.7484	17.8	24.9
MW-258R	05/15/2018 09:51	0.84	-166	7.28	0.089	1.7480	17.67	24.1
MW-258R	05/15/2018 09:54	0.81	-166	7.29	0.089	1.7448	17.82	54
MW-258R	05/15/2018 09:57	0.77	-168	7.29	0.090	1.7512	17.74	21.2
MW-258R	05/15/2018 09:59	0.75	-169	7.31	0.090	1.7547	17.68	20.2
MW-258R	05/15/2018 10:02	0.74	-169	7.31	0.090	1.7646	17.78	24.5
MW-258R	05/16/2018 09:25	2.08	-68.00	7.80	0.10	1.927	17.66	105.80
MW-258R	05/16/2018 10:02	0.74	-169.00	7.31	0.09	1.758	17.96	24.55
MW-258R	05/16/2018 10:50	4.36	-136.00	7.04	0.08	1.657	13.32	94.30
MW-258R	08/16/2018 11:14	0.29	-167.00	7.20	0.09	1.744	25.36	37.60
MW-258R	08/16/2018 14:12	1.74	-106.00	7.25	0.11	2.163	24.35	27.30
MW-258R	11/30/2018 13:55	0.71	-152.40	7.20	0.97	1.897	12.52	15.90
MW-258R	11/30/2018 14:07	0.36	-160.60	7.20	0.93	1.833	13.18	12.00
MW-258R	11/30/2018 14:17	0.33	-163.80	7.19	0.92	1.799	13.25	9.80
MW-258R	02/19/2019 13:00	11.01	131.3	7.65	NM	2.525	6.82	10.1
MW-258R	02/19/2019 13:35	3.67	-20.4	7.21	1.16	2.25	8.38	31.1
MW-258R	05/20/2019 10:24	5.21	22.9	7.28	0.57	1.144	14.83	27.9
MW-258R	08/14/2019 10:05	0.38	-81.7	7.14	NM	1.424	21.87	8.8
MW-258R	08/14/2019 10:10	0.24	-84.8	7.15	NM	1.429	22.51	5.9
MW-258R	08/14/2019 10:15	0.19	-84.2	7.15	NM	1.432	22.78	4.7
MW-258R	08/14/2019 10:20	0.17	-80.4	7.14	NM	1.43	22.76	3.6
MW-258R	08/14/2019 10:25	0.16	-77.8	7.14	NM	1.426	22.7	2.5
MW-258R	08/14/2019 10:30	0.16	-72.5	7.13	NM	1.423	22.65	2.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-258R	08/14/2019 10:35	0.18	-71	7.13	NM	1.423	22.71	3.1
MW-258R	08/14/2019 10:40	0.22	-68.9	7.13	NM	1.426	22.68	3.3
MW-258R	08/14/2019 10:45	0.23	-69.2	7.13	NM	1.425	22.66	2.9
MW-258R	08/14/2019 10:50	0.23	-71.5	7.12	NM	1.429	22.52	2.8
MW-258R	08/14/2019 12:40	0.23	-71.5	7.12	NM	1.429	22.52	2.8
MW-258R	08/14/2019 13:15	1.72	-90.2	7.12	0.74	1.477	22.48	3.8
MW-258R	08/14/2019 13:25	1.65	-87.6	7.11	0.78	1.545	22.91	721.1
MW-258R	02/18/2020 13:20	1.3	79.2	7.45	NM	0.403	8.34	33.3
MW-258R	02/18/2020 13:40	1.4	63.5	7.29	0.23	0.474	8.72	100.9
MW-258R	09/28/2020 12:25	NM	NM	NM	NM	NM	NM	46.6
MW-258R	10/15/2020 11:00	4.23	57.3	7.08	1.14	2.219	19.73	50.5
MW-258R	10/15/2020 11:05	8.15	66.8	7	1.15	2.242	19.78	38.4
MW-258R	10/15/2020 11:10	11.23	70.5	6.98	1.16	2.262	19.88	33.2
MW-258R	10/15/2020 11:15	13.8	72	6.94	1.19	2.314	20	42.3
MW-258R	10/15/2020 11:20	14.28	71.4	6.92	1.21	2.345	20.01	41.4
MW-258R	10/15/2020 11:25	17.85	69	6.87	1.25	2.42	20.12	33.3
MW-258R	10/15/2020 11:30	22.4	64.8	6.84	1.29	2.487	20.15	27.4
MW-258R	10/15/2020 11:35	28.24	59.5	6.82	1.32	2.553	20.17	19
MW-258R	10/15/2020 11:40	23.37	55.1	6.82	1.35	2.594	20.11	18.1
MW-258R	10/15/2020 11:45	28.19	51.1	6.81	1.37	2.637	20.15	12.3
MW-258R	10/15/2020 12:05	4.44	4.1	6.67	1.52	2.919	21.94	8.9
MW-258R	10/15/2020 12:25	11.36	14.7	6.68	1.52	2.911	22.03	NM
MW-258R	01/12/2021 09:50	3.39	170	6.74	0.46	0.93	6.73	92.7
MW-258R	01/12/2021 09:55	2.03	157.8	6.84	0.46	0.924	6.05	50.1
MW-258R	01/12/2021 10:00	1.55	143.7	6.92	0.45	0.915	5.49	33.4
MW-258R	01/12/2021 10:05	1.46	123.2	7.02	0.45	0.906	5.52	27.3
MW-258R	01/12/2021 10:10	1.51	101.7	7.08	0.44	0.9	5.53	26.9
MW-258R	01/12/2021 10:15	1.56	82.2	7.12	0.44	0.903	5.48	24.7
MW-258R	01/12/2021 10:20	1.53	62.6	7.15	0.45	0.906	5.8	23.6
MW-258R	01/12/2021 10:25	1.43	48.5	7.17	0.45	0.906	5.9	21.2
MW-258R	01/12/2021 10:30	1.35	41.9	7.17	0.45	0.904	6.09	19.5
MW-258R	01/12/2021 10:35	1.29	31.3	7.18	0.45	0.91	6.3	20.1
MW-258R	01/12/2021 11:25	3.49	-32.2	6.93	0.46	0.934	9.26	1.6
MW-258R	01/12/2021 11:45	4.35	-35.5	6.85	0.5	1.01	8.71	78.1
MW-258R	04/08/2021 12:45	6.63	-27.1	8.29	0.65	1.26	16.38	36.8
MW-258R	04/08/2021 12:50	3.21	130.3	7.69	0.6	1.208	13.74	40.9
MW-258R	04/08/2021 12:55	5.63	121.3	7.56	0.56	1.13	13.09	33.2
MW-258R	04/08/2021 13:00	2.91	65.4	7.48	0.55	1.092	12.13	10.7
MW-258R	04/08/2021 13:05	4.59	7.9	7.46	0.57	1.146	11.89	14.2
MW-258R	04/08/2021 13:10	4.63	7.2	7.41	0.59	1.173	12.05	29.2
MW-258R	04/08/2021 13:15	4.66	15.4	7.38	0.62	1.24	11.69	20.6
MW-258R	04/08/2021 13:20	4.29	21.5	7.34	0.65	1.291	11.55	11.9
MW-258R	04/08/2021 13:25	5.14	5.3	7.41	0.67	1.338	10.93	33.5
MW-258R	04/08/2021 13:30	6.5	-9.5	7.44	0.68	1.346	10.88	18.7
MW-258R	07/15/2021 12:35	1.05	-112.6	7.28	0.47	0.964	27.56	36.1
MW-258R	07/15/2021 12:40	0.81	-106	7.14	0.47	0.956	28.63	31.7
MW-258R	07/15/2021 12:45	0.66	-112.4	7.21	0.47	0.954	29.82	24.5
MW-258R	07/15/2021 12:50	0.58	-114.5	7.23	0.46	0.954	29.98	25.4
MW-258R	07/15/2021 12:55	0.53	-116.8	7.25	0.46	0.944	29.36	32.8
MW-258R	07/15/2021 13:00	0.47	-117.7	7.25	0.46	0.936	29.36	8.5
MW-258R	07/15/2021 13:05	0.43	-120.5	7.27	0.45	0.933	29.59	6
MW-258R	07/15/2021 13:10	0.41	-123.3	7.28	0.46	0.936	29.8	3.5
MW-258R	07/15/2021 13:15	0.38	-125.5	7.28	0.46	0.943	29.69	5.9
MW-258R	07/15/2021 13:20	0.33	-127.9	7.28	0.46	0.952	29.38	19.3
MW-258R	01/28/2022 09:05	5.71	150.8	6.82	0.44	0.933	6.15	114.3
MW-258R	01/28/2022 09:10	5.18	145.9	6.83	0.43	0.873	5.66	66.4
MW-258R	01/28/2022 09:15	5.12	135.2	6.92	0.44	0.888	4.84	66.1
MW-258R	01/28/2022 09:20	5.03	133.2	6.94	0.44	0.904	4.57	70
MW-258R	01/28/2022 09:25	4.57	122.4	6.9	0.45	0.914	5.47	52.7
MW-258R	01/28/2022 09:30	4.84	111.8	6.98	0.46	0.938	5.78	39.4
MW-258R	01/28/2022 09:35	4.94	91.4	7.04	0.48	0.967	6.03	38.7
MW-258R	01/28/2022 09:40	4.61	63.4	7.18	0.48	0.969	6.01	35.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-258R	01/28/2022 09:45	5.21	62.6	7.18	0.48	0.967	5.95	35.5
MW-258R	01/28/2022 09:50	5.27	61.9	7.18	0.48	0.965	5.91	33.2
MW-258R	04/13/2022 08:40	2.25	15.3	8.47	0.14	0.228	13.86	17.3
MW-258R	04/13/2022 08:45	1.84	-29.4	7.83	0.12	0.226	13.7	8.9
MW-258R	04/13/2022 08:50	2.11	-40.2	7.78	0.11	0.293	13.74	11.3
MW-258R	04/13/2022 08:55	2.01	-55.8	7.7	0.11	0.327	14.09	13.7
MW-258R	04/13/2022 09:00	2.03	-63.1	7.64	0.12	0.227	14.39	5.6
MW-258R	04/13/2022 09:05	1.69	-68.5	7.6	0.15	0.24	14.49	6.2
MW-258R	04/13/2022 09:10	1.89	-70.9	7.57	0.13	0.233	14.6	9.9
MW-258R	04/13/2022 09:15	1.88	-73.4	7.55	0.13	0.236	14.6	5.4
MW-258R	04/13/2022 09:20	2.33	-74.1	7.55	0.11	0.28	14.63	2.3
MW-258R	04/13/2022 09:25	2.25	-75	7.54	0.11	0.288	14.51	2.1
MW-259	04/25/2012 08:33	2.52	-90	7.22	0.03	0.654	13.38	7.8
MW-259	04/25/2012 08:35	0.95	-118	7.3	0.03	0.64699	13.08	5.4
MW-259	04/25/2012 08:37	0.64	-133	7.35	0.03	0.64917	12.78	5.8
MW-259	04/25/2012 08:40	0.5	-141	7.38	0.03	0.64845	12.7	6.2
MW-259	04/25/2012 08:42	0.42	-148	7.39	0.03	0.64915	12.69	6.8
MW-259	04/25/2012 08:44	0.35	-153	7.4	0.03	0.64892	12.63	8.9
MW-259	04/25/2012 08:47	0.33	-157	7.41	0.03	0.65057	12.54	7.9
MW-259	04/25/2012 08:49	0.3	-160	7.42	0.03	0.6474	12.59	7.9
MW-259	04/25/2012 08:51	0.27	-163	7.43	0.03	0.64776	12.62	8.2
MW-259	04/25/2012 08:54	0.25	-165	7.43	0.03	0.64622	12.64	9
MW-259	04/25/2012 08:56	0.24	-168	7.44	0.03	0.64596	12.63	9.7
MW-259	04/25/2012 08:58	0.22	-170	7.44	0.03	0.64707	12.67	9.8
MW-259	04/25/2012 09:01	0.21	-171	7.45	0.03	0.64633	12.6	11.2
MW-259	04/25/2012 09:03	0.2	-173	7.45	0.03	0.64553	12.68	12.1
MW-259	04/25/2012 09:06	0.19	-174	7.46	0.03	0.64379	12.7	13.1
MW-259	04/25/2012 09:08	0.19	-176	7.46	0.03	0.64484	12.65	12.9
MW-259	04/25/2012 09:33	5.40	-124	7.60	0.03	0.681	13.27	48.90
MW-259	04/26/2012 08:51	1.10	-116	7.57	0.03	0.667	14.17	70.60
MW-259	08/08/2012 08:31	1.94	-157	13.96	0.03	0.667	23.42	3.5
MW-259	08/08/2012 08:33	1.55	-173	13.79	0.03	0.666	23.57	4.3
MW-259	08/08/2012 08:35	1.21	-176	13.87	0.03	0.667	23.16	2.8
MW-259	08/08/2012 08:37	1.13	-177	13.85	0.03	0.666	23.29	3.1
MW-259	08/08/2012 08:39	0.99	-177	13.83	0.03	0.661	23.57	3.9
MW-259	08/08/2012 08:41	0.87	-178	13.81	0.03	0.667	23.48	3.7
MW-259	08/08/2012 08:43	0.79	-179	13.78	0.03	0.667	23.59	3.8
MW-259	08/08/2012 08:45	0.73	-181	13.75	0.03	0.672	23.59	3.7
MW-259	08/08/2012 08:48	0.69	-182	13.7	0.03	0.675	23.63	4.6
MW-259	08/08/2012 08:50	0.63	-183	13.66	0.03	0.675	23.65	4
MW-259	08/08/2012 08:52	0.61	-184	13.62	0.03	0.677	23.63	4.7
MW-259	08/08/2012 08:54	0.61	-186	13.57	0.03	0.68	23.77	4.3
MW-259	08/08/2012 08:56	0.60	-187	13.55	0.03	0.681	23.45	4.81
MW-259	08/08/2012 09:19	4.30	-170	13.75	0.03	0.669	19.42	18.60
MW-259	08/09/2012 09:00	4.81	-154	7.65	0.0000	0.644	25.97	122.00
MW-259	04/18/2013 11:08	1.05	-281	7.59	0.06	1.166	11.49	4.63
MW-259	04/18/2013 11:36	3.18	-211	7.63	0.05	1.071	11.81	225.3
MW-259	04/19/2013 10:05	1.02	-255	7.52	0.06	1.143	12.64	88.8
MW-259	08/19/2013 13:49	4.41	-33.3	7.20	0.32	649.000	22.36	201.20
MW-259	08/19/2013 14:44	1.20	-145.9	7.49	0.30	0.620	19.79	170.20
MW-259	08/19/2013 15:14	1.11	-125.8	7.43	0.30	0.615	19.57	89.90
MW-259	08/20/2013 15:14	1.11	-125.8	7.43	0.30	0.615	19.57	89.90
MW-259	09/23/2013 09:16	0.53	-353	2.55	0.07	1.292	18.62	3.66
MW-259	09/23/2013 09:40	1.31	-257	7.61	0.06	1.206	20.13	79.30
MW-259	09/24/2013 09:45	0.32	-234	7.36	0.09	1.694	20.95	78.70
MW-259	03/26/2014 14:06	1.03	-395	7.35	0.21	4.115	5.23	9.03
MW-259	03/26/2014 14:29	4.28	-298	7.72	0.13	2.467	7.70	161.60
MW-259	03/27/2014 13:34	0.99	-493	7.42	0.17	3.359	6.42	37.60
MW-259	08/18/2014 12:30	0.23	-161.1	7.01	0.55	1.106	21.36	0.0000
MW-259	08/18/2014 13:05	0.22	-159.3	6.99	0.54	1.099	21.91	0.0000
MW-259	08/18/2014 13:25	0.22	-163.2	6.99	0.55	1.111	22.24	0.50
MW-259	12/05/2014 09:40	0.22	-141.5	7.33	1.02	1.992	12.22	5.60

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-259	12/05/2014 10:27	0.16	-148	7.39	0.95	1.866	13.16	3.50
MW-259	12/05/2014 10:53	0.28	-140.7	7.37	0.95	1.855	11.18	14.50
MW-259	01/13/2015 11:11	-0.68	-221	7.41	0.13	2.604	5.45	15.97
MW-259	01/13/2015 11:31	1.11	-174	7.35	0.12	2.283	10.37	622.30
MW-259	01/14/2015 13:47	3.32	-193	7.22	0.17	3.247	6.35	39.40
MW-259	09/15/2015 15:03	0.36	-141.5	6.14	1.54	2.964	22.81	0.0000
MW-259	09/15/2015 15:15	0.35	-141.5	6.14	1.54	2.963	23.41	0.0000
MW-259	03/03/2016 10:10	0.92	-178	6.67	0.11	2.205	6.29	81.70
MW-259	03/03/2016 11:15	5.06	-126	7.23	0.41	7.450	8.67	62.80
MW-259	12/20/2016 10:05	0.03	-177	7.26	0.08	1.588	9.21	50
MW-259	12/20/2016 11:11	3.89	-113	7.06	0.09	1.732	10.32	125.8
MW-259	02/08/2017 10:48	0.10	1117	7.27	0.07	1.459	7.69	59.00
MW-259	02/08/2017 14:16	5.44	1213	6.96	0.10	1.947	8.29	99.20
MW-260	03/06/2012 14:48	-0.16	-195	8.4	0.43	7.7398	9.91	75.3
MW-260	03/06/2012 14:50	-0.14	-208	8.4	0.43	7.82902	9.66	69.4
MW-260	03/06/2012 14:51	-0.12	-209	8.47	0	0.00854	8.91	2.3
MW-260	03/06/2012 14:53	-0.16	-202	8.41	0.43	7.91504	8.12	59
MW-260	03/06/2012 14:55	-0.13	-222	8.4	0.43	7.87834	8.09	52.7
MW-260	03/06/2012 14:57	-0.11	-231	8.41	0.43	7.89363	8.16	58
MW-260	03/06/2012 14:59	-0.1	-237	8.41	0.43	7.88343	8.24	54
MW-260	03/06/2012 15:01	-0.1	-242	8.41	0.43	7.86131	8.05	50.8
MW-260	03/06/2012 15:03	-0.1	-247	8.42	0.43	7.83377	8.14	49.2
MW-260	03/06/2012 15:05	-0.09	-251	8.43	0.43	7.81667	8.12	48.7
MW-260	08/20/2012 13:02	7.20	-308	7.36	1.3	21.60	24.2	46.4
MW-260	08/20/2012 13:04	5.93	-333	7.37	1.3	21.60	25.3	42.4
MW-260	08/20/2012 13:06	5.57	-361	7.34	1.3	21.50	25.6	37.6
MW-260	08/20/2012 13:08	5.39	-372	7.32	1.3	21.50	25.7	33.3
MW-260	08/20/2012 13:10	5.27	-377	7.32	1.3	21.50	25.7	31.9
MW-260	08/20/2012 13:12	5.15	-379	7.31	1.3	21.50	25.9	28.6
MW-260	08/20/2012 13:14	5.07	-381	7.30	1.3	21.60	25.8	27.6
MW-260	08/20/2012 13:16	5.04	-382	7.30	1.3	21.60	25.8	25.8
MW-260	08/20/2012 13:18	5.04	-382	7.29	1.3	21.60	25.6	25.2
MW-260	08/20/2012 13:21	5.03	-382	7.29	1.30	21.500	25.54	25.50
MW-260	08/21/2012 11:32	5.17	-291	7.60	0.60	11.300	24.00	70.10
MW-260	03/25/2013 09:26	0.71	-333	6.84	1.95	32030	6.93	5.26
MW-260	04/10/2013 16:35	0.45	-302	6.73	1.13	18.99	15.53	13.7
MW-260	09/26/2013 09:28	0.36	-257	6.94	1.95	31.020	20.01	5.94
MW-260	05/27/2014 09:37	1.26	-274	6.84	1.02	17.050	19.37	2.90
MW-260	07/02/2015 10:23	7.31	-187	7.44	1.09	18.26	22.76	118.2
MW-260	07/02/2015 11:13	2.21	-230	7.44	1.14	18.92	21.47	2.6
MW-260	03/08/2016 10:15	0.14	-269	8.46	0.33	6.077	7.64	66.60
MW-260	03/08/2016 10:18	3.07	-264	7.94	1.11	19.020	7.02	32.40
MW-260	09/08/2016 09:47	0.32	-213	7.18	0.47	8.391	24.03	133.50
MW-260	09/08/2016 10:23	3.05	-226	7.05	0.58	10.090	23.64	14.30
MW-260	02/07/2017 09:23	3.72	117	9.80	0.65	11.720	5.84	132.00
MW-260	02/07/2017 10:40	4.94	538	7.32	0.85	14.810	6.63	38.20
MW-260R	11/26/2018 09:15	0.18	-136.90	7.50	10.34	17.520	10.68	24.90
MW-260R	11/26/2018 10:05	2.12	-138.80	7.43	8.06	13.900	11.53	6.30
MW-260R	11/26/2018 10:15	3.35	-140.10	7.60	7.56	13.090	11.41	34.50
MW-260R	02/05/2019 10:55	4	-152.1	7.33	11.48	19.28	9.79	107.6
MW-260R	05/21/2019 13:35	0.2	-147.3	6.91	NM	16.58	14.74	0.4
MW-260R	05/21/2019 14:03	0.42	-178.8	7.04	8.78	15.01	13.2	21.7
MW-260R	08/23/2019 12:45	1.54	-62.3	6.88	NM	20.87	21.31	22.5
MW-260R	08/23/2019 13:45	0.76	-90.8	7.04	12.21	20.38	22.02	12.7
MW-260R	08/23/2019 14:55	3.03	68.2	7.52	12.01	20.08	21.13	68.3
MW-260R	11/04/2019 12:00	2.38	-95.2	6.78	NM	8.299	16.9	14.7
MW-260R	11/04/2019 12:05	0.37	-122.8	6.78	NM	8.697	17.07	9.2
MW-260R	11/04/2019 12:10	0.24	-152.5	6.97	NM	8.34	17.09	27.1
MW-260R	11/04/2019 12:15	0.24	-171	7.03	NM	8.136	16.78	27.1
MW-260R	11/04/2019 12:20	0.24	-181.4	7.05	NM	8.075	16.83	24.1
MW-260R	11/04/2019 12:25	0.24	-186.8	7.05	NM	8.073	16.83	22
MW-260R	11/04/2019 12:30	0.2	-196.4	7.04	NM	8.069	16.68	17.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-260R	11/04/2019 12:35	0.19	-203.5	7.05	NM	8.052	16.8	16.6
MW-260R	11/04/2019 12:40	0.17	-201.9	7.06	NM	8.026	16.78	14.5
MW-260R	11/04/2019 12:45	0.15	-211.8	7.08	NM	7.994	16.81	12.7
MW-260R	11/04/2019 13:25	0.07	-229.8	7.13	4.04	7.268	16.57	5.9
MW-260R	11/04/2019 14:05	0.21	-224	7.04	4.48	8.026	17.52	52.4
MW-260R	02/28/2020 11:35	0.11	-274.4	6.99	NM	7.461	7.41	6.8
MW-260R	02/28/2020 12:10	0.19	-282.5	6.99	4.14	7.502	8.22	5
MW-260RR	01/06/2021 14:20	3.37	-267.8	9.43	54.13	78.2	11.49	8.6
MW-260RR	01/06/2021 14:55	2.47	-291.8	9.45	51.14	74.55	11.51	30.9
MW-260RR	01/06/2021 15:15	2.03	-333.7	9.4	56.89	81.41	13.74	62.6
MW-260RR	03/31/2021 08:40	0	-348.9	8.62	47.22	69.45	11.87	4.6
MW-260RR	03/31/2021 08:45	0	-361.9	8.63	47.22	69.46	11.94	4.7
MW-260RR	03/31/2021 08:50	0	-377	8.65	47.36	69.65	11.81	4.7
MW-260RR	03/31/2021 08:55	0	-390.3	8.65	47.36	69.65	12.08	3.6
MW-260RR	03/31/2021 09:00	0	-395.7	8.64	46.64	68.76	11.8	5.7
MW-260RR	03/31/2021 09:05	0	-396.1	8.66	46.59	68.65	11.71	6
MW-260RR	03/31/2021 09:10	0	-397.9	8.65	46.56	68.59	11.76	6.3
MW-260RR	03/31/2021 09:15	0	-397.8	8.63	46.93	69.08	11.88	5.9
MW-260RR	03/31/2021 09:55	0.16	-376.5	8.7	47.7	69.78	15.07	37.9
MW-260RR	03/31/2021 10:20	0.08	-395.8	8.56	22.51	35.64	14.82	84.5
MW-260RR	01/21/2022 10:30	0	-417	8.24	46.53	70.02	4.32	20.6
MW-260RR	01/21/2022 10:35	0	-424.4	8.27	47.14	70.9	4.19	20.1
MW-260RR	01/21/2022 10:40	0	-429.3	8.32	47.56	71.54	3.85	21.1
MW-260RR	01/21/2022 10:45	0	-429.3	8.34	47.48	71.61	3.52	20.4
MW-260RR	01/21/2022 10:50	0	-429.8	8.36	47.44	71.56	3.45	17.8
MW-260RR	01/21/2022 10:55	0	-430.4	8.38	47.33	71.3	3.5	20.9
MW-260RR	01/21/2022 11:00	0	-429.9	8.35	47.33	71.42	3.42	20.2
MW-260RR	01/21/2022 11:05	0	-429.8	8.35	47.3	71.34	3.44	20
MW-261R	11/27/2018 10:00	1.89	-253.20	8.45	11.37	19.080	12.2	84.90
MW-261R	11/27/2018 11:00	1.37	-260.30	8.69	2.02	3.822	10.5	10.60
MW-261R	11/27/2018 11:10	2.17	-241.70	8.40	1.20	2.332	9.33	11.30
MW-261R	02/05/2019 10:25	5.45	-264.10	8.14	11.96	20.080	10.26	577.90
MW-261R	02/05/2019 11:10	4.17	-221.00	8.01	1.87	3.611	12.19	160.50
MW-261R	02/05/2019 11:30	3.99	-210.50	8.03	2.02	3.484	12.05	247.30
MW-261R	11/06/2019 11:15	0.32	-347.8	7.86	NM	8.673	16.95	4.2
MW-261R	11/06/2019 12:23	0.72	-322.8	7	0.85	1.675	16.53	1.9
MW-261R	11/06/2019 12:30	2.44	-222.7	7.23	0.71	1.406	17.33	5.1
MW-261R	02/19/2020 10:25	13.65	-236.5	8.59	1.55	3.003	8.06	10.6
MW-261R	01/07/2021 09:05	4	-138.3	7.16	8.75	15.08	8.44	5.1
MW-261R	01/07/2021 10:05	3.12	-123.7	7.67	1.83	3.434	8.11	4.5
MW-261R	01/07/2021 10:25	2.17	-89.4	7.46	1.19	2.304	9.12	125.6
MW-261R	03/31/2021 13:30	0.94	-300.6	7.84	12.42	20.82	13.56	16.8
MW-261R	03/31/2021 13:35	0.33	-310.7	7.71	11.95	20.1	13.18	18.4
MW-261R	03/31/2021 13:40	0.09	-315.6	7.6	6.68	12.07	12.8	15
MW-261R	03/31/2021 13:45	0.24	-308.9	7.55	2.3	6.734	12.3	7.2
MW-261R	03/31/2021 13:50	0.25	-304.8	7.51	2.81	5.271	12.07	3.8
MW-261R	03/31/2021 13:55	0.21	-289.7	7.45	2.21	4.16	11.59	1.4
MW-261R	03/31/2021 14:00	0.25	-282.2	7.4	2.05	3.865	11.65	0.5
MW-261R	03/31/2021 14:05	0.26	-293.1	7.4	1.96	3.711	12.23	0.4
MW-261R	03/31/2021 14:10	0.29	-290.6	7.36	1.9	3.593	12.09	0.4
MW-261R	03/31/2021 14:15	0.28	-288.6	7.36	1.9	3.592	11.99	0.1
MW-261R	03/31/2021 15:05	1.79	-202.4	7.59	1.78	3.375	11.96	8.8
MW-261R	03/31/2021 15:25	3.16	-147.9	7.46	1.25	2.414	10.84	70.7
MW-261R	01/21/2022 09:00	0.12	-287.9	7.42	11.57	19.71	3.16	296.5
MW-261R	01/21/2022 09:05	0	-302.3	7.36	11.88	20.19	3	293.7
MW-261R	01/21/2022 09:10	0	-309.1	7.34	12.05	20.55	2.96	292.7
MW-261R	01/21/2022 09:15	0	-314.2	7.3	11.34	19.51	2.64	306.6
MW-261R	01/21/2022 09:20	0.29	-322.7	7.26	9.41	16.37	2.78	225.6
MW-261R	01/21/2022 09:25	0.13	-328	7.21	7.43	13.15	2.77	147.4
MW-261R	01/21/2022 09:30	0.01	-329.8	7.18	5.88	10.65	2.68	97.8
MW-261R	01/21/2022 09:35	0.57	-332	7.13	4.58	8.554	2.65	76.3
MW-261R	01/21/2022 09:40	1.38	-337.2	7.13	3.77	6.986	2.37	43.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-261R	01/21/2022 09:45	1.9	-336.1	7.11	3.64	6.756	2.24	38.2
MW-262	03/21/2012 09:10	0.48	-96	6.32	0.10	1.220	12.40	24.10
MW-262	03/06/2013 14:15	4.18	-28.9	6.9	0.7	1.05	15.1	70.9
MW-262	03/06/2013 14:20	7.24	-9	6.84	0.6	1.02	14.8	72.2
MW-262	03/06/2013 14:23	8.4	1.6	6.86	0.6	0.99	14.5	0.5
MW-262	03/06/2013 14:26	9.13	3.3	6.85	0.6	0.99	14.4	3.6
MW-262	03/06/2013 14:29	9.78	1.9	6.85	0.6	0.99	14.3	4.2
MW-262	03/06/2013 14:32	10.09	-4.8	6.84	0.6	0.98	14.3	0 (-4.2)
MW-262	03/06/2013 14:35	10.52	-5.3	6.84	0.6	0.98	14.2	0(-4.4)
MW-262	03/06/2013 14:39	10.71	-4.9	6.83	0.6	0.78	14.1	0(-4.9)
MW-262	05/06/2013 14:46	10.84	-11	6.79	0.63	0.951	12.34	~1.0
MW-262	05/06/2013 15:05	11.76	-25.4	6.72	0.65	0.979	12.32	0
MW-262	05/07/2013 15:20	12.5	-50.4	6.88	0.64	1.024	14.02	130
MW-262	06/20/2013 14:35	0.98	40	6.55	0.61	1.219	19.20	1.50
MW-262	06/20/2013 14:50	1.42	7.9	6.70	0.61	1.212	16.20	8.30
MW-262	06/20/2013 15:20	1.33	-6.5	6.72	0.61	1.217	17.03	18.30
MW-262	06/21/2013 15:20	1.33	-6.5	6.72	0.61	1.217	17.03	18.30
MW-262	07/02/2014 12:44	0.0000	-184.9	9.51	7.51	13.000	21.87	99.60
MW-262	07/02/2014 13:20	0.15	-173.8	9.70	9.80	16.630	18.39	60.90
MW-262	07/02/2014 13:45	0.26	-191.4	9.87	10.02	16.930	21.74	67.60
MW-262	07/31/2014 12:50	7.42	-174.4	7.72	0.03	0.700	21.45	8.00
MW-262	07/31/2014 13:20	0.80	-234.5	7.19	2.55	4.721	20.55	8.20
MW-262	07/31/2014 13:50	0.49	-221.6	7.22	2.44	3.949	22.61	16.60
MW-262	08/28/2014 11:12	0.37	219	7.68	0.42	7.582	20.69	131.60
MW-262	01/16/2015 10:00	1.23	-43.7	7.64	1.35	2.632	9.18	36.70
MW-262	01/16/2015 10:20	0.25	-225.1	9.05	2.54	4.712	9.82	8.90
MW-262	01/16/2015 10:50	4.96	-194.7	9.13	2.57	4.710	9.35	48.10
MW-262	12/15/2015 10:15	7.36	56	6.80	1.10	2.220	15.75	0.0000
MW-262	12/15/2015 10:50	8.50	31	6.98	1.40	2.720	15.55	105.00
MW-262	12/06/2016 11:04	1.36	-140	7.31	0.11	2.119	10.76	88.4
MW-262	12/06/2016 14:02	6.49	-118	7.4	0.11	2.061	12.66	76.4
MW-262	10/11/2019 12:45	4.62	-122.2	7.05	NM	1.372	18.48	63.6
MW-262	10/11/2019 12:50	2.65	-122.6	6.96	NM	1.369	18.57	46.8
MW-262	10/11/2019 12:55	1.63	-122.6	6.92	NM	1.366	18.66	24.4
MW-262	10/11/2019 13:00	1.72	-121.3	6.9	NM	1.364	18.7	19
MW-262	10/11/2019 13:05	2.31	-119.7	6.89	NM	1.362	18.71	10.7
MW-262	10/11/2019 13:10	2.5	-126.3	6.89	NM	1.357	18.78	3.4
MW-262	10/11/2019 13:15	2.45	-131.1	6.89	NM	1.358	18.69	2.2
MW-262	10/11/2019 13:20	2.62	-133.5	6.89	NM	1.357	18.64	2.3
MW-262	10/11/2019 13:25	2.74	-138.3	6.88	NM	1.357	18.67	0.2
MW-262	10/11/2019 13:30	2.69	-144.4	6.89	NM	1.356	18.61	0
MW-262	10/11/2019 14:05	2.89	-138.5	7.27	0.7	1.401	18.75	11.7
MW-262	10/11/2019 14:20	3.22	-171.9	7.1	0.69	1.375	19.1	63.6
MW-262	09/28/2020 12:45	2.51	-25.4	7.28	0.68	1.351	21.48	2.3
MW-262	09/28/2020 12:50	1.66	-29.7	7.03	0.67	1.343	21.93	6.9
MW-262	09/28/2020 12:55	2.32	-26.9	6.95	0.66	1.327	22.32	1.6
MW-262	09/28/2020 13:00	1.81	-33.1	6.96	0.66	1.313	22.32	1.3
MW-262	09/28/2020 13:05	1.74	-43.2	6.95	0.65	1.308	22.3	0.3
MW-262	09/28/2020 13:10	2.26	-50.3	6.93	0.65	1.309	22.81	0
MW-262	09/28/2020 13:15	2.49	-53.5	6.91	0.65	1.31	22.91	0
MW-262	09/28/2020 13:20	2.9	-54.6	6.9	0.65	1.309	23	0
MW-262	09/28/2020 13:25	3.14	-52.6	6.9	0.65	1.31	22.18	0.4
MW-262	09/28/2020 13:30	3.33	-48.8	6.89	0.65	1.307	21.93	0.1
MW-262	09/28/2020 14:15	4.26	-65.6	7.32	0.68	1.351	21.33	5.7
MW-262	09/28/2020 14:30	4.93	-70.6	7.15	0.65	1.293	22.17	NM
MW-262	10/21/2020 14:30	NM	NM	NM	NM	NM	NM	221.1
MW-262	12/02/2020 12:00	0.12	-220.1	7.58	0.68	1.343	13.57	87.6
MW-262	12/02/2020 12:05	0.09	-219.5	7.43	0.68	1.343	13.05	31.3
MW-262	12/02/2020 12:10	0.08	-220.2	7.36	0.68	1.349	13.02	16.4
MW-262	12/02/2020 12:15	0.07	-219.4	7.31	0.69	1.357	12.92	17.5
MW-262	12/02/2020 12:20	0.07	-219.5	7.27	0.69	1.365	12.71	14.9
MW-262	12/02/2020 12:25	0.07	-218	7.22	0.67	1.335	13.3	19.6

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-262	12/02/2020 12:30	0.06	-219.2	7.21	0.67	1.334	13.07	16
MW-262	12/02/2020 12:35	12.4	-220.3	7.19	0.67	1.337	12.82	12.2
MW-262	12/02/2020 12:40	0.05	-219.6	7.18	0.68	1.34	12.67	10.3
MW-262	12/02/2020 12:45	0.05	-219.2	7.16	0.68	1.345	12.45	9.9
MW-262	12/02/2020 13:25	0.68	-151.1	7.32	0.7	1.379	11.83	16.2
MW-262	12/02/2020 14:50	1.08	-135.5	7.2	0.67	1.323	11.99	71.1
MW-262	03/18/2021 09:05	1.25	-45.4	6.3	0.57	1.15	9.01	114.9
MW-262	03/18/2021 09:10	0.58	-61.1	6.59	0.57	1.147	8.74	33.7
MW-262	03/18/2021 09:15	0.51	-76.1	6.84	0.57	1.148	8.4	10.3
MW-262	03/18/2021 09:20	0.44	-77	6.91	0.57	1.142	8.34	6.8
MW-262	03/18/2021 09:25	1.79	-63	7.02	0.57	1.145	8.29	55
MW-262	03/18/2021 09:30	4.64	-80.7	7.18	0.57	1.145	8.2	51.4
MW-262	03/18/2021 09:35	6.57	-78.4	7.31	0.57	1.145	8.1	42.4
MW-262	03/18/2021 09:40	1.58	-85.5	7.25	0.57	1.142	8.53	8.2
MW-262	03/18/2021 09:45	0.54	-93.1	7.28	0.57	1.14	8.6	4.3
MW-262	03/18/2021 09:50	0.4	-95.9	7.31	0.57	1.138	8.56	4.2
MW-262	03/18/2021 10:35	3.81	-109.8	7.58	0.56	1.128	8.91	1.1
MW-262	03/18/2021 11:00	2.79	-87.7	7.35	0.56	1.126	8.27	64.6
MW-262	09/03/2021 13:40	0.04	-107.7	8.4	0.8	1.584	21.25	192.5
MW-262	09/03/2021 13:45	0.02	-113.4	7.56	0.64	1.278	20.8	81.5
MW-262	09/03/2021 13:50	0.02	-119.5	7.47	0.64	1.272	20.78	40.7
MW-262	09/03/2021 13:55	0.02	-125	7.49	0.63	1.27	21.05	32.1
MW-262	09/03/2021 14:00	0.02	-109.1	7.28	0.64	1.27	20.89	25.2
MW-262	09/03/2021 14:05	0.02	-136.8	7.2	0.64	1.271	20.71	21.1
MW-262	09/03/2021 14:10	0.02	-145.6	7.15	0.63	1.27	20.55	19.7
MW-262	09/03/2021 14:15	0.02	-153.1	7.11	0.63	1.27	20.46	17.7
MW-262	09/03/2021 14:20	0.02	-156.1	7.09	0.63	1.269	20.81	15.8
MW-262	09/03/2021 14:25	0.02	-159.8	7.09	0.64	1.27	20.93	16.9
MW-262	03/16/2022 08:25	10.22	67.8	7.25	0.7	1.387	11.02	163.5
MW-262	03/16/2022 08:30	11.4	23.7	6.88	0.68	1.353	10.46	109.5
MW-262	03/16/2022 08:35	12.43	-34.4	6.85	0.68	1.356	10.53	42.3
MW-262	03/16/2022 08:40	15.13	-37.2	6.83	0.68	1.357	10.46	40.4
MW-262	03/16/2022 08:45	17.14	-66.7	6.82	0.68	1.356	10.47	17.1
MW-262	03/16/2022 08:50	18.08	-73.5	6.95	0.68	1.354	10.46	14
MW-262	03/16/2022 08:55	17.7	-85.2	6.85	0.68	1.352	10.51	11.8
MW-262	03/16/2022 09:00	17.24	-97.5	6.61	0.68	1.347	10.59	10.2
MW-262	03/16/2022 09:05	18.09	-98.6	6.88	0.68	1.348	10.6	9.7
MW-262	03/16/2022 09:10	19.39	-106	6.94	0.67	1.343	10.73	9.7
MW-263	03/08/2012 10:27	3.14	-98	6.08	1.90	30.800	16.40	300.00
MW-263	03/09/2012 09:20	0.85	86	6.40	1.40	23.000	10.70	80.00
MW-263	05/28/2014 10:43	3.10	-204	6.83	2.81	43.690	13.83	35.10
MW-263	05/29/2014 11:05	1.22	-302	6.82	2.82	43.620	15.52	37.50
MW-263	06/08/2016 11:02	0.18	-168	6.69	2.17	34.460	15.32	364.60
MW-263	06/08/2016 11:55	6.26	-111	6.74	1.32	21.690	19.53	30.90
MW-263	05/09/2017 09:32	2.15	-95.00	6.66	2.74	42.750	13.6	63.00
MW-263	05/09/2017 09:48	1.04	-73.00	6.54	1.79	28.970	13.93	14.80
MW-263	10/18/2018 13:10	1.09	-77.80	7.06	14.65	24.050	16.36	5.90
MW-263	10/18/2018 14:25	0.62	-78.60	6.97	15.77	25.750	16.88	20.50
MW-263	10/18/2018 14:35	1.14	-114.30	7.14	15.81	25.800	16.85	391.40
MW-263	04/08/2019 11:10	1.61	-79	7	33.52	51.4	16.41	12.3
MW-263	07/11/2019 10:10	2.62	-160	7.4	NM	12.31	22.29	9
MW-263	07/11/2019 10:55	4.88	-119	7.19	10.94	18.42	19.39	17.7
MW-263	07/11/2019 11:00	2.35	-127.1	7.37	10.01	16.96	17.58	22.6
MW-263	10/01/2019 10:15	1.12	-115.1	6.75	NM	16.26	21.71	27
MW-263	10/01/2019 11:10	0.88	-109.3	6.72	12.26	20.44	17.63	14.9
MW-263	10/01/2019 11:25	3.55	-120.5	6.7	10.85	18.04	18.05	45.4
MW-263	01/14/2020 08:55	6.79	111.2	8.15	NM	22.9	11.25	46.3
MW-263	01/14/2020 09:45	7.15	32	7.34	16.31	26.51	12.91	8.3
MW-263	01/14/2020 09:55	5.12	26.5	7.37	16.81	27.32	13.3	49.2
MW-263	03/25/2020 12:45	0.18	-44.9	7.22	NM	23.21	10.26	27.8
MW-263	03/25/2020 13:50	3.7	2.2	7.37	16.36	26.66	12.36	8.7
MW-263	12/15/2020 08:45	1.85	214.9	6.54	13.4	22.14	13.8	28.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-263	12/15/2020 08:50	0.88	103.5	6.61	13.46	22.29	13.2	26.9
MW-263	12/15/2020 08:55	0.43	-82.9	6.86	13.14	21.85	10.51	35.2
MW-263	12/15/2020 09:00	0.38	-91.4	6.91	13.02	21.68	9.99	39.9
MW-263	12/15/2020 09:05	0.33	-95	6.95	12.9	21.51	9.64	42.5
MW-263	12/15/2020 09:10	0.31	-94.4	6.97	12.9	21.51	9.6	49.8
MW-263	12/15/2020 09:15	0.3	-95	6.98	12.92	21.53	9.87	53.5
MW-263	12/15/2020 09:20	0.3	-95.7	6.99	12.98	21.63	9.64	54.6
MW-263	12/15/2020 10:30	1.59	-51.2	7.13	16.49	26.82	14.4	19
MW-263	12/15/2020 10:40	1.72	-67.9	7.14	18.2	29.38	12.91	56.2
MW-263	03/17/2021 08:50	1.67	-24.3	6.66	15.19	24.97	9.88	37.2
MW-263	03/17/2021 08:55	0.77	-31.8	6.89	15.37	25.31	8.9	25.1
MW-263	03/17/2021 09:00	0.63	-32.9	7	15.19	25.06	8.33	37.8
MW-263	03/17/2021 09:05	0.6	-31	7.05	15.02	24.79	8.45	26.4
MW-263	03/17/2021 09:10	0.57	-31.4	7.05	15.01	24.76	8.57	34.5
MW-263	03/17/2021 09:15	0.52	-30.3	7.04	15.05	24.89	8.68	37
MW-263	03/17/2021 09:20	0.52	-30.3	7.02	15.25	25.2	8.89	26.9
MW-263	03/17/2021 09:25	0.51	-30.9	7.02	15.39	25.32	8.94	34.1
MW-263	03/17/2021 09:30	0.45	-31.1	7.03	15.35	25.25	9.06	27.3
MW-263	03/17/2021 09:35	0.45	-42.9	7.04	15.32	25.25	9.21	24.8
MW-263	03/17/2021 10:25	2.47	-50.1	7.12	17.43	28.24	13.41	8.2
MW-263	03/17/2021 10:40	2.44	-50.3	7.28	17.79	28.8	13.09	8.5
MW-263	06/03/2021 12:30	0.96	-103	6.92	15.47	25.32	21.09	14.8
MW-263	06/03/2021 12:35	0.97	-105.6	6.88	15.74	25.74	21.6	13.1
MW-263	06/03/2021 12:40	0.97	-104.9	6.86	15.97	26.09	22.04	11.6
MW-263	06/03/2021 12:45	1.44	-106.3	6.85	15.6	25.63	20.05	9.6
MW-263	06/03/2021 12:50	1.18	-113.1	6.91	14.76	24.26	18.08	9.9
MW-263	06/03/2021 12:55	1.12	-115	6.93	14.53	23.88	17.63	10.9
MW-263	06/03/2021 13:00	1.11	-114.6	6.94	14.46	23.79	17.39	11.7
MW-263	06/03/2021 13:05	1.09	-114.4	6.94	14.42	23.72	17.17	13.6
MW-263	06/03/2021 13:10	1.08	-113.2	6.94	14.42	23.72	17.05	13
MW-263	06/03/2021 13:15	1.07	-112	6.94	14.41	23.7	17.03	13.3
MW-263	08/30/2021 12:40	3.46	-141.2	7.22	10.82	18.28	26.35	36.1
MW-263	08/30/2021 12:45	3.13	-136.6	6.91	11.34	19.09	22.78	12.4
MW-263	08/30/2021 12:50	4.25	-139.6	6.94	10.88	18.36	22.57	6.8
MW-263	08/30/2021 12:55	4.34	-139.2	6.95	10.84	18.29	22.14	4.5
MW-263	08/30/2021 13:00	4.33	-137.4	6.94	11.01	18.54	22.08	4.2
MW-263	08/30/2021 13:05	4.3	-136.4	6.93	11.23	18.88	21.94	4
MW-263	08/30/2021 13:10	4.18	-135.3	6.93	11.41	19.16	21.81	4.3
MW-263	08/30/2021 13:15	4.28	-135	6.93	11.61	19.47	22.36	4.1
MW-263	08/30/2021 13:20	4.34	-135.3	6.93	11.77	19.7	22.78	3.8
MW-263	08/30/2021 13:25	4.49	-134.8	6.91	11.81	19.74	22.63	3.9
MW-263	08/30/2021 13:30	4.56	-131.2	6.9	11.85	19.8	22.58	4
MW-263	03/04/2022 08:50	3.38	-92.9	6.75	12.97	21.5	7.54	40.8
MW-263	03/04/2022 08:55	1.13	-112.6	6.78	13.24	22.13	6.8	41.5
MW-263	03/04/2022 09:00	0.69	-112.9	6.79	12.99	21.79	6.87	61.2
MW-263	03/04/2022 09:05	0.17	-112	6.8	12.85	21.55	7.07	58.6
MW-263	03/04/2022 09:10	0.53	-108.9	6.81	12.59	21.12	7.5	65.2
MW-263	03/04/2022 09:15	0.66	-103.2	6.83	12.45	20.89	7.76	71.7
MW-263	03/04/2022 09:20	0.63	-99.6	6.83	12.47	20.93	7.62	66.9
MW-263	03/04/2022 09:25	0.4	-97.9	6.84	12.46	20.89	7.57	60.7
MW-263	03/04/2022 09:30	0.57	-95.5	6.84	12.32	20.72	7.95	57.8
MW-263	03/04/2022 09:35	0.6	-95.2	6.83	12.32	20.7	8.27	53.5
MW-264	09/09/2014 16:01	0.53	109	7.34	0.20	3.736	23.75	31.80
MW-264	12/04/2015 11:50	3.62	-94.1	7.18	2.09	3.942	14.24	1.80
MW-264	12/04/2015 12:22	2.55	-83.2	7.10	2.11	3.890	13.79	0.90
MW-264	06/10/2016 11:14	0.23	-143	7.39	0.12	2.334	20.09	35.70
MW-264	06/10/2016 11:54	2.17	-140	7.32	0.12	2.399	18.71	139.40
MW-264	07/22/2016 13:51	0.31	-59.8	6.84	1.82	3.459	18.27	8.10
MW-264	07/22/2016 14:22	0.95	-63.3	6.93	1.84	3.477	18.91	16.60
MW-264	05/11/2017 11:02	2.22	-93.00	7.30	0.17	3.203	15.31	14.50
MW-264	05/11/2017 13:27	1.53	28.00	7.27	0.18	3.384	15.67	14.20
MW-264	06/07/2018 13:08	3.52	-41.00	7.11	0.19	3.557	16.69	11.20

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-264	06/07/2018 13:11	1.00	-177.00	7.33	0.16	2.980	18.69	26.10
MW-264	10/22/2018 11:20	4.93	-91.40	7.60	1.88	3.559	17.45	10.80
MW-264	10/22/2018 11:50	2.53	-112.30	7.31	1.78	3.378	18.2	6.60
MW-264	10/22/2018 12:00	2.90	-118.90	7.61	1.72	3.275	18.3	24.80
MW-264	01/15/2019 09:50	9.87	-50.00	7.15	1.69	3.245	5.69	27.50
MW-264	01/15/2019 10:30	5.13	-48.60	7.35	1.87	3.537	11.87	7.70
MW-264	01/15/2019 10:40	2.29	-68.10	6.96	1.88	3.561	11.11	6.80
MW-264	06/14/2019 12:45	6.34	135.4	6.76	NM	2.712	18.93	8.5
MW-264	06/14/2019 13:05	3.17	39.3	7.78	2.41	4.494	16.68	4
MW-264	06/14/2019 13:20	1.73	41.8	8.31	2.43	4.527	18	4.3
MW-264	03/18/2020 10:40	10	-99.4	7.97	1.31	2.574	13.74	3.2
MW-264	03/11/2021 12:35	10.78	-68.1	7.61	0.98	1.911	14.36	212.6
MW-264	03/11/2021 12:45	7.15	-115.1	7.11	1.6	3.052	12.99	34.2
MW-264	03/11/2021 13:03	4.44	-107.5	7.17	0.6	1.201	12.34	158.3
MW-264	06/07/2021 12:55	0.67	-132	6.95	8.13	13.99	26.26	21.7
MW-264	06/07/2021 13:00	0.32	-133.1	6.81	8.44	14.49	22.99	40.4
MW-264	06/07/2021 13:05	0.42	-131.5	6.87	8.43	14.51	22.2	73.5
MW-264	06/07/2021 13:10	0.48	-129.1	6.9	8.38	14.43	21.91	86.4
MW-264	06/07/2021 13:15	0.59	-128.6	6.93	8.42	14.48	22.09	7
MW-264	06/07/2021 13:20	0.66	-128.1	6.96	8.38	14.43	22	4.5
MW-264	06/07/2021 13:25	0.62	-128.1	6.97	8.37	14.42	21.45	3.7
MW-264	06/07/2021 13:30	0.61	-127.8	6.97	8.37	14.37	20.93	3.3
MW-264	06/07/2021 13:35	0.65	-126.8	6.98	8.28	14.26	20.84	3.2
MW-264	06/07/2021 13:40	0.63	-126.8	6.97	8.32	14.32	21.01	3.1
MW-265	08/16/2013 14:31	0.73	-233.9	9.31	0.99	3.989	23.51	268.10
MW-265	08/16/2013 15:05	0.06	-403.3	9.87	2.61	4.849	20.88	166.70
MW-265	08/16/2013 15:33	0.02	-408.1	9.89	2.73	5.048	2.00	171.60
MW-265	11/12/2014 09:47	2.56	-335	8.01	0.09	1.739	15.60	64.70
MW-265	07/02/2015 11:33	1.76	-359	9.43	0.21	4.001	17.64	141.8
MW-265	12/10/2015 10:42	0.78	-184	9.97	1.90	3.630	19.21	150.00
MW-265	12/10/2015 11:50	0.0000	-198	9.77	1.30	2.600	21.02	163.00
MW-265	02/09/2016 12:15	0.43	-68	6.91	0.01	0.218	6.18	28.30
MW-265	02/09/2016 15:26	6.79	-78	7.62	0.05	1.027	6.91	40.70
MW-265	08/02/2016 14:56	0.96	-231.4	9.65	0.76	1.552	21.02	24.40
MW-265	08/02/2016 15:06	1.04	-240.3	9.65	0.77	1.554	20.91	30.10
MW-265	08/16/2016 10:06	0.13	-163	6.76	0.03	0.623	26.87	30.90
MW-265	08/16/2016 11:05	0.56	-211	8.78	0.36	6.882	22.92	114.20
MW-265	05/11/2017 11:40	1.74	-157.00	6.94	0.02	0.499	15.28	20.50
MW-265	05/11/2017 14:20	4.53	24.00	7.55	0.06	1.196	15.79	35.20
MW-265	10/24/2018 10:15	3.46	-343.10	5.21	9.07	15.460	16.75	656.90
MW-265	10/24/2018 10:55	1.66	-402.10	6.07	1.97	3.715	16.83	181.20
MW-265	10/24/2018 11:05	2.76	-313.60	6.44	0.83	1.636	16.85	102.20
MW-265	01/16/2019 12:50	5.47	-21.70	8.40	1.30	2.529	7.35	47.30
MW-265	01/16/2019 13:45	3.99	-150.90	9.68	1.77	3.375	6.82	49.80
MW-265	01/16/2019 13:55	8.71	-158.70	9.87	1.67	3.185	7.02	49.50
MW-265	07/12/2019 12:50	4.74	-110.7	7.84	NM	0.117	26.99	6
MW-265	07/12/2019 13:15	3.14	-234.5	8.53	0.39	0.801	23.59	24.7
MW-265	07/12/2019 13:30	4.79	-124.3	8.31	0.06	0.124	28.57	34.2
MW-266	04/25/2012 13:29	0.17	-118	6.81	0.08	1.569	18.55	7.21
MW-266	04/25/2012 13:54	4.51	-76	7.12	0.08	1.646	15.83	8.40
MW-266	04/26/2012 10:43	0.82	-78	6.81	0.05	1.062	15.83	81.90
MW-266	04/11/2013 10:10	1.24	-270	6.6	0.43	7.705	11.9	43.44
MW-266	04/11/2013 10:36	2.91	-200	6.73	0.27	5.079	12.3	298.9
MW-266	04/12/2013 14:04	0.33	-184	6.63	0.32	5.885	12.84	84.1
MW-266	08/20/2013 09:04	2.24	48.9	6.33	3.08	5.679	25.08	232.50
MW-266	08/20/2013 09:53	0.13	-67.8	6.38	3.57	6.541	24.34	25.40
MW-266	08/20/2013 10:22	0.15	-60.2	6.40	3.69	6.731	24.59	30.40
MW-266	08/21/2013 10:22	0.15	-60.2	6.40	3.69	6.731	24.59	30.40
MW-266	08/14/2014 11:50	3.02	-212	7.18	3.00	5.500	25.39	0.0000
MW-266	08/14/2014 12:35	2.87	-239	7.19	3.00	5.570	24.16	0.0000
MW-266	08/14/2014 13:05	2.81	-231	7.18	3.00	5.560	25.39	0.0000
MW-266	08/27/2014 10:13	0.52	135	6.50	0.29	5.350	26.16	9.61

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-266	08/27/2014 10:53	1.38	188	6.64	0.78	5.051	25.64	30.40
MW-266	08/28/2014 10:35	0.51	-432	6.64	0.30	5.525	23.71	86.80
MW-266	12/04/2014 10:50	0.62	-138	6.62	3.23	5.911	11.93	3.90
MW-266	12/04/2014 11:15	0.78	-158.6	6.62	3.24	5.935	11.98	4.60
MW-266	12/04/2014 13:17	1.39	-200	6.63	3.26	5.959	11.53	35.00
MW-266	12/10/2015 10:39	0.79	237	7.07	0.25	4.739	13.73	65.9
MW-266	12/10/2015 13:40	8.39	294	7.17	0.23	4.356	13.29	146.5
MW-266	06/08/2016 11:26	8.63	-102	6.66	0.14	2.654	22.64	52.20
MW-266	06/08/2016 12:17	1.92	-167	6.64	0.08	1.557	22.82	465.00
MW-266	02/23/2017 15:55	3.87	-136	6.76	0.11	2.246	8.91	84.90
MW-266	05/01/2017 09:04	-0.08	-97.00	6.93	0.11	2.046	13.1	6.60
MW-266	01/30/2018 14:32	0.05	149.00	6.78	0.33	6.152	6.29	3.97
MW-266	01/30/2018 15:03	3.94	165.00	6.97	1.36	22.990	6.59	6.60
MW-266	05/08/2018 08:38	5.65	-118	6.59	0.0993	1.9336	16.87	4.5
MW-266	05/08/2018 08:40	2.58	-141	6.6	0.1009	1.9658	15.57	5.7
MW-266	05/08/2018 08:42	1.83	-155	6.63	0.1000	1.9509	15.37	3.9
MW-266	05/08/2018 08:44	1.57	-164	6.65	0.0998	1.9463	15.22	4.1
MW-266	05/08/2018 08:46	1.42	-169	6.66	0.1005	1.9598	15.21	4.8
MW-266	05/08/2018 08:48	1.38	-173	6.67	0.1015	1.9781	15.25	3.5
MW-266	05/08/2018 08:50	1.34	-176	6.68	0.1029	2.0056	15.13	4.6
MW-266	05/08/2018 08:52	1.3	-179	6.69	0.1066	2.0728	15.16	3.2
MW-266	05/08/2018 08:54	1.27	-182	6.69	0.1134	2.1992	15.01	3.9
MW-266	05/08/2018 08:56	1.22	-184	6.7	0.1176	2.2767	14.95	4.2
MW-266	05/08/2018 08:58	1.18	-187	6.71	0.1199	2.3194	14.99	4
MW-266	05/08/2018 09:00	1.19	-190	6.71	0.1212	2.3422	14.95	5.4
MW-266	05/08/2018 09:02	1.14	-192	6.72	0.1215	2.3472	15.12	3.9
MW-266	05/08/2018 09:04	1.12	-194	6.73	0.1221	2.3601	14.83	3.5
MW-266	05/08/2018 09:06	1.13	-195	6.73	0.1225	2.3676	14.9	3.8
MW-266	05/08/2018 09:07	1.13	-195.00	6.73	0.12	2.358	15.08	3.78
MW-266	07/23/2018 09:42	1.69	-96	6.79	0.1193	2.2960	25.35	73.23
MW-266	07/23/2018 09:44	0.63	-113	6.61	0.1190	2.2900	25.33	60.78
MW-266	07/23/2018 09:46	0.41	-121	6.57	0.1186	2.2830	25.43	57.5
MW-266	07/23/2018 09:48	0.36	-127	6.55	0.1175	2.2620	25.54	54.51
MW-266	07/23/2018 09:50	0.33	-131	6.55	0.1163	2.2400	25.58	44.42
MW-266	07/23/2018 09:52	0.45	-135	6.55	0.1159	2.2340	25.52	41.19
MW-266	07/23/2018 09:54	0.3	-138	6.56	0.1150	2.2170	25.53	31.61
MW-266	07/23/2018 09:56	0.27	-141	6.56	0.1144	2.2070	25.59	30.55
MW-266	07/23/2018 09:58	0.27	-144	6.56	0.1134	2.1880	25.53	27.41
MW-266	07/23/2018 10:00	0.28	-147	6.57	0.1127	2.1750	25.51	23.45
MW-266	07/23/2018 10:02	0.29	-149	6.57	0.1129	2.1790	25.46	26.63
MW-266	07/23/2018 10:04	0.26	-151	6.57	0.1125	2.1710	25.5	20.96
MW-266	07/23/2018 10:06	0.28	-153	6.58	0.1116	2.1550	25.69	22.28
MW-266	07/23/2018 10:08	0.26	-154	6.58	0.1108	2.1410	25.71	24.17
MW-266	07/23/2018 10:10	0.26	-156	6.58	0.1101	2.1280	25.7	19.57
MW-266	07/23/2018 10:12	0.26	-157	6.59	0.1104	2.1320	25.77	18.39
MW-266	07/23/2018 10:13	0.27	-158	6.59	0.1105	2.1350	25.71	15.24
MW-266	07/23/2018 10:15	0.28	-160	6.6	0.1104	2.1320	25.74	12.05
MW-266	07/23/2018 10:17	0.28	-161	6.6	0.1109	2.1420	25.78	13.2
MW-266	07/23/2018 10:19	0.28	-162	6.6	0.1114	2.1510	25.81	14.5
MW-266	07/23/2018 10:21	0.29	-163.00	6.61	0.1112	2.148	25.93	13.77
MW-266	10/03/2018 11:05	0.28	-101.70	6.61	1.47	2.812	18.42	2.20
MW-266	10/03/2018 11:25	0.25	-112.40	6.62	1.45	2.777	18.66	1.50
MW-266	10/03/2018 11:35	0.24	-114.20	6.62	1.45	2.776	18.66	1.30
MW-266	10/31/2018 10:30	0.8	-56.5	6.57	1.84	3.504	17.83	19.5
MW-266	10/31/2018 10:35	0.72	-58.7	6.58	1.8	3.416	17.8	17.2
MW-266	10/31/2018 10:40	0.47	-74.3	6.57	1.6	3.057	18.04	7.6
MW-266	10/31/2018 10:45	0.38	-83.5	6.58	1.5	2.953	18.23	4.3
MW-266	10/31/2018 10:50	0.32	-92	6.6	1.49	2.851	18.3	3.1
MW-266	10/31/2018 10:55	0.3	-96	6.61	1.47	2.821	18.28	3
MW-266	10/31/2018 11:00	0.29	-99.2	6.61	1.48	2.83	18.36	2.4
MW-266	10/31/2018 11:05	0.28	-101.70	6.61	1.47	2.812	18.42	2.20
MW-266	10/31/2018 11:25	0.25	-112.40	6.62	1.45	2.777	18.66	1.50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-266	10/31/2018 11:35	0.24	-114.20	6.62	1.45	2.776	18.66	1.30
MW-266	01/25/2019 14:05	0.72	-48.3	6.77	NM	2.16	7.43	NM
MW-266	01/25/2019 14:15	0.72	-48.30	6.77	1.11	2.160	7.43	0.0000
MW-266	01/25/2019 14:35	0.37	-101.00	7.09	1.47	2.817	8.06	0.0000
MW-266	01/25/2019 14:55	0.36	-104.30	7.07	1.49	2.854	7.47	0.0000
MW-266	07/10/2019 10:05	1.88	-66.6	6.95	NM	1.234	25.14	61.6
MW-266	07/10/2019 10:10	0.93	-76.2	6.83	NM	1.205	25.02	58.8
MW-266	07/10/2019 10:15	0.56	-82.2	6.83	NM	1.154	24.59	36.8
MW-266	07/10/2019 10:20	0.47	-83.8	6.81	NM	1.12	24.71	25.7
MW-266	07/10/2019 10:25	0.42	-83.8	6.82	NM	1.098	24.63	18.3
MW-266	07/10/2019 10:30	0.43	-83.2	6.79	NM	1.085	24.44	12.9
MW-266	07/10/2019 10:35	0.47	84.8	6.79	NM	1.07	24.31	9.3
MW-266	07/10/2019 10:40	0.42	-83.9	6.79	NM	1.054	24.48	7.7
MW-266	07/10/2019 10:45	0.42	-88.1	6.78	NM	1.048	24.36	6.2
MW-266	07/10/2019 10:50	0.42	-88.1	6.78	NM	1.048	24.36	6.2
MW-266	07/10/2019 13:30	3.51	-64.2	7.52	0.39	0.776	24.21	1.9
MW-266	07/10/2019 13:40	6.06	-61.3	7.33	0.52	1.041	24.11	64.2
MW-266	01/23/2020 12:55	8.84	36.5	6.71	NM	1.07	9.11	390.4
MW-266	01/23/2020 13:00	1.25	-33.7	6.74	NM	1.085	8.92	146
MW-266	01/23/2020 13:05	0.68	-45.6	6.78	NM	1.087	9.23	45.7
MW-266	01/23/2020 13:10	0.58	-51.8	6.8	NM	1.103	9.19	31.5
MW-266	01/23/2020 13:15	0.58	-56.7	6.81	NM	1.112	9.17	28.6
MW-266	01/23/2020 13:20	0.57	-60.7	6.82	NM	1.116	9.18	23.9
MW-266	01/23/2020 13:25	0.58	-64.5	6.82	NM	1.12	9.22	20.7
MW-266	01/23/2020 13:30	0.58	-67.2	6.82	NM	1.123	9.1	14.2
MW-266	01/23/2020 13:35	0.6	-69.1	6.83	NM	1.124	9.05	14.5
MW-266	01/23/2020 13:40	0.58	-69.4	6.83	NM	1.128	8.99	16
MW-266	01/23/2020 13:50	0.65	-72.6	6.83	0.56	1.131	8.93	18.2
MW-266	01/23/2020 14:10	4.87	-59	6.89	0.56	1.126	8.82	268
MW-266	10/06/2020 10:40	NM	NM	NM	NM	NM	NM	173.7
MW-266	10/21/2020 09:05	12.39	-88.4	6.76	1.12	2.184	19.81	10.2
MW-266	10/21/2020 09:10	11.78	-106.4	6.81	1.1	2.144	19.73	9.1
MW-266	10/21/2020 09:15	11.88	-113.4	6.82	1.1	2.137	19.67	7.5
MW-266	10/21/2020 09:20	11.9	-120.7	6.83	1.09	2.117	19.58	6.7
MW-266	10/21/2020 09:25	11.78	-125.5	6.83	1.08	2.097	19.57	5.2
MW-266	10/21/2020 09:30	11.66	-131.5	6.84	1.06	2.075	19.6	4.8
MW-266	10/21/2020 09:35	11.34	-136.7	6.85	1.06	2.058	19.63	3.9
MW-266	10/21/2020 09:40	10.97	-142.5	6.85	1.05	2.046	19.76	3.3
MW-266	10/21/2020 09:45	9.19	-147.6	6.86	1.04	2.03	19.82	3.2
MW-266	10/21/2020 09:50	8.06	-151	6.85	1.03	2.014	19.86	2.7
MW-266	10/21/2020 10:25	2.32	-142.6	6.96	1.01	1.975	20.44	2.2
MW-266	10/21/2020 10:40	3.92	-122.7	7.09	1.01	1.98	20.29	NM
MW-266	01/11/2021 09:05	0.09	-113.7	7.56	1.22	2.369	9.76	883.4
MW-266	01/11/2021 09:10	0.08	-114.2	7.14	1.21	2.349	9.9	862.9
MW-266	01/11/2021 09:15	0.06	-115.9	7.09	1.2	2.327	9.43	859.3
MW-266	01/11/2021 09:20	0.03	-123	7.06	1.04	2.055	8.83	624.3
MW-266	01/11/2021 09:25	0.08	-127.8	7.06	1.01	1.969	8.84	128.3
MW-266	01/11/2021 09:30	0.04	-132.2	7.08	1.01	1.975	8.83	47.7
MW-266	01/11/2021 09:35	0.02	-134.3	7.1	1.01	1.977	8.75	26.3
MW-266	01/11/2021 09:40	0.02	-119.2	7.1	1.02	1.989	8.58	28.7
MW-266	01/11/2021 09:45	0.02	-126.2	7.11	1.01	1.985	8.49	15.5
MW-266	01/11/2021 09:50	0.02	-119	7.12	1.01	1.982	8.49	11.1
MW-266	01/11/2021 10:17	0.24	-87.3	7.52	1.01	1.979	8.4	3.2
MW-266	01/11/2021 10:41	0.33	-93.6	7.28	0.91	1.78	8.5	466.3
MW-266	04/12/2021 11:00	3.99	-12.2	6.61	0.13	0.272	12.32	240.6
MW-266	04/12/2021 11:05	4.2	-99.1	6.92	0.66	1.361	11.24	136.4
MW-266	04/12/2021 11:10	3.14	-156	6.93	0.92	1.836	11.08	133.1
MW-266	04/12/2021 11:15	3.06	-198.5	6.96	1.02	1.981	10.97	159.8
MW-266	04/12/2021 11:20	2.46	-216.5	6.99	0.97	1.891	10.97	49.7
MW-266	04/12/2021 11:25	2.47	-218.3	6.99	0.96	1.872	10.97	24.9
MW-266	04/12/2021 11:30	2.97	-219.8	6.99	0.96	1.873	10.98	19.9
MW-266	04/12/2021 11:35	2.5	-219.1	7.01	0.95	10.95	1.857	28.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-266	04/12/2021 11:40	5.78	-212.6	7.02	0.95	1.848	10.96	11.5
MW-266	04/12/2021 11:45	5.04	-218.1	7.01	0.94	1.843	11	10.8
MW-266	02/11/2022 11:45	5.15	-59.1	6.85	1.01	1.976	8.75	289.3
MW-266	02/11/2022 11:50	3.25	-67	6.65	0.97	1.894	7.67	189.6
MW-266	02/11/2022 11:55	2.72	-73.9	6.56	0.92	1.813	7.63	116.4
MW-266	02/11/2022 12:00	2.53	-79.4	6.5	0.9	1.777	7.43	78.3
MW-266	02/11/2022 12:05	2.33	-84.5	6.49	0.88	1.738	7.55	56.8
MW-266	02/11/2022 12:10	2.85	-88.3	6.46	0.87	1.708	7.47	45.7
MW-266	02/11/2022 12:15	2.69	-91.4	6.45	0.85	1.68	7.53	40.6
MW-266	02/11/2022 12:20	2.52	-93.9	6.43	0.84	1.656	7.78	34.1
MW-266	02/11/2022 12:25	2.61	-96.4	6.44	0.83	1.637	7.62	27.8
MW-266	02/11/2022 12:30	2.58	-98.4	6.44	0.82	1.623	7.64	24.4
MW-267	03/06/2012 08:31	-0.13	52	7.37	0.59	10.68002	3.46	65.1
MW-267	03/06/2012 08:34	-0.01	26	7.52	0.58	10.61138	3.01	97.5
MW-267	03/06/2012 08:37	-0.03	19	7.53	0.58	10.60762	2.59	63.4
MW-267	03/06/2012 08:40	-0.05	12	7.52	0.58	10.56457	2.66	60.1
MW-267	03/06/2012 08:43	-0.09	-1	7.51	0.57	10.53686	2.5	57.8
MW-267	03/06/2012 08:46	-0.1	-14	7.5	0.57	10.51913	2.38	52.1
MW-267	03/06/2012 08:50	-0.09	-26	7.49	0.57	10.46424	2.73	43.2
MW-267	03/06/2012 08:53	-0.1	-41	7.48	0.56	10.32473	2.81	33.7
MW-267	03/06/2012 08:56	-0.11	-50	7.47	0.55	10.15119	2.87	29.3
MW-267	03/06/2012 08:59	-0.13	-57	7.46	0.54	9.8684	3.43	26.5
MW-267	03/06/2012 09:02	-0.13	-63	7.46	0.53	9.6668	3.4	22.7
MW-267	03/06/2012 09:05	-0.14	-65	7.46	0.51	9.398	3.7	20.2
MW-267	03/06/2012 09:08	-0.17	-70	7.46	0.5	9.15728	3.85	18
MW-267	03/06/2012 09:12	-0.15	-75	7.46	0.48	8.93412	3.96	16.8
MW-267	03/06/2012 09:15	-0.15	-78	7.46	0.47	8.75009	4.2	14.7
MW-267	03/06/2012 09:18	-0.16	-80	7.46	0.46	8.57072	4.05	13.9
MW-267	03/06/2012 10:40	0.92	-212	16.39	2.86	35.200	14.30	817.00
MW-267	03/07/2012 09:20	0.49	-82	6.98	0.72	12.600	9.40	72.60
MW-267	08/20/2012 10:48	5.29	-377	7.12	2.00	32.600	22.28	0.0000
MW-267	08/20/2012 12:05	7.63	-311	7.50	2.00	31.500	21.23	72.10
MW-267	08/21/2012 10:23	4.96	-208	7.18	1.00	17.500	23.37	9.80
MW-267	09/26/2013 14:15	0.39	-263	6.87	0.97	16.360	19.86	93.88
MW-267	09/26/2013 15:29	0.74	-360	6.79	5.77	82.050	16.59	22.70
MW-267	09/27/2013 10:45	0.38	-500	6.83	1.83	29.260	19.23	13.30
MW-267	05/27/2014 15:39	1.54	-310	6.79	0.88	14.950	20.29	18.57
MW-267	07/22/2015 14:10	0.51	-111	6.67	6.12	86.58	15.3	26.5
MW-267	03/08/2016 11:08	1.00	-113	6.50	0.50	8.993	8.87	32.20
MW-267	03/08/2016 12:33	6.65	-224	6.80	2.96	45.870	13.05	43.60
MW-267	09/08/2016 11:19	0.64	-108	6.72	0.56	9.889	21.40	30.70
MW-267	09/08/2016 14:50	0.60	-268	6.73	1.49	24.250	20.09	14.70
MW-267	02/07/2017 10:18	3.21	331	7.98	1.11	18.970	8.59	35.90
MW-267	02/07/2017 12:37	4.56	780	6.15	2.15	34.500	10.43	18.00
MW-267R	11/27/2018 08:30	0.32	-169.30	7.54	17.01	27.690	11	5.20
MW-267R	11/27/2018 09:30	3.48	-172.00	7.47	11.31	18.800	10.85	7.70
MW-267R	11/27/2018 09:40	1.66	-169.80	7.51	10.98	18.520	10.39	107.10
MW-267R	02/05/2019 09:14	1.63	-100.10	7.12	19.67	31.720	11.26	7.50
MW-267R	02/05/2019 09:55	3.75	-139.40	7.47	17.51	28.610	11.74	16.00
MW-267R	02/05/2019 10:10	3.45	-138.90	7.49	18.16	25.680	11.89	18.20
MW-267R	07/30/2019 09:18	1.96	-213.3	6.77	NM	32.16	24.53	10.1
MW-267R	07/30/2019 10:10	2.06	-217.3	6.87	18.1	29.28	24.54	6.1
MW-267R	07/30/2019 10:20	3.05	-232.3	6.85	18.23	29.47	24.1	9.1
MW-267R	11/06/2019 09:15	0.29	-280.1	6.91	NM	11.74	15.98	8.4
MW-267R	11/06/2019 10:43	0.21	-321.8	6.96	6.03	10.63	16.36	4.1
MW-267R	11/06/2019 10:55	2.64	-150.4	7.14	6.32	11.09	17.09	23.3
MW-267R	12/19/2019 10:40	7.57	-68	7.05	NM	13.05	2.95	14.1
MW-267R	12/19/2019 10:45	1.61	-87.7	7	NM	13.07	4.01	13.8
MW-267R	12/19/2019 10:50	0.92	-94.1	6.98	NM	13.3	4.02	12.9
MW-267R	12/19/2019 10:55	0.86	-100.6	6.99	NM	13.4	4.11	11.8
MW-267R	12/19/2019 11:00	0.71	-107.5	6.99	NM	13.28	4.58	11.3
MW-267R	12/19/2019 11:05	0.49	-114.2	6.97	NM	12.89	5.53	11.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-267R	12/19/2019 11:10	0.36	-120.1	6.98	NM	13.34	5.03	9.9
MW-267R	12/19/2019 11:15	0.27	-129.2	6.98	NM	13.42	4.64	8
MW-267R	12/19/2019 11:20	0.26	-131.9	6.98	NM	13.11	4.89	8.5
MW-267R	12/19/2019 11:25	0.26	-138.2	6.99	NM	13.24	4.72	7.5
MW-267R	12/19/2019 12:10	0.28	-94.4	6.98	7.78	13.42	6.87	8.6
MW-267R	12/19/2019 12:55	0.28	-94.4	6.98	7.78	13.42	6.87	8.6
MW-267R	12/19/2019 13:00	0.88	-210.6	6.99	7.94	13.51	8.24	78.4
MW-267R	03/02/2020 13:19	0.25	-144	6.81	NM	23.76	10.05	0.6
MW-267R	03/02/2020 14:00	0.22	-154.3	6.88	10.33	23.44	9.89	0
MW-267R	05/20/2020 13:30	6.93	-187.3	8.03	6.36	11.18	14.13	0.8
MW-267R	12/15/2020 13:10	5.11	-160.5	8.05	16.64	27.17	9.84	0.5
MW-267R	12/15/2020 13:15	0.93	-126.4	7.03	16.98	27.61	11.22	1.3
MW-267R	01/07/2021 11:05	3.24	-140.9	7.33	15.23	25.09	8.99	19.1
MW-267R	01/07/2021 12:05	2.93	-139.5	7.56	15.11	24.9	9.33	4.2
MW-267R	01/07/2021 12:15	2.8	-145.2	7.49	15.73	25.77	10.8	27.2
MW-267R	03/31/2021 10:35	1.02	-253.8	7.45	19.28	31.06	12.02	6.9
MW-267R	03/31/2021 10:40	0.45	-268	7.17	18.4	31.23	11.74	1.7
MW-267R	03/31/2021 10:45	0.43	-276.8	7.12	18.73	30.25	11.94	2.2
MW-267R	03/31/2021 10:50	0.36	-276.7	7.12	18.18	29.36	11.72	1.9
MW-267R	03/31/2021 10:55	0.31	-277.8	7.11	17.77	28.81	11.54	0.8
MW-267R	03/31/2021 11:00	0.27	-279	7.11	17.5	28.48	11.48	0.7
MW-267R	03/31/2021 11:05	0.23	-280.1	7.12	17.49	28.3	11.34	0.3
MW-267R	03/31/2021 11:10	0.19	-281.7	7.12	17.27	28.09	11.6	0.4
MW-267R	03/31/2021 11:15	0.19	-283	7.12	17.26	28.05	11.6	0.4
MW-267R	03/31/2021 11:20	0.17	-283.2	7.13	17.15	27.82	11.77	0.5
MW-267R	03/31/2021 12:10	1.33	-239.7	7.27	19	30.61	13.58	13.3
MW-267R	03/31/2021 12:20	1.12	-243.8	7.18	18.85	30.41	11.76	21.3
MW-267R	04/02/2021 10:40	2.7	-165.8	7.22	15.58	25.75	6.19	18
MW-267R	04/02/2021 10:45	1.24	-196.7	7.29	15.61	25.81	6.34	17.6
MW-267R	04/02/2021 10:50	1.44	-201.6	7.3	15.64	25.86	6.35	18
MW-267R	04/02/2021 10:55	0.91	-204	7.31	15.67	25.91	6.3	17.8
MW-267R	04/02/2021 11:00	0.87	-214	7.31	15.36	25.47	5.79	14.3
MW-267R	04/02/2021 11:05	0.63	-222.4	7.32	15.5	25.65	6.22	18.1
MW-267R	04/02/2021 11:10	0.6	-223.6	7.32	15.52	25.68	6.22	17.5
MW-267R	04/02/2021 11:15	0.59	-223.7	7.31	15.47	25.61	6.37	17.5
MW-267R	07/12/2021 12:30	6.79	-335.6	6.92	19.6	26.97	20.32	13.4
MW-267R	07/12/2021 12:35	8.23	-331	6.96	15.13	26.55	20.79	10.2
MW-267R	07/12/2021 12:40	7.93	-331.3	6.99	16.02	26.15	20.95	8.5
MW-267R	07/12/2021 12:45	5.87	328.8	7	15.96	26	20.79	7.9
MW-267R	01/28/2022 09:10	4.57	-85.2	6.69	19.24	31.25	6.48	14.2
MW-267R	01/28/2022 09:15	3.19	-93.8	6.71	19.32	31.4	6.41	11.8
MW-267R	01/28/2022 09:20	1.08	-123.2	6.72	19.43	31.58	6	15.2
MW-267R	01/28/2022 09:25	0.99	-127.4	6.72	19.44	31.59	5.91	14.8
MW-267R	01/28/2022 09:30	0.71	-131.5	6.62	19.4	31.55	5.63	15.2
MW-267R	01/28/2022 09:35	0.63	-131.9	6.55	19.31	31.49	5.66	16.4
MW-267R	01/28/2022 09:40	0.53	-130.7	6.51	19.32	31.42	5.57	14.6
MW-267R	01/28/2022 09:45	0.62	-128.4	6.44	19.36	31.54	5.31	15.1
MW-267R	01/28/2022 09:50	0.61	-127.5	6.42	19.28	31.49	5.25	14
MW-267R	01/28/2022 09:55	0.64	-123.4	6.37	19.24	31.4	5.27	13.3
MW-267R	04/19/2022 10:55	0.42	-234.4	6.79	19.76	31.78	10.11	138.6
MW-267R	04/19/2022 11:00	0.34	-268.3	6.76	20.21	32.46	9.71	183.6
MW-267R	04/19/2022 11:05	0.31	-284.5	6.75	20.32	32.57	9.55	160.8
MW-267R	04/19/2022 11:10	0.39	-290	6.74	20.25	32.58	9.47	135.7
MW-267R	04/19/2022 11:15	0.46	-301.9	6.73	20.25	32.51	10.27	68.5
MW-267R	04/19/2022 11:20	0.5	-305.7	6.73	20.23	32.47	10.31	65.9
MW-267R	04/19/2022 11:25	0.47	-308.5	6.75	20.21	32.45	10.29	64.3
MW-268	04/23/2012 09:05	3.27	-42	6.63	0.2	3.69438	13.35	48.6
MW-268	04/23/2012 09:07	1.01	-66	6.71	0.19	3.68479	13.2	32.5
MW-268	04/23/2012 09:09	0.64	-74	6.75	0.19	3.67521	13.13	19.9
MW-268	04/23/2012 09:11	0.5	-78	6.78	0.19	3.67101	13.13	26.9
MW-268	04/23/2012 09:14	0.42	-81	6.81	0.19	3.65673	13.13	30
MW-268	04/23/2012 09:16	0.35	-83	6.83	0.19	3.64161	13.19	32.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-268	04/23/2012 09:18	0.33	-85	6.84	0.19	3.61727	13.2	28
MW-268	04/23/2012 09:20	0.3	-86	6.86	0.19	3.60609	13.17	18.6
MW-268	04/23/2012 09:22	0.28	-87	6.86	0.19	3.59971	13.2	29.1
MW-268	04/23/2012 09:24	0.26	-88	6.87	0.19	3.6052	13.17	23.9
MW-268	04/23/2012 09:26	0.24	-89	6.87	0.19	3.59666	13.17	25.4
MW-268	04/23/2012 09:28	0.23	-90	6.87	0.19	3.58049	13.3	26.9
MW-268	04/23/2012 09:30	0.2	-90	6.88	0.19	3.5612	13.21	28.1
MW-268	04/23/2012 09:32	0.19	-91	6.88	0.19	3.57356	13.21	43.8
MW-268	04/23/2012 09:34	0.18	-92	6.88	0.19	3.5483	13.28	27
MW-268	04/23/2012 09:36	0.16	-92	6.88	0.19	3.54609	13.23	28.6
MW-268	04/23/2012 09:38	0.15	-93	6.88	0.19	3.54687	13.23	28.4
MW-268	04/23/2012 09:40	0.15	-93	6.88	0.19	3.54572	13.38	27.1
MW-268	04/23/2012 09:57	3.39	-74	6.83	0.19	3.540	13.57	114.30
MW-268	04/24/2012 09:20	0.34	-90	6.83	0.18	3.374	13.90	196.70
MW-268	04/10/2013 14:46	0.95	-179	6.83	0.28	5.219	13.21	10.65
MW-268	04/10/2013 15:07	3.1	-142	7	0.26	4.869	11.44	353
MW-268	04/11/2013 11:36	0.44	-136	6.82	0.37	6.815	9.85	159.1
MW-268	08/14/2014 11:35	1.04	-68.8	6.55	2.82	5.235	21.87	8.10
MW-268	08/27/2014 09:09	0.78	208	6.45	0.27	5.046	23.91	17.77
MW-268	08/27/2014 09:47	1.30	39	6.78	0.25	4.665	23.44	393.40
MW-268	08/28/2014 09:49	0.56	-387	6.66	0.27	4.990	22.39	415.30
MW-268	11/04/2014 09:35	-0.60	8	6.66	0.17	3.165	17.20	10.91
MW-268	11/04/2014 10:02	2.62	-84	6.79	0.17	3.246	17.42	252.50
MW-268	11/05/2014 12:20	2.70	-93	6.87	0.26	4.888	16.98	40.20
MW-268	12/10/2014 11:40	5.42	-83.4	6.82	NM	4.816	14.63	12.20
MW-268	12/10/2014 11:50	0.62	-106.4	6.77	NM	5.064	15.09	2.20
MW-268	12/10/2014 12:25	3.96	-111.3	6.80	NM	4.316	14.79	219.10
MW-268	07/08/2015 11:08	-0.02	-146	6.72	1.11	18.51	20.55	99.8
MW-268	07/08/2015 14:05	4.28	-122	6.48	0.26	4.807	22.53	371.1
MW-268	03/22/2016 11:23	0.41	-129	6.61	0.17	3.290	10.32	146.60
MW-268	03/22/2016 13:33	8.67	-134	6.59	0.17	3.305	10.91	124.30
MW-268R	05/02/2019 13:35	4.75	-160.9	7.45	14.54	23.99	17.53	1.6
MW-268R	06/19/2019 10:05	0.31	182.1	6.38	NM	1.199	18.97	21.7
MW-268R	06/19/2019 10:10	0.24	171	6.27	NM	1.187	18.87	21.9
MW-268R	06/19/2019 10:15	0.18	146.5	6.24	NM	1.172	18.78	21.7
MW-268R	06/19/2019 10:20	0.15	129.9	6.24	NM	1.096	18.75	20.3
MW-268R	06/19/2019 10:25	0.14	115.5	6.26	NM	1.089	18.73	19.7
MW-268R	06/19/2019 10:30	0.12	102.8	6.27	NM	1.085	18.67	18.2
MW-268R	06/19/2019 10:35	0.12	94.8	6.28	NM	1.078	18.65	17.1
MW-268R	06/19/2019 10:40	0.11	88.4	6.27	NM	1.075	18.63	16.8
MW-268R	06/19/2019 10:45	0.13	83.4	6.28	NM	1.074	18.59	15.5
MW-268R	06/19/2019 10:50	0.11	80.2	6.28	NM	1.071	18.57	15.9
MW-268R	06/19/2019 14:10	0.11	80.2	6.28	NM	1.071	18.57	15.9
MW-268R	07/16/2019 10:05	0.85	-98.7	6.8	NM	4.109	24.34	0
MW-268R	07/16/2019 10:10	0.61	-118.4	6.82	NM	3.918	23.78	0
MW-268R	07/16/2019 10:15	0.32	-156.7	6.83	NM	3.819	22.31	0
MW-268R	07/16/2019 10:20	0.22	-173.3	6.85	NM	3.841	22.45	0
MW-268R	07/16/2019 10:25	0.15	-190.6	6.86	NM	3.843	22.71	0
MW-268R	07/16/2019 10:30	0.14	-211.8	6.88	NM	3.892	22.72	0
MW-268R	07/16/2019 10:35	0.16	-256.8	6.88	NM	3.934	22.56	0
MW-268R	07/16/2019 10:40	0.16	-260.8	6.88	NM	3.94	22.39	0
MW-268R	07/16/2019 10:45	0.17	-279.5	6.87	NM	3.952	22.43	0
MW-268R	07/16/2019 10:50	0.2	-320.8	6.84	NM	3.971	22.45	0
MW-268R	07/16/2019 14:05	0.2	-320.8	6.84	NM	3.971	22.45	NM
MW-268R	09/03/2019 14:00	1.94	-70.8	7.39	NM	2.157	27.17	34.1
MW-268R	09/03/2019 14:05	1.02	-89.3	6.96	NM	2.494	26.06	30.5
MW-268R	09/03/2019 14:10	0.64	-117.9	6.9	NM	2.925	24.78	36.2
MW-268R	09/03/2019 14:15	0.55	-141.9	6.93	NM	3.1	24.56	19.9
MW-268R	09/03/2019 14:20	0.45	-182.7	7.01	NM	3.275	24.48	19.6
MW-268R	09/03/2019 14:25	0.35	-226.8	7.1	NM	3.366	24.34	16.4
MW-268R	09/03/2019 14:30	0.33	-254.1	7.18	NM	3.447	23.96	14.5
MW-268R	09/03/2019 14:35	0.33	-269.1	7.21	NM	3.484	23.71	11.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-268R	09/03/2019 14:40	0.34	-277.1	7.24	NM	3.517	23.61	10.3
MW-268R	09/03/2019 14:45	0.36	-282.1	7.25	NM	3.547	23.54	9
MW-268R	09/08/2020 12:35	9.08	-265	7.5	2.33	5.411	22.81	51
MW-268R	09/08/2020 13:15	1.77	-341.1	7.6	2.38	5.259	22.4	11
MW-268R	09/08/2020 13:25	1.43	-350.3	7.65	3.06	6.17	22.43	25.7
MW-268R	05/20/2021 13:00	1.38	-21.3	6.18	0.96	1.877	16.55	37.4
MW-268R	05/20/2021 13:05	0.9	-23.4	6.06	1.01	1.966	16.08	35.5
MW-268R	05/20/2021 13:10	1	-45	6.04	1.32	2.526	15.37	32.2
MW-268R	05/20/2021 13:15	1	-73.3	6.08	1.69	3.192	14.95	20.4
MW-268R	05/20/2021 13:20	1.06	-97	6.13	1.89	3.567	14.7	17
MW-268R	05/20/2021 13:25	1.4	-125	6.17	1.97	3.712	14.65	14.4
MW-268R	05/20/2021 13:30	1.59	-144.3	6.21	3.765	3.767	14.62	10.3
MW-268R	05/20/2021 13:35	1.49	-157.3	6.21	2.02	3.801	14.65	9.5
MW-268R	05/20/2021 13:40	1.46	-170.3	6.26	2.04	3.832	14.7	7.8
MW-268R	05/20/2021 13:45	1.54	-178.3	6.28	2.05	3.851	14.65	7.6
MW-269	03/20/2012 13:03	1.19	-32	6.9	0.07	1.34346	20.13	80.3
MW-269	03/20/2012 13:06	1.01	-38	6.94	0.07	1.35206	15.27	8.1
MW-269	03/20/2012 13:09	2.05	-41	6.96	0.07	1.35272	14.77	7.9
MW-269	03/20/2012 13:11	2.19	-43	6.97	0.07	1.35366	14.4	7.3
MW-269	03/20/2012 13:14	1.83	-44	6.99	0.07	1.35341	14.43	11.4
MW-269	03/20/2012 13:17	3.63	-45	7	0.07	1.3516	14.38	7.3
MW-269	03/20/2012 13:20	1.38	-46	7	0.07	1.35325	14.62	5.4
MW-269	03/20/2012 13:22	1.28	-47	7	0.07	1.35169	14.86	6.9
MW-269	03/20/2012 13:25	2.81	-48	7.01	0.07	1.35749	14.83	6.2
MW-269	03/20/2012 13:28	1.29	-50	7.01	0.07	1.36032	14.91	6.7
MW-269	03/20/2012 13:30	0.94	-50	7.01	0.07	1.35387	14.87	7.1
MW-269	03/20/2012 13:33	0.89	-51	7.02	0.07	1.35701	14.88	6.9
MW-269	03/20/2012 13:36	0.74	-51	7.02	0.07	1.35631	14.89	6.2
MW-269	03/20/2012 13:39	0.75	-52	7.02	0.07	1.35735	14.76	6.9
MW-269	03/20/2012 13:41	0.73	-53	7.02	0.07	1.35718	14.98	7.6
MW-269	03/20/2012 13:44	0.82	-53	7.02	0.07	1.35756	14.88	7.3
MW-269	03/20/2012 13:47	0.95	-53	7.02	0.07	1.35864	14.78	7.2
MW-269	03/20/2012 13:50	1.47	-54	7.02	0.07	1.35763	14.8	6.2
MW-269	03/20/2012 13:52	1.24	-54	7.02	0.07	1.36019	14.91	7.4
MW-269	03/20/2012 14:15	6.81	-47	7.15	0.07	1.334	11.99	252.70
MW-269	03/21/2012 10:50	0.54	-79	6.55	0.10	1.460	11.70	30.40
MW-273	08/08/2012 12:56	7.93	-373	6.71	2.3	35.80	21.4	0.00
MW-273	08/08/2012 12:58	6.28	-388	6.78	2.2	35.30	22.6	0.00
MW-273	08/08/2012 13:00	5.25	-404	6.81	2.2	35.30	23.9	13.1
MW-273	08/08/2012 13:02	5.06	-406	6.83	2.2	35.20	24.1	14.2
MW-273	08/08/2012 13:04	4.97	-407	6.84	2.2	35.00	24.5	25.2
MW-273	08/08/2012 13:06	4.82	-408	6.87	2.2	34.70	24.9	4.0
MW-273	08/08/2012 13:08	4.71	-407	6.90	2.2	34.01	25.2	3.7
MW-273	08/08/2012 13:10	4.61	-406	6.93	2.1	34.00	25.3	7.2
MW-273	08/08/2012 13:12	4.53	-406	6.94	2.1	33.60	25.6	3.1
MW-273	08/08/2012 13:14	4.50	-405	6.97	2.1	33.30	25.6	3.7
MW-273	08/08/2012 13:16	4.44	-405	6.97	2.1	32.90	25.7	0.4
MW-273	08/08/2012 13:18	4.42	-407	6.97	2.1	32.70	25.7	0.3
MW-273	08/08/2012 13:20	4.41	-408	6.98	2.10	32.600	25.67	0.20
MW-273	08/09/2012 11:47	4.35	-259	7.25	0.70	12.600	25.31	66.00
MW-273	03/26/2013 09:38	1.03	-374	6.8	2.33	37.48	8.34	73.23
MW-273	09/26/2013 11:17	0.31	-353	6.83	2.62	4.530	21.17	0.83
MW-273	05/27/2014 13:27	1.35	-352	6.80	1.49	24.230	19.61	15.16
MW-273	07/02/2015 09:36	1.18	-244	7.17	2.37	37.09	19.45	37.9
MW-273	07/02/2015 09:43	0.21	-184	6.97	1.49	24.24	21.22	21.5
MW-273	03/08/2016 11:52	0.40	-179	6.70	0.24	4.506	7.91	46.80
MW-273	03/08/2016 14:54	2.04	-308	7.07	1.90	30.900	9.89	52.70
MW-273	09/08/2016 10:29	0.41	-295	6.81	0.57	9.903	23.32	23.10
MW-273	09/08/2016 11:45	1.04	-224	6.94	0.56	9.770	23.73	33.10
MW-273	02/03/2017 09:38	5.08	209	9.39	0.24	4.635	3.42	120.60
MW-273	02/03/2017 12:29	6.48	-294	6.46	0.70	12.310	9.04	102.90
MW-273	11/27/2018 11:30	1.95	-288.40	6.92	12.91	21.420	10.91	94.20

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-273	11/27/2018 12:35	2.04	-317.60	6.96	5.36	9.520	10.88	8.70
MW-273	11/27/2018 12:45	0.87	-292.00	7.55	1.89	3.580	9.78	23.70
MW-273	02/05/2019 09:30	5.10	-182.40	7.34	10.68	18.190	6.38	115.40
MW-273	02/05/2019 09:55	3.72	-211.40	7.77	4.48	8.090	6.27	31.50
MW-273	02/05/2019 10:05	4.77	-198.70	7.62	4.51	9.039	6.29	42.90
MW-273R	07/30/2019 10:49	3.17	-328.7	6.53	NM	16.9	25.49	54.4
MW-273R	07/30/2019 11:38	5.46	-329.6	6.89	8.1	14	24.33	13.9
MW-273R	07/30/2019 11:41	3.23	-205.5	7.66	1.26	2.467	35.86	49
MW-273R	11/07/2019 12:40	-1.46	-351.3	6.44	NM	9.6	16.23	5.5
MW-273R	11/07/2019 14:15	1.88	-249.8	7.31	1.38	2.648	16.31	24.9
MW-273R	11/07/2019 14:20	2.5	-240.5	8.17	0.46	0.931	14.46	11.3
MW-273R	12/11/2019 13:30	-7.87	-346.9	6.32	NM	13.17	11.92	5.7
MW-273R	12/11/2019 13:35	-5.78	-420.9	6.54	NM	11.98	11.79	35.3
MW-273R	12/11/2019 13:40	3.56	-345.9	6.68	NM	10.62	12.05	37.9
MW-273R	12/11/2019 13:45	3.68	-416	6.76	NM	9.008	11.86	37.6
MW-273R	12/11/2019 13:50	6.87	-436.7	6.78	NM	7.289	11.47	31.2
MW-273R	12/11/2019 13:55	3.76	-459	6.8	NM	6.096	11.28	23
MW-273R	12/11/2019 14:00	3.98	-437	6.82	NM	5.592	11.23	18
MW-273R	12/11/2019 14:05	3.98	-437	6.82	NM	5.592	11.23	18
MW-273R	12/11/2019 14:10	3.65	-425.9	6.82	NM	5.428	11.03	22.7
MW-273R	12/11/2019 14:15	3.76	-416	6.84	NM	5.377	10.95	16.3
MW-273R	12/11/2019 15:00	6.87	-260.9	7.13	2.78	5.138	10.38	9.5
MW-273R	12/11/2019 15:10	4.76	-241.3	8.27	0.47	0.959	7.51	9.7
MW-273R	02/26/2020 14:20	0.11	-241.3	7.23	NM	9.347	9.02	4.7
MW-273R	02/26/2020 14:40	0.08	-308.8	7.21	4.01	7.242	8.87	17.7
MW-273R	03/02/2020 15:00	6.87	-260.9	7.13	2.78	5.138	10.38	9.5
MW-273R	05/18/2020 08:45	1.3	-296.4	7.11	2.86	5.329	11.84	18
MW-273R	05/18/2020 10:20	0.14	-249.9	7.19	NM	16	16.96	9.7
MW-273R	05/18/2020 11:00	4.25	-176.9	7.69	7.82	13.5	15.82	0.6
MW-273R	08/24/2020 09:00	4.42	-75.2	6.89	25.02	39.23	25.17	3.1
MW-273R	08/24/2020 09:05	3.62	-152.2	6.95	24.95	39.4	24.82	1.8
MW-273R	08/24/2020 09:10	2.73	-215.7	7.03	21.2	33.61	24.8	2.7
MW-273R	08/24/2020 09:15	2.21	-228.4	7.07	18.69	29.91	24.74	4.3
MW-273R	08/24/2020 09:20	1.92	-231.8	7.09	17.47	28.23	24.39	2.7
MW-273R	08/24/2020 09:25	1.79	-235.9	7.11	16.73	27.27	24.53	1.8
MW-273R	08/24/2020 09:30	1.64	-239.9	7.13	16.63	27.11	24.5	1.4
MW-273R	08/24/2020 09:35	1.55	-236	7.14	16.57	27.03	24.49	1.3
MW-273R	08/24/2020 09:40	1.47	-244.5	7.15	16.41	26.79	24.29	1.6
MW-273R	08/24/2020 09:45	1.37	-245.9	7.16	16.12	26.35	24.15	2
MW-273R	08/24/2020 10:15	0.67	-263.4	7.2	14.69	24.21	23.95	24.4
MW-273R	08/24/2020 10:30	0.23	-281.2	6.96	29.63	45.9	22.32	65
MW-273R	11/11/2020 12:15	1.12	-42	7.21	4.1	7.382	18.38	21.3
MW-273R	11/11/2020 12:20	0.57	-58.6	7.21	4.17	7.506	18.26	21
MW-273R	11/11/2020 12:25	0.59	-106.6	7.25	3.96	7.174	18.09	20.7
MW-273R	11/11/2020 12:30	2.02	-126.8	7.27	3.82	6.92	17.95	22
MW-273R	11/11/2020 12:35	2.43	-131.7	7.26	3.81	6.903	17.97	21.3
MW-273R	11/11/2020 12:40	1.79	-147.1	7.25	3.91	7.08	17.87	20.9
MW-273R	11/11/2020 12:45	1.4	-156	7.26	3.92	7.086	17.99	20.5
MW-273R	11/11/2020 12:50	1.27	-157	7.26	3.91	7.086	18	22.3
MW-273R	11/11/2020 12:55	1.19	-169	7.26	3.98	7.189	17.99	19.8
MW-273R	11/11/2020 13:00	1.67	-170.9	7.26	3.99	7.202	17.97	19.8
MW-273R	11/11/2020 13:30	2.42	11.6	7.57	4.22	7.621	17.89	16.6
MW-273R	11/11/2020 13:40	0.57	-72.4	7.39	4.17	7.519	18.65	17.8
MW-273R	02/24/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-273R	02/24/2021 10:45	1.29	155.9	7.28	5.14	9.086	6.31	82.9
MW-273R	02/24/2021 10:50	1.28	173.1	7.28	6.02	10.57	6.09	90
MW-273R	02/24/2021 10:55	0.98	180.1	7.34	6.21	10.94	6.13	112.1
MW-273R	02/24/2021 11:00	0.78	189.2	7.31	6.31	11.16	5.99	101.8
MW-273R	02/24/2021 11:05	0.79	194.1	7.29	6.48	11.44	5.96	88.3
MW-273R	02/24/2021 11:10	0.95	192.5	7.27	6.76	11.9	6.02	18.9
MW-273R	02/24/2021 11:15	0.68	201.1	7.27	6.86	12.06	5.98	70
MW-273R	02/24/2021 11:20	0.55	205.7	7.27	6.94	12.2	5.98	79.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-273R	02/24/2021 11:25	0.54	210	7.28	7	12.3	5.96	95.2
MW-273R	02/24/2021 11:30	0.51	214.4	7.41	7.02	12.32	6.05	79.4
MW-273R	02/24/2021 12:25	4.9	191	7.29	8.84	15.26	7.06	3.5
MW-273R	02/24/2021 13:05	5.36	156.6	7.74	8.18	14.1	10.16	24.7
MW-273R	05/12/2021 08:40	3.23	-46.7	6.68	14.81	23.9	13.33	34
MW-273R	05/12/2021 08:45	2.16	-78.1	6.7	16.39	26.28	13.04	36.2
MW-273R	05/12/2021 08:50	2.57	-159.3	6.96	15.31	25.43	13.05	9.8
MW-273R	05/12/2021 08:55	2.55	-182.4	7.02	14.12	23.28	13.06	3.8
MW-273R	05/12/2021 09:00	2.34	-238	7.12	11.17	18.8	13.03	0.1
MW-273R	05/12/2021 09:05	2.76	-251.3	7.15	10.06	17.05	13.08	0.3
MW-273R	05/12/2021 09:10	1.84	-257	7.17	9.53	16.21	13.21	3.5
MW-273R	05/12/2021 09:15	1.66	-267.4	7.17	9.3	15.82	13.9	5
MW-273R	05/12/2021 09:20	1.69	-268.3	7.17	9.3	15.83	13.91	5.3
MW-273R	05/12/2021 09:25	1.58	-275.4	7.16	9.2	15.68	13.34	5.7
MW-273R	08/06/2021 13:55	2.57	-96.2	6.89	14.03	22.89	24.97	10.9
MW-273R	08/06/2021 14:00	1.98	-118.9	6.96	14.59	23.98	25.2	8.4
MW-273R	08/06/2021 14:05	1.24	-160.9	7.07	15.08	24.83	25.5	9
MW-273R	08/06/2021 14:10	1.15	-179.6	7.13	14.25	23.58	25.67	7.6
MW-273R	08/06/2021 14:15	1.1	-186.4	7.18	13.27	22.06	25.05	6.9
MW-273R	08/06/2021 14:20	1.01	-199.2	7.23	12.01	20.16	24.76	5.6
MW-273R	08/06/2021 14:25	1.03	-229.5	7.24	11.46	19.3	25.71	5.4
MW-273R	08/06/2021 14:30	0.99	-238.9	7.26	11.08	18.82	25.97	5.6
MW-273R	08/06/2021 14:35	1.01	-245.3	7.28	25.14	18.26	25.12	5.8
MW-273R	08/06/2021 14:40	1.18	-228.6	7.28	10.77	18.24	25.71	3.9
MW-273R	02/22/2022 09:45	4.94	-167.1	7.01	15.11	23.55	8.27	364.6
MW-273R	02/22/2022 09:50	6.88	-188.1	7.09	12.3	20.87	7.66	409.2
MW-273R	02/22/2022 09:55	5.36	-216.5	7.14	9.55	16.83	7.23	65.6
MW-273R	02/22/2022 10:00	4.18	-220.3	7.14	9.46	16.22	7.23	-2.5
MW-273R	02/22/2022 10:05	4.68	-233.2	7.15	8.95	15.42	6.78	7
MW-273R	02/22/2022 10:10	4.21	-213.1	7.14	8.73	15.06	6.93	-0.5
MW-273R	02/22/2022 10:15	2.74	-235.2	7.16	8.48	14.69	6.94	-3.7
MW-273R	02/22/2022 10:20	3.66	-236.7	7.16	8.47	14.62	7	113.4
MW-273R	02/22/2022 10:25	3.31	-227.8	7.17	8.68	14.96	7.13	94.7
MW-273R	02/22/2022 10:30	1.92	-259.8	7.2	8.56	14.76	7.1	9.6
MW-274	07/19/2016 12:00	0.59	-58.4	6.56	1.70	3.244	22.87	0.80
MW-274	07/19/2016 12:49	0.56	-38.2	6.37	3.11	5.857	22.55	6.20
MW-274	10/11/2016 12:10	1.13	-71.3	6.48	1.36	2.651	24.72	8.00
MW-281	03/08/2012 14:16	0.68	-78	6.48	0.10	1.580	14.40	108.00
MW-281	03/09/2012 11:40	0.66	-62	6.42	0.10	1.970	14.10	86.00
MW-281	08/08/2012 11:18	1.75	-115	11.84	0.07	1.420	24.40	4.40
MW-281	08/09/2012 10:57	4.56	-171	6.64	0.09	1.690	24.20	14.00
MW-281	03/20/2013 13:31	3.1	-219	6.65	0.23	4.359	13.41	22.8
MW-281	03/21/2013 11:01	0.56	-307	6.69	0.25	4.687	13.28	62.4
MW-281	09/25/2013 14:40	0.66	-379	6.66	0.08	1.597	23.83	15.40
MW-281	09/26/2013 12:05	0.09	-268	6.59	0.30	5.429	23.67	7.00
MW-281	05/29/2014 11:12	4.42	-234	7.84	0.08	1.645	16.98	84.10
MW-281	05/30/2014 09:51	1.21	-512	6.71	0.12	2.397	16.93	6.30
MW-281	01/13/2015 09:42	0.65	-144	6.66	0.10	1.859	15.47	15.30
MW-281	01/14/2015 13:30	0.25	-137	6.67	0.10	1.910	15.10	87.80
MW-281	03/22/2016 10:24	-0.04	-105	6.48	0.09	1.851	14.28	42.90
MW-281	03/22/2016 11:29	3.54	-123	6.40	0.09	1.757	14.34	18.40
MW-281	09/09/2016 08:44	0.12	-86	6.41	0.34	6.239	24.46	8.00
MW-281	09/09/2016 09:18	0.94	-12	6.20	0.18	3.472	24.97	25.90
MW-281	05/03/2017 11:46	0.52	-96.00	6.63	0.08	1.652	15.59	20.80
MW-281	05/03/2017 14:25	5.34	9.00	7.35	0.12	2.311	15.85	46.90
MW-281	05/16/2018 10:08	NM	-66.00	7.09	0.08	1.561	15.79	6.40
MW-281	05/16/2018 12:29	1.93	107.00	6.68	0.07	1.421	16.48	20.80
MW-281	04/24/2019 11:50	2.75	-60.1	6.66	0.6	1.2	17.93	5.2
MW-281	11/18/2019 13:30	2.53	31.9	6.78	NM	0.8	15.02	100.6
MW-281	11/18/2019 14:55	3.47	-6.4	7.05	0.46	0.932	14.68	8.9
MW-281	11/18/2019 15:00	5	-78.9	7	0.46	0.925	16	10.1
MW-281	03/04/2020 13:30	4.44	-180.3	8.71	0.81	1.592	12.43	300.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-281	08/26/2020 10:30	0.45	-68.4	6.42	0.67	1.335	24.77	17.6
MW-281	08/26/2020 11:15	4.03	-97.9	6.36	0.72	1.445	23.44	1.1
MW-281	08/26/2020 11:25	4.25	-96	6.35	0.73	1.456	23.32	3.7
MW-281	03/12/2021 10:48	3.95	-113.2	7.86	0.6	1.192	13.01	45.3
MW-281	03/12/2021 11:45	2.93	-123	7.27	0.71	1.413	13.06	1.2
MW-281	03/12/2021 11:53	3.01	-84	6.89	0.65	1.288	13.55	2.3
MW-281	05/04/2021 09:05	0.68	12.9	6.7	1.65	3.147	14.75	94.5
MW-281	05/04/2021 09:10	0.46	-14.1	6.64	1.5	2.885	14.56	79.8
MW-281	05/04/2021 09:15	0.42	-42.9	6.65	1.52	2.899	14.29	66.8
MW-281	05/04/2021 09:20	0.39	-55.9	6.69	1.52	2.902	14.27	58.9
MW-281	05/04/2021 09:25	0.41	-63.1	6.71	1.52	2.909	14.26	55
MW-281	05/04/2021 09:30	0.73	-72.5	6.73	1.54	2.934	14.26	45.9
MW-281	05/04/2021 09:35	0.59	-80.5	6.74	1.55	2.964	14.25	39.4
MW-281	05/04/2021 09:40	0.48	-83.6	6.74	1.56	2.969	14.21	37.4
MW-281	05/04/2021 09:45	0.42	-90.2	6.76	1.57	2.987	14.16	30.7
MW-281	05/04/2021 09:50	0.36	-94.4	6.76	1.57	3.002	14.17	27
MW-281	03/24/2022 11:05	0.6	80.2	6.53	0.85	1.676	12.24	58.4
MW-281	03/24/2022 11:10	0.59	78.2	6.53	0.85	1.678	12.29	58.7
MW-281	03/24/2022 11:15	0.72	61.5	6.54	0.85	1.68	12.24	55.3
MW-281	03/24/2022 11:20	0.6	59.3	6.54	0.86	1.683	12.33	55.2
MW-281	03/24/2022 11:25	0.48	37	6.54	0.86	1.69	12.34	52.1
MW-281	03/24/2022 11:30	0.47	17.6	6.56	0.86	1.698	12.33	47.8
MW-281	03/24/2022 11:35	0.43	9.7	6.56	0.87	1.701	12.32	44.6
MW-281	03/24/2022 11:40	0.41	7	6.55	0.87	1.705	12.53	46.3
MW-281	03/24/2022 11:45	0.65	-9.5	6.57	0.88	1.718	13.02	40.7
MW-281	03/24/2022 11:50	0.44	-18.9	6.58	0.88	1.723	12.95	34.3
MW-3	03/21/2012 10:03	9.14	-42	6.83	0.47	8.51376	12.73	82.8
MW-3	03/21/2012 10:05	3.3	-52	6.83	0.47	8.42765	13.26	48.4
MW-3	03/21/2012 10:07	2.45	-56	6.83	0.47	8.4172	13.53	37.6
MW-3	03/21/2012 10:10	1.98	-59	6.83	0.47	8.41947	13.73	28.2
MW-3	03/21/2012 10:12	1.1	-61	6.83	0.47	8.42083	13.97	32.1
MW-3	03/21/2012 10:15	0.97	-62	6.84	0.47	8.43732	14.13	39
MW-3	03/21/2012 10:17	0.95	-63	6.84	0.47	8.44357	14.26	37.5
MW-3	03/21/2012 10:20	0.85	-64	6.84	0.47	8.44067	14.42	31
MW-3	03/21/2012 10:22	0.78	-65	6.84	0.47	8.43677	14.54	37
MW-3	03/21/2012 10:25	0.79	-65	6.84	0.47	8.419	14.69	39.7
MW-3	03/21/2012 10:27	0.81	-66	6.84	0.47	8.41779	14.85	31.4
MW-3	03/21/2012 10:30	0.83	-66	6.83	0.48	8.52768	14.5	69
MW-3	03/21/2012 10:32	0.84	-63	6.84	0.48	8.62397	12.34	32.9
MW-3	03/21/2012 10:34	0.97	-65	6.86	0.48	8.58737	11.86	24.1
MW-3	03/21/2012 10:37	1.15	-68	6.88	0.47	8.44835	11.94	22.4
MW-3	03/21/2012 10:39	0.78	-71	6.91	0.47	8.41362	11.98	18.8
MW-3	03/21/2012 10:42	0.84	-72	6.91	0.47	8.41955	11.96	14.7
MW-3	03/21/2012 10:44	0.88	-72	6.91	0.47	8.43273	12	18
MW-3	03/21/2012 10:47	4.09	-73	6.91	0.47	8.44828	12.04	17.4
MW-3	03/21/2012 10:49	1	-71	6.88	0.48	8.57352	12.11	19.6
MW-3	03/21/2012 10:51	0.95	-64	6.80	0.49	8.809	12.27	14.25
MW-3	03/21/2012 10:52	0.95	-64	6.8	0.49	8.80903	12.27	14.3
MW-3	03/21/2012 11:38	2.08	31	6.28	0.62	11.000	12.43	101.40
MW-3	03/22/2012 09:35	1.33	41	5.90	0.60	10.200	11.00	78.70
MW-3	02/26/2013 13:40	0.32	-250	6.02	2.14	34.520	9.82	50.40
MW-3	02/26/2013 14:38	1.90	143	5.95	2.77	43.330	12.20	60.10
MW-3	02/27/2013 10:50	1.08	-184	5.84	2.22	35.500	12.00	30.80
MW-3	03/31/2014 11:11	1.30	-364	6.02	1.32	22.170	8.62	31.08
MW-3	03/31/2014 12:03	6.96	-185	5.91	2.04	33.050	9.89	35.00
MW-3	04/01/2014 09:55	1.89	-238	5.86	1.90	31.100	8.85	35.60
MW-3	12/29/2015 09:29	3.24	593	5.93	0.53	9.362	15.67	20
MW-3	12/29/2015 10:56	5.61	-7	6.41	1.19	19.9	16.3	88
MW-3	09/21/2016 11:24	0.07	-34	6.14	0.57	9.904	24.37	11.80
MW-3	09/21/2016 11:57	1.40	-22	6.23	0.46	8.166	22.32	26.40
MW-3	02/16/2017 10:32	4.54	297	6.96	0.28	5.132	11.88	9.90
MW-3	02/16/2017 11:56	8.08	7	7.66	0.44	7.917	13.21	141.00

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-3	03/05/2018 12:46	6.8	282	6.21	0.1312	2.5494	9.97	357.6
MW-3	03/05/2018 12:49	1.21	231	6	1.1176	18.9913	9.75	192.1
MW-3	03/05/2018 12:52	0.95	217	6.01	1.2447	20.9685	9.85	133.7
MW-3	03/05/2018 12:54	0.8	209	6.02	1.3015	21.8537	9.79	77.3
MW-3	03/05/2018 12:57	0.64	205	6.03	1.3164	22.0709	9.99	62.2
MW-3	03/05/2018 13:00	0.58	200	6.04	1.3792	23.0481	9.85	83.9
MW-3	03/05/2018 13:02	0.52	194	6.04	1.4350	23.8880	10.08	65.8
MW-3	03/05/2018 13:05	0.47	189	6.05	1.4379	23.9309	10.1	57.5
MW-3	03/05/2018 13:08	0.43	184	6.05	1.4504	24.1417	9.84	48
MW-3	03/05/2018 13:10	0.39	181	6.05	1.4561	24.2249	9.88	48.6
MW-3	03/05/2018 13:13	0.37	176	6.06	1.4679	24.4168	9.74	48.6
MW-3	03/05/2018 13:16	0.32	171	6.06	1.4602	24.2830	9.96	48
MW-3	03/05/2018 13:18	0.28	166	6.06	1.4855	24.6689	9.96	39.5
MW-3	03/05/2018 13:21	0.25	164	6.07	1.5062	24.9951	9.83	39.6
MW-3	03/05/2018 13:23	0.23	160	6.07	1.5312	25.3707	9.89	47.9
MW-3	03/05/2018 13:26	0.19	156	6.07	1.5571	25.7727	9.79	46.1
MW-3	03/05/2018 13:29	0.17	151	6.07	1.5328	25.3799	10.09	45.3
MW-3	03/05/2018 13:31	0.17	147	6.07	1.4929	24.7624	10.22	38.7
MW-3	03/05/2018 13:34	0.16	143	6.07	1.5008	24.8799	10.26	40.8
MW-3	03/05/2018 13:37	0.14	138	6.07	1.5110	25.0548	9.99	31.9
MW-3	03/06/2018 11:15	8.56	-16.00	5.88	2.34	37.250	11.13	33.50
MW-3	03/06/2018 13:37	0.14	138.00	6.07	1.51	25.150	9.85	31.90
MW-3	03/06/2018 14:25	3.25	10.00	6.00	1.08	18.270	12.4	43.50
MW-3	03/20/2019 09:55	0.4	117.3	6.22	NM	6.42	10.52	1.1
MW-3	03/20/2019 12:00	2.39	37.9	6.12	3.66	6.652	11.84	4.7
MW-3	02/14/2020 12:15	1	39	6.23	NM	5.227	10.86	62.5
MW-3	02/14/2020 13:45	1.62	11.1	6.07	2.95	5.429	12.26	6.2
MW-3	01/22/2021 10:55	7.55	48.7	6.61	3.27	6.044	10.26	425.2
MW-3	01/22/2021 11:00	4.68	65.5	6.46	3.61	6.569	10.94	214.8
MW-3	01/22/2021 11:05	4.55	69.8	6.43	3.67	6.669	10.88	153.1
MW-3	01/22/2021 11:10	4.02	72.4	6.4	3.7	6.729	10.92	100
MW-3	01/22/2021 11:15	3.56	73.9	6.39	3.72	6.758	10.96	90.1
MW-3	01/22/2021 11:20	3.12	71.3	6.38	3.73	6.771	10.79	72.9
MW-3	01/22/2021 11:25	2.64	59.5	6.37	3.72	6.759	10.73	65.3
MW-3	01/22/2021 11:30	2.26	53.3	6.38	3.73	6.768	10.81	46.3
MW-3	01/22/2021 11:35	2.08	52.5	6.37	3.73	6.783	10.89	39.3
MW-3	01/22/2021 11:40	1.83	48	6.37	3.72	6.766	10.67	37.6
MW-3	01/22/2021 13:05	0.59	17.6	6.21	3.95	7.139	12.53	10.1
MW-3	01/22/2021 13:15	1.01	17.4	6.21	4	7.222	12.3	136
MW-310	03/28/2012 12:42	0.84	-12	6.69	0.04	0.750	12.26	12.40
MW-310	03/29/2012 09:27	2.04	-6	6.64	0.04	0.730	11.67	4.20
MW-312	04/25/2012 14:40	1.69	-159	8.25	0.06	1.260	13.39	231.80
MW-312	04/26/2012 10:00	0.09	-108	8.36	0.06	1.114	14.24	18.90
MW-312	09/30/2013 16:03	1.94	-364	6.51	1.79	28.740	18.90	18.70
MW-312	10/01/2013 11:30	0.17	-193	6.25	1.23	20.370	20.00	7.60
MW-314	03/27/2012 10:08	1.55	-80	6.92	0.15	2.88182	10.15	225.1
MW-314	03/27/2012 10:11	-0.32	-78	6.89	0.15	2.86167	9.29	58.8
MW-314	03/27/2012 10:14	-0.81	-81	6.93	0.15	2.87899	9.97	41.1
MW-314	03/27/2012 10:17	-0.99	-80	6.93	0.15	2.87531	9.09	34.8
MW-314	03/27/2012 10:20	-0.98	-79	6.9	0.15	2.87441	9.83	26.3
MW-314	03/27/2012 10:23	-1	-80	6.93	0.15	2.87889	9.73	24.8
MW-314	03/27/2012 10:26	-1.02	-80	6.93	0.15	2.89348	9.72	21.3
MW-314	03/27/2012 10:29	-1.01	-78	6.89	0.15	2.88859	10.02	25.1
MW-314	03/27/2012 10:32	1.28	-79	6.92	0.15	2.91014	9.38	23
MW-314	03/27/2012 10:35	0.83	-79	6.91	0.15	2.92062	9.51	19.5
MW-314	03/27/2012 10:37	0.57	-78	6.9	0.15	2.93441	9.58	23.4
MW-314	03/27/2012 10:40	0.36	-80	6.93	0.15	2.9399	10.06	18.3
MW-314	03/27/2012 10:43	0.19	-80	6.92	0.15	2.95865	9.68	26.8
MW-314	03/27/2012 10:46	0.07	-79	6.9	0.15	2.95298	9.87	25.9
MW-314	03/27/2012 10:49	-0.02	-79	6.9	0.15	2.95825	9.44	22
MW-314	03/27/2012 10:52	-0.12	-81	6.92	0.15	2.95913	9.74	25.6
MW-314	03/27/2012 10:55	-0.17	-80	6.91	0.15	2.94201	10.26	23.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-314	03/27/2012 10:57	-0.19	-81	6.92	0.15	2.959	10.45	28.51
MW-314	03/27/2012 10:58	-0.19	-81	6.92	0.15	2.95949	10.45	28.5
MW-314	03/27/2012 11:48	5.21	-70	7.05	0.15	2.952	9.89	37.60
MW-314	03/28/2012 09:35	1.51	-43	6.67	0.10	2.670	11.72	48.80
MW-314	04/10/2013 13:22	1.28	-158	6.67	0.18	3.322	15.81	192
MW-314	04/10/2013 14:09	2.73	-170	6.65	0.17	3.151	12.54	65.7
MW-314	04/11/2013 10:35	0.45	-127	6.78	0.17	3.173	10.37	153.8
MW-314	03/27/2014 09:33	1.27	-371	6.72	1.20	20.790	3.16	65.60
MW-314	03/27/2014 10:15	5.32	-172	6.61	0.20	3.920	7.15	202.30
MW-314	03/28/2014 09:20	1.33	-368	6.72	0.21	3.926	8.02	673.50
MW-314	02/24/2016 10:26	3.27	117	7.04	0.11	2.261	5.17	3496.10
MW-314	02/24/2016 12:26	6.61	-136	6.55	0.12	2.397	9.21	21.10
MW-314	04/25/2017 10:10	0.04	-94.00	6.83	0.11	2.193	11.64	44.27
MW-314	01/30/2018 10:05	1.17	20.00	6.95	0.10	1.964	9.99	162.20
MW-314	01/30/2018 10:19	0.06	51.00	6.57	0.22	4.125	8.59	124.10
MW-314	01/30/2018 11:24	2.01	125.00	7.08	0.14	2.655	10.61	895.20
MW-314	05/09/2018 08:56	4.09	-151	6.56	0.163	3.106	15.9	111.1
MW-314	05/09/2018 08:59	1.85	-142	6.64	0.162	3.078	15.24	48.4
MW-314	05/09/2018 09:01	1.42	-137	6.68	0.161	3.069	15.14	50
MW-314	05/09/2018 09:03	1.23	-137	6.71	0.161	3.063	15.18	52.5
MW-314	05/09/2018 09:05	1.15	-137	6.73	0.161	3.066	15.16	46.8
MW-314	05/09/2018 09:07	1.11	-137	6.74	0.161	3.062	15.2	44.7
MW-314	05/09/2018 09:09	1.11	-138.00	6.75	0.16	3.047	15.43	46.55
MW-314	07/11/2018 12:43	0.58	-150	6.66	0.088	1.721	22.21	25.4
MW-314	07/11/2018 12:46	0.56	-151	6.67	0.088	1.717	22.77	28.6
MW-314	07/11/2018 12:48	0.55	-151	6.67	0.088	1.722	22.98	29.9
MW-314	07/11/2018 12:50	0.54	-152	6.67	0.089	1.735	22.72	29.8
MW-314	07/11/2018 12:52	0.53	-153	6.67	0.090	1.749	22.43	35.6
MW-314	07/11/2018 12:54	0.55	-154	6.67	0.091	1.766	22.35	32.3
MW-314	07/11/2018 12:56	0.51	-155	6.67	0.092	1.796	22.4	36.5
MW-314	07/11/2018 12:59	0.58	-153	6.66	0.092	1.798	22.44	35.2
MW-314	07/11/2018 13:01	0.62	-153	6.66	0.092	1.802	22.65	37.4
MW-314	07/11/2018 13:03	0.61	-154	6.67	0.093	1.814	22.55	40.8
MW-314	07/11/2018 13:05	0.58	-155.00	6.67	0.09	1.824	22.76	37.33
MW-314	10/30/2018 12:45	-0.01	-112.50	6.70	1.20	2.332	18.54	445.20
MW-314	10/30/2018 13:20	0.03	-102.20	6.79	0.89	1.364	18.3	89.10
MW-314	10/30/2018 13:25	0.04	-100.30	6.85	0.82	1.614	18.37	51.60
MW-314	05/04/2021 10:50	2.08	-97.1	6.97	1.88	3.547	14.04	55.5
MW-314	05/04/2021 10:55	0.48	-106.7	6.74	2	3.774	12.96	53.1
MW-314	05/04/2021 11:00	0.41	-110.3	6.77	1.94	3.664	13.07	67.8
MW-314	05/04/2021 11:05	0.43	-113	6.81	1.91	3.614	13.39	80.1
MW-314	05/04/2021 11:10	0.44	-111.8	6.83	1.94	3.653	13.51	115.4
MW-314	05/04/2021 11:15	0.44	-114	6.82	2.02	3.799	13.79	120.6
MW-314	05/04/2021 11:20	0.43	-116.7	6.84	2.09	3.921	14.33	121.6
MW-314	05/04/2021 11:25	0.41	-117.3	6.84	2.12	3.972	14.45	120.8
MW-314	05/04/2021 11:30	0.4	-117.4	6.85	2.11	3.96	14.52	106.3
MW-314	05/04/2021 11:35	0.37	-117.6	6.85	2.06	3.883	14.69	86.5
MW-314	03/24/2022 09:10	0.95	-126.5	6.33	0.64	1.281	9.41	409.8
MW-314	03/24/2022 09:15	0.2	-131.1	6.4	0.65	1.285	9.33	232.2
MW-314	03/24/2022 09:20	0.59	-136.6	6.49	0.65	1.3	9.22	115.6
MW-314	03/24/2022 09:25	0.87	-140.3	6.58	0.65	1.294	9.19	59.9
MW-314	03/24/2022 09:30	0.63	-140	6.6	0.65	1.285	9.19	53.5
MW-314	03/24/2022 09:35	0.81	-142.3	6.63	0.64	1.272	9.2	57.7
MW-314	03/24/2022 09:40	0.79	-143.2	6.67	0.63	1.251	9.23	70.7
MW-314	03/24/2022 09:45	0.7	-143.5	6.68	0.62	1.231	9.27	81.8
MW-314	03/24/2022 09:50	1.33	-143.3	6.7	0.61	1.212	9.32	81.3
MW-314	03/24/2022 09:55	1.29	-142.3	6.72	0.6	1.199	9.34	80.3
MW-315	03/20/2012 15:03	2.42	-118	7.43	0.17	3.29512	26.18	14.5
MW-315	03/20/2012 15:05	5.48	-110	7.48	0.18	3.35214	21.4	28.9
MW-315	03/20/2012 15:07	3.44	-117	7.51	0.17	3.30719	16.83	7.8
MW-315	03/20/2012 15:09	3.61	-120	7.52	0.17	3.30107	16.27	16.2
MW-315	03/20/2012 15:11	4.65	-122	7.52	0.17	3.30596	16.2	50.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-315	03/20/2012 15:13	4.31	-124	7.53	0.17	3.29727	16.53	8.3
MW-315	03/20/2012 15:16	4	-125	7.53	0.17	3.28498	16.54	8.5
MW-315	03/20/2012 15:18	3.84	-126	7.54	0.17	3.28837	16.27	11.3
MW-315	03/20/2012 15:20	3.75	-127	7.54	0.17	3.29795	16.09	9.2
MW-315	03/20/2012 15:22	3.65	-127	7.54	0.17	3.29123	16.1	9.4
MW-315	03/20/2012 15:24	3.51	-128	7.54	0.17	3.28155	16.16	9
MW-315	03/20/2012 15:58	10.96	-46	7.69	0.18	3.327	14.11	59.30
MW-315	03/21/2012 11:30	2.62	-149	7.22	0.20	3.520	11.40	145.00
MW-322	03/14/2012 08:29	1.48	-60	6.74	0.17	3.17674	15.71	44.1
MW-322	03/14/2012 08:31	1.98	-65	6.76	0.17	3.25251	13.89	42.2
MW-322	03/14/2012 08:34	2.12	-68	6.76	0.17	3.25879	14.16	59.9
MW-322	03/14/2012 08:37	2.8	-71	6.76	0.17	3.25965	14.21	42.8
MW-322	03/14/2012 08:40	2.7	-73	6.76	0.17	3.26358	14.19	33.3
MW-322	03/14/2012 08:43	2.58	-74	6.77	0.17	3.26656	14.23	30.2
MW-322	03/14/2012 08:46	2.52	-75	6.77	0.17	3.27416	14.24	29.8
MW-322	03/14/2012 08:49	2.4	-76	6.78	0.17	3.28393	14.25	27
MW-322	03/14/2012 08:52	2.23	-77	6.78	0.17	3.28801	14.29	33.7
MW-322	03/14/2012 08:55	2.07	-77	6.78	0.17	3.292	14.3	29.5
MW-322	03/14/2012 08:58	1.92	-78	6.79	0.17	3.29713	14.34	25.3
MW-322	03/14/2012 09:01	1.76	-78	6.8	0.17	3.30062	14.31	28.5
MW-322	03/14/2012 09:04	1.59	-79	6.8	0.17	3.30615	14.38	28.5
MW-322	03/14/2012 09:07	1.47	-80	6.81	0.17	3.31118	14.42	26.8
MW-322	03/14/2012 09:10	1.38	-80	6.82	0.17	3.32029	14.46	27.2
MW-322	03/14/2012 09:13	1.27	-81	6.83	0.18	3.33248	14.48	22.1
MW-322	03/14/2012 09:16	1.19	-81	6.84	0.18	3.34257	14.55	23
MW-322	03/14/2012 09:18	1.07	-82	6.84	0.18	3.35536	14.63	25.1
MW-322	03/14/2012 09:51	3.07	-60	6.81	0.17	3.250	15.53	95.30
MW-322	03/15/2012 09:15	0.64	-40	6.36	0.20	3.630	15.30	189.00
MW-322	05/16/2012 08:28	1.79	-44	6.7	0.19	3.52144	18.42	24.8
MW-322	05/16/2012 08:29	1.48	-52	6.73	0.19	3.5077	17.12	49.7
MW-322	05/16/2012 08:30	1.27	-57	6.73	0.19	3.52835	16.53	60.7
MW-322	05/16/2012 08:31	1.04	-60	6.73	0.19	3.52637	16.34	52.6
MW-322	05/16/2012 08:33	0.85	-62	6.73	0.19	3.52629	16.31	113.9
MW-322	05/16/2012 08:34	0.68	-64	6.73	0.19	3.52632	16.26	92.9
MW-322	05/16/2012 08:35	0.55	-66	6.73	0.19	3.52001	16.32	56.7
MW-322	05/16/2012 08:36	0.46	-67	6.73	0.19	3.52432	16.18	72.7
MW-322	05/16/2012 08:38	0.4	-68	6.73	0.19	3.52472	16.22	42.6
MW-322	05/16/2012 08:39	0.33	-69	6.73	0.19	3.52795	16.27	58.4
MW-322	05/16/2012 08:40	0.35	-70	6.74	0.19	3.52359	16.27	171.8
MW-322	05/16/2012 08:41	0.91	-71	6.74	0.19	3.5384	16.21	361.9
MW-322	05/16/2012 08:43	0.73	-72	6.75	0.19	3.53485	16.26	264
MW-322	05/16/2012 08:44	0.54	-72	6.75	0.19	3.53418	16.17	163.5
MW-322	05/16/2012 08:45	0.65	-73	6.75	0.19	3.53637	16.15	100.1
MW-322	05/16/2012 08:46	1	-73	6.76	0.19	3.536	16.27	143.8
MW-322	05/16/2012 08:48	0.71	-74	6.76	0.19	3.53869	16.23	105.5
MW-322	05/16/2012 08:49	0.5	-75	6.77	0.19	3.52828	16.31	120.7
MW-322	05/16/2012 08:50	0.36	-75	6.77	0.19	3.5337	16.28	140.5
MW-322	05/16/2012 08:51	0.28	-75	6.77	0.19	3.53795	16.31	112
MW-322	05/16/2012 08:53	0.24	-76	6.78	0.19	3.54694	16.27	38.3
MW-322	05/16/2012 08:54	0.23	-76	6.78	0.19	3.55127	16.27	32.2
MW-322	05/16/2012 08:55	0.23	-76	6.78	0.19	3.54552	16.27	31.1
MW-322	05/16/2012 08:56	0.21	-76	6.78	0.19	3.53706	16.35	33.2
MW-322	05/16/2012 08:58	0.19	-77	6.79	0.19	3.54527	16.38	38.8
MW-322	05/16/2012 08:59	0.17	-77	6.79	0.19	3.54534	16.34	35.9
MW-322	05/16/2012 09:00	0.15	-78	6.79	0.19	3.54414	16.32	36.4
MW-322	05/16/2012 09:02	0.14	-78	6.8	0.19	3.55164	16.29	54.9
MW-322	05/16/2012 09:03	0.41	-78	6.8	0.19	3.54701	16.37	37.8
MW-322	05/16/2012 09:04	0.56	-79	6.81	0.19	3.55443	16.25	37.6
MW-322	05/16/2012 09:05	0.45	-79	6.81	0.19	3.55398	16.2	37.2
MW-322	05/16/2012 09:07	0.37	-80	6.82	0.19	3.56167	16.27	38.6
MW-322	05/16/2012 09:08	0.35	-80	6.82	0.19	3.57051	16.09	37.1
MW-322	05/16/2012 09:09	0.29	-80	6.82	0.19	3.56351	16.17	41.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	05/16/2012 09:10	0.24	-80	6.82	0.19	3.5495	16.37	52.2
MW-322	05/16/2012 09:12	0.2	-80	6.82	0.19	3.56345	16.24	53.8
MW-322	05/16/2012 09:13	0.17	-80	6.82	0.19	3.56503	16.22	57.3
MW-322	05/16/2012 09:14	0.14	-80	6.83	0.19	3.56978	16.28	58.6
MW-322	05/16/2012 09:15	0.12	-81	6.83	0.19	3.571	16.39	59.3
MW-322	05/16/2012 11:12	1.5	-56	6.74	0.18	3.447	21.08	141.8
MW-322	05/17/2012 09:05	2.35	-25	6.42	0.2	3.75	14.35	114
MW-322	07/30/2012 10:27	1.8	-121	13.17	0.22	4.18152	23.07	10.9
MW-322	07/30/2012 10:28	1.59	-119	13.16	0.23	4.205	20.77	15.5
MW-322	07/30/2012 10:29	1.46	-121	13.16	0.23	4.19296	20.1	8.1
MW-322	07/30/2012 10:30	1.36	-122	13.16	0.23	4.19823	20.3	8.4
MW-322	07/30/2012 10:32	1.31	-122	13.19	0.23	4.1961	19.92	7.7
MW-322	07/30/2012 10:33	1.28	-122	13.2	0.23	4.20328	19.6	9.1
MW-322	07/30/2012 10:34	1.34	-122	13.21	0.23	4.19905	19.41	6.7
MW-322	07/30/2012 10:35	1.29	-123	13.21	0.23	4.19657	19.46	5.7
MW-322	07/30/2012 10:37	1.24	-123	13.21	0.23	4.19194	19.46	5.7
MW-322	07/30/2012 10:38	1.21	-123	13.21	0.22	4.18144	19.51	6.4
MW-322	07/30/2012 10:39	1.18	-123	13.22	0.22	4.17974	19.39	5.2
MW-322	07/30/2012 10:40	1.13	-123	13.22	0.22	4.17435	19.37	5.2
MW-322	07/30/2012 10:41	1.07	-123	13.22	0.22	4.17575	19.45	4.4
MW-322	07/30/2012 10:43	1.01	-123	13.23	0.22	4.17756	19.57	4.3
MW-322	07/30/2012 10:44	0.98	-123	13.23	0.22	4.18119	19.54	3.6
MW-322	07/30/2012 10:45	1.02	-123	13.23	0.22	4.17053	19.64	4.4
MW-322	07/30/2012 10:46	0.95	-123	13.23	0.22	4.17099	19.6	4.8
MW-322	07/30/2012 10:48	0.92	-123	13.23	0.22	4.17502	19.69	5.7
MW-322	07/30/2012 10:49	0.91	-123	13.23	0.22	4.17259	19.65	3.6
MW-322	07/30/2012 10:50	0.9	-122	13.24	0.22	4.17453	19.6	3.5
MW-322	07/30/2012 10:51	0.89	-123	13.24	0.22	4.17617	19.59	2.8
MW-322	07/30/2012 10:53	0.88	-123	13.24	0.22	4.1689	19.69	4.4
MW-322	07/30/2012 10:54	0.88	-123	13.24	0.22	4.16748	19.73	3.5
MW-322	07/30/2012 10:55	0.87	-122	13.24	0.22	4.16921	19.71	2.8
MW-322	07/30/2012 10:56	0.86	-122	13.25	0.22	4.1697	19.7	2.7
MW-322	07/30/2012 10:58	0.86	-122	13.25	0.22	4.17364	19.69	3.1
MW-322	07/30/2012 10:59	0.85	-122	13.25	0.22	4.17389	19.8	3.2
MW-322	07/30/2012 11:00	0.84	-122	13.25	0.22	4.16806	19.72	2.9
MW-322	07/30/2012 11:01	0.83	-122	13.25	0.22	4.17221	19.76	2.9
MW-322	07/30/2012 11:03	0.83	-122	13.25	0.22	4.16985	19.67	2.8
MW-322	07/30/2012 11:04	0.82	-122	13.26	0.22	4.17282	19.71	3.1
MW-322	07/30/2012 11:05	0.8	-121	13.26	0.22	4.17423	19.71	2.7
MW-322	07/30/2012 11:06	0.79	-121	13.26	0.22	4.16951	19.74	3.2
MW-322	07/30/2012 11:08	0.78	-121	13.26	0.22	4.16935	19.89	2.9
MW-322	07/30/2012 11:09	0.77	-121	13.26	0.22	4.16357	19.86	3.3
MW-322	07/30/2012 11:10	0.76	-121	13.26	0.22	4.16442	19.9	2.6
MW-322	07/30/2012 11:11	0.75	-121	13.26	0.22	4.16941	19.94	2.3
MW-322	07/30/2012 11:13	0.74	-121	13.26	0.22	4.16911	20	3.3
MW-322	07/30/2012 11:14	0.72	-120	13.26	0.22	4.17221	19.95	2.5
MW-322	07/30/2012 11:15	0.71	-120	13.23	0.22	4.170	19.89	11.99
MW-322	07/30/2012 12:39	5.81	-128	6.91	0.22	4.035	25.15	117.50
MW-322	07/31/2012 09:52	5.09	-87	6.57	0.20	3.930	16.30	158.00
MW-322	11/19/2012 13:58	5.76	-102	6.80	0.2	3.74	16.3	17.2
MW-322	11/19/2012 14:00	5.22	-103	6.68	0.2	3.74	16.7	16.4
MW-322	11/19/2012 14:02	4.99	-103	6.68	0.2	3.74	16.9	14.8
MW-322	11/19/2012 14:04	4.68	-103	6.69	0.2	3.75	17.2	13.6
MW-322	11/19/2012 14:06	4.59	-103	6.70	0.2	3.75	17.3	13.3
MW-322	11/19/2012 14:08	4.48	-102	6.71	0.2	3.77	17.4	14.5
MW-322	11/19/2012 14:10	4.43	-101	6.72	0.20	3.790	17.44	14.20
MW-322	02/19/2013 11:55	5.22	-142	6.68	0.31	5.79652	12.61	42.3
MW-322	02/19/2013 11:56	5.09	-145	6.69	0.31	5.79757	12.38	74.3
MW-322	02/19/2013 11:58	4.99	-138	6.72	0.32	5.82022	13.43	61.8
MW-322	02/19/2013 11:59	5.2	-128	6.75	0.33	6.01301	13.66	210.8
MW-322	02/19/2013 12:01	5.25	-119	6.78	0.33	5.99669	13.77	83.3
MW-322	02/19/2013 12:03	5.36	-114	6.81	0.32	5.94994	13.77	83.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	02/19/2013 12:04	5.47	-112	6.82	0.32	5.95126	13.81	95.2
MW-322	02/19/2013 12:06	5.61	-111	6.84	0.33	5.96722	13.77	126.4
MW-322	02/19/2013 12:07	5.76	-111	6.86	0.33	6.00141	13.78	147.2
MW-322	02/19/2013 12:09	5.89	-110	6.88	0.33	6.00405	13.74	164.3
MW-322	02/19/2013 12:11	6.01	-110	6.89	0.33	5.96019	13.72	170.8
MW-322	02/19/2013 12:12	6.12	-111	6.9	0.33	5.98296	13.75	195
MW-322	02/19/2013 12:14	6.2	-111	6.91	0.33	5.99767	13.74	205.9
MW-322	02/19/2013 12:15	6.3	-111	6.92	0.32	5.94605	13.68	243.7
MW-322	02/19/2013 12:17	6.36	-111	6.92	0.33	6.00394	13.73	279.6
MW-322	02/19/2013 12:18	6.41	-111	6.93	0.33	6.00997	13.73	257
MW-322	02/19/2013 12:20	6.46	-111	6.93	0.33	6.026	13.83	264.90
MW-322	06/12/2013 10:49	0.52	-146	6.73	0.38	6.822	15.69	34.15
MW-322	06/12/2013 11:18	2.12	-109	6.63	0.34	6.184	15.33	14.50
MW-322	09/05/2013 09:25	1.03	-272	6.76	0.35	6.300	19.59	13.05
MW-322	11/07/2013 10:20	0.86	-221	6.66	0.38	6.932	18.33	13.57
MW-322	03/12/2014 09:50	1.03	-141	6.54	0.18	3.464	11.91	19.21
MW-322	03/12/2014 10:24	2.01	-104	6.55	0.25	4.735	13.75	23.30
MW-322	05/19/2014 13:15	1.27	-343	6.58	0.47	8.445	15.71	13.26
MW-322	08/04/2014 14:00	1.61	-423	6.65	0.17	3.256	19.65	36.75
MW-322	08/04/2014 14:41	2.09	-396	7.03	0.17	3.266	16.35	16.90
MW-322	10/29/2014 09:17	3.30	-143	6.75	0.22	4.047	18.29	54.00
MW-322	10/29/2014 09:54	3.19	-156	6.67	0.22	4.050	17.47	366.00
MW-322	03/03/2015 10:59	0.50	205	6.65	0.10	2.020	10.27	563.60
MW-322	03/03/2015 11:28	2.17	247	6.95	0.10	2.011	11.40	218.70
MW-322	09/14/2015 14:29	8.13	-92	6.46	0.36	6.545	17.52	19.7
MW-322	11/18/2015 09:28	3.18	113	6.59	0.2778	5115.2119	17.86	24.3
MW-322	11/18/2015 09:31	0.7	-12	6.58	0.3238	5910.4303	17.42	34.4
MW-322	11/18/2015 09:33	0.39	-68	6.6	0.3406	6197.1246	17.4	46.1
MW-322	11/18/2015 09:36	0.36	-87	6.61	0.3421	6222.6195	17.36	36.5
MW-322	11/18/2015 09:39	0.33	-98	6.63	0.3404	6194.0110	17.34	27.3
MW-322	11/18/2015 09:41	0.32	-105	6.64	0.3342	6087.9164	17.42	24
MW-322	11/18/2015 09:44	0.3	-109	6.65	0.3260	5947.5716	17.48	24.8
MW-322	11/18/2015 09:47	0.28	-111	6.65	0.3169	5791.6718	17.46	24.9
MW-322	11/18/2015 09:49	0.28	-113	6.64	0.3073	5625.9543	17.53	23.5
MW-322	11/18/2015 09:52	0.28	-114	6.65	0.3028	5549.0650	17.61	25.4
MW-322	11/18/2015 09:55	0.28	-115	6.65	0.3018	5530.9952	17.64	27.2
MW-322	11/18/2015 09:57	0.28	-115	6.64	0.3018	5530.4955	17.56	21.7
MW-322	11/18/2015 10:00	0.27	-117	6.65	0.3058	5600.4468	17.59	21.2
MW-322	11/18/2015 10:03	0.26	-118	6.66	0.3052	5588.9817	17.62	20.5
MW-322	11/18/2015 10:26	1.71	-103	6.71	0.35	6.331	17.72	38.80
MW-322	01/07/2016 12:54	4.32	-63	6.6	0.3027	5597.8904	11.43	19.9
MW-322	01/07/2016 12:57	1.03	-67	6.59	0.3176	5842.6047	12.63	18.9
MW-322	01/07/2016 12:59	0.57	-69	6.59	0.3204	5882.7301	13.31	13.7
MW-322	01/07/2016 13:02	0.48	-71	6.6	0.3206	5885.6205	13.37	6.3
MW-322	01/07/2016 13:04	1.85	-72	6.62	0.3264	5995.7691	12.54	6.9
MW-322	01/07/2016 13:07	1.56	-72	6.59	0.3593	6547.3686	13.7	15
MW-322	01/07/2016 13:10	0.67	-74	6.6	0.3695	6718.8671	13.93	13.8
MW-322	01/07/2016 13:12	0.54	-76	6.62	0.3683	6696.8995	14.01	12.5
MW-322	01/07/2016 13:15	0.49	-77	6.63	0.3655	6648.6652	14.06	14.3
MW-322	01/07/2016 13:18	0.42	-79	6.64	0.3637	6618.9098	13.96	7.4
MW-322	01/07/2016 13:20	0.39	-81	6.66	0.3624	6597.1520	13.94	4.6
MW-322	01/07/2016 13:23	0.39	-83	6.67	0.3662	6660.6537	14.09	4.8
MW-322	01/07/2016 13:26	0.38	-84	6.68	0.3710	6741.5705	14.07	4.1
MW-322	01/07/2016 13:28	0.38	-86	6.68	0.3740	6794.8376	14.01	5.7
MW-322	01/07/2016 13:31	0.38	-87	6.69	0.3776	6853.9009	14.18	4.7
MW-322	01/07/2016 13:34	0.37	-89	6.7	0.3777	6855.6901	14.17	4.2
MW-322	01/07/2016 13:36	0.34	-90	6.7	0.3741	6794.4977	14.15	3.5
MW-322	01/07/2016 13:39	0.31	-92	6.71	0.3773	6848.2890	14.22	2.8
MW-322	01/07/2016 13:42	0.31	-94	6.72	0.3804	6899.7748	14.29	3.1
MW-322	01/07/2016 14:06	1.74	-98	6.72	0.38	6.88	16	42.9
MW-322	04/06/2016 11:28	4.59	-27	6.7	0.3630	6637.0773	11.53	204.5
MW-322	04/06/2016 11:31	1.09	-50	6.42	0.3721	6791.7119	11.64	268.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	04/06/2016 11:33	0.64	-55	6.37	0.3745	6833.6617	11.63	214.4
MW-322	04/06/2016 11:36	0.59	-63	6.34	0.3734	6813.5004	11.65	171.9
MW-322	04/06/2016 11:39	0.5	-82	6.32	0.3681	6722.8252	11.71	80
MW-322	04/06/2016 11:41	0.44	-90	6.31	0.3696	6747.6440	11.7	43.3
MW-322	04/06/2016 11:44	0.44	-93	6.33	0.3807	6938.8016	11.61	45.6
MW-322	04/06/2016 11:47	0.45	-96	6.37	0.3948	7179.4545	11.64	55.1
MW-322	04/06/2016 11:49	0.45	-98	6.41	0.4131	7487.8858	11.8	64.6
MW-322	04/06/2016 11:52	0.71	-99	6.43	0.4164	7538.6475	12.11	60.7
MW-322	04/06/2016 11:55	1.39	-95	6.43	0.4180	7559.7898	12.5	58.8
MW-322	04/06/2016 11:57	1.71	-88	6.47	0.4082	7394.5771	12.45	83.6
MW-322	04/06/2016 12:00	4.3	-76	6.51	0.3650	6659.5622	12.39	214.7
MW-322	04/06/2016 12:03	3.33	-78	6.5	0.4317	7803.8871	11.78	146.1
MW-322	04/06/2016 12:05	1.06	-83	6.45	0.4295	7763.5910	11.96	141.6
MW-322	04/06/2016 12:08	0.66	-90	6.48	0.4320	7803.4020	12.06	121
MW-322	04/06/2016 12:11	0.59	-98	6.53	0.4531	8162.5014	11.92	103.3
MW-322	04/06/2016 12:13	0.55	-102	6.55	0.4601	8275.4138	12.19	101.6
MW-322	04/06/2016 12:16	0.48	-106	6.57	0.4670	8391.6015	12.19	88.3
MW-322	04/06/2016 12:18	0.45	-110	6.61	0.4831	8664.6264	11.94	68.7
MW-322	04/06/2016 12:52	0.53	-112	6.56	0.40	7.165	13.17	112.00
MW-322	07/20/2016 12:11	2.02	-86	6.52	NM	7256.09	26.32	46.9
MW-322	07/20/2016 12:13	1.52	-105	6.53	NM	9404.28	23.43	108.7
MW-322	07/20/2016 12:14	1.23	-114	6.56	NM	10477.18	23.08	250.6
MW-322	07/20/2016 12:16	1.11	-119	6.59	NM	10914.56	22.38	92.5
MW-322	07/20/2016 12:18	1.06	-123	6.6	NM	11351.67	21.89	89
MW-322	07/20/2016 12:19	0.99	-125	6.61	NM	11337.94	22.04	75.4
MW-322	07/20/2016 12:21	0.97	-127	6.63	NM	11260.41	21.63	78.5
MW-322	07/20/2016 12:22	0.97	-129	6.63	NM	11325.09	21.52	64.8
MW-322	07/20/2016 12:24	0.96	-129	6.64	NM	11063.63	21.63	56.4
MW-322	07/20/2016 12:26	0.94	-130	6.64	NM	10814.3	21.53	51.1
MW-322	07/20/2016 12:27	0.91	-130	6.63	NM	10455.81	21.65	43.5
MW-322	07/20/2016 12:29	0.9	-130	6.63	NM	10232.49	21.7	47.8
MW-322	07/20/2016 12:30	0.9	-130	6.62	NM	10011.13	21.61	62.5
MW-322	07/20/2016 12:32	0.87	-130	6.62	NM	9792.89	21.62	35
MW-322	07/20/2016 12:33	0.88	-130	6.61	NM	9713.27	21.65	32.6
MW-322	07/20/2016 12:35	0.87	-130	6.61	NM	9533.84	21.84	41.7
MW-322	07/20/2016 12:37	0.84	-130	6.6	NM	9428.57	22.16	38.4
MW-322	07/20/2016 12:38	0.82	-130	6.6	NM	9300.8	22.16	33.2
MW-322	07/20/2016 12:40	0.82	-130	6.6	NM	9188.61	22.01	40.4
MW-322	07/20/2016 12:41	0.8	-130	6.59	NM	9198.9	22.13	36.3
MW-322	07/20/2016 12:43	0.79	-130	6.59	NM	9093.11	22.28	33.5
MW-322	07/20/2016 12:44	0.79	-131	6.59	NM	8927.95	22.18	37.6
MW-322	07/20/2016 12:46	0.8	-130	6.59	NM	8847.5	22.16	33.3
MW-322	07/20/2016 12:48	0.78	-131	6.59	NM	8855.92	22.29	32.6
MW-322	07/20/2016 12:49	0.77	-131	6.59	NM	8787.42	22.21	32.9
MW-322	07/20/2016 13:24	0.93	-117	6.64	0.95	16.130	17.53	39.50
MW-322	10/13/2016 13:14	3.63	-145	6.6	0.4245	7594.2214	20.74	11
MW-322	10/13/2016 13:17	1.52	-119	6.6	0.4459	7953.4843	20.3	24.1
MW-322	10/13/2016 13:20	0.78	-119	6.62	0.4630	8238.2145	20.1	20.8
MW-322	10/13/2016 13:23	0.64	-119	6.63	0.4670	8306.2206	19.99	14.8
MW-322	10/13/2016 13:26	0.56	-120	6.64	0.4657	8285.1020	19.94	15.2
MW-322	10/13/2016 13:29	0.42	-123	6.67	0.4647	8266.8237	20.02	7.9
MW-322	10/13/2016 13:32	0.37	-125	6.67	0.4589	8170.5526	20.09	7.9
MW-322	10/13/2016 13:36	0.36	-128	6.69	0.4487	7999.9758	20.19	8.8
MW-322	10/13/2016 13:39	0.38	-128	6.7	0.4422	7892.0673	20.21	9.3
MW-322	10/13/2016 13:42	0.39	-129	6.71	0.4505	8029.7276	20.33	8.4
MW-322	10/13/2016 13:45	0.4	-129	6.74	0.4578	8151.7406	20.23	7
MW-322	10/13/2016 13:48	0.38	-127	6.72	0.4671	8306.4280	20.3	6
MW-322	10/13/2016 13:51	0.38	-126	6.73	0.4746	8429.4849	20.28	7.4
MW-322	10/13/2016 13:54	0.39	-125	6.73	0.4732	8407.2898	20.08	6.7
MW-322	10/13/2016 13:58	0.37	-127	6.75	0.4765	8462.6906	20.01	5.9
MW-322	10/13/2016 14:01	0.35	-127	6.74	0.4793	8510.9434	19.86	6.2
MW-322	10/13/2016 14:04	0.34	-128	6.74	0.4810	8538.5728	19.78	5.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	10/13/2016 14:25	3.05	-124	6.55	0.47	8.334	18.29	52.40
MW-322	01/17/2017 09:08	4.03	31	6.67	0.0551	1110.2661	10.85	69.2
MW-322	01/17/2017 09:11	1.12	-10	6.61	0.0550	1106.8401	11.49	72.8
MW-322	01/17/2017 09:14	0.35	-16	6.59	0.0548	1100.3470	12.55	70.5
MW-322	01/17/2017 09:17	0.15	-18	6.63	0.0550	1105.6545	12.25	31
MW-322	01/17/2017 09:20	0.06	-19	6.67	0.0545	1097.0149	12.13	17.7
MW-322	01/17/2017 09:23	0.3	-20	6.69	0.0548	1102.9255	11.71	17.7
MW-322	01/17/2017 09:26	0.89	-19	6.71	0.0548	1104.1880	10.91	17.1
MW-322	01/17/2017 09:30	1.21	-19	6.72	0.0546	1101.7024	10.36	19
MW-322	01/17/2017 09:33	1.45	-21	6.72	0.0539	1088.7085	9.92	21.7
MW-322	01/17/2017 09:36	2.4	-21	6.75	0.0541	1096.1909	8.76	18
MW-322	01/17/2017 09:39	2.32	-22	6.76	0.0537	1088.1049	8.77	17.4
MW-322	01/17/2017 09:42	2.35	-22	6.77	0.0536	1085.9370	8.67	18.1
MW-322	03/16/2017 10:15	4.41	-100.20	6.54	1.42	2.706	12.3	101.20
MW-322	03/16/2017 10:55	3.25	-96.30	6.48	1.48	2.828	12.4	96.10
MW-322	03/16/2017 11:20	0.89	123.60	6.72	1.44	2.748	10.12	20.70
MW-322	04/27/2017 10:26	3.5	33	6.34	0.1771	0.0335	17.57	26.6
MW-322	04/27/2017 10:29	1.06	13	6.52	0.2078	0.0390	15.56	37.6
MW-322	04/27/2017 10:32	0.38	-10	6.57	0.2250	0.0421	14.96	23.9
MW-322	04/27/2017 10:35	0.27	-27	6.59	0.2246	0.0420	14.85	23.7
MW-322	04/27/2017 10:38	0.23	-38	6.61	0.2339	0.0437	14.79	22.1
MW-322	04/27/2017 10:42	0.19	-47	6.62	0.2377	0.0443	14.81	22.4
MW-322	04/27/2017 10:45	0.16	-53	6.63	0.2405	0.0448	14.84	17.7
MW-322	04/27/2017 10:48	0.14	-58	6.65	0.2428	0.0452	14.84	16.4
MW-322	04/27/2017 10:51	0.18	-62	6.66	0.2422	0.0451	14.96	19
MW-322	04/27/2017 10:54	0.18	-64	6.66	0.2401	0.0447	15.1	13.3
MW-322	04/27/2017 10:57	0.71	-67	6.65	0.2237	0.0418	16.12	13.2
MW-322	04/27/2017 11:00	1.66	-68	6.65	0.2106	0.0394	17.37	18.7
MW-322	04/27/2017 11:04	3.55	-67	6.69	0.2423	0.0451	14.71	88.9
MW-322	04/27/2017 11:07	1.57	-66	6.67	0.2418	0.0450	15.56	34.2
MW-322	04/27/2017 11:10	2.33	-66	6.68	0.2516	0.0468	14.71	20.3
MW-322	04/27/2017 11:13	1.48	-65	6.66	0.2500	0.0465	15.32	15.4
MW-322	04/27/2017 11:16	1.77	-67	6.66	0.2226	0.0415	17.46	33.9
MW-322	01/19/2018 10:51	4.34	182	6.25	1.0876	0.1854	9.44	48.4
MW-322	01/19/2018 10:54	1.75	176	6.36	1.0467	0.1784	10.33	58
MW-322	01/19/2018 10:57	0.93	168	6.45	1.0468	0.1783	10.55	41.2
MW-322	01/19/2018 11:00	0.71	160	6.51	1.0337	0.1761	10.95	58.5
MW-322	01/19/2018 11:03	0.61	153	6.56	1.0134	0.1726	11.59	58.4
MW-322	01/19/2018 11:06	0.61	146	6.6	1.0136	0.1727	11.57	36.9
MW-322	01/19/2018 11:09	0.56	139	6.63	1.0339	0.1760	11.25	31.1
MW-322	01/19/2018 11:13	0.5	134	6.65	1.0419	0.1772	11.32	26
MW-322	01/19/2018 11:16	0.44	129	6.67	1.0638	0.1808	11	30
MW-322	01/19/2018 11:19	0.38	123	6.69	1.0679	0.1814	11.14	28.4
MW-322	01/19/2018 11:22	0.32	119	6.7	1.0616	0.1803	11.32	23.5
MW-322	01/19/2018 11:25	0.28	114	6.72	1.0640	0.1806	11.54	21.8
MW-322	01/19/2018 11:28	0.26	110	6.73	1.0516	0.1786	11.73	20.3
MW-322	01/19/2018 11:31	0.25	106	6.74	1.0520	0.1787	11.68	19.9
MW-322	01/19/2018 11:35	0.25	103	6.75	1.0615	0.1801	11.77	17.4
MW-322	01/19/2018 11:38	0.24	100	6.76	1.0815	0.1834	11.35	18.9
MW-322	01/19/2018 11:41	0.24	97.00	6.77	1.08	18.530	10.95	18.40
MW-322	04/13/2018 09:07	5.5	-37	7.11	0.1742	0.0033	14.56	42.4
MW-322	04/13/2018 09:10	1.18	-33	6.69	0.1750	0.0033	13.85	35.4
MW-322	04/13/2018 09:13	1.31	-30	6.58	0.1735	0.0033	13.65	23.2
MW-322	04/13/2018 09:17	2.09	-26	6.53	0.1759	0.0033	13.18	46.7
MW-322	04/13/2018 09:20	2.64	-22	6.51	0.1770	0.0034	13.13	42.9
MW-322	04/13/2018 09:23	2.67	-19	6.5	0.1794	0.0034	13.05	49.3
MW-322	04/13/2018 09:26	2.57	-18	6.5	0.1819	0.0035	12.92	47.4
MW-322	04/13/2018 09:29	2.56	-18	6.5	0.1812	0.0034	12.97	34
MW-322	04/13/2018 09:32	2.57	-18	6.5	0.1816	0.0034	12.98	34.1
MW-322	04/13/2018 09:35	2.38	-21	6.51	0.1802	0.0034	13	29.5
MW-322	04/13/2018 09:38	2.24	-23	6.51	0.1786	0.0034	13.01	23.7
MW-322	04/13/2018 09:42	2.08	-26	6.51	0.1801	0.0034	13	21.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	04/13/2018 09:45	1.85	-30	6.52	0.1808	0.0034	12.99	14.3
MW-322	04/13/2018 09:48	1.6	-33	6.52	0.1814	0.0034	13.21	11.9
MW-322	04/13/2018 09:51	1.4	-36	6.52	0.1833	0.0035	13.26	8.4
MW-322	04/13/2018 09:54	1.05	-38	6.52	0.1827	0.0035	13.49	7.6
MW-322	04/13/2018 09:57	2.11	-32.00	6.51	0.18	3.485	14.48	17.73
MW-322	04/20/2018 09:17	8.25	38	5.42	0.1864	0.0036	8.61	16
MW-322	04/20/2018 09:20	2.95	20	5.7	0.1914	0.0037	9.23	23.3
MW-322	04/20/2018 09:23	1.92	11	5.86	0.1881	0.0036	9.43	17.6
MW-322	04/20/2018 09:26	1.56	5	5.96	0.1900	0.0036	9.45	19.6
MW-322	04/20/2018 09:30	1.33	0	6.03	0.1905	0.0036	9.78	18.5
MW-322	04/20/2018 09:33	1.16	-4	6.09	0.1944	0.0037	9.9	19.2
MW-322	04/20/2018 09:36	1.04	-6	6.13	0.1945	0.0037	9.55	25.3
MW-322	04/20/2018 09:39	0.83	-7	6.16	0.1953	0.0037	9.68	16.1
MW-322	04/20/2018 09:43	0.8	-8	6.2	0.1942	0.0037	9.71	16.5
MW-322	04/20/2018 09:46	0.68	-8	6.22	0.1947	0.0037	9.6	16.5
MW-322	04/20/2018 09:49	0.67	-8	6.23	0.1952	0.0037	9.69	13.5
MW-322	04/20/2018 09:52	0.59	-9	6.25	0.1951	0.0037	9.99	19.1
MW-322	04/20/2018 09:55	0.58	-6	6.26	0.1889	0.0036	10.06	10.1
MW-322	04/20/2018 09:59	0.55	-2	6.27	0.1883	0.0036	10.2	9.2
MW-322	04/20/2018 10:02	0.52	1	6.28	0.1870	0.0036	10.28	7.5
MW-322	04/20/2018 10:05	0.49	4.00	6.30	0.17	3.349	9.62	6.72
MW-322	07/13/2018 08:58	4.47	-100	6.52	0.188	3.5425	20.19	12.7
MW-322	07/13/2018 09:01	3.06	-116	6.45	0.187	3.5191	20.15	7.2
MW-322	07/13/2018 09:05	2.7	-121	6.45	0.187	3.5141	20.47	8.7
MW-322	07/13/2018 09:09	2.37	-125	6.46	0.188	3.5290	20.43	7.5
MW-322	07/13/2018 09:12	2.06	-128	6.47	0.188	3.5343	20.61	13.5
MW-322	07/13/2018 09:16	1.97	-131	6.47	0.187	3.5125	20.94	12
MW-322	07/13/2018 09:19	3.31	-133	6.48	0.187	3.5204	21.1	10.2
MW-322	07/13/2018 09:23	3.5	-136	6.49	0.188	3.5403	21.13	14.7
MW-322	07/13/2018 09:27	2.87	-138	6.5	0.189	3.5505	20.82	10.3
MW-322	07/13/2018 09:30	2.26	-139	6.51	0.190	3.5623	20.91	11.2
MW-322	07/13/2018 09:34	2.27	-140	6.52	0.190	3.5613	21.14	13.2
MW-322	07/13/2018 09:38	2.49	-141	6.53	0.191	3.5799	21.19	17
MW-322	07/13/2018 09:41	2.68	-142	6.54	0.192	3.5975	21.12	12.3
MW-322	07/13/2018 09:45	2.76	-142.00	6.55	0.19	3.610	21.44	11.97
MW-322	10/25/2018 10:15	4.10	-85.00	6.87	2.96	5.437	19.5	110.40
MW-322	04/02/2019 10:35	2.07	-106.4	6.79	NM	3.491	12.34	21.1
MW-322	07/02/2019 10:05	3.02	-141.2	6.66	NM	3.603	20.67	115.7
MW-322	07/02/2019 10:10	2.76	-118.4	6.64	NM	3.576	17.29	46.9
MW-322	07/02/2019 10:15	2.86	-112.8	6.71	NM	3.64	17.44	111.1
MW-322	07/02/2019 10:20	5.41	-113.6	6.72	NM	3.734	17.14	15.1
MW-322	07/02/2019 10:25	2.68	-106.4	6.7	NM	3.739	16.56	80.7
MW-322	07/02/2019 10:30	2.66	-100.3	6.69	NM	3.737	16.57	79.4
MW-322	07/02/2019 10:35	2.65	-98.4	6.66	NM	3.737	16.58	78.1
MW-322	07/02/2019 13:45	2.65	-98.4	6.66	NM	3.737	16.58	78.1
MW-322	10/02/2019 09:10	3.92	-100.4	6.93	NM	2.42	24.14	207.6
MW-322	10/02/2019 09:15	2.99	-101.4	6.92	NM	2.413	23.69	272.9
MW-322	10/02/2019 09:20	2.53	-101.4	6.93	NM	2.405	23.49	317.5
MW-322	10/02/2019 09:25	2.21	-101.6	6.93	NM	2.399	23.46	305.2
MW-322	10/02/2019 09:30	2.05	-92.8	6.93	NM	2.402	24.14	322.1
MW-322	10/02/2019 09:35	1.77	-104.4	6.92	NM	2.403	24.26	298
MW-322	10/02/2019 09:40	1.6	-107.6	6.89	NM	2.399	23.88	257.9
MW-322	10/02/2019 09:45	1.3	-107.1	6.85	NM	2.406	23.74	155
MW-322	10/02/2019 09:50	1.1	-105	6.82	NM	2.411	23.83	139.8
MW-322	10/02/2019 09:55	0.95	-106.4	6.8	NM	2.429	23.83	119.3
MW-322	01/02/2020 10:45	4.37	-81.3	6.44	NM	2.161	12.54	21.1
MW-322	01/02/2020 10:50	3.28	-84	6.49	NM	2.08	12.9	23
MW-322	01/02/2020 10:55	2.67	-83.7	6.51	NM	2.071	13.19	22.8
MW-322	01/02/2020 11:00	2.07	-82.3	6.53	NM	2.082	13.23	19.2
MW-322	01/02/2020 11:05	1.83	-83.2	6.54	NM	2.092	13.26	13.5
MW-322	01/02/2020 11:10	1.58	-88.3	6.55	NM	2.151	13.3	11.7
MW-322	01/02/2020 11:15	2.43	-105.7	6.67	NM	2.127	13.72	15.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	01/02/2020 11:20	2.98	-107.9	6.65	NM	2.132	13.73	14.2
MW-322	01/02/2020 11:25	1.37	-105.2	6.58	NM	2.11	13.96	21.8
MW-322	01/02/2020 11:30	0.86	-104.1	6.56	NM	2.102	14.22	11.6
MW-322	04/01/2020 09:35	3.9	-60.4	6.69	NM	1.926	11.81	69.2
MW-322	07/06/2020 09:55	0.61	-118.6	6.8	1.9	3.585	18.06	0
MW-322	07/06/2020 10:00	0.43	-125.4	6.74	1.88	3.563	18.02	2.1
MW-322	07/06/2020 10:05	0.38	-130.2	6.75	1.9	3.606	20.33	0
MW-322	07/06/2020 10:10	0.34	-128.8	6.76	1.91	3.629	22.32	0
MW-322	07/06/2020 10:15	0.23	-126.5	6.73	1.9	3.621	24.84	1.3
MW-322	07/06/2020 10:20	0.19	-125.7	6.73	1.95	3.699	25.06	0
MW-322	07/06/2020 10:25	0.14	-120.5	6.71	2.06	3.902	24.64	0
MW-322	07/06/2020 10:30	0.16	-117	6.7	2.1	3.975	24.83	0
MW-322	07/06/2020 10:35	0.16	-112.7	6.7	2.1	3.978	25.43	0
MW-322	07/06/2020 10:40	0.08	-112.1	6.69	2.06	3.901	25.85	0
MW-322	10/13/2020 09:35	1.73	-115.8	6.72	0.78	1.537	18.4	27.3
MW-322	10/13/2020 09:40	1.56	-119.8	6.74	0.78	1.538	18.49	29.2
MW-322	10/13/2020 09:45	1.38	-130.2	6.8	0.78	1.538	18.5	39.8
MW-322	10/13/2020 09:50	1.18	-125.6	6.77	0.8	1.572	18.02	24.4
MW-322	10/13/2020 09:55	1.58	-98.4	6.72	0.82	1.621	16.88	23
MW-322	10/13/2020 10:00	2.22	-76.6	6.71	0.83	1.627	16.48	28.7
MW-322	10/13/2020 10:05	3.07	-66.2	6.72	0.83	1.63	16.25	38.3
MW-322	10/13/2020 10:10	3.36	-61.1	6.72	0.83	1.634	16.04	51.6
MW-322	10/13/2020 10:15	3.62	-60.1	6.72	0.83	1.639	15.9	62.6
MW-322	10/13/2020 10:20	3.61	-60.2	6.72	0.83	1.637	15.92	64.9
MW-322	01/06/2021 10:05	5.28	-130.3	6.64	1.78	3.373	12.67	55
MW-322	01/06/2021 10:10	3.32	-168.1	6.71	2.12	3.982	14.32	24.6
MW-322	01/06/2021 10:15	3.06	-171.3	6.73	2.16	4.052	14.08	21.2
MW-322	01/06/2021 10:20	2.69	-168.6	6.75	2.24	4.198	14.14	15.3
MW-322	01/06/2021 10:25	2.69	-168.3	6.75	2.25	4.204	14.29	14.3
MW-322	01/06/2021 10:30	2.23	-167.3	6.79	2.27	4.256	13.44	10
MW-322	01/06/2021 10:35	2	-168.3	6.8	2.27	4.242	13.26	8.2
MW-322	01/06/2021 10:40	1.84	-170.2	6.81	140	4.255	13.22	7.1
MW-322	01/06/2021 10:45	1.47	-167.8	6.8	2.28	4.257	13.35	4.4
MW-322	01/06/2021 10:50	0.99	-162.4	6.75	12.53	4.158	12.51	8.2
MW-322	04/01/2021 12:10	1.49	-39.3	6.48	1.9	3.593	10.54	112.9
MW-322	04/01/2021 12:15	0.48	-37.3	6.53	1.9	3.597	10.86	91.9
MW-322	04/01/2021 12:20	0.53	-40.6	6.57	2	3.793	10.78	198
MW-322	04/01/2021 12:25	0.51	-44.4	6.63	2	3.763	10.85	202.1
MW-322	04/01/2021 12:30	1.5	-50	6.68	1.98	3.734	10.87	74.5
MW-322	04/01/2021 12:35	1.25	-50.3	6.66	1.92	3.625	11.87	38.3
MW-322	04/01/2021 12:40	0.85	-54.7	6.69	1.92	3.631	11.78	30.5
MW-322	04/01/2021 12:45	0.62	-54.9	6.7	1.93	3.65	11.55	34.8
MW-322	04/01/2021 12:50	0.61	-55.6	6.7	1.94	3.657	11.54	30.3
MW-322	04/01/2021 12:55	0.51	-57	6.71	1.95	3.67	11.64	27.5
MW-322	07/09/2021 12:30	7.58	19.1	8.34	0.19	0.41	23.45	49.8
MW-322	07/09/2021 12:35	3.02	-142.8	6.85	1.96	3.718	21.69	95.5
MW-322	07/09/2021 12:40	2.59	-140.6	6.73	1.96	3.711	22.4	53.7
MW-322	07/09/2021 12:45	1.67	-143	6.73	1.96	3.714	22.59	105.6
MW-322	07/09/2021 12:50	2.02	-146.3	6.74	1.95	3.701	22.36	36
MW-322	07/09/2021 12:55	1.89	-150	6.76	1.93	3.667	23.06	37.3
MW-322	07/09/2021 13:00	2.04	-155.2	6.79	1.93	3.659	23.28	23.2
MW-322	07/09/2021 13:05	2.21	-155.6	6.79	1.92	3.655	24.64	19.5
MW-322	07/09/2021 13:10	2.34	-150	6.81	1.93	3.671	26.01	19.3
MW-322	07/09/2021 13:15	2.74	-145.8	6.85	1.94	3.7	27.37	31.3
MW-322	01/19/2022 10:30	3.14	-80.1	6.8	4.59	8.237	10.29	196.5
MW-322	01/19/2022 10:35	0.61	-91.4	6.72	4.72	8.427	12.24	163.6
MW-322	01/19/2022 10:40	0.59	-93.9	6.72	4.78	8.544	11.64	113.3
MW-322	01/19/2022 10:45	0.65	-93.8	6.7	4.76	8.506	11.54	105.6
MW-322	01/19/2022 10:50	0.56	-85.8	6.68	4.78	8.52	11.76	97.5
MW-322	01/19/2022 10:55	0.95	-95.4	6.73	4.74	8.478	1.56	100.9
MW-322	01/19/2022 11:00	0.71	-94.4	6.72	4.68	8.369	12.14	26.9
MW-322	01/19/2022 11:05	0.64	-92.2	6.72	4.68	8.372	12.2	22

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-322	01/19/2022 11:10	0.64	-89.6	6.71	4.69	8.392	12.25	21.5
MW-322	01/19/2022 11:15	0.62	-88.6	6.71	4.68	8.38	12.15	21
MW-322	04/06/2022 10:30	0.5	-87.6	6.47	1.89	3.56	11.34	192.1
MW-322	04/06/2022 10:35	0.45	-90.2	6.49	1.89	3.57	11.29	167.3
MW-322	04/06/2022 10:40	0.43	-91.2	6.49	1.9	3.582	11.22	140.3
MW-322	04/06/2022 10:45	1.12	-88.1	6.51	1.95	3.68	10.8	103.9
MW-322	04/06/2022 10:50	1.77	-71.2	6.52	1.97	3.717	10.64	90
MW-322	04/06/2022 10:55	1.83	-70.7	6.51	1.97	3.718	10.62	93.1
MW-322	04/06/2022 11:00	1.8	-69.5	6.52	1.97	3.715	10.65	85.6
MW-323	03/14/2012 10:03	2.1	-77	8.45	0.02	0.47984	19.46	54.7
MW-323	03/14/2012 10:08	1.57	-43	6.63	0.11	2.17331	15.49	43.9
MW-323	03/14/2012 10:13	1.23	-29	6.58	0.12	2.27724	15.45	38.9
MW-323	03/14/2012 10:18	1.09	-27	6.59	0.12	2.27542	15.5	29
MW-323	03/14/2012 10:23	1.02	-27	6.59	0.12	2.25963	15.68	27.4
MW-323	03/14/2012 10:28	0.97	-28	6.59	0.12	2.25641	15.53	25.3
MW-323	03/14/2012 10:33	0.9	-27	6.57	0.12	2.24669	15.71	23.6
MW-323	03/14/2012 10:38	0.86	-28	6.56	0.12	2.23955	16.08	16.7
MW-323	03/14/2012 10:43	0.88	-28	6.56	0.12	2.24149	15.81	16
MW-323	03/14/2012 10:48	0.84	-29	6.57	0.11	2.22213	15.84	13.6
MW-323	03/14/2012 10:53	0.8	-29	6.56	0.11	2.22592	15.96	12.5
MW-323	03/14/2012 10:54	0.80	-29	6.56	0.11	2.226	15.96	12.46
MW-323	03/14/2012 11:26	6.01	-58	7.51	0.03	0.643	15.98	60.00
MW-323	03/15/2012 09:45	0.61	-100	7.12	0.0000	0.595	12.80	58.00
MW-323	05/16/2012 10:13	2.24	-31	6.71	0.09	1.78791	21.43	7.6
MW-323	05/16/2012 10:15	2.13	-27	6.64	0.1	2.00325	18.15	6.2
MW-323	05/16/2012 10:16	1.35	-26	6.62	0.1	2.00263	18.27	5.8
MW-323	05/16/2012 10:17	1.25	-26	6.6	0.1	2.01142	18.75	4.8
MW-323	05/16/2012 10:19	1.23	-28	6.59	0.1	2.01446	18.94	6.5
MW-323	05/16/2012 10:20	1.05	-29	6.59	0.1	2.02077	18.81	8.3
MW-323	05/16/2012 10:22	0.86	-30	6.58	0.1	2.02615	18.73	10.6
MW-323	05/16/2012 10:23	0.73	-31	6.57	0.11	2.05652	18.86	12.8
MW-323	05/16/2012 10:24	0.61	-30	6.55	0.11	2.13243	19.27	14.6
MW-323	05/16/2012 10:26	0.55	-29	6.54	0.11	2.1638	19.36	18.5
MW-323	05/16/2012 10:27	0.49	-27	6.54	0.11	2.17704	19.38	15.8
MW-323	05/16/2012 10:29	0.45	-26	6.54	0.11	2.18865	19.05	11.5
MW-323	05/16/2012 10:30	0.4	-26	6.53	0.11	2.18479	19.09	15.1
MW-323	05/16/2012 10:31	0.36	-25	6.53	0.11	2.18621	19	12.4
MW-323	05/16/2012 10:33	0.34	-25	6.53	0.11	2.18752	18.89	16
MW-323	05/16/2012 10:34	0.31	-25	6.53	0.11	2.18736	18.87	10.9
MW-323	05/16/2012 10:36	0.28	-25	6.53	0.11	2.18828	18.95	12.9
MW-323	05/16/2012 10:37	0.26	-24	6.53	0.11	2.19144	18.78	11.1
MW-323	05/16/2012 10:39	0.24	-24	6.53	0.11	2.19032	18.81	10.7
MW-323	05/16/2012 10:40	0.23	-24	6.52	0.11	2.19432	18.81	10.5
MW-323	05/16/2012 10:41	0.21	-24	6.52	0.11	2.19121	18.96	8.8
MW-323	05/16/2012 10:43	0.19	-25	6.52	0.11	2.19076	19.18	9.8
MW-323	05/16/2012 10:44	0.18	-25	6.52	0.11	2.19683	19.27	11.1
MW-323	05/16/2012 10:46	0.18	-25	6.52	0.11	2.19968	19.12	9.8
MW-323	05/16/2012 10:47	0.17	-25	6.52	0.11	2.19971	19.24	14.2
MW-323	05/16/2012 10:48	0.16	-25	6.52	0.11	2.19711	19.19	15.9
MW-323	05/16/2012 10:50	0.16	-25	6.52	0.11	2.19768	19.26	15.7
MW-323	05/16/2012 10:51	0.15	-25	6.52	0.11	2.19647	19.3	20.5
MW-323	05/16/2012 10:53	0.15	-25	6.52	0.11	2.19816	19.31	26.5
MW-323	05/16/2012 10:54	0.14	-25	6.52	0.11	2.19854	19.39	27.7
MW-323	05/16/2012 10:55	0.14	-25	6.52	0.11	2.20281	19.34	31.1
MW-323	05/16/2012 10:57	0.13	-25	6.52	0.11	2.19905	19.42	30.2
MW-323	05/16/2012 10:58	0.13	-25	6.52	0.11	2.204	19.39	31.78
MW-323	05/16/2012 12:10	1.06	-5	6.62	0.11	2.078	17.35	41.3
MW-323	05/17/2012 09:35	2.15	-25	6.39	0.1	2.15	14.43	10.6
MW-323	07/30/2012 08:45	3.43	-93	12.79	0.11	2.11262	21.78	9.9
MW-323	07/30/2012 08:46	2.94	-67	12.81	0.12	2.29447	20.97	18.5
MW-323	07/30/2012 08:48	2.57	-58	12.91	0.12	2.32591	19.81	24.5
MW-323	07/30/2012 08:49	2.34	-57	12.95	0.12	2.31783	19.43	22.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-323	07/30/2012 08:51	2.11	-58	12.97	0.12	2.31125	19.35	23.5
MW-323	07/30/2012 08:52	1.83	-59	13	0.12	2.32016	19.29	21.7
MW-323	07/30/2012 08:53	1.78	-60	13.01	0.12	2.30609	19.32	17.9
MW-323	07/30/2012 08:55	1.77	-61	13.04	0.12	2.29225	19.24	21
MW-323	07/30/2012 08:56	1.75	-61	13.05	0.12	2.31311	19.17	19.2
MW-323	07/30/2012 08:58	1.73	-62	13.06	0.12	2.31255	19.18	22.4
MW-323	07/30/2012 08:59	1.7	-63	13.07	0.12	2.29752	19.14	19.4
MW-323	07/30/2012 09:00	1.67	-63	13.07	0.12	2.30034	19.18	18.7
MW-323	07/30/2012 09:02	1.66	-64	13.09	0.12	2.3055	19.11	22.8
MW-323	07/30/2012 09:03	1.65	-64	13.1	0.12	2.30317	19.13	17
MW-323	07/30/2012 09:05	1.6	-65	13.1	0.12	2.31496	19.1	16.4
MW-323	07/30/2012 09:06	1.56	-65	13.11	0.12	2.323	19.08	17.21
MW-323	07/30/2012 10:17	2.79	-115	13.10	0.11	2.082	20.63	39.20
MW-323	07/31/2012 09:20	4.81	-96	6.40	0.10	2.160	19.24	17.60
MW-323	11/20/2012 13:48	5.95	-101	6.87	0.1	1.47	16.6	31.4
MW-323	11/20/2012 13:50	5.31	-105	6.94	0.1	1.51	16.7	29.9
MW-323	11/20/2012 13:52	5.01	-108	6.98	0.1	1.51	16.9	27.8
MW-323	11/20/2012 13:54	4.83	-109	6.99	0.1	1.52	16.9	26.7
MW-323	11/20/2012 13:56	4.72	-107	6.99	0.1	1.53	16.9	26.1
MW-323	11/20/2012 13:58	4.64	-88	6.89	0.1	1.54	16.9	26.3
MW-323	11/20/2012 14:00	4.54	-76	6.78	0.1	1.57	16.7	21.7
MW-323	11/20/2012 14:02	4.49	-71	6.73	0.1	1.60	17.0	22.0
MW-323	11/20/2012 14:04	4.43	-67	6.70	0.10	1.610	16.93	21.30
MW-323	02/20/2013 13:33	4.69	-138	6.96	0.13	2.50421	7.78	13.8
MW-323	02/20/2013 13:35	3.78	-156	6.92	0.13	2.47126	8.67	8.5
MW-323	02/20/2013 13:37	2.01	-158	6.9	0.13	2.60892	10.67	7.7
MW-323	02/20/2013 13:40	1.6	-164	6.88	0.14	2.64821	10.96	6.2
MW-323	02/20/2013 13:42	0.66	-169	6.86	0.13	2.60021	11.7	6.4
MW-323	02/20/2013 13:44	0.46	-175	6.79	0.14	2.70903	11.98	6.5
MW-323	02/20/2013 13:46	0.33	-177	6.67	0.15	2.80233	12.12	5.2
MW-323	02/20/2013 13:49	0.27	-180	6.58	0.14	2.78516	12.31	4.7
MW-323	02/20/2013 13:51	0.22	-183	6.54	0.15	2.81309	12.47	7
MW-323	02/20/2013 13:53	0.21	-189	6.52	0.15	2.80987	12.82	4.2
MW-323	02/20/2013 13:56	0.2	-190	6.5	0.15	2.88143	12.74	8.6
MW-323	02/20/2013 13:58	0.2	-180	6.39	0.17	3.18591	12.97	5.8
MW-323	02/20/2013 14:00	0.21	-181	6.38	0.19	3.51839	12.94	5.7
MW-323	02/20/2013 14:02	0.2	-185	6.37	0.19	3.54201	12.96	4.1
MW-323	02/20/2013 14:05	0.19	-191	6.37	0.18	3.50983	12.7	3.3
MW-323	02/20/2013 14:07	0.18	-196	6.37	0.18	3.49572	12.87	2.6
MW-323	02/20/2013 14:09	0.18	-201	6.37	0.19	3.54231	12.87	2.3
MW-323	02/20/2013 14:12	0.18	-206	6.37	0.19	3.56555	12.66	2
MW-323	02/20/2013 14:14	0.17	-209	6.37	0.19	3.60323	12.76	1.7
MW-323	02/20/2013 14:16	0.17	-213	6.37	0.19	3.53017	12.82	1.7
MW-323	02/20/2013 14:18	0.16	-216	6.36	0.19	3.62133	12.86	1.2
MW-323	02/20/2013 14:21	0.16	-216	6.36	0.19	3.681	13.29	1.24
MW-323	06/12/2013 09:46	0.59	-121	6.33	0.19	3.548	16.89	14.60
MW-323	06/12/2013 10:23	6.64	-7	6.66	0.11	2.098	18.06	36.40
MW-323	09/05/2013 10:54	4.45	-193	6.51	0.14	2.733	18.36	130.40
MW-323	11/05/2013 14:35	1.07	-281	6.11	0.19	3.559	16.74	51.35
MW-323	03/12/2014 11:28	1.06	-111	6.25	0.20	3.781	12.99	26.20
MW-323	03/12/2014 11:55	8.27	-38	7.77	0.34	6.175	12.39	26.99
MW-323	05/20/2014 14:04	1.58	-331	6.26	0.27	5.044	16.71	265.80
MW-323	08/05/2014 09:20	2.42	-239	6.74	0.07	1.348	34.37	48.47
MW-323	08/05/2014 10:08	3.25	-370	6.91	0.04	0.813	21.14	138.40
MW-323	10/29/2014 10:52	1.72	-303	6.30	0.12	2.366	16.80	143.60
MW-323	10/29/2014 11:26	5.07	-125	7.12	0.04	0.899	18.55	365.50
MW-323	03/03/2015 14:22	9.03	67	8.03	0.07	1.412	6.35	1.02
MW-323	03/03/2015 14:50	12.11	26	8.09	0.08	1.613	5.90	755.60
MW-323	09/15/2015 14:58	9.92	-26	6.28	0.16	3.011	21.5	96.4
MW-323	11/18/2015 10:49	5.47	-106	6.98	0.1991	3743.4188	16.17	10.2
MW-323	11/18/2015 10:54	1.37	-93	6.71	0.1964	3694.9696	16.55	176.9
MW-323	11/18/2015 10:59	0.87	-89	6.55	0.1915	3607.4386	16.51	71.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-323	11/18/2015 11:04	0.64	-89	6.5	0.1895	3573.7265	16.26	27.7
MW-323	11/18/2015 11:10	0.49	-88	6.47	0.2000	3758.6129	16.7	18.7
MW-323	11/18/2015 11:15	0.49	-88	6.46	0.2018	3786.9696	17.3	14.8
MW-323	11/18/2015 11:20	0.47	-89	6.45	0.2025	3797.7647	17.77	11.8
MW-323	11/18/2015 11:25	0.56	-90	6.45	0.2039	3822.1859	18.1	9.3
MW-323	11/18/2015 11:31	0.74	-90	6.45	0.2051	3842.6980	18.28	9.4
MW-323	11/18/2015 11:36	1.13	-90	6.46	0.2056	3851.3326	18.34	12.4
MW-323	11/18/2015 11:41	1.01	-91	6.46	0.2106	3940.7352	18.34	14.1
MW-323	11/18/2015 12:06	7.15	-94	7.17	0.17	3.277	16.85	49.90
MW-323	01/07/2016 11:31	9.56	22	7.24	0.0422	858.5059	10.77	18.6
MW-323	01/07/2016 11:36	1.4	-25	6.93	0.0459	926.3120	13.98	113.2
MW-323	01/07/2016 11:41	0.71	-33	6.74	0.0543	1089.5891	14.14	120.5
MW-323	01/07/2016 11:46	0.39	-36	6.63	0.0579	1157.7017	14.28	95.2
MW-323	01/07/2016 11:51	0.41	-39	6.57	0.0597	1192.2347	14.29	91.3
MW-323	01/07/2016 11:57	0.41	-43	6.54	0.0608	1214.7281	14.23	75.1
MW-323	01/07/2016 12:02	0.39	-45	6.52	0.0600	1198.5830	14.38	100
MW-323	01/07/2016 12:07	0.37	-47	6.52	0.0601	1200.6377	14.35	72.7
MW-323	01/07/2016 12:12	0.35	-49	6.51	0.0596	1191.1127	14.44	73.1
MW-323	01/07/2016 12:17	0.32	-51	6.51	0.0595	1187.6250	14.49	69.6
MW-323	01/07/2016 12:22	0.29	-53	6.51	0.0597	1192.9184	14.54	63.3
MW-323	01/07/2016 12:48	5.03	-70	6.87	0.05	1.029	14.85	422.2
MW-323	04/13/2016 13:05	1.51	-141	8.47	0.0587	1173.5020	14.92	44.9
MW-323	04/13/2016 13:13	0.19	-118	7.1	0.0693	1373.5304	15.23	76.3
MW-323	04/13/2016 13:14	0.17	-117	7.09	NM	1356.5778	15.24	139.8
MW-323	04/13/2016 13:19	0.09	-105	6.73	0.2761	5101.0921	15.34	55.2
MW-323	04/13/2016 13:24	0.05	-93	6.55	0.3049	5598.5290	15.44	58.2
MW-323	04/13/2016 13:30	0.04	-90	6.51	0.3137	5748.2230	15.49	44
MW-323	04/13/2016 13:35	0.04	-90	6.5	0.3179	5821.1626	15.54	48.4
MW-323	04/13/2016 13:41	0.04	-91	6.5	0.3219	5889.4688	15.47	41.9
MW-323	04/13/2016 13:46	0.02	-91	6.5	0.3236	5918.2814	15.52	39.9
MW-323	04/13/2016 13:52	0.01	-90	6.5	0.3271	5980.2402	15.43	39.6
MW-323	04/13/2016 14:15	4.05	-121	9.52	0.07	1.433	13.70	173.70
MW-323	07/22/2016 09:13	3.96	-26	7.49	NM	3251.91	21.11	14.2
MW-323	07/22/2016 09:15	3	-66	7.14	NM	3597.89	20.49	515.4
MW-323	07/22/2016 09:17	1.79	-62	6.86	NM	4224.39	20.22	841.6
MW-323	07/22/2016 09:19	1.21	-59	6.68	NM	4586.44	20.53	679.7
MW-323	07/22/2016 09:22	1.03	-59	6.58	NM	4982.86	20.45	584.4
MW-323	07/22/2016 09:24	1.01	-60	6.51	NM	5224	20.51	510.4
MW-323	07/22/2016 09:26	1.03	-62	6.47	NM	5263.74	20.71	502.7
MW-323	07/22/2016 09:28	1.06	-63	6.45	NM	5372.13	20.86	455.4
MW-323	07/22/2016 09:31	1.07	-65	6.44	NM	5385.44	20.76	465.2
MW-323	07/22/2016 10:07	4.03	-143	7.99	0.20	3.792	20.38	65.20
MW-323	10/13/2016 14:34	5.23	-59	8.09	0.3005	5500.4881	19.3	11
MW-323	10/13/2016 14:39	0.26	-70	6.48	0.4047	7284.4320	17.22	289.1
MW-323	10/13/2016 14:45	0.17	-68	6.48	0.4126	7418.7713	17.01	1524.4
MW-323	10/13/2016 14:50	0.23	-67	6.47	0.4153	7465.5891	16.87	1365.9
MW-323	10/13/2016 14:56	0.27	-64	6.46	0.4202	7547.3571	16.8	620.4
MW-323	10/13/2016 15:01	0.27	-62	6.45	0.4228	7591.9043	16.75	360.8
MW-323	10/13/2016 15:07	0.27	-62	6.45	0.4227	7590.2168	16.69	268.1
MW-323	10/13/2016 15:12	0.26	-63	6.46	0.4215	7571.1035	16.64	197.1
MW-323	10/13/2016 15:18	0.25	-64	6.47	0.4201	7547.4948	16.57	230.8
MW-323	10/13/2016 15:24	0.25	-66	6.47	0.4182	7515.2535	16.57	138.4
MW-323	10/13/2016 15:42	2.29	-102	8.62	0.31	5.593	18.56	23.70
MW-323	01/17/2017 10:19	7.42	-41	7.37	0.0507	1025.5820	10.42	26.9
MW-323	01/17/2017 10:24	2.12	-78	8.06	0.0521	1047.4561	13.13	39
MW-323	01/17/2017 10:29	0.98	-100	8.58	0.0509	1024.8661	13.51	44.5
MW-323	01/17/2017 10:34	0.49	-96	8.57	0.0502	1011.5827	13.38	51.1
MW-323	01/17/2017 10:39	0.16	-74	8.11	0.0498	1003.9451	13.28	85.2
MW-323	01/17/2017 10:44	0.06	-58	7.71	0.0499	1004.9164	13.26	113.9
MW-323	01/17/2017 10:49	-0.01	-42	7.33	0.0504	1014.6283	13.17	154.6
MW-323	01/17/2017 10:55	-0.03	-29	7.03	0.0506	1018.3696	13.29	140.4
MW-323	01/17/2017 11:00	-0.04	-21	6.84	0.0507	1020.7649	13.17	134.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-323	01/17/2017 11:05	-0.02	-17	6.72	0.0506	1018.0734	13.2	136.3
MW-323	01/17/2017 11:10	-0.01	-14	6.64	0.0505	1018.3420	12.96	132.8
MW-323	03/17/2017 10:25	0.51	-48.30	6.48	1.05	2.041	9.56	0.30
MW-323	03/17/2017 12:50	2.90	-98.70	7.47	0.98	1.905	13.85	16.40
MW-323	03/17/2017 13:00	9.99	-64.00	7.44	0.61	1.214	13.38	45.60
MW-323	04/27/2017 08:58	8.2	192	7.18	0.0826	0.0162	16.25	11.5
MW-323	04/27/2017 09:03	1.45	180	6.84	0.1308	0.0252	14.78	166
MW-323	04/27/2017 09:09	0.73	164	6.67	0.1354	0.0260	14.84	140.6
MW-323	04/27/2017 09:14	0.44	144	6.57	0.1398	0.0268	14.89	54.5
MW-323	04/27/2017 09:20	0.35	122	6.52	0.1419	0.0272	14.92	28.9
MW-323	04/27/2017 09:25	0.29	99	6.49	0.1436	0.0275	14.95	22.9
MW-323	04/27/2017 09:31	0.25	79	6.48	0.1440	0.0276	15.06	21.7
MW-323	04/27/2017 09:36	0.21	63	6.47	0.1436	0.0275	15.14	22
MW-323	04/27/2017 09:42	0.19	50	6.47	0.1439	0.0276	15.2	21.1
MW-323	04/27/2017 09:47	0.18	40.00	6.46	0.14	2.798	14.89	20.25
MW-323	04/27/2017 09:48	0.18	40	6.46	0.1448	0.0277	15.26	20.3
MW-323	01/19/2018 09:29	9.71	182	8.09	0.0016	0.0004	6.12	27.4
MW-323	01/19/2018 09:35	3.48	176	7.7	0.1925	0.0366	10.42	130.4
MW-323	01/19/2018 09:40	1.32	176	7.35	0.2092	0.0395	11.51	59.3
MW-323	01/19/2018 09:46	1	171	7.17	0.2208	0.0416	11.83	43.8
MW-323	01/19/2018 09:51	0.66	163	7.06	0.2268	0.0426	12.15	42.1
MW-323	01/19/2018 09:57	0.55	154	6.98	0.2324	0.0436	12.23	44.7
MW-323	01/19/2018 10:03	0.6	146	6.92	0.2344	0.0439	12.54	47.2
MW-323	01/19/2018 10:08	0.63	139	6.87	0.2433	0.0455	12.3	51
MW-323	01/19/2018 10:14	0.63	132	6.83	0.2514	0.0470	12.08	60.9
MW-323	01/19/2018 10:19	0.61	127.00	6.80	0.25	4.754	12.22	61.08
MW-323	04/13/2018 10:30	10.03	97	6.93	0.0950	0.0019	17.38	147.4
MW-323	04/13/2018 10:36	2.17	126	6.72	0.0999	0.0019	15.48	27.6
MW-323	04/13/2018 10:41	1.34	62	6.54	0.1033	0.0020	15.66	11.9
MW-323	04/13/2018 10:47	1.07	54	6.44	0.1019	0.0020	15.57	10.2
MW-323	04/13/2018 10:53	0.95	51	6.38	0.0996	0.0019	15.58	10.3
MW-323	04/13/2018 10:58	0.85	48	6.34	0.1017	0.0020	15.65	9.9
MW-323	04/13/2018 11:04	0.82	46	6.3	0.1024	0.0020	15.74	9.5
MW-323	04/13/2018 11:09	0.78	45	6.29	0.1008	0.0020	15.6	9.3
MW-323	04/13/2018 11:10	0.78	45.00	6.29	0.10	1.971	15.48	9.28
MW-323	04/20/2018 10:20	9.05	33	6.63	0.0973	0.0019	10.05	41.6
MW-323	04/20/2018 10:26	5.28	66	6.62	0.1008	0.0020	9.74	82.8
MW-323	04/20/2018 10:32	3.41	85	6.5	0.1001	0.0020	10.32	56.3
MW-323	04/20/2018 10:38	2.56	96	6.39	0.1025	0.0020	10.32	51.3
MW-323	04/20/2018 10:44	2.29	103	6.3	0.1009	0.0020	10.12	67.2
MW-323	04/20/2018 10:50	1.65	87	6.21	0.1038	0.0020	10.61	45.5
MW-323	04/20/2018 10:55	1.15	75	6.16	0.1035	0.0020	10.87	29.3
MW-323	04/20/2018 11:01	0.86	68	6.12	0.1019	0.0020	11.21	21.5
MW-323	04/20/2018 11:07	0.79	63	6.1	0.1045	0.0020	11.09	17.2
MW-323	04/20/2018 11:13	0.61	58.00	6.08	0.10	2.116	11.53	10.26
MW-323	07/13/2018 10:22	7.48	-37	7.25	0.091	1.7772	26.02	11.5
MW-323	07/13/2018 10:28	3.4	-84	6.73	0.102	1.9879	20.27	99
MW-323	07/13/2018 10:34	1.95	-93	6.55	0.104	2.0123	20.49	58.2
MW-323	07/13/2018 10:40	1.49	-99	6.46	0.105	2.0326	20.25	47.3
MW-323	07/13/2018 10:46	1.31	-105	6.44	0.105	2.0262	20.34	49.6
MW-323	07/13/2018 10:52	1.22	-108	6.43	0.104	2.0258	20.45	47.2
MW-323	07/13/2018 10:58	1.16	-111	6.42	0.104	2.0130	20.36	46.7
MW-323	07/13/2018 11:04	1.11	-114	6.42	0.104	2.0127	20.16	40.8
MW-323	07/13/2018 11:10	1.06	-115.00	6.42	0.104	2.007	20.54	39.36
MW-323	10/26/2018 09:15	6.66	52.40	6.81	1.54	2.927	15.14	-0.80
MW-323	04/09/2019 13:30	0.8	-36.4	6.56	NM	1.795	14.01	10.9
MW-323	07/09/2019 10:05	6.8	61.3	6.08	NM	1.56	22.14	95.3
MW-323	07/09/2019 10:10	4.42	63	6.57	NM	1.457	18.1	10.8
MW-323	07/09/2019 10:15	1.7	23.4	6.36	NM	1.603	17.92	10.5
MW-323	07/09/2019 10:20	0.92	13.3	6.32	NM	1.684	17.85	8.2
MW-323	07/09/2019 10:25	0.58	7.3	6.31	NM	1.711	17.72	11.4
MW-323	07/09/2019 10:30	0.56	4	6.32	NM	1.711	17.7	12

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-323	07/09/2019 10:35	0.55	1.9	6.33	NM	1.712	17.71	12.1
MW-323	07/09/2019 14:05	0.55	1.9	6.33	NM	1.712	17.71	12.1
MW-323	10/07/2019 09:50	4.31	-37.6	6.73	NM	1.144	21.3	27.6
MW-323	10/07/2019 09:55	3.01	-48.3	6.56	NM	1.216	20.68	28.4
MW-323	10/07/2019 10:00	2.09	-55.5	6.46	NM	1.346	18.78	22.1
MW-323	10/07/2019 10:05	1.46	-58.6	6.44	NM	1.428	18.43	17.6
MW-323	10/07/2019 10:10	1.14	-59.5	6.43	NM	1.449	18.34	14.6
MW-323	10/07/2019 10:15	0.87	-59.8	6.43	NM	1.464	18.13	14
MW-323	10/07/2019 10:20	0.78	-60.1	6.43	NM	1.467	18.27	12
MW-323	10/07/2019 10:25	0.66	-60.2	6.43	NM	1.469	18.55	11.2
MW-323	10/07/2019 10:30	0.59	-60.9	6.43	NM	1.465	18.61	10.7
MW-323	10/07/2019 10:35	0.52	-60.3	6.43	NM	1.458	18.79	10.4
MW-323	01/02/2020 12:45	7.54	73.3	6.7	NM	1.013	12.14	41.1
MW-323	01/02/2020 12:50	6.47	62.4	6.73	NM	0.955	12.36	45
MW-323	01/02/2020 12:55	5.79	54.8	6.75	NM	0.941	12.3	35.2
MW-323	01/02/2020 13:00	5.28	45.3	6.76	NM	0.93	12.97	29.5
MW-323	01/02/2020 13:05	2.43	-69.3	6.41	NM	1.044	13.42	19.9
MW-323	01/02/2020 13:10	1.02	-75.9	6.3	NM	1.119	13.47	13.2
MW-323	01/02/2020 13:15	0.62	-76	6.28	NM	1.126	13.5	11.5
MW-323	01/02/2020 13:20	0.46	-76.1	6.27	NM	1.12	13.67	9.4
MW-323	01/02/2020 13:25	0.38	-76.3	6.27	NM	1.112	13.73	8.3
MW-323	01/02/2020 13:30	0.34	-76.1	6.27	NM	1.106	13.63	7.3
MW-323	04/01/2020 11:25	4.02	42.7	6.7	NM	0.918	14.14	5.4
MW-323	07/06/2020 12:20	6.07	149.2	7.01	0.5	0.24	27.75	0
MW-323	07/06/2020 12:25	0.96	87.9	6.97	0.92	1.814	24.96	2.3
MW-323	07/06/2020 12:30	0.71	95	6.7	0.9	1.785	24.23	3.1
MW-323	07/06/2020 12:35	0.6	96.4	6.61	0.9	1.78	23.79	5.1
MW-323	07/06/2020 12:40	0.48	68.9	6.54	0.92	1.808	23.58	15.6
MW-323	07/06/2020 12:45	0.34	11.6	6.45	0.97	1.9	23.59	15.7
MW-323	07/06/2020 12:50	0.22	-11.6	6.38	1.03	2.02	23.55	14
MW-323	07/06/2020 12:55	0.17	-19	6.36	1.06	2.086	23.45	17
MW-323	07/06/2020 13:00	0.13	-24.5	6.35	1.07	2.093	23.4	24.5
MW-323	07/06/2020 13:05	0.12	-26	6.35	1.07	2.096	23.52	24.1
MW-323	10/12/2020 09:20	NM	NM	NM	NM	NM	NM	31.3
MW-323	10/13/2020 08:35	7.28	79.5	7.06	0.35	0.717	17.18	21.1
MW-323	10/13/2020 08:40	6.34	85.5	6.56	0.35	0.707	17.62	22.6
MW-323	10/13/2020 08:45	7.07	89.5	6.44	0.35	0.704	17.03	13.9
MW-323	10/13/2020 08:50	7.72	93.7	6.4	0.34	0.703	16.45	10.9
MW-323	10/13/2020 08:55	5	99.5	6.38	0.34	0.702	16.02	11.9
MW-323	10/13/2020 09:00	5.25	99.8	6.38	0.34	0.701	16	12
MW-323	10/13/2020 09:05	3.35	103.6	6.38	0.34	0.702	15.82	12.8
MW-323	10/13/2020 09:10	4.13	79.3	6.38	0.34	0.702	15.68	48.3
MW-323	10/13/2020 09:15	4.65	76.6	6.38	0.34	0.702	15.67	50.6
MW-323	10/13/2020 09:20	5.19	70.6	6.38	0.34	0.703	15.67	NM
MW-323	01/06/2021 09:05	4.57	54.2	6.67	1.17	2.274	13.39	128.4
MW-323	01/06/2021 09:10	4.34	81.6	6.41	1.17	2.257	14	100.2
MW-323	01/06/2021 09:15	4.33	95.3	6.31	1.17	2.256	14.42	74.4
MW-323	01/06/2021 09:20	4.51	101.3	6.28	1.16	2.252	14.23	66.9
MW-323	01/06/2021 09:25	4.45	105.2	6.26	1.16	2.251	14.3	67
MW-323	01/06/2021 09:30	4.27	111.5	6.25	1.16	2.243	14.15	50.7
MW-323	01/06/2021 09:35	4.49	86.8	6.25	1.16	2.236	13.37	55.3
MW-323	01/06/2021 09:40	4.14	58	6.25	1.15	2.233	12.93	60.6
MW-323	01/06/2021 09:45	3.49	40.8	6.26	1.15	2.221	11.96	60.1
MW-323	01/06/2021 09:50	3.45	37.7	6.26	1.14	2.218	11.82	59.7
MW-323	04/01/2021 14:45	1.56	58.7	6.44	1.1	2.128	13.72	195.4
MW-323	04/01/2021 14:50	0.93	46.8	6.08	1.09	2.112	14.09	173.9
MW-323	04/01/2021 14:55	0.64	39.7	6	1.08	2.102	13.94	152.4
MW-323	04/01/2021 15:00	0.56	30.1	6.12	1.08	2.106	13.98	157.5
MW-323	04/01/2021 15:05	0.54	27.5	6.15	1.08	2.108	14.03	220
MW-323	04/01/2021 15:10	0.5	23.7	6.22	1.08	2.109	14.12	185.2
MW-323	04/01/2021 15:15	0.41	15.6	6.27	1.08	2.096	14.1	178.7
MW-323	04/01/2021 15:20	0.35	10.8	6.3	1.07	2.081	14.1	179.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-323	04/01/2021 15:25	0.3	8.9	6.29	1.07	2.074	14.03	183.2
MW-323	04/01/2021 15:30	0.27	4.8	6.29	1.06	2.069	13.95	175.6
MW-323	07/14/2021 13:35	2.8	38.9	6.62	0.95	1.894	22.25	68.3
MW-323	07/14/2021 13:40	1.26	32.9	6.34	0.96	1.884	21.06	63.1
MW-323	07/14/2021 13:45	1.13	25.6	6.36	0.96	1.888	22.59	51.8
MW-323	07/14/2021 13:50	1.03	22.5	6.38	0.96	1.89	23.39	73.5
MW-323	07/14/2021 13:55	0.98	21.1	6.38	0.96	1.895	23.39	157.5
MW-323	07/14/2021 14:00	0.91	18	6.39	0.96	1.891	23.39	71.3
MW-323	07/14/2021 14:05	1.1	7.3	6.4	0.96	1.89	23.42	62.4
MW-323	07/14/2021 14:10	1.07	-0.8	6.4	0.96	1.892	23.26	113.4
MW-323	07/14/2021 14:15	0.86	-10.1	6.42	0.96	1.891	23.37	54.2
MW-323	07/14/2021 14:20	0.86	-15.3	6.43	0.96	1.895	23.4	55.3
MW-323	01/19/2022 12:10	6.87	-126.6	7.55	1.88	3.562	13.23	120
MW-323	01/19/2022 12:15	3.6	-59.5	6.8	1.87	3.515	12.71	199.2
MW-323	01/19/2022 12:20	1.75	-56.2	6.51	1.97	3.703	13	131.5
MW-323	01/19/2022 12:25	1.79	-55.3	6.5	2	3.78	12.43	120.9
MW-323	01/19/2022 12:30	1.44	-52.4	6.46	2.05	3.851	12.23	97.4
MW-323	01/19/2022 12:35	1.29	-52.1	6.46	2.05	3.857	12.4	81.6
MW-323	01/19/2022 12:40	1.2	-52.8	6.44	2.06	3.874	12.83	71
MW-323	01/19/2022 12:45	1.26	-53.1	6.44	2.07	3.896	12.8	54.3
MW-323	01/19/2022 12:50	1.23	-54	6.44	2.08	3.903	12.85	52.9
MW-323	01/19/2022 12:55	1.2	-54.8	6.43	2.08	3.925	12.89	51.4
MW-323	04/06/2022 09:10	0.98	105.8	6.06	0.99	1.924	12.4	168.7
MW-323	04/06/2022 09:15	0.86	104.4	5.98	0.99	1.925	12.29	153
MW-323	04/06/2022 09:20	0.71	19.7	5.98	0.97	1.899	10.65	105.9
MW-323	04/06/2022 09:25	0.72	15.9	5.99	0.97	1.895	10.63	106.4
MW-323	04/06/2022 09:30	0.71	5.7	6.01	0.96	1.881	10.58	112.8
MW-323	04/06/2022 09:35	0.57	-7.9	6.1	0.95	1.864	10.66	131.7
MW-323	04/06/2022 09:40	0.57	-8.6	6.11	0.95	1.863	10.66	127.2
MW-323	04/06/2022 09:45	0.41	-16.3	6.15	0.95	1.859	12.16	517.1
MW-323	04/06/2022 09:50	0.4	-18	6.16	0.95	1.857	12.24	541.2
MW-323	04/06/2022 09:55	0.39	-20.4	6.16	0.95	1.853	12.4	587.2
MW-324	03/12/2012 12:57	1.58	-26	6.09	0.36	6.56313	19.97	280.4
MW-324	03/12/2012 13:00	1.03	-29	6.21	0.38	6.91509	16.07	363.1
MW-324	03/12/2012 13:03	0.71	-35	6.25	0.39	7.06954	15.64	287.7
MW-324	03/12/2012 13:06	0.52	-38	6.26	0.39	7.13108	15.8	200.2
MW-324	03/12/2012 13:09	0.41	-43	6.3	0.41	7.33396	15.68	165.3
MW-324	03/12/2012 13:12	0.31	-46	6.32	0.41	7.41897	15.87	140.2
MW-324	03/12/2012 13:15	0.23	-48	6.33	0.42	7.49233	16	112.4
MW-324	03/12/2012 13:18	0.18	-54	6.39	0.43	7.7121	15.89	103.3
MW-324	03/12/2012 13:21	0.13	-57	6.4	0.43	7.79535	15.94	90.7
MW-324	03/12/2012 13:24	0.1	-59	6.42	0.44	7.81375	15.82	93.4
MW-324	03/12/2012 13:27	0.05	-58	6.4	0.43	7.73652	15.92	90.3
MW-324	03/12/2012 13:30	0.03	-58	6.4	0.43	7.77185	15.76	85.3
MW-324	03/12/2012 13:32	0.01	-59	6.41	0.44	7.87602	15.99	88.5
MW-324	03/12/2012 13:35	0.01	-61	6.43	0.44	7.86549	15.94	64
MW-324	03/12/2012 13:38	0	-62	6.44	0.44	7.93871	16.17	66.4
MW-324	03/12/2012 13:41	0	-65	6.47	0.45	8.01939	16.33	59.4
MW-324	03/12/2012 13:44	-0.01	-67	6.47	0.45	8.10031	16.47	74.2
MW-324	03/12/2012 13:47	-0.02	-68	6.48	0.46	8.13814	16.57	74.1
MW-324	03/12/2012 13:50	-0.02	-68	6.48	0.38	6.828	16.57	74.11
MW-324	03/12/2012 14:33	0.61	-62	6.57	0.48	8.573	15.37	147.05
MW-324	03/13/2012 11:40	0.43	-154	7.35	0.10	2.380	14.50	34.10
MW-324	05/17/2012 10:35	1	7	6.09	0.33	6.01896	15.81	387.1
MW-324	05/17/2012 10:37	0.7	4	6.11	0.34	6.1135	15.67	339.3
MW-324	05/17/2012 10:38	0.53	0	6.15	0.34	6.21267	15.65	405
MW-324	05/17/2012 10:39	0.42	-4	6.18	0.34	6.27482	15.72	311.5
MW-324	05/17/2012 10:40	0.37	-7	6.19	0.35	6.30116	15.65	291
MW-324	05/17/2012 10:42	0.31	-9	6.21	0.35	6.34149	15.78	284.1
MW-324	05/17/2012 10:43	0.27	-13	6.24	0.35	6.41346	15.74	209.3
MW-324	05/17/2012 10:44	0.23	-16	6.27	0.36	6.4691	15.73	173.3
MW-324	05/17/2012 10:46	0.21	-19	6.29	0.36	6.52356	15.65	185.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-324	05/17/2012 10:47	0.19	-20	6.3	0.36	6.50147	15.7	208.4
MW-324	05/17/2012 10:48	0.17	-22	6.31	0.36	6.55114	15.7	204
MW-324	05/17/2012 10:49	0.16	-23	6.31	0.36	6.54783	15.8	230.4
MW-324	05/17/2012 10:51	0.15	-23	6.3	0.36	6.4829	15.95	208.8
MW-324	05/17/2012 10:52	0.14	-24	6.31	0.36	6.5148	15.64	220.6
MW-324	05/17/2012 10:53	0.13	-25	6.31	0.36	6.56475	15.72	211.5
MW-324	05/17/2012 10:55	0.12	-26	6.32	0.36	6.5316	15.67	295.4
MW-324	05/17/2012 10:56	0.11	-26	6.32	0.36	6.54986	15.67	281.5
MW-324	05/17/2012 10:57	0.1	-27	6.33	0.36	6.55286	15.91	262.3
MW-324	05/17/2012 10:58	0.1	-28	6.33	0.36	6.57782	15.68	295.6
MW-324	05/17/2012 11:00	0.09	-28	6.33	0.36	6.56233	15.78	388.4
MW-324	05/17/2012 11:01	0.09	-29	6.33	0.36	6.51315	15.89	687.3
MW-324	05/17/2012 11:02	0.09	-30	6.34	0.36	6.53048	15.9	736.4
MW-324	05/17/2012 11:03	0.08	-30	6.33	0.36	6.55982	15.58	815.3
MW-324	05/17/2012 11:05	0.08	-30	6.34	0.36	6.55105	15.69	838.6
MW-324	05/17/2012 11:06	0.07	-31	6.35	0.36	6.58418	15.7	818.7
MW-324	05/17/2012 11:07	0.07	-32	6.36	0.36	6.60424	15.62	800.5
MW-324	05/17/2012 11:08	0.07	-32	6.36	0.36	6.604	15.62	800.5
MW-324	05/17/2012 11:09	0.07	-32	6.36	0.36	6.60866	15.73	791.2
MW-324	05/17/2012 12:37	1.57	21	6.31	0.41	7.49	13.88	127.9
MW-324	05/18/2012 09:32	1.66	-111	6.5	0.5	9.57	13.41	158
MW-324	07/30/2012 13:36	2.46	-36	11.65	0.3	5.47583	31.99	36.1
MW-324	07/30/2012 13:37	2.14	-35	11.72	0.32	5.90116	26.97	60.1
MW-324	07/30/2012 13:38	1.78	-32	11.98	0.32	5.89696	22.96	64.5
MW-324	07/30/2012 13:40	1.45	-30	12	0.32	5.85087	21.84	51.9
MW-324	07/30/2012 13:41	1.26	-30	12.05	0.32	5.85813	21.74	51.7
MW-324	07/30/2012 13:42	1.15	-29	12.11	0.32	5.81999	21.67	51.4
MW-324	07/30/2012 13:44	1.11	-27	12.21	0.32	5.80483	21.68	36.8
MW-324	07/30/2012 13:45	1.06	-27	12.26	0.32	5.76331	21.7	50.2
MW-324	07/30/2012 13:46	1.02	-26	12.32	0.32	5.75483	21.74	43.8
MW-324	07/30/2012 13:47	0.98	-27	12.45	0.32	5.78612	21.54	32.6
MW-324	07/30/2012 13:49	0.94	-27	12.47	0.32	5.78921	21.4	46
MW-324	07/30/2012 13:50	0.91	-27	12.47	0.32	5.78512	21.39	30.7
MW-324	07/30/2012 13:51	0.89	-25	12.49	0.32	5.74438	21.34	41.9
MW-324	07/30/2012 13:52	0.85	-26	12.5	0.32	5.77075	21.36	37.2
MW-324	07/30/2012 13:54	0.83	-26	12.52	0.32	5.77586	21.26	36.4
MW-324	07/30/2012 13:55	0.81	-27	12.53	0.32	5.80026	21.18	50.1
MW-324	07/30/2012 13:56	0.79	-31	12.54	0.32	5.8696	21.07	75.1
MW-324	07/30/2012 13:58	0.77	-30	12.53	0.32	5.8281	21.13	88.5
MW-324	07/30/2012 13:59	0.74	-32	12.55	0.32	5.88683	21.25	76.6
MW-324	07/30/2012 14:00	0.73	-32	12.55	0.32	5.89334	21.09	73.2
MW-324	07/30/2012 14:01	0.7	-35	12.55	0.33	5.94493	21.1	63.6
MW-324	07/30/2012 14:03	0.69	-38	12.6	0.33	5.98538	20.93	93.9
MW-324	07/30/2012 14:04	0.67	-40	12.61	0.33	6.02814	20.83	85.3
MW-324	07/30/2012 14:05	0.65	-40	12.63	0.33	6.00801	20.95	71.5
MW-324	07/30/2012 14:07	0.63	-40	12.63	0.33	6.01313	20.95	55.5
MW-324	07/30/2012 14:08	0.61	-41	12.64	0.33	6.03575	20.98	48.4
MW-324	07/30/2012 14:09	0.6	-42	12.64	0.33	6.04621	20.97	62.6
MW-324	07/30/2012 14:10	0.59	-43	12.66	0.33	6.07601	20.89	62.9
MW-324	07/30/2012 14:12	0.57	-44	12.65	0.34	6.09209	21.08	76.9
MW-324	07/30/2012 14:13	0.56	-49	12.65	0.34	6.1873	21.14	77.9
MW-324	07/30/2012 14:14	0.54	-50	12.66	0.34	6.22078	21.09	67.7
MW-324	07/30/2012 14:15	0.53	-52	12.67	0.35	6.26383	20.99	81.1
MW-324	07/30/2012 14:17	0.52	-53	12.68	0.35	6.26105	20.98	83.1
MW-324	07/30/2012 14:18	0.5	-56	12.67	0.35	6.33325	20.95	98.8
MW-324	07/30/2012 14:19	0.49	-57	12.66	0.35	6.35249	21.17	69.4
MW-324	07/30/2012 14:21	0.48	-59	12.64	0.35	6.38815	21.1	99.5
MW-324	07/30/2012 14:22	0.47	-58	12.65	0.35	6.36263	21.03	85.1
MW-324	07/30/2012 14:23	0.46	-58	12.64	0.35	6.35425	21.04	82.8
MW-324	07/30/2012 14:24	0.44	-58	12.63	0.35	6.36491	21.21	77.8
MW-324	07/30/2012 14:25	0.44	-58	12.63	0.35	3.365	21.21	77.83
MW-324	07/30/2012 15:45	2.97	0	5.67	0.28	5.101	16.11	111.50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-324	07/31/2012 10:45	4.91	-134	6.57	0.40	8.110	15.02	562.00
MW-324	11/21/2012 09:00	6.06	-80	6.08	0.3	6.13	15.6	97.5
MW-324	11/21/2012 09:02	5.40	-83	6.10	0.3	6.13	16.1	93.2
MW-324	11/21/2012 09:04	5.13	-84	6.11	0.3	6.14	16.2	102.0
MW-324	11/21/2012 09:06	4.90	-85	6.11	0.3	6.16	16.3	106.0
MW-324	11/21/2012 09:08	4.76	-87	6.13	0.3	6.18	16.4	94.8
MW-324	11/21/2012 09:10	4.66	-88	6.14	0.3	6.19	16.4	105.0
MW-324	11/21/2012 09:12	4.50	-90	6.15	0.3	6.20	16.5	115.0
MW-324	11/21/2012 09:14	4.54	-92	6.16	0.30	6.220	16.55	111.00
MW-324	02/21/2013 11:12	0.32	-115	5.92	0.59	10440	13.14	3.06
MW-324	06/17/2013 10:01	0.51	-128	6.13	0.63	10.800	15.88	37.94
MW-324	06/17/2013 10:35	0.98	-44	5.62	0.43	7.718	15.97	81.90
MW-324	09/09/2013 11:18	0.70	-163	5.99	0.51	9.019	17.86	11.06
MW-324	11/05/2013 11:12	0.95	-253	5.98	0.99	16.680	17.32	18.44
MW-324	03/11/2014 09:23	0.99	-91	5.82	0.44	7.924	10.71	52.43
MW-324	03/11/2014 10:49	4.55	-68	5.98	0.39	7.111	10.00	236.50
MW-324	05/21/2014 10:38	1.40	-384	5.97	0.42	7.580	13.54	39.49
MW-324	08/07/2014 10:43	1.62	-375	5.90	0.27	4.912	20.23	31.12
MW-324	08/07/2014 11:23	2.79	-169	6.79	0.04	0.740	25.42	49.50
MW-324	10/28/2014 11:57	2.33	-191	5.96	0.19	3.535	18.64	483.30
MW-324	10/28/2014 12:29	3.44	-77	5.93	0.17	3.222	18.36	1456.00
MW-324	03/10/2015 11:17	1.11	-275	6.26	0.19	3.700	10.49	2215.00
MW-324	03/10/2015 12:10	3.80	-124	6.22	0.16	3.096	10.68	1576.40
MW-324	09/17/2015 10:49	3.81	-3	6.08	0.48	8.456	18.73	419.2
MW-324	11/17/2015 09:37	3.45	-107	5.91	0.0857	1682.1754	15.85	355.3
MW-324	11/17/2015 09:40	4.38	-79	5.96	0.0857	1680.9061	17.06	809.2
MW-324	11/17/2015 09:42	5.42	-68	6.03	0.0856	1678.0346	17.18	820.9
MW-324	11/17/2015 09:45	5.28	-63	6.06	0.0851	1669.7912	17.16	712
MW-324	11/17/2015 09:48	4.96	-61	6.06	0.0863	1691.4056	17.2	583.5
MW-324	11/17/2015 09:51	4.83	-59	6.07	0.0857	1679.6512	17.24	531.3
MW-324	11/17/2015 09:53	4.28	-58	6.05	0.0856	1678.1849	17.22	496.7
MW-324	11/17/2015 09:56	4.21	-57	6.05	0.0854	1675.6364	17.18	401.9
MW-324	11/17/2015 09:59	4.1	-56	6.05	0.0853	1673.1288	17.11	381.2
MW-324	11/17/2015 10:02	4.11	-56	6.05	0.0850	1666.3930	17.28	386.1
MW-324	11/17/2015 10:38	4.95	-29	6.22	0.09	1.696	17.26	519.50
MW-324	01/12/2016 09:57	5.32	1226	6.58	2.2412	35888.9897	10.45	360.2
MW-324	01/12/2016 09:59	1.09	1335	6.23	2.3204	36790.1820	12.91	1065.5
MW-324	01/12/2016 10:02	0.83	1318	6.08	2.3628	37334.8314	13.65	805.7
MW-324	01/12/2016 10:05	0.67	1272	6.02	2.6101	40833.3006	13.93	793.5
MW-324	01/12/2016 10:07	0.62	1308	5.99	2.6399	41230.2764	14.19	913.9
MW-324	01/12/2016 10:10	0.56	1294	5.97	2.7584	42901.5103	14.16	948.9
MW-324	01/12/2016 10:13	0.53	1328	5.96	2.9323	45319.4575	14.3	877.6
MW-324	01/12/2016 10:15	0.45	1206	5.97	2.9042	44894.1127	14.65	828.8
MW-324	01/12/2016 10:18	0.41	1179	5.96	2.9576	45662.5894	14.39	857.7
MW-324	01/12/2016 10:21	0.37	1214	5.96	2.9625	45721.1117	14.49	840.4
MW-324	01/12/2016 10:23	0.35	1275	5.97	3.2218	49294.3632	14.56	1030.7
MW-324	01/12/2016 10:26	0.32	677	5.97	3.1238	47959.6122	14.43	934.5
MW-324	01/12/2016 10:29	0.3	963	6.02	3.5786	54175.4019	14.4	898.8
MW-324	01/12/2016 10:31	0.28	674	6.04	3.5212	53376.6657	14.57	718
MW-324	01/12/2016 10:34	0.27	1240	6.06	3.8198	57386.2136	14.65	674
MW-324	01/12/2016 10:36	0.24	607	6.06	3.8453	57716.2705	14.73	579.9
MW-324	01/12/2016 10:39	0.23	587	6.07	3.9515	59137.9620	14.68	549.4
MW-324	01/12/2016 10:42	0.22	584	6.08	4.0401	60323.1360	14.61	508.8
MW-324	01/12/2016 10:44	0.22	569	6.08	4.1113	61239.8306	14.79	451.7
MW-324	01/12/2016 10:47	0.22	541	6.09	4.2509	63115.3541	14.54	421.9
MW-324	01/12/2016 11:12	1.45	795	6.16	0.37	6.786	15.53	632.4
MW-324	04/07/2016 11:47	3.49	-95	5.97	0.8317	14298.8405	14.24	93
MW-324	04/07/2016 11:51	0.35	-99	5.86	0.9398	16046.6345	13.09	99.6
MW-324	04/07/2016 11:52	0.34	-99	5.86	0.9404	16056.4423	13.08	107.3
MW-324	04/07/2016 11:55	0.19	-102	5.85	0.9407	16059.3530	13.11	73.6
MW-324	04/07/2016 11:57	0.13	-104	5.84	0.9424	16081.1508	13.26	70.4
MW-324	04/07/2016 12:00	0.1	-105	5.84	0.9421	16076.2774	13.27	57.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-324	04/07/2016 12:03	0.07	-106	5.84	0.9434	16097.0705	13.26	45.5
MW-324	04/07/2016 12:05	0.06	-107	5.84	0.9479	16170.1022	13.23	43.8
MW-324	04/07/2016 12:08	0.05	-108	5.84	0.9460	16136.9600	13.33	40.9
MW-324	04/07/2016 12:11	0.04	-108	5.84	0.9547	16273.2505	13.34	39.7
MW-324	04/07/2016 12:13	0.03	-109	5.84	0.9607	16368.7991	13.31	46.4
MW-324	04/07/2016 12:16	0.02	-109	5.84	0.9682	16489.8682	13.24	44.9
MW-324	04/07/2016 12:19	0.01	-109	5.84	0.9657	16450.7704	13.22	45.9
MW-324	04/07/2016 12:21	0.01	-110	5.85	0.9753	16606.1630	13.11	47.2
MW-324	04/07/2016 12:24	0.01	-110	5.85	0.9743	16591.0425	13.05	51.4
MW-324	04/07/2016 12:27	0.01	-110	5.87	0.9950	16918.4743	13	93.2
MW-324	04/07/2016 12:29	-0.01	-112	5.91	1.0432	17673.0698	13.05	247.7
MW-324	04/07/2016 12:32	0	-114	5.94	1.0624	17971.8591	13.08	303.5
MW-324	04/07/2016 12:35	0	-116	5.96	1.0836	18301.2630	13.12	323.7
MW-324	04/07/2016 12:55	0.85	-121	6.03	1.12	18.840	12.60	185.30
MW-324	07/21/2016 10:53	2.43	-59	6.08	NM	9290.16	24.26	46.5
MW-324	07/21/2016 10:55	1.75	-61	5.97	NM	9869.81	22.82	38.8
MW-324	07/21/2016 10:56	1.43	-63	5.93	NM	10153.51	22.47	33.4
MW-324	07/21/2016 10:58	1.31	-66	5.92	NM	10310.07	22.25	29.8
MW-324	07/21/2016 10:59	1.25	-68	5.91	NM	10345.2	22.02	31.3
MW-324	07/21/2016 11:01	1.25	-69	5.91	NM	10452.58	21.79	30.6
MW-324	07/21/2016 11:03	1.27	-71	5.9	NM	10508.86	21.71	23.9
MW-324	07/21/2016 11:04	1.27	-72	5.9	NM	10446.38	21.91	26.1
MW-324	07/21/2016 11:06	1.28	-73	5.9	NM	10489.48	21.89	25.2
MW-324	07/21/2016 11:37	1.45	-79	5.91	0.77	13.290	15.54	16.60
MW-324	10/12/2016 08:53	1.64	-43	6.96	0.2909	5343.1125	17.47	125.7
MW-324	10/12/2016 08:56	1.28	-46	6.71	0.2954	5420.2618	17.71	95.8
MW-324	10/12/2016 08:59	0.96	-45	6.52	0.2975	5457.6816	17.34	96.8
MW-324	10/12/2016 09:01	0.91	-45	6.41	0.2978	5461.7884	17.54	82.7
MW-324	10/12/2016 09:04	0.9	-45	6.33	0.3005	5508.8317	17.63	117
MW-324	10/12/2016 09:07	0.85	-44	6.28	0.3027	5546.2868	17.67	175.3
MW-324	10/12/2016 09:09	0.77	-44	6.24	0.3043	5573.3544	17.63	252.9
MW-324	10/12/2016 09:12	0.65	-44	6.22	0.3068	5616.4706	17.86	262.7
MW-324	10/12/2016 09:14	0.53	-45	6.2	0.3070	5619.7826	17.77	202.8
MW-324	10/12/2016 09:17	0.47	-45	6.19	0.3086	5646.7761	17.81	178.3
MW-324	10/12/2016 09:20	0.43	-46	6.18	0.3100	5670.5413	17.87	169.2
MW-324	10/12/2016 09:22	0.41	-47	6.17	0.3111	5689.9589	17.88	143.1
MW-324	10/12/2016 09:25	0.4	-47	6.16	0.3124	5711.2454	17.86	137.8
MW-324	10/12/2016 09:28	0.39	-48	6.15	0.3136	5731.5155	17.89	136.6
MW-324	10/12/2016 09:51	0.62	-87	7.05	0.31	5.683	18.95	1150.60
MW-324	01/18/2017 10:33	2.27	38	6.04	4.7730	70317.3422	12.39	177.3
MW-324	01/18/2017 10:36	0.91	36	5.94	3.6933	55923.5135	12.97	-24.3
MW-324	01/18/2017 10:39	0.69	33	5.91	3.1369	48336.2858	12.78	117
MW-324	01/18/2017 10:41	0.62	31	5.9	2.8931	44923.0445	12.91	-1.3
MW-324	01/18/2017 10:44	0.71	30	5.89	0.6191	10897.4737	12.91	1.4
MW-324	01/18/2017 10:47	0.78	28	5.89	0.5953	10504.5089	13.07	-10.3
MW-324	01/18/2017 10:49	19.54	21	5.86	0.5417	9618.1719	13.16	-3.3
MW-324	01/18/2017 10:52	0.73	25	5.89	0.5613	9941.7794	13.21	-6.9
MW-324	01/18/2017 10:55	18.84	21	5.87	0.5038	8986.1120	13.37	10.4
MW-324	01/18/2017 10:57	0.61	23	5.89	0.5184	9229.4276	13.38	-24
MW-324	01/18/2017 11:00	18.77	21	5.87	0.4824	8629.6735	13.36	5
MW-324	01/18/2017 11:03	0.7	21	5.9	0.5110	9105.6611	13.41	-29.9
MW-324	01/18/2017 11:05	18.45	19	5.88	0.4830	8637.5219	13.51	-6.6
MW-324	01/18/2017 11:08	1.44	18	5.9	0.5093	9073.7213	13.57	-32.7
MW-324	01/18/2017 11:11	19.2	17	5.89	0.4814	8610.2693	13.47	26.6
MW-324	01/18/2017 11:13	0.56	17	5.89	0.5090	9070.0754	13.57	-19.2
MW-324	01/18/2017 11:16	19.39	14	5.9	0.4822	8623.1279	13.56	-2.8
MW-324	01/18/2017 11:18	1.33	15	5.91	0.5082	9055.3263	13.59	-7
MW-324	01/18/2017 11:21	17.44	12	5.91	0.4850	8669.9255	13.59	48.5
MW-324	01/18/2017 11:24	1.38	15	5.9	0.5106	9090.2756	13.97	-2.3
MW-324	04/26/2017 10:30	2.35	-4	6.26	0.2856	0.0528	13.05	489
MW-324	04/26/2017 10:33	0.67	-5	6.06	0.2902	0.0537	12.6	444.3
MW-324	04/26/2017 10:35	0.26	-9	6.01	0.2839	0.0526	12.55	371.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-324	04/26/2017 10:38	0.21	-12	5.99	0.2809	0.0521	12.55	287.4
MW-324	04/26/2017 10:41	0.17	-15	5.98	0.2786	0.0517	12.58	228
MW-324	04/26/2017 10:44	0.17	-17	5.98	0.2772	0.0514	12.6	191.2
MW-324	04/26/2017 10:47	0.16	-18	5.97	0.2750	0.0510	12.63	149.9
MW-324	04/26/2017 10:50	0.16	-19	5.97	0.2721	0.0505	12.68	110.8
MW-324	04/26/2017 10:53	0.14	-21	5.97	0.2713	0.0504	12.69	101
MW-324	04/26/2017 10:55	0.14	-21	5.97	0.2699	0.0501	12.72	86.8
MW-324	04/26/2017 10:58	0.13	-22	5.97	0.2720	0.0505	12.69	90.4
MW-324	04/26/2017 11:01	0.11	-23	5.96	0.2773	0.0514	12.72	286.1
MW-324	04/26/2017 11:04	0.12	-25	5.95	0.2979	0.0550	12.81	650.3
MW-324	04/26/2017 11:07	0.1	-27	5.98	0.3098	0.0570	12.88	658.8
MW-324	04/26/2017 11:10	0.09	-29	6.01	0.3138	0.0577	12.93	665.6
MW-324	04/26/2017 11:12	0.06	-30	6.02	0.3137	0.0577	12.93	629.4
MW-324	04/26/2017 11:15	0.05	-32	6	0.3438	0.0629	12.97	514
MW-324	04/26/2017 11:18	0.05	-34.00	6.04	0.35	6.455	12.67	405.70
MW-324	01/24/2018 08:56	7.46	164	7.97	0.1810	0.0344	11.98	1786.2
MW-324	01/24/2018 08:59	7.03	168	7.21	0.0032	0.0007	13.13	2010.7
MW-324	01/24/2018 09:01	1.86	162	6.87	1.0238	0.1735	13.61	1752.2
MW-324	01/24/2018 09:04	1.03	154	6.71	0.2724	0.0505	13.43	1647.2
MW-324	01/24/2018 09:07	0.6	150	6.54	1.0225	0.1734	13.4	1529.7
MW-324	01/24/2018 09:09	0.43	146	6.4	1.0495	0.1776	13.33	1501.1
MW-324	01/24/2018 09:12	0.51	141	6.29	1.0682	0.1805	13.31	1518.2
MW-324	01/24/2018 09:15	0.28	137	6.2	1.0781	0.1821	13.31	1478.3
MW-324	01/24/2018 09:17	0.34	132	6.18	0.2766	0.0512	13.23	1232.5
MW-324	01/24/2018 09:20	0.78	129	6.12	0.2634	0.0490	12.87	767.7
MW-324	01/24/2018 09:23	0.87	128	6.03	0.2722	0.0505	12.81	768.2
MW-324	01/24/2018 09:25	0.8	128	5.97	0.2765	0.0513	12.89	708.6
MW-324	01/24/2018 09:28	0.64	127	5.91	1.0325	0.1751	12.92	760.7
MW-324	01/24/2018 09:31	0.5	126	5.88	1.0446	0.1770	13.02	788.1
MW-324	01/24/2018 09:33	0.38	125	5.85	1.0535	0.1783	13.06	832.4
MW-324	01/24/2018 09:36	0.41	123	5.83	1.0749	0.1816	13.23	807
MW-324	01/24/2018 09:39	0.51	122	5.81	1.0909	0.1841	13.23	792.8
MW-324	01/24/2018 09:41	0.45	120	5.81	1.0988	0.1853	13.4	787.2
MW-324	01/24/2018 09:44	0.41	117	5.8	1.1011	0.1856	13.52	769.9
MW-324	01/24/2018 09:46	0.27	115	5.79	1.1091	0.1868	13.51	736.7
MW-324	04/11/2018 09:15	5.81	154	7.28	0.0894	0.0018	12.72	2465.8
MW-324	04/11/2018 09:18	1.42	139	6.55	0.0887	0.0017	12.43	2532.8
MW-324	04/11/2018 09:21	4.45	143	6.26	0.0952	0.0019	12.04	2486.9
MW-324	04/11/2018 09:23	1.22	141	5.97	0.0928	0.0018	11.93	2326.2
MW-324	04/11/2018 09:26	0.93	141	5.74	0.0921	0.0018	11.97	2242.1
MW-324	04/11/2018 09:29	0.88	141	5.58	0.0920	0.0018	11.96	1704.8
MW-324	04/11/2018 09:31	0.85	141	5.45	0.0935	0.0018	11.88	1258.4
MW-324	04/11/2018 09:34	0.89	141	5.35	0.0930	0.0018	11.87	948.6
MW-324	04/11/2018 09:37	0.91	142	5.27	0.0905	0.0018	11.89	669.1
MW-324	04/11/2018 09:39	0.92	144	5.19	0.0907	0.0018	11.91	362.2
MW-324	04/11/2018 09:42	0.86	145	5.13	0.0909	0.0018	11.83	282.8
MW-324	04/11/2018 09:45	0.71	144	5.09	0.0898	0.0018	11.77	240.4
MW-324	04/11/2018 09:47	0.79	144	5.07	0.0905	0.0018	11.69	219.5
MW-324	04/11/2018 09:50	0.77	143	5.05	0.0908	0.0018	11.84	201
MW-324	04/11/2018 09:53	0.77	142	5.04	0.0893	0.0018	11.95	190.5
MW-324	04/11/2018 09:55	0.79	142	5.03	0.0894	0.0018	12.04	175.8
MW-324	04/11/2018 09:58	0.72	141	5.02	0.0894	0.0018	12.04	161.5
MW-324	04/11/2018 10:01	0.75	141	5.01	0.0895	0.0018	12.03	150.7
MW-324	04/11/2018 10:04	0.72	141.00	5.00	0.09	1.754	12.05	149.30
MW-324	07/17/2018 08:44	0.95	-65	5.81	0.108	2.0970	26.76	233.7
MW-324	07/17/2018 08:47	1.12	-66	5.82	0.110	2.1220	24.94	285.8
MW-324	07/17/2018 08:50	1.38	-70	5.83	0.107	2.0750	21.87	212.8
MW-324	07/17/2018 08:53	1.65	-75	5.85	0.107	2.0640	21.36	200.9
MW-324	07/17/2018 08:58	2.27	-79	5.86	0.106	2.0530	21.41	170
MW-324	07/17/2018 09:01	2.19	-79	5.86	0.106	2.0540	21.41	175
MW-324	07/17/2018 09:04	2.78	-81	5.86	0.106	2.0480	21.66	185.8
MW-324	07/17/2018 09:07	2.76	-82	5.87	0.106	2.0450	21.68	162.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-324	07/17/2018 09:10	2.38	-84	5.87	0.105	2.0400	21.91	142.9
MW-324	07/17/2018 09:14	2.09	-85	5.88	0.105	2.0370	22.14	140.9
MW-324	07/17/2018 09:17	2.14	-86	5.89	0.105	2.0350	22.38	131.9
MW-324	07/17/2018 09:20	2.38	-87	5.89	0.105	2.0320	22.72	116.4
MW-324	07/17/2018 09:23	2.83	-88	5.9	0.105	2.0350	22.86	107.4
MW-324	07/17/2018 09:26	3	-90	5.9	0.105	2.0360	23.05	100.4
MW-324	07/17/2018 09:29	3.09	-91	5.91	0.105	2.0380	23.24	93.6
MW-324	07/17/2018 09:33	3.13	-92.00	5.91	0.11	2.042	23.4	89.20
MW-324	04/09/2019 09:50	1.74	60.8	5.45	NM	1.566	11.97	1249.8
MW-324	07/09/2019 10:05	1.61	-26.2	6.34	NM	1.88	26.77	1352
MW-324	07/09/2019 10:10	0.46	25.4	5.68	NM	1.571	21.54	51.3
MW-324	07/09/2019 10:15	0.29	29.4	5.67	NM	1.477	20.24	68.8
MW-324	07/09/2019 10:20	0.22	35.4	5.62	NM	1.507	20.03	144.8
MW-324	07/09/2019 10:25	0.25	61.7	5.38	NM	1.719	19.64	1295.8
MW-324	07/09/2019 10:30	0.26	68.3	5.36	NM	1.72	19.62	1294.8
MW-324	07/09/2019 10:35	0.27	70.2	5.34	NM	1.721	19.62	1295.1
MW-324	07/09/2019 11:25	0.27	70.2	5.34	NM	1.721	19.62	1295.1
MW-324	10/07/2019 13:30	1.81	77.1	5.45	NM	1.771	22.56	1279
MW-324	10/07/2019 13:35	1.21	27.4	5.44	NM	1.828	22.72	1101.1
MW-324	10/07/2019 13:40	1.54	53.5	5.33	NM	1.791	22.84	1022.2
MW-324	10/07/2019 13:45	1.37	55.9	5.3	NM	1.65	23.38	803.2
MW-324	10/07/2019 13:50	2	55.2	5.32	NM	1.477	23.57	592.6
MW-324	10/07/2019 13:55	2.02	51	5.38	NM	1.332	23.31	406.4
MW-324	10/07/2019 14:00	2.13	48.4	5.44	NM	1.213	23.13	329.5
MW-324	10/07/2019 14:05	2.22	44.5	5.46	NM	1.158	23.08	283.4
MW-324	10/07/2019 14:10	2.22	46.4	5.45	NM	1.158	22.93	159
MW-324	10/07/2019 14:15	2.78	48.6	5.43	NM	1.188	23.09	54.1
MW-324	01/06/2020 12:58	3.81	35.4	5.53	NM	0.963	11.78	589.9
MW-324	01/06/2020 13:03	1.78	36.9	5.46	NM	1.096	12.09	605.9
MW-324	01/06/2020 13:08	1.36	38.1	5.44	NM	1.119	12.22	505.8
MW-324	01/06/2020 13:13	1.28	40.6	5.43	NM	1.103	12.14	404.6
MW-324	01/06/2020 13:18	1.11	44.1	5.42	NM	1.06	12.29	280.1
MW-324	01/06/2020 13:23	1.46	48.9	5.41	NM	0.972	12.28	221.1
MW-324	01/06/2020 13:28	1.78	52	5.41	NM	0.912	12.16	183
MW-324	01/06/2020 13:33	1.83	56.4	5.4	NM	0.85	12.2	166.1
MW-324	01/06/2020 13:38	1.75	58.3	5.38	NM	0.853	12.29	131.3
MW-324	01/06/2020 13:43	1.55	58.4	5.37	NM	0.878	12.42	121.9
MW-324	04/03/2020 13:05	1.41	36.9	5.55	NM	1.211	12.94	547.8
MW-324	07/08/2020 09:40	4.53	-1	5.8	1.09	2.124	22.81	658.3
MW-324	07/08/2020 09:45	4.14	4.2	5.6	1.15	2.236	22.79	680.2
MW-324	07/08/2020 09:50	5.05	6.4	5.51	1.22	2.366	22.9	589
MW-324	07/08/2020 09:55	7.09	6.1	5.44	1.27	2.468	23.4	411.5
MW-324	07/08/2020 10:00	8.35	4.6	5.42	1.29	2.498	23.78	346.6
MW-324	07/08/2020 10:05	9.19	3.6	5.41	1.29	2.5	23.88	256.1
MW-324	07/08/2020 10:10	10.67	2.2	5.41	1.28	2.494	24.06	249.6
MW-324	07/08/2020 10:15	11.27	1.1	5.4	1.27	2.478	24.2	219.9
MW-324	07/08/2020 10:20	11.64	0.1	5.4	1.27	2.467	24.31	236.5
MW-324	07/08/2020 10:25	11.71	0	5.4	1.27	2.466	24.33	208.2
MW-324	10/12/2020 09:50	1.5	-14.5	5.39	1.47	2.881	16.57	1304.6
MW-324	10/12/2020 09:55	1.32	15.3	5.8	1.26	2.653	16.49	1245.3
MW-324	10/12/2020 10:00	2.3	31.3	5.47	1.65	3.154	16.72	1247.8
MW-324	10/12/2020 10:05	1.51	33.2	5.43	1.7	3.236	17.07	1294.9
MW-324	10/12/2020 10:10	1.25	31.9	5.45	1.64	3.107	17.4	1265.9
MW-324	10/12/2020 10:15	0.88	30.6	5.45	1.57	2.993	17.5	1216.8
MW-324	10/12/2020 10:20	1.41	31.3	5.46	1.57	3	17.42	1078.6
MW-324	10/12/2020 10:25	0.86	34.7	5.43	1.6	3.059	17.34	770.9
MW-324	10/12/2020 10:30	0.67	36.7	36.8	1.63	3.11	17.26	610.8
MW-324	10/12/2020 10:35	0.62	37.4	5.42	1.64	3.126	17.16	530.8
MW-324	01/07/2021 10:05	2.73	-39.4	6.2	1.16	2.231	11.5	344.4
MW-324	01/07/2021 10:10	2.33	-10	5.69	1.68	3.185	12.44	393.3
MW-324	01/07/2021 10:15	2.74	-4	5.55	1.78	3.373	12.84	399.2
MW-324	01/07/2021 10:20	1.89	4.5	5.51	1.76	3.336	12.62	372.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-324	01/07/2021 10:25	1.83	4.8	5.48	1.75	3.323	12.62	372.9
MW-324	01/07/2021 10:30	1.23	7	5.48	1.74	3.296	12.8	299.7
MW-324	01/07/2021 10:35	1.17	7.6	5.46	1.73	3.281	12.94	272.3
MW-324	01/07/2021 10:40	0.97	9.6	5.45	1.69	3.221	12.98	190.3
MW-324	01/07/2021 10:45	0.97	9.6	5.44	1.69	3.207	13.02	184.1
MW-324	01/07/2021 10:50	0.97	9.7	5.44	1.68	3.207	13.02	184.4
MW-324	04/12/2021 12:55	4.28	31.6	5.5	0.87	1.716	11.86	683.4
MW-324	04/12/2021 13:00	5.61	48.5	5.6	0.55	1.109	11.73	1041
MW-324	04/12/2021 13:05	3.77	84.4	5.23	0.93	1.762	11.73	418.8
MW-324	04/12/2021 13:10	4.27	83.1	5.25	1.03	2.007	11.83	286.6
MW-324	04/12/2021 13:15	4.32	82.9	5.24	1.03	2.016	11.87	258.4
MW-324	04/12/2021 13:20	3.53	82.7	5.24	1.3	2.498	12.03	130
MW-324	04/12/2021 13:25	2.91	79.6	5.23	1.37	2.626	12.23	92.3
MW-324	04/12/2021 13:30	2.64	77.6	5.26	1.41	2.705	12.34	58.2
MW-324	04/12/2021 13:35	2.66	77.3	5.26	1.41	2.704	12.38	59.2
MW-324	04/12/2021 13:40	2.59	76.8	5.26	1.42	2.725	12.64	85.5
MW-324	01/17/2022 08:35	1.65	-18.6	5.41	2.93	5.395	12.44	239.8
MW-324	01/17/2022 08:40	1.29	-3.7	5.37	2.98	5.47	13.3	157.9
MW-324	01/17/2022 08:45	1.24	-1.8	5.39	2.99	5.507	11.78	189.4
MW-324	01/17/2022 08:50	1.26	-1.6	5.4	3.01	5.529	11.03	175.2
MW-324	01/17/2022 08:55	1.24	-1.7	5.42	3.01	5.539	10.26	144.8
MW-324	01/17/2022 09:00	1.21	-2.4	5.43	2.99	5.513	10.4	120.5
MW-324	01/17/2022 09:05	1.24	-2.7	5.43	3.01	5.535	10.34	104.5
MW-324	01/17/2022 09:10	1.25	-3.3	5.44	3.01	5.535	10.08	96
MW-324	01/17/2022 09:15	1.26	-5.5	5.46	3	5.529	10.32	75.3
MW-324	01/17/2022 09:20	1.25	-6.6	5.47	3.01	5.547	10.3	72
MW-324	01/17/2022 09:25	1.27	-8.2	5.5	3	5.531	10.28	69.3
MW-324	04/12/2022 08:35	4.89	-15.5	5.36	1.7	3.207	11.99	286.3
MW-324	04/12/2022 08:40	3.03	-9.5	5.33	1.84	3.422	12.05	263.1
MW-324	04/12/2022 08:45	1.35	-5.6	5.34	2.02	3.81	12.24	238.3
MW-324	04/12/2022 08:50	2.47	18.3	5.39	1.22	2.394	11.93	197.3
MW-324	04/12/2022 08:55	2.7	23	5.41	1.18	2.29	11.91	158.8
MW-324	04/12/2022 09:00	2.74	25	5.41	1.18	2.286	11.88	149.7
MW-324	04/12/2022 09:05	2.04	29.6	5.36	1.48	2.829	12	113.5
MW-324	04/12/2022 09:10	1.99	29.6	5.35	1.49	2.848	12	114.3
MW-324	04/12/2022 09:15	1.95	29.1	5.35	1.5	2.879	12.01	111.7
MW-325	03/12/2012 14:46	4.89	-88	10.01	0.08	1.51437	22.33	33.9
MW-325	03/12/2012 14:50	1.05	-169	7.85	0.11	2.21222	15.71	20.4
MW-325	03/12/2012 14:55	0.48	-158	7.73	0.11	2.20022	15.88	19.1
MW-325	03/12/2012 15:00	0.3	-154	7.69	0.11	2.20798	15.56	14.6
MW-325	03/12/2012 15:04	0.23	-152	7.67	0.11	2.21205	15.56	19.1
MW-325	03/12/2012 15:09	0.12	-151	7.67	0.11	2.20679	15.6	27.4
MW-325	03/12/2012 15:13	0.08	-150	7.66	0.11	2.20181	15.49	24
MW-325	03/12/2012 15:18	0.03	-150	7.66	0.11	2.20484	15.36	19.6
MW-325	03/12/2012 15:22	0.01	-149	7.66	0.11	2.1995	15.57	19
MW-325	03/12/2012 15:27	-0.02	-150	7.66	0.11	2.1998	15.51	21.9
MW-325	03/12/2012 15:32	-0.05	-150	7.66	0.11	2.2077	15.41	18.4
MW-325	03/12/2012 15:36	-0.06	-150	7.66	0.11	2.20624	15.48	13.6
MW-325	03/12/2012 15:37	-0.06	-150	7.66	0.11	2.206	15.48	13.62
MW-325	03/12/2012 16:10	3.16	-131	7.70	0.11	2.193	15.00	117.80
MW-325	03/13/2012 12:05	0.26	-117	6.33	0.60	10.700	15.10	591.00
MW-325	05/17/2012 08:49	1.4	-87	7.61	0.11	2.19671	15.42	2.6
MW-325	05/17/2012 08:50	0.85	-102	7.64	0.11	2.20885	15.15	3.8
MW-325	05/17/2012 08:51	0.62	-112	7.66	0.11	2.20931	15.04	3.2
MW-325	05/17/2012 08:53	0.51	-118	7.66	0.11	2.21327	14.94	3.6
MW-325	05/17/2012 08:54	0.45	-122	7.66	0.11	2.22039	14.92	4.1
MW-325	05/17/2012 08:56	0.41	-123	7.64	0.11	2.2219	14.92	3.9
MW-325	05/17/2012 08:57	0.37	-124	7.63	0.11	2.22519	14.91	3.9
MW-325	05/17/2012 08:58	0.35	-125	7.63	0.11	2.22651	14.91	3.3
MW-325	05/17/2012 09:00	0.33	-126	7.62	0.11	2.22774	14.89	3.4
MW-325	05/17/2012 09:01	0.3	-127	7.62	0.12	2.22995	14.82	3
MW-325	05/17/2012 09:03	0.29	-128	7.61	0.11	2.22462	14.95	3.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-325	05/17/2012 09:04	0.27	-129	7.61	0.12	2.23365	15.05	2.9
MW-325	05/17/2012 09:05	0.28	-130	7.6	0.12	2.23164	15	3.6
MW-325	05/17/2012 09:07	0.28	-130	7.59	0.12	2.23068	15.09	3.5
MW-325	05/17/2012 09:08	0.28	-131	7.59	0.12	2.23115	15.01	2.9
MW-325	05/17/2012 09:09	0.28	-132	7.58	0.12	2.23454	14.97	2.8
MW-325	05/17/2012 09:11	0.27	-132	7.57	0.12	2.23611	15.02	3.1
MW-325	05/17/2012 09:12	0.28	-132	7.57	0.12	2.2348	15.14	2.9
MW-325	05/17/2012 09:14	0.28	-132	7.56	0.12	2.23799	15.17	2
MW-325	05/17/2012 09:15	0.28	-133	7.56	0.12	2.24184	15.09	2.6
MW-325	05/17/2012 09:16	0.27	-133	7.56	0.12	2.23903	15.1	2.2
MW-325	05/17/2012 09:18	0.22	-133	7.56	0.12	2.23603	15.12	3.1
MW-325	05/17/2012 09:19	0.26	-134	7.56	0.12	2.24098	15.07	2.4
MW-325	05/17/2012 09:21	0.27	-134	7.56	0.12	2.23958	15.24	2.2
MW-325	05/17/2012 09:22	0.26	-134	7.56	0.12	2.24178	15.13	1.8
MW-325	05/17/2012 09:23	0.26	-134	7.56	0.12	2.24277	15.18	2.6
MW-325	05/17/2012 09:25	0.25	-135	7.56	0.12	2.23915	15.12	2.3
MW-325	05/17/2012 09:26	0.24	-135	7.56	0.12	2.23967	15.14	2.1
MW-325	05/17/2012 09:28	0.24	-135	7.56	0.12	2.23955	15.09	2.3
MW-325	05/17/2012 09:29	0.23	-135	7.56	0.12	2.23795	15.09	1.6
MW-325	05/17/2012 09:30	0.24	-135	7.56	0.12	2.23974	15.18	1.6
MW-325	05/17/2012 09:32	0.24	-136	7.57	0.12	2.239	15.26	1.708
MW-325	05/17/2012 11:13	4.59	-56	7.26	0.11	2.197	14.71	33.3
MW-325	05/18/2012 08:58	2.08	-148	7.52	0.1	2.44	15.93	11.7
MW-325	07/26/2012 08:20	2.68	-148	12.11	0.1	2.0062	21.91	10.1
MW-325	07/26/2012 08:21	2.42	-156	12.16	0.11	2.12473	21.03	11.4
MW-325	07/26/2012 08:23	1.59	-160	12.25	0.12	2.23437	19.04	11
MW-325	07/26/2012 08:24	1.05	-163	12.36	0.12	2.25154	18.06	10.9
MW-325	07/26/2012 08:25	0.79	-165	12.45	0.12	2.25345	17.74	12.2
MW-325	07/26/2012 08:27	0.66	-166	12.51	0.12	2.25289	17.61	10.8
MW-325	07/26/2012 08:28	0.57	-166	12.51	0.12	2.25296	17.61	17.2
MW-325	07/26/2012 08:29	0.52	-167	12.5	0.12	2.25339	17.48	11.2
MW-325	07/26/2012 08:31	0.48	-167	12.49	0.12	2.25076	17.48	10.7
MW-325	07/26/2012 08:32	0.46	-168	12.48	0.12	2.2529	17.5	11.8
MW-325	07/26/2012 08:33	0.42	-168	12.47	0.12	2.25359	17.52	9.1
MW-325	07/26/2012 08:35	0.4	-169	12.47	0.12	2.25246	17.59	10.1
MW-325	07/26/2012 08:36	0.37	-169	12.47	0.12	2.2517	17.59	10.7
MW-325	07/26/2012 08:38	0.35	-169	12.48	0.12	2.2527	17.67	10.5
MW-325	07/26/2012 08:39	0.34	-169	12.47	0.12	2.25393	17.66	10.4
MW-325	07/26/2012 08:40	0.34	-167	12.47	0.12	2.254	17.66	10.41
MW-325	07/26/2012 10:37	2.85	26	12.37	0.07	1.432	17.11	54.80
MW-325	07/27/2012 08:50	1.27	-146	12.25	0.11	2.056	17.11	15.60
MW-325	11/21/2012 10:32	6.02	-199	7.45	0.1	2.31	16.2	26.7
MW-325	11/21/2012 10:34	5.62	-205	7.52	0.1	2.34	15.9	21.7
MW-325	11/21/2012 10:36	5.32	-208	7.61	0.1	2.35	15.9	16.4
MW-325	11/21/2012 10:38	5.17	-210	7.64	0.1	2.34	16.0	22.1
MW-325	11/21/2012 10:40	5.05	-211	7.67	0.1	2.35	16.1	17.9
MW-325	11/21/2012 10:42	4.92	-213	7.69	0.1	2.34	16.2	20.5
MW-325	11/21/2012 10:44	4.88	-214	7.70	0.1	2.34	16.1	21.1
MW-325	11/21/2012 10:46	4.86	-214	7.71	0.1	2.35	16.0	23.1
MW-325	11/21/2012 10:48	4.80	-215	7.72	0.1	2.34	16.1	24.0
MW-325	11/21/2012 10:50	4.79	-215	7.73	0.10	2.340	16.09	23.90
MW-325	02/21/2013 10:03	0.11	-254	7.53	0.21	3.894	13.72	21.61
MW-325	06/14/2013 10:01	0.40	-161	7.49	0.15	2.801	14.75	12.06
MW-325	06/14/2013 10:33	1.68	-114	7.30	0.14	2.612	14.29	181.30
MW-325	09/09/2013 09:47	0.75	-245	7.53	0.19	3.573	18.77	36.11
MW-325	11/05/2013 09:36	1.24	-271	7.43	0.14	2.717	15.27	61.44
MW-325	03/11/2014 11:23	0.83	-177	7.37	0.21	4.009	14.41	41.03
MW-325	03/11/2014 11:25	0.83	-177	7.37	0.21	4.009	14.41	41.03
MW-325	03/11/2014 11:53	6.73	0.84	7.54	0.08	1.511	13.82	191.80
MW-325	03/11/2014 11:55	6.73	0.84	7.54	0.08	1.511	13.82	191.80
MW-325	05/21/2014 09:01	4.58	-119	7.47	0.03	0.603	15.01	39.67
MW-325	08/07/2014 09:21	1.63	-344	7.51	0.12	2.336	17.90	63.33

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-325	08/07/2014 10:01	3.51	-285	7.80	0.05	0.992	17.81	634.30
MW-325	10/28/2014 10:02	1.63	-347	7.44	0.12	2.332	16.18	155.40
MW-325	10/28/2014 10:43	3.78	-121	7.22	0.03	0.604	17.73	584.50
MW-325	03/10/2015 00:00	7.35	-85	7.18	0.06	1271.000	13.57	476.20
MW-325	03/10/2015 10:01	1.23	-332	7.37	0.13	2.455	12.08	2812.00
MW-325	09/17/2015 12:17	13.67	-35	7.45	0.16	2.958	79.28	92.3
MW-325	11/17/2015 11:09	5.98	-102	7.19	0.0322	656.3485	15.94	14.1
MW-325	11/17/2015 11:14	0.62	-136	7.21	0.0457	920.9349	15.82	1901.8
MW-325	11/17/2015 11:19	0.07	-152	7.31	0.0460	927.2596	15.84	2024.9
MW-325	11/17/2015 11:24	-0.01	-158	7.35	0.0461	928.0573	15.76	1280.3
MW-325	11/17/2015 11:29	-0.02	-163	7.37	0.0460	927.7021	15.68	1118.2
MW-325	11/17/2015 11:34	-0.03	-166	7.38	0.0461	928.3146	15.73	946.5
MW-325	11/17/2015 11:39	-0.02	-168	7.39	0.0462	931.3485	15.62	881.5
MW-325	11/17/2015 11:44	-0.01	-170	7.4	0.0462	930.4366	15.67	743.3
MW-325	11/17/2015 11:49	-0.01	-172	7.41	0.0432	872.8878	15.69	666.3
MW-325	11/17/2015 11:54	-0.01	-173	7.41	0.0465	935.7252	15.64	477.4
MW-325	11/17/2015 11:59	-0.01	-174	7.41	0.0466	937.8620	15.58	449.6
MW-325	11/17/2015 12:23	5.87	-127	7.27	0.03	0.573	16.29	278.20
MW-325	01/12/2016 11:31	10.95	1249	6.7	0.1382	2681.0172	9.49	49.2
MW-325	01/12/2016 11:36	0.42	1157	6.82	1.7843	28929.1335	13.3	604.1
MW-325	01/12/2016 11:41	0.18	1292	7.01	1.4148	23364.7925	13.74	956
MW-325	01/12/2016 11:46	0.14	1297	7.19	2.0470	32772.5420	13.57	1588.5
MW-325	01/12/2016 11:51	0.13	1243	7.3	1.8672	30130.4623	13.65	2660.1
MW-325	01/12/2016 11:56	0.15	1319	7.34	1.8910	30482.7083	13.63	3233.5
MW-325	01/12/2016 12:01	0.12	1194	7.41	2.2831	36188.9264	13.65	2842.4
MW-325	01/12/2016 12:06	0.14	1179	7.43	2.2878	36262.0895	13.58	2364.5
MW-325	01/12/2016 12:12	0.14	1170	7.45	2.2678	35985.9292	13.44	1205.6
MW-325	01/12/2016 12:17	0.16	1158	7.47	2.2347	35499.9910	13.54	853.9
MW-325	01/12/2016 12:22	0.15	1143	7.47	2.2330	35469.8761	13.61	630.4
MW-325	01/12/2016 12:48	4.68	784	7.62	0.17	3.215	15.14	1175.4
MW-325	04/07/2016 10:24	2.76	-119	7.08	0.0924	1809.3744	14.85	153.8
MW-325	04/07/2016 10:25	1.56	-134	7.15	0.3229	5914.0960	14.6	173
MW-325	04/07/2016 10:31	0.75	-156	7.29	0.3440	6276.3915	14.51	89
MW-325	04/07/2016 10:36	0.46	-164	7.33	0.3541	6450.3173	14.37	188.9
MW-325	04/07/2016 10:41	0.27	-167	7.35	0.3573	6506.4676	14.37	367
MW-325	04/07/2016 10:46	0.23	-170	7.37	0.3561	6483.6514	14.47	261.9
MW-325	04/07/2016 10:51	0.19	-173	7.38	0.3544	6451.8712	14.81	169.5
MW-325	04/07/2016 10:56	0.15	-175	7.39	0.3584	6520.4975	14.7	194.3
MW-325	04/07/2016 11:01	0.13	-177	7.41	0.3636	6612.1803	14.44	125.6
MW-325	04/07/2016 11:06	0.1	-178	7.41	0.3691	6707.5791	14.29	152.5
MW-325	04/07/2016 11:11	0.08	-179	7.42	0.3703	6727.7881	14.26	130.3
MW-325	04/07/2016 11:16	0.06	-180	7.42	0.3674	6677.3377	14.43	158.6
MW-325	04/07/2016 11:38	0.98	-136	7.21	0.47	8.370	13.79	731.80
MW-325	07/21/2016 09:22	4.68	-39	7.18	NM	895.88	26.64	212.2
MW-325	07/21/2016 09:24	3.98	-86	7.23	NM	3732.03	21.74	413
MW-325	07/21/2016 09:27	1.66	-105	7.21	NM	4291.1	20.39	436.7
MW-325	07/21/2016 09:29	0.99	-120	7.24	NM	4728.43	20.13	320.8
MW-325	07/21/2016 09:31	0.71	-132	7.28	NM	4939.75	20.2	256.9
MW-325	07/21/2016 09:33	0.58	-143	7.31	NM	5104.96	20.35	228.5
MW-325	07/21/2016 09:35	0.54	-151	7.34	NM	5230.27	20.32	238
MW-325	07/21/2016 09:38	0.47	-157	7.36	NM	5302.47	20.3	223.8
MW-325	07/21/2016 09:40	0.42	-162	7.37	NM	5375.9	20.28	208.4
MW-325	07/21/2016 09:42	0.4	-166	7.39	NM	5414.83	20.24	177
MW-325	07/21/2016 09:44	0.39	-169	7.4	NM	5548.82	20.24	191.8
MW-325	07/21/2016 09:47	0.37	-172	7.41	NM	5472.65	20.35	200.1
MW-325	07/21/2016 09:49	0.39	-175	7.41	NM	5562.01	19.91	179.7
MW-325	07/21/2016 09:51	0.37	-177	7.42	NM	5575.94	20.14	216.3
MW-325	07/21/2016 09:53	0.36	-179	7.42	NM	5593.7	20.45	208.5
MW-325	07/21/2016 09:56	0.38	-180	7.42	NM	5562.92	20.53	254.6
MW-325	07/21/2016 09:58	0.36	-182	7.42	NM	5590.37	20.67	247.1
MW-325	07/21/2016 10:00	0.36	-183	7.43	NM	5542.62	20.54	258.4
MW-325	07/21/2016 10:44	9.24	-113	7.39	0.30	5.478	17.93	866.60

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-325	10/12/2016 10:05	3.23	-122	7.74	0.1913	3594.5967	19.6	22.4
MW-325	10/12/2016 10:10	0.23	-127	7.71	0.2362	4390.4846	18.33	97.7
MW-325	10/12/2016 10:15	2.29	-130	7.81	0.2328	4330.4757	18.49	1182.2
MW-325	10/12/2016 10:16	2.42	-130	7.82	0.2326	4326.1619	18.47	1241.7
MW-325	10/12/2016 10:21	3.51	-126	7.84	0.2278	4243.7729	18.17	1866.5
MW-325	10/12/2016 10:26	3.09	-124	7.84	0.2259	4211.4699	17.94	2088.7
MW-325	10/12/2016 10:31	2.59	-124	7.86	0.2226	4152.5638	18.14	2339.9
MW-325	10/12/2016 10:36	2.31	-124	7.88	0.2183	4074.7243	18.6	2271.5
MW-325	10/12/2016 10:41	2.21	-123	7.89	0.2157	4027.0433	19.05	2481.3
MW-325	10/12/2016 10:46	2.16	-122	7.89	0.2112	3947.9897	19.59	2441.8
MW-325	10/12/2016 11:10	6.11	-107	7.79	0.17	3.166	18.55	1199.60
MW-325	01/18/2017 08:51	6.88	52	6.95	0.5060	9057.4411	11.47	337.8
MW-325	01/18/2017 08:57	0.94	6	7.24	0.5364	9527.1296	13.36	85.1
MW-325	01/18/2017 09:02	0.3	-5	7.2	0.5335	9481.7988	13.19	79.2
MW-325	01/18/2017 09:03	0.27	-5	7.18	0.5331	9476.5305	13.19	82.3
MW-325	01/18/2017 09:09	0.06	-11	7.33	0.5342	9491.9078	13.33	70.3
MW-325	01/18/2017 09:10	0.03	-11	NM	0.5343	9492.2256	13.34	76.1
MW-325	01/18/2017 09:14	-0.04	-15	7.32	0.5325	9463.8327	13.3	266.6
MW-325	01/18/2017 09:19	-0.12	-20	7.38	0.5285	9395.9626	13.35	307.8
MW-325	01/18/2017 09:25	-0.16	-22	7.52	0.5275	9379.0971	13.44	317.2
MW-325	01/18/2017 09:30	-0.17	-25	7.33	0.5255	9343.9234	13.52	314.7
MW-325	01/18/2017 09:35	-0.19	-27	7.36	0.5235	9312.7217	13.44	249.3
MW-325	01/18/2017 09:40	-0.2	-29	7.38	0.5226	9296.7439	13.44	214.3
MW-325	04/26/2017 09:09	4.19	-33	7.25	0.1104	0.0215	13.87	616.4
MW-325	04/26/2017 09:14	1.2	-41	7.2	0.1298	0.0250	13.91	381.2
MW-325	04/26/2017 09:19	0.32	-58	7.25	0.1338	0.0258	14.01	355.2
MW-325	04/26/2017 09:24	0.18	-76	7.3	0.1353	0.0260	14.05	281.3
MW-325	04/26/2017 09:29	0.12	-89	7.34	0.1364	0.0262	14.07	222.9
MW-325	04/26/2017 09:34	0.1	-99	7.37	0.1362	0.0262	14.11	237.1
MW-325	04/26/2017 09:39	0.07	-105	7.39	0.1376	0.0265	14.1	233.1
MW-325	04/26/2017 09:44	0.06	-110	7.41	0.1402	0.0269	14.12	193.9
MW-325	04/26/2017 09:49	0.04	-113	7.42	0.1417	0.0272	14.16	170.8
MW-325	04/26/2017 09:54	0.02	-116	7.43	0.1425	0.0273	14.19	162.3
MW-325	04/26/2017 09:59	0.01	-117.00	7.43	0.14	2.773	12.24	142.70
MW-325	04/26/2017 10:00	0.01	-117	7.43	0.1432	0.0275	14.19	142.7
MW-325	01/24/2018 10:13	7.89	67	7.6	0.1387	0.0268	11.37	31.9
MW-325	01/24/2018 10:18	0.62	71	7.35	0.2484	0.0463	13.51	182.8
MW-325	01/24/2018 10:24	0.09	67	7.33	0.2623	0.0487	13.57	94.8
MW-325	01/24/2018 10:29	-0.05	63	7.34	0.2687	0.0499	13.49	57.7
MW-325	01/24/2018 10:34	0.24	59	7.36	0.2727	0.0505	13.54	47.2
MW-325	01/24/2018 10:39	-0.14	56	7.38	0.2731	0.0506	13.68	45
MW-325	01/24/2018 10:44	-0.18	53	7.4	0.2720	0.0504	14.05	46.8
MW-325	01/24/2018 10:49	-0.21	50	7.42	0.2717	0.0503	14.2	44.5
MW-325	01/24/2018 10:54	-0.24	49	7.44	1.0277	0.1741	13.58	44.8
MW-325	01/24/2018 10:59	-0.26	47	7.46	1.0384	0.1758	13.43	54.5
MW-325	01/24/2018 11:04	-0.17	45	7.47	1.0124	0.1716	14.11	53.3
MW-325	04/11/2018 10:38	7.09	73	7.63	0.0176	0.0004	14.34	1498.7
MW-325	04/11/2018 10:43	2.98	90	7.05	0.0596	0.0012	14.2	830.7
MW-325	04/11/2018 10:48	1.74	80	7.07	0.0735	0.0015	14.3	757.5
MW-325	04/11/2018 10:53	1.24	73	7.07	0.0891	0.0017	14.92	526.4
MW-325	04/11/2018 10:58	0.98	68	7.08	0.0904	0.0018	14.36	431.6
MW-325	04/11/2018 11:03	0.95	58	7.09	0.0926	0.0018	14.45	368.7
MW-325	04/11/2018 11:08	0.87	48	7.09	0.0940	0.0018	14.47	367.2
MW-325	04/11/2018 11:13	0.79	38	7.09	0.0942	0.0018	14.49	313.4
MW-325	04/11/2018 11:18	0.78	31	7.09	0.0944	0.0018	14.49	300.6
MW-325	04/11/2018 11:23	0.73	26	7.1	0.0942	0.0018	14.55	288.1
MW-325	04/11/2018 11:28	0.81	21.00	7.10	0.10	1.885	14.43	298.50
MW-325	07/17/2018 10:02	3.04	-67	6.74	0.015	0.3100	32.69	169.4
MW-325	07/17/2018 10:08	3.8	-91	6.76	0.015	0.3030	19.02	231.9
MW-325	07/17/2018 10:13	2.23	-88	6.32	0.075	1.4770	20.35	103.9
MW-325	07/17/2018 10:18	1.72	-119	6.7	0.096	1.8620	20.31	75.3
MW-325	07/17/2018 10:23	1.53	-135	6.93	0.098	1.9100	20.16	95.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-325	07/17/2018 10:28	1.41	-144	7.05	0.100	1.9380	20.25	99.9
MW-325	07/17/2018 10:33	1.28	-150	7.12	0.101	1.9660	20.52	90
MW-325	07/17/2018 10:38	1.21	-155	7.17	0.102	1.9880	20.53	85.5
MW-325	07/17/2018 10:43	1.2	-160	7.21	0.103	1.9950	19.76	72.5
MW-325	07/17/2018 10:48	1.14	-163	7.23	0.103	2.0060	20.19	63.2
MW-325	07/17/2018 10:53	1.09	-165.00	7.25	0.10	2.013	20.52	62.25
MW-325	10/24/2018 11:40	0.59	-99.30	7.39	0.77	1.528	16.28	152.90
MW-325	05/02/2019 11:05	0.88	-33.4	7.43	NM	1.49	13.81	435
MW-325	07/09/2019 10:05	5.44	145.3	8.35	NM	0.409	18.95	65.6
MW-325	07/09/2019 10:10	4.56	140.8	7.91	NM	0.394	17.66	80.4
MW-325	07/09/2019 10:15	3.77	78.9	7.3	NM	0.519	16.58	129.6
MW-325	07/09/2019 10:20	1.45	-49.8	7.1	NM	1.347	16.46	224.7
MW-325	07/09/2019 10:25	0.34	-98.9	7.29	NM	1.786	16.7	43.3
MW-325	07/09/2019 10:30	0.54	-87.3	7.23	NM	1.743	16.7	57.8
MW-325	07/09/2019 10:35	0.51	-91.5	7.27	NM	1.748	16.58	52.3
MW-325	07/09/2019 10:40	0.42	-94	7.29	NM	1.771	16.58	41.5
MW-325	07/09/2019 10:45	0.36	-97.3	7.29	NM	1.788	16.55	43.8
MW-325	07/09/2019 10:50	0.34	-98.9	7.29	NM	1.786	16.7	43.3
MW-325	10/07/2019 11:55	17.78	-97.2	7.23	NM	0.569	23.79	179.5
MW-325	10/07/2019 12:00	17.75	-118.7	7.28	NM	0.783	22.98	183.7
MW-325	10/07/2019 12:05	15.07	-144.4	7.34	NM	1.128	22.02	183.9
MW-325	10/07/2019 12:10	14.08	-154.8	7.39	NM	1.238	21	153.2
MW-325	10/07/2019 12:15	12.94	-162.8	7.42	NM	1.289	20.85	117.8
MW-325	10/07/2019 12:25	3.64	-156.4	7.42	NM	1.735	20.44	83
MW-325	10/07/2019 12:30	2.8	-50	7.6	NM	1.387	20.5	73.1
MW-325	10/07/2019 12:40	1.64	-164.1	7.41	NM	1.556	20.79	49.6
MW-325	10/07/2019 12:45	1.24	-143.5	7.38	NM	1.489	21.35	34.1
MW-325	10/07/2019 12:50	0.81	-160.5	7.39	NM	1.344	21.83	48.4
MW-325	01/06/2020 11:30	6.84	-28.7	7.34	NM	0.137	13.6	105.3
MW-325	01/06/2020 11:35	4.51	-24.2	7.46	NM	0.123	13.9	82.8
MW-325	01/06/2020 11:40	3.83	-18.7	7.55	NM	0.121	14.36	13.6
MW-325	01/06/2020 11:45	2.8	-13.7	7.64	NM	0.12	14.54	96
MW-325	01/06/2020 11:50	2.95	-4.9	7.71	NM	0.119	14.67	10.1
MW-325	01/06/2020 11:55	2.75	4	7.75	NM	0.12	14.43	152.9
MW-325	01/06/2020 12:00	2.87	9.3	7.76	NM	0.121	14.7	13.3
MW-325	01/06/2020 12:05	2.51	-55.5	7.41	NM	0.248	14.34	131
MW-325	01/06/2020 12:10	1.38	-127.9	7.3	NM	0.608	14.26	89.7
MW-325	01/06/2020 12:15	0.9	-145.3	7.37	NM	0.673	13.84	84
MW-325	04/03/2020 11:45	0.44	-156	7.56	NM	0.816	14.43	27
MW-325	07/08/2020 08:30	3.78	104.8	7.26	0.19	0.403	15.53	445.4
MW-325	07/08/2020 08:35	3.42	99.6	7.28	0.19	0.398	15.29	309.3
MW-325	07/08/2020 08:40	3.35	97.2	7.28	0.19	0.396	15.21	283.4
MW-325	07/08/2020 08:45	3.28	94.9	7.32	0.19	0.397	15.25	275.6
MW-325	07/08/2020 08:50	3.24	93	7.32	0.19	0.398	15.2	257.9
MW-325	07/08/2020 08:55	3.25	90.3	7.36	0.19	0.398	15.22	235.7
MW-325	07/08/2020 09:00	3.16	90.1	7.36	0.2	0.412	15.19	230.9
MW-325	07/08/2020 09:05	2.19	13.7	7.21	0.66	1.321	15.94	131
MW-325	07/08/2020 09:10	1.96	-109.3	7.27	0.81	1.595	16.02	125.4
MW-325	07/08/2020 09:15	2.01	-115	7.28	0.82	1.607	16.04	123.9
MW-325	10/12/2020 11:15	1.01	-74.2	6.83	0.48	0.944	14.68	283.7
MW-325	10/12/2020 11:20	0.56	-90.7	7.08	0.43	0.861	15.38	156
MW-325	10/12/2020 11:25	0.23	-73.3	7.23	0.45	0.903	15.2	56.8
MW-325	10/12/2020 11:30	0.11	-62.7	7.24	0.56	1.227	15.1	42.9
MW-325	10/12/2020 11:35	0.67	-96.3	7.28	0.71	1.404	15	53.4
MW-325	10/12/2020 11:40	0.23	-116.3	7.29	0.74	1.472	14.87	49.6
MW-325	10/12/2020 11:45	0.1	-126.8	7.31	0.76	1.5	14.87	86
MW-325	10/12/2020 11:50	0.1	-128.8	7.31	0.75	1.491	14.92	137.5
MW-325	10/12/2020 11:55	0.16	-122.2	7.31	0.74	1.455	14.9	208.1
MW-325	10/12/2020 12:00	0.18	-126.1	7.31	0.74	1.459	14.91	NM
MW-325	10/14/2020 12:00	NM	NM	NM	NM	NM	NM	239
MW-325	01/07/2021 09:00	7.33	-32.6	11.27	0.3	0.612	8.56	65.5
MW-325	01/07/2021 09:05	6.97	-40.5	11.32	0.3	0.624	8.87	50.8

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-325	01/07/2021 09:10	4.52	-45.2	11.4	0.31	0.634	8.63	45.2
MW-325	01/07/2021 09:15	6.46	-42.6	11.42	0.31	0.638	8.29	42.8
MW-325	01/07/2021 09:20	6.46	-42.9	11.4	0.31	0.637	8.31	42.3
MW-325	01/07/2021 09:25	6.51	-42	11.49	0.31	0.639	8	41.3
MW-325	01/07/2021 09:30	6.24	-41.3	11.47	0.32	0.662	7.7	42.1
MW-325	01/07/2021 09:35	6.1	-41.1	11.5	0.33	0.674	7.47	42.5
MW-325	01/07/2021 09:40	5.66	-42.5	11.72	0.35	0.713	7.42	43.9
MW-325	01/07/2021 09:45	5.5	-46.1	11.63	0.37	0.761	7.28	46.2
MW-325	04/12/2021 11:20	7.37	57.7	8.17	0.15	0.314	13.56	177.6
MW-325	04/12/2021 11:25	7.02	77.3	8.03	0.15	0.309	13.66	197.5
MW-325	04/12/2021 11:30	6.97	83.2	7.57	0.15	0.309	13.69	197.1
MW-325	04/12/2021 11:35	6.9	86.2	7.36	0.15	0.31	13.73	206
MW-325	04/12/2021 11:40	6.87	88.7	7.28	0.15	0.31	13.54	189.1
MW-325	04/12/2021 11:45	6.81	69.3	9.39	0.15	0.312	13.84	100.9
MW-325	04/12/2021 11:50	6.67	66.2	9.79	0.15	0.319	13.95	82.2
MW-325	04/12/2021 11:55	5.83	59.9	9.99	0.16	0.336	13.96	78.2
MW-325	04/12/2021 12:00	5.03	68.1	9.51	0.24	0.509	13.94	70.5
MW-325	04/12/2021 12:05	1.18	-148.1	7.61	0.7	1.38	13.96	70.1
MW-325	01/14/2022 09:05	6.01	168	7.22	0.32	0.659	12.14	31.3
MW-325	01/14/2022 09:10	4.92	159.1	7.23	0.32	0.658	10.81	35.4
MW-325	01/14/2022 09:15	4.29	156.1	7.2	0.32	0.649	11.22	39.8
MW-325	01/14/2022 09:20	4.14	152.4	7.23	0.32	0.649	11.32	35
MW-325	01/14/2022 09:25	3.98	148.7	7.24	0.32	0.646	11.41	23.8
MW-325	01/14/2022 09:30	3.86	147.3	7.23	0.32	0.646	11.45	16
MW-325	01/14/2022 09:35	3.8	143.2	7.26	0.32	0.645	11.49	13.4
MW-325	01/14/2022 09:40	3.82	142.4	7.25	0.32	0.644	11.26	13.3
MW-325	01/14/2022 09:45	3.82	141.8	7.26	0.32	0.644	11.33	11
MW-325	01/14/2022 09:50	3.84	140.9	7.25	0.32	0.643	11.13	9.7
MW-325	04/05/2022 12:00	4.31	-8.9	7.01	0.46	0.932	14.6	39.2
MW-325	04/05/2022 12:05	4	-5.9	7.12	0.48	0.958	14.58	34.2
MW-325	04/05/2022 12:10	0.72	-148.2	7.27	0.88	1.736	14.69	37.8
MW-325	04/05/2022 12:15	0.71	-150.1	7.28	0.89	1.738	14.76	32.3
MW-325	04/05/2022 12:20	0.7	-150.9	7.29	0.89	1.74	14.8	32.7
MW-325	04/05/2022 12:25	0.69	-151.9	7.3	0.89	1.743	14.85	36.6
MW-325	04/05/2022 12:30	0.68	-152.7	7.3	0.69	1.746	14.87	29.6
MW-325	04/05/2022 12:35	0.67	-153.4	7.31	0.89	1.748	14.87	30.2
MW-325	04/05/2022 12:40	0.59	-158.2	7.36	0.9	1.757	15.05	30
MW-325	04/05/2022 12:45	0.59	-158.7	7.36	0.89	1.754	15.06	30.5
MW-326	03/12/2012 08:38	2.64	-31	6.37	0.68	11.93768	11.95	210.5
MW-326	03/12/2012 08:42	2.38	-39	6.38	0.68	11.9572	11.91	202.9
MW-326	03/12/2012 08:46	1.9	-36	6.31	0.63	11.13678	11.98	158.6
MW-326	03/12/2012 08:49	1.59	-33	6.26	0.59	10.46354	12.18	105.2
MW-326	03/12/2012 08:53	1.39	-30	6.23	0.55	9.80917	12.26	88.9
MW-326	03/12/2012 08:57	1.18	-28	6.2	0.51	9.18632	12.28	89.5
MW-326	03/12/2012 09:00	1.05	-27	6.18	0.49	8.82871	12.44	95.6
MW-326	03/12/2012 09:04	0.95	-27	6.17	0.46	8.23032	12.61	132.7
MW-326	03/12/2012 09:08	0.86	-28	6.16	0.44	7.89539	12.84	141.1
MW-326	03/12/2012 09:11	0.81	-28	6.15	0.43	7.77524	12.85	148.8
MW-326	03/12/2012 09:15	0.74	-28	6.15	0.41	7.48492	12.8	164.2
MW-326	03/12/2012 09:19	0.68	-27	6.14	0.41	7.40151	12.95	156.4
MW-326	03/12/2012 09:23	0.64	-27	6.14	0.41	7.3747	13.21	146.5
MW-326	03/12/2012 09:26	0.61	-27	6.14	0.41	7.33264	13.31	139.9
MW-326	03/12/2012 09:59	5.07	-22	6.27	0.30	5.508	15.29	787.00
MW-326	03/13/2012 09:36	0.45	-79	6.09	0.80	13.600	15.90	29.50
MW-326	05/23/2012 08:27	1.52	23	5.92	0.37	6.64395	20.62	2.7
MW-326	05/23/2012 08:28	1.63	12	5.94	0.43	7.65143	17.99	3
MW-326	05/23/2012 08:30	1.38	7	5.95	0.42	7.6056	16.8	4.4
MW-326	05/23/2012 08:31	1.02	4	5.95	0.41	7.41989	16.85	7.4
MW-326	05/23/2012 08:32	0.76	1	5.93	0.41	7.37762	17.24	9.1
MW-326	05/23/2012 08:33	0.61	0	5.94	0.4	7.15222	17.33	7.5
MW-326	05/23/2012 08:35	0.5	0	5.94	0.38	6.95118	16.79	11.2
MW-326	05/23/2012 08:36	0.4	-2	5.94	0.38	6.81365	16.67	12.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-326	05/23/2012 08:37	0.32	-3	5.95	0.37	6.62864	16.73	13.4
MW-326	05/23/2012 08:39	0.26	-4	5.95	0.36	6.57678	16.77	19.8
MW-326	05/23/2012 08:40	0.25	-4	5.95	0.36	6.5642	16.68	18.8
MW-326	05/23/2012 08:41	0.21	-5	5.95	0.36	6.55618	16.76	17.8
MW-326	05/23/2012 08:43	0.19	-5	5.95	0.36	6.56607	16.75	10.1
MW-326	05/23/2012 08:44	0.17	-5	5.97	0.37	6.71126	16.87	12.3
MW-326	05/23/2012 08:45	0.15	-6	5.97	0.38	6.87298	16.83	14.6
MW-326	05/23/2012 08:47	0.13	-6	5.98	0.37	6.73548	16.78	16.5
MW-326	05/23/2012 08:48	0.13	-6	5.99	0.39	7.00229	16.73	17.1
MW-326	05/23/2012 08:49	0.12	-7	5.99	0.39	6.99267	16.77	17.5
MW-326	05/23/2012 08:50	0.11	-7	5.99	0.39	6.98697	16.76	20.5
MW-326	05/23/2012 08:52	0.12	-7	6	0.38	6.84609	16.79	24.2
MW-326	05/23/2012 08:53	0.1	-8	6	0.37	6.75565	16.63	24
MW-326	05/23/2012 08:54	0.09	-7	6	0.37	6.70493	16.63	42
MW-326	05/23/2012 08:56	0.08	-8	6	0.38	6.83589	16.71	50.2
MW-326	05/23/2012 08:57	0.07	-8	6	0.37	6.66935	16.97	52.3
MW-326	05/23/2012 08:58	0.07	-8	6	0.36	6.60316	17.01	66.1
MW-326	05/23/2012 09:00	0.07	-8	6	0.36	6.53648	17.26	48.6
MW-326	05/23/2012 09:01	0.07	-8	6	0.36	6.44823	17.27	51.7
MW-326	05/23/2012 09:02	0.07	-8	6.01	0.35	6.43186	17.08	49.2
MW-326	05/23/2012 09:03	0.07	-8	6.01	0.35	6.432	17.08	49.25
MW-326	05/23/2012 11:05	3.43	-24	6.06	0.35	6.34	19.78	160.8
MW-326	07/26/2012 11:08	2.52	-22	11.76	0.39	6.99362	22.29	26.2
MW-326	07/26/2012 11:10	1.85	-20	11.83	0.42	7.49554	20.29	34
MW-326	07/26/2012 11:11	1.18	-19	11.96	0.42	7.50689	19.47	56.6
MW-326	07/26/2012 11:12	0.81	-19	12.04	0.41	7.36696	19.46	65.6
MW-326	07/26/2012 11:13	0.64	-19	12.06	0.41	7.28066	19.21	78.7
MW-326	07/26/2012 11:15	0.53	-19	12.02	0.4	7.20198	19.22	87.2
MW-326	07/26/2012 11:16	0.45	-20	12.06	0.39	7.09212	19.33	97.6
MW-326	07/26/2012 11:17	0.39	-20	11.97	0.39	6.95983	19.37	97.2
MW-326	07/26/2012 11:19	0.35	-21	11.93	0.38	6.83108	19.38	105.7
MW-326	07/26/2012 11:20	0.32	-21	11.91	0.37	6.74748	19.38	106.3
MW-326	07/26/2012 11:21	0.29	-21	11.89	0.37	6.61924	19.64	117.3
MW-326	07/26/2012 11:23	0.27	-21	11.88	0.36	6.46441	19.58	101.8
MW-326	07/26/2012 11:24	0.25	-22	11.87	0.35	6.36848	19.61	103.9
MW-326	07/26/2012 11:25	0.24	-23	11.86	0.34	6.24532	19.57	98.3
MW-326	07/26/2012 11:27	0.22	-23	11.85	0.34	6.24513	19.8	110.5
MW-326	07/26/2012 11:28	0.21	-23	11.85	0.34	6.19406	19.8	125.4
MW-326	07/26/2012 11:29	0.2	-24	11.84	0.34	6.14185	19.82	118.7
MW-326	07/26/2012 11:31	0.19	-24	11.84	0.33	6.03925	19.83	96.8
MW-326	07/26/2012 11:32	0.19	-23	11.84	0.33	5.99396	19.73	87.9
MW-326	07/26/2012 11:33	0.18	-23	11.83	0.33	5.855	19.78	88.34
MW-326	07/26/2012 13:04	3.22	-59	10.46	0.32	5.780	21.94	192.50
MW-326	07/27/2012 10:32	0.40	-29	11.84	0.50	8.828	15.74	61.90
MW-326	11/20/2012 10:38	5.44	-23	5.81	0.3	6.08	17.0	>1000.0
MW-326	11/20/2012 10:40	5.07	-23	5.81	0.3	6.04	17.0	>1000.0
MW-326	11/20/2012 10:42	4.80	-22	5.81	0.3	6.00	17.1	913.0
MW-326	11/20/2012 10:44	4.67	-22	5.81	0.3	5.94	17.2	775.0
MW-326	11/20/2012 10:46	4.63	-22	5.81	0.3	5.92	17.1	680.0
MW-326	11/20/2012 10:48	4.57	-22	5.81	0.3	5.88	17.0	630.0
MW-326	11/20/2012 10:50	4.50	-22	5.81	0.3	5.89	17.0	585.0
MW-326	11/20/2012 10:52	4.43	-22	5.81	0.3	5.88	17.0	521.0
MW-326	11/20/2012 10:54	4.40	-22	5.81	0.3	5.88	17.1	447.0
MW-326	11/20/2012 10:56	4.37	-22	5.80	0.3	5.88	17.1	380.0
MW-326	11/20/2012 10:58	4.36	-22	5.81	0.3	5.88	17.0	352.0
MW-326	11/20/2012 11:00	4.36	-22	5.81	0.3	5.90	16.9	341.0
MW-326	11/20/2012 11:02	4.32	-23	5.82	0.30	5.870	16.95	332.00
MW-326	02/20/2013 09:02	0.68	-111	5.92	0.67	11.76293	13.21	90.3
MW-326	02/20/2013 09:04	0.51	-124	5.93	0.66	11.62082	13.45	124.8
MW-326	02/20/2013 09:06	0.47	-134	5.94	0.63	11.02693	13.39	157.1
MW-326	02/20/2013 09:08	0.46	-139	5.95	0.62	10.88942	13.24	166.2
MW-326	02/20/2013 09:09	0.43	-141	5.97	0.59	10.34143	13.54	140.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-326	02/20/2013 09:11	0.43	-143	5.99	0.58	10.26367	13.22	123.6
MW-326	02/20/2013 09:13	0.4	-144	5.96	0.6	10.63594	13.49	94.4
MW-326	02/20/2013 09:15	0.38	-146	5.97	0.61	10.68013	13.35	92.9
MW-326	02/20/2013 09:17	0.36	-147	5.99	0.58	10.29852	13.51	90
MW-326	02/20/2013 09:18	0.34	-147	5.99	0.58	10.21358	13.53	96.4
MW-326	02/20/2013 09:20	0.33	-147	6	0.58	10.15985	13.68	77.1
MW-326	02/20/2013 09:22	0.34	-147	6.01	0.57	10.01524	13.46	89.2
MW-326	02/20/2013 09:24	0.33	-148	6.01	0.56	9.98825	13.52	80
MW-326	02/20/2013 09:25	0.32	-149	6.01	0.56	9.94564	13.36	83.9
MW-326	02/20/2013 09:27	0.32	-149	6.02	0.56	9.88824	13.37	63.6
MW-326	02/20/2013 09:29	0.31	-148	6.02	0.57	10.03779	13.25	59.4
MW-326	02/20/2013 09:31	0.31	-149	6.02	0.56	9.92687	13.1	79
MW-326	02/20/2013 09:32	0.31	-149	6.03	0.57	10.00776	13.15	68.9
MW-326	02/20/2013 09:34	0.31	-149	6.03	0.55	9.75913	13.04	59.5
MW-326	02/20/2013 09:36	0.32	-147	6.04	0.56	9.94483	13.13	56.8
MW-326	02/20/2013 09:38	0.32	-146	6.04	0.55	9.77917	13.15	50.8
MW-326	02/20/2013 09:39	0.32	-146	6.04	0.56	9.84005	13.27	52.7
MW-326	02/20/2013 09:41	0.32	-146	6.04	0.55	9.776	13.36	51.36
MW-326	06/13/2013 12:58	0.53	-89	6.07	0.33	6.089	15.62	57.72
MW-326	06/13/2013 13:30	2.64	-64	6.53	0.24	4.499	14.90	82.40
MW-326	09/05/2013 14:01	0.71	-182	6.21	0.37	6.752	19.37	4.64
MW-326	11/06/2013 10:54	0.99	-233	5.98	0.86	14.630	18.07	4.71
MW-326	03/10/2014 13:51	0.77	-89	6.02	0.20	3.712	12.99	4.66
MW-326	03/10/2014 14:26	3.41	-104	6.18	0.17	3.309	13.27	88.10
MW-326	05/20/2014 10:42	1.41	-320	5.95	0.43	7.676	16.86	6.79
MW-326	08/05/2014 14:21	1.22	-375	6.10	0.20	3.791	20.30	8.83
MW-326	08/05/2014 15:06	1.87	-113	6.47	0.20	3.789	18.82	23.20
MW-326	03/23/2015 13:05	4.20	-84	6.04	0.30	5.515	12.36	18.75
MW-326	03/23/2015 13:38	6.73	-98	6.05	0.26	4.891	12.37	28.90
MW-326	09/18/2015 10:24	10.74	-47	6.95	0.4	7.258	17.3	41.6
MW-326	11/18/2015 13:29	3.31	-39	6.31	0.4199	7546.4750	16.32	30.1
MW-326	11/18/2015 13:32	1.21	-47	6.03	1.7213	27837.2514	16.22	35.9
MW-326	11/18/2015 13:36	1.22	-55	5.98	1.9689	31481.5759	15.99	31.7
MW-326	11/18/2015 13:39	1.11	-57	5.95	2.0579	32776.8887	15.96	32.1
MW-326	11/18/2015 13:43	1.02	-59	5.93	2.1344	33888.5706	15.87	44.5
MW-326	11/18/2015 13:47	0.95	-61	5.93	2.1429	34015.1405	15.8	38.9
MW-326	11/18/2015 13:50	0.86	-63	5.94	2.0702	32925.1939	16.49	36.6
MW-326	11/18/2015 13:54	0.48	-63	5.94	1.8916	30322.1056	16.62	28.4
MW-326	11/18/2015 13:57	0.38	-64	5.95	1.8192	29259.7191	16.67	23.5
MW-326	11/18/2015 14:01	0.34	-66	5.97	1.7319	27972.0394	16.73	16.9
MW-326	11/18/2015 14:05	0.32	-69	5.99	1.6999	27499.9465	16.7	12.5
MW-326	11/18/2015 14:08	0.31	-70	6.01	1.6638	26965.2500	16.73	12.6
MW-326	11/18/2015 14:12	0.3	-72	6.02	1.6755	27138.8481	16.71	11.9
MW-326	11/18/2015 14:33	4.31	-97	6.85	0.43	7.635	17.00	58.70
MW-326	01/11/2016 11:24	12.53	119	7.34	0.3986	7411.4110	4.62	125.9
MW-326	01/11/2016 11:28	3.92	70	6.46	0.5048	9015.1058	12.61	59
MW-326	01/11/2016 11:32	4.36	30	6.31	0.4793	8582.8793	13.05	84
MW-326	01/11/2016 11:35	5.32	2	6.24	0.4553	8178.1853	13.22	96.3
MW-326	01/11/2016 11:39	5.67	-9	6.19	0.4283	7723.7220	13.22	136.6
MW-326	01/11/2016 11:42	5.8	-10	6.11	0.4054	7339.5419	13.06	184.3
MW-326	01/11/2016 11:46	5.47	-13	6.08	0.3991	7228.7054	13.35	172.8
MW-326	01/11/2016 11:50	5.39	-15	6.06	0.3926	7118.9147	13.33	171.3
MW-326	01/11/2016 12:12	4.62	-46	6.76	0.45	8.098	14.78	180.4
MW-326	04/12/2016 13:05	2.76	30	5.69	0.4010	7298.8033	10.82	127.5
MW-326	04/12/2016 13:06	2.7	29	5.7	NM	7302.2003	10.89	125.2
MW-326	04/12/2016 13:09	1.07	-13	5.8	0.5065	9037.3788	13.03	133.2
MW-326	04/12/2016 13:14	0.4	-31	5.64	0.3668	6681.1935	13.19	78.7
MW-326	04/12/2016 13:15	0.39	-31	NM	NM	6696.8050	13.19	82.6
MW-326	04/12/2016 13:18	0.27	-33	5.56	0.3500	6394.5706	13.11	73.2
MW-326	04/12/2016 13:22	0.22	-34	5.54	0.3484	6367.6509	13.12	78.5
MW-326	04/12/2016 13:25	0.2	-39	5.56	0.3513	6416.9328	13.05	62.3
MW-326	04/12/2016 13:29	0.18	-42	5.57	0.3474	6347.6775	13.25	139

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-326	04/12/2016 13:33	0.19	-45	5.58	0.3452	6310.9256	13.22	54.5
MW-326	04/12/2016 13:36	0.19	-47	5.59	0.3464	6330.4444	13.3	61.4
MW-326	04/12/2016 13:40	0.21	-50	5.62	0.3481	6358.9908	13.35	54.5
MW-326	04/12/2016 13:43	0.19	-53	5.63	0.3446	6298.8176	13.46	61
MW-326	04/12/2016 13:47	0.21	-55	5.65	0.3423	6256.4366	13.66	60.7
MW-326	04/12/2016 13:51	0.23	-58	5.67	0.3409	6231.4154	13.75	52.3
MW-326	04/12/2016 13:54	0.27	-60	5.68	0.3415	6241.7920	13.81	57.7
MW-326	04/12/2016 14:16	1.63	-50	5.79	0.41	7.445	14.35	120.40
MW-326	07/19/2016 12:28	5.15	-62	5.92	NM	6233	24.76	20.5
MW-326	07/19/2016 12:30	3.59	-78	5.9	NM	8275.19	22.79	24.6
MW-326	07/19/2016 12:32	2.67	-85	5.93	NM	9962.17	20.97	25.4
MW-326	07/19/2016 12:34	2.03	-87	5.95	NM	10455.93	20.41	21.8
MW-326	07/19/2016 12:35	1.64	-89	5.97	NM	10669.41	20.38	25.4
MW-326	07/19/2016 12:37	1.37	-90	5.98	NM	10762.5	20.32	23
MW-326	07/19/2016 12:39	1.19	-91	5.99	NM	10707.42	20.28	23.1
MW-326	07/19/2016 12:41	1.06	-92	5.99	NM	10892.2	20.25	23.1
MW-326	07/19/2016 12:43	0.98	-92	6	NM	10720.16	20.05	20.8
MW-326	07/19/2016 12:45	0.93	-93	6	NM	11040.36	19.89	19.6
MW-326	07/19/2016 12:46	0.9	-93	6.01	NM	11214.3	20.05	22.1
MW-326	07/19/2016 12:48	0.85	-94	6.01	NM	11213.03	20.43	20.5
MW-326	07/19/2016 12:50	0.85	-94	6.01	NM	11160.18	20.22	20
MW-326	07/19/2016 13:28	11.05	-65	6.33	0.63	10.940	16.76	59.90
MW-326	10/13/2016 08:51	3.21	-47	5.86	0.3931	7080.6692	18.4	20.7
MW-326	10/13/2016 08:54	2.55	-60	5.93	0.4782	8502.7121	18.3	27.4
MW-326	10/13/2016 08:58	1.23	-61	5.96	0.5031	8915.8440	18.22	25.2
MW-326	10/13/2016 09:01	0.86	-65	5.98	0.5031	8915.9826	18.15	20.4
MW-326	10/13/2016 09:05	0.73	-68	6	0.4935	8757.4051	18.15	19.7
MW-326	10/13/2016 09:09	0.67	-71	6.02	0.4903	8704.2909	18.17	20.2
MW-326	10/13/2016 09:12	0.63	-72	6.04	0.4852	8622.0934	18.03	19.9
MW-326	10/13/2016 09:16	0.62	-73	6.05	0.4833	8590.4874	18.01	19.8
MW-326	10/13/2016 09:36	4.51	51	5.56	0.36	6.521	18.88	88.90
MW-326	01/17/2017 13:16	4.9	-35	6.98	0.0495	1002.6249	10.78	37.8
MW-326	01/17/2017 13:20	1.47	-4	6.4	0.0513	1033.3522	13.03	114
MW-326	01/17/2017 13:23	1.02	2	6.27	0.0513	1031.1634	13.79	101.1
MW-326	01/17/2017 13:27	1.25	1	6.26	0.0505	1015.4980	13.97	77.1
MW-326	01/17/2017 13:30	1.66	-1	6.28	0.0500	1006.8033	14.07	63
MW-326	01/17/2017 13:34	1.72	-2	6.29	0.0499	1003.9492	14.06	57.7
MW-326	01/17/2017 13:38	1.7	-2	6.29	0.0498	1003.0523	14.12	60.9
MW-326	04/21/2017 10:29	5.36	-1	6.63	0.1786	0.0339	12.73	119.2
MW-326	04/21/2017 10:33	0.68	-15	6.16	0.2604	0.0484	13.68	73.1
MW-326	04/21/2017 10:37	0.26	-20	6.07	0.2233	0.0419	13.88	112.5
MW-326	04/21/2017 10:40	0.14	-16	5.96	0.1973	0.0372	13.84	172.8
MW-326	04/21/2017 10:44	0.08	-12	5.86	0.1881	0.0356	13.75	233.3
MW-326	04/21/2017 10:47	0.03	-11	5.83	0.1890	0.0358	13.71	233.6
MW-326	04/21/2017 10:51	0.01	-10	5.81	0.1881	0.0356	13.7	221.7
MW-326	04/21/2017 10:55	0	-11	5.83	0.1898	0.0359	13.69	203.9
MW-326	04/21/2017 10:58	0	-12	5.86	0.1899	0.0359	13.73	176.2
MW-326	04/21/2017 11:02	-0.01	-11	5.87	0.1925	0.0364	13.73	165.7
MW-326	04/21/2017 11:05	0	-11	5.89	0.1888	0.0357	13.82	159.4
MW-326	04/21/2017 11:09	-0.01	-10	5.88	0.1885	0.0357	13.82	137.5
MW-326	04/21/2017 11:13	-0.01	-10	5.89	0.1906	0.0360	13.81	118
MW-326	04/21/2017 11:16	0.01	-9	5.89	0.1897	0.0359	13.79	104.6
MW-326	04/21/2017 11:20	0.03	-9.00	5.91	0.19	3.612	13.47	99.51
MW-326	01/23/2018 11:14	3.28	236	7.69	0.2084	0.0392	13.82	15.8
MW-326	01/23/2018 11:17	1.4	229	7.11	0.2685	0.0498	14.33	10.3
MW-326	01/23/2018 11:21	0.59	216	6.89	0.2708	0.0501	14.44	12.5
MW-326	01/23/2018 11:24	0.45	207	6.74	1.0132	0.1717	14.14	9.7
MW-326	01/23/2018 11:27	0.4	199	6.64	1.0277	0.1740	14.01	10.8
MW-326	01/23/2018 11:31	0.35	192	6.55	1.0393	0.1758	13.96	9.6
MW-326	01/23/2018 11:34	0.3	186	6.49	1.0333	0.1749	13.98	11.8
MW-326	01/23/2018 11:38	0.26	180	6.43	1.0462	0.1769	13.97	12.5
MW-326	01/23/2018 11:41	0.23	174	6.39	1.0545	0.1782	13.96	13

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-326	01/23/2018 11:44	0.21	168	6.36	1.0615	0.1793	13.94	13.7
MW-326	01/23/2018 11:48	0.19	163	6.34	1.0645	0.1797	13.92	17.1
MW-326	01/23/2018 11:51	0.2	157	6.31	1.0594	0.1789	13.94	12.7
MW-326	01/23/2018 11:55	0.2	152	6.29	1.0689	0.1804	13.94	20.4
MW-326	01/23/2018 11:58	0.21	147	6.28	1.0681	0.1803	13.97	16.4
MW-326	01/23/2018 12:01	0.2	143	6.27	1.0599	0.1790	13.97	18.9
MW-326	01/23/2018 12:05	0.19	138.00	6.25	1.07	18.070	13.89	14.18
MW-326	04/10/2018 11:16	9.23	96	7.23	0.2127	0.0040	12.06	20.9
MW-326	04/10/2018 11:19	1.48	45	6.48	0.3028	0.0056	13.08	19.5
MW-326	04/10/2018 11:23	0.99	38	6.22	0.2686	0.0050	13.54	26.1
MW-326	04/10/2018 11:26	0.84	38	6.11	0.2260	0.0042	13.57	32.1
MW-326	04/10/2018 11:30	0.82	41	6.02	0.2166	0.0041	13.6	41.5
MW-326	04/10/2018 11:33	0.77	44	5.95	0.2135	0.0040	13.29	35.2
MW-326	04/10/2018 11:37	0.75	45	5.9	0.2124	0.0040	13.11	45.8
MW-326	04/10/2018 11:40	0.74	46	5.87	0.2118	0.0040	12.98	41.3
MW-326	04/10/2018 11:44	0.74	47	5.84	0.2128	0.0040	12.99	33.1
MW-326	04/10/2018 11:47	0.74	47	5.83	0.2081	0.0039	12.92	47.5
MW-326	04/10/2018 11:51	0.73	47	5.82	0.2128	0.0040	13.03	51.3
MW-326	04/10/2018 11:54	0.74	47	5.82	0.2071	0.0039	13.05	46.2
MW-326	04/10/2018 11:58	0.73	47	5.81	0.2082	0.0039	13.16	41.8
MW-326	04/10/2018 12:01	0.74	48	5.81	0.2092	0.0039	13.16	32.7
MW-326	04/10/2018 12:05	0.71	48.00	5.80	0.21	3.958	13.13	38.09
MW-326	07/16/2018 12:34	4.18	-55	5.98	0.209	3.9023	27.25	17.2
MW-326	07/16/2018 12:38	3.59	-81	5.94	0.262	4.8360	21.33	21.7
MW-326	07/16/2018 12:42	3.49	-89	5.96	0.263	4.8437	21.35	20.1
MW-326	07/16/2018 12:46	2.32	-92	5.97	0.254	4.7002	20.52	19
MW-326	07/16/2018 12:49	2.03	-95	5.97	0.250	4.6224	20.25	14.8
MW-326	07/16/2018 12:53	1.77	-96	5.98	0.246	4.5571	20.69	15.6
MW-326	07/16/2018 12:56	1.68	-97	5.98	0.245	4.5362	20.82	13.2
MW-326	07/16/2018 13:00	1.71	-99	5.99	0.243	4.5045	20.81	16.8
MW-326	07/16/2018 13:04	1.73	-100	5.99	0.242	4.4922	20.65	14.2
MW-326	07/16/2018 13:07	1.77	-102.00	6.00	0.24	4.097	20.64	13.98
MW-326	10/29/2018 14:00	2.05	-65.30	6.34	1.94	3.671	18	8.60
MW-326	04/03/2019 13:25	2.46	-85.5	6.21	NM	3.679	13.67	15.8
MW-326	07/02/2019 10:00	1.16	-46.3	6.08	NM	4.38	15.76	89.3
MW-326	07/02/2019 10:05	3.49	-41.1	6.03	NM	4.641	17.85	396.5
MW-326	07/02/2019 10:10	1.31	-59.8	6.02	NM	4.616	15.5	123.8
MW-326	07/02/2019 10:15	1.19	-62	6.03	NM	4.539	15.51	10.5
MW-326	07/02/2019 10:20	0.99	-61.2	6.05	NM	4.383	15.35	33.5
MW-326	07/02/2019 10:25	1.15	-52.3	6.05	NM	4.381	15.74	87.8
MW-326	07/02/2019 10:30	1.17	-49.3	6.07	NM	4.38	15.76	87.4
MW-326	07/02/2019 10:35	1.16	-46.3	6.08	NM	4.38	15.76	89.3
MW-326	10/02/2019 11:50	2.41	-92.5	6.05	NM	2.649	25.91	8.9
MW-326	10/02/2019 11:55	1.37	-77.5	6.1	NM	2.674	23.94	3.2
MW-326	10/02/2019 12:00	1.07	-70.7	6.13	NM	2.638	23.46	2.4
MW-326	10/02/2019 12:05	0.74	-64.2	6.13	NM	2.64	23.1	3.2
MW-326	10/02/2019 12:10	0.8	-63.2	6.12	NM	2.629	22.88	2
MW-326	10/02/2019 12:15	0.58	-62	6.12	NM	2.628	23.16	1.8
MW-326	10/02/2019 12:20	0.61	-61.8	6.12	NM	2.625	23.14	2.5
MW-326	10/02/2019 12:25	0.61	-60.4	6.12	NM	2.621	23.24	1.7
MW-326	10/02/2019 12:30	0.6	-59.2	6.12	NM	2.622	22.68	1.7
MW-326	10/02/2019 12:35	0.65	-59.6	6.12	NM	2.622	23.17	1.5
MW-326	01/03/2020 12:50	3.54	-36.8	6.2	NM	1.667	12.93	114.8
MW-326	01/03/2020 12:55	1.88	-73.3	6.13	NM	2.087	13.36	54.7
MW-326	01/03/2020 13:00	1.63	-79.8	6.14	NM	2.24	13.73	57.2
MW-326	01/03/2020 13:05	1.24	-81.3	6.16	NM	2.253	13.86	83.4
MW-326	01/03/2020 13:10	1.14	-79.9	6.18	NM	2.222	13.85	101.9
MW-326	01/03/2020 13:15	1.02	-73.7	6.19	NM	2.045	13.85	135.1
MW-326	01/03/2020 13:20	1.05	-67.4	6.21	NM	1.764	13.83	159.1
MW-326	01/03/2020 13:25	1.02	-58.9	6.21	NM	1.491	13.91	177.1
MW-326	01/03/2020 13:30	1	-53.8	6.2	NM	1.42	13.85	177
MW-326	01/03/2020 13:35	1	-46.9	6.19	NM	1.344	13.83	174.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-326	04/07/2020 09:20	0.65	464	5.44	NM	1.469	13.27	71.1
MW-326	07/13/2020 11:55	0.54	-11	6.07	NM	2.776	18.32	17.9
MW-326	10/12/2020 13:05	NM	NM	NM	NM	NM	NM	36.7
MW-326	10/14/2020 12:20	2.24	-38.3	6.09	1.35	2.597	19.3	26
MW-326	10/14/2020 12:25	1.09	-49.3	6.12	1.36	2.629	19.01	30.7
MW-326	10/14/2020 12:30	0.87	-53.5	6.13	1.37	2.645	18.83	29.6
MW-326	10/14/2020 12:35	0.83	-54.7	6.13	1.37	2.641	18.75	34
MW-326	10/14/2020 12:40	0.78	-54.4	6.13	1.36	2.623	18.74	41.5
MW-326	10/14/2020 12:45	0.79	-51.8	6.12	1.35	2.597	18.76	42.2
MW-326	10/14/2020 12:50	0.88	-45.5	6.09	1.33	2.557	18.78	52
MW-326	10/14/2020 12:55	1.01	-39.1	6.07	1.3	2.51	18.79	48.2
MW-326	10/14/2020 13:00	1.04	-36.6	6.05	1.29	2.491	18.81	44.6
MW-326	10/14/2020 13:05	1.03	-37.8	6.06	1.29	2.494	18.71	NM
MW-326	01/12/2021 09:05	1.87	171.9	5.95	1.08	2.081	11.05	61.5
MW-326	01/12/2021 09:10	1.79	178.4	5.81	1.07	2.089	11.07	62.7
MW-326	01/12/2021 09:15	1.81	210.2	5.66	1.07	2.083	12	56.7
MW-326	01/12/2021 09:20	2.24	215.6	5.66	1.06	2.059	11.82	50.8
MW-326	01/12/2021 09:25	2.43	218.8	5.66	1.07	2.085	11.15	51.1
MW-326	01/12/2021 09:30	2.51	220.9	5.67	1.08	2.094	10.7	46.6
MW-326	01/12/2021 09:35	2.52	233.4	5.67	1.07	2.085	9.77	43.5
MW-326	01/12/2021 09:40	2.58	233.6	5.68	1.07	2.085	9.72	43.2
MW-326	01/12/2021 09:45	2.64	225.4	5.68	1.06	2.075	8.94	43.7
MW-326	01/12/2021 09:50	2.59	225.1	5.68	1.06	2.074	8.88	43
MW-326	04/13/2021 11:45	2.98	93.2	5.86	1.9	3.576	14.77	103.3
MW-326	04/13/2021 11:50	1.28	28.1	5.86	1.94	3.658	14.55	87.7
MW-326	04/13/2021 11:55	1.01	44.8	5.76	1.86	3.522	14.44	95
MW-326	04/13/2021 12:00	0.81	64.3	5.66	1.76	3.353	14.62	81.9
MW-326	04/13/2021 12:05	0.62	73.3	5.59	1.7	3.222	14.37	105.2
MW-326	04/13/2021 12:10	0.73	75.6	5.58	1.66	3.158	14.56	92.5
MW-326	04/13/2021 12:15	0.55	68.7	5.62	1.66	3.159	14.57	104.8
MW-326	04/13/2021 12:20	0.54	66.6	5.62	1.68	3.149	14.58	78
MW-326	04/13/2021 12:25	0.56	66.7	5.6	1.66	3.148	14.51	83.7
MW-326	04/13/2021 12:30	0.54	52.8	5.69	1.68	3.186	14.2	100.3
MW-326	01/18/2022 12:10	7.15	-49.1	6.99	2.29	4.282	10.8	18.8
MW-326	01/18/2022 12:15	5.13	-5.3	6.13	2.26	4.226	12.75	16.3
MW-326	01/18/2022 12:20	4.97	-2.4	6.05	2.31	4.318	11.32	12.3
MW-326	01/18/2022 12:25	4.86	-2.1	6.02	2.31	4.326	11.02	11
MW-326	01/18/2022 12:30	4.88	-0.7	6.04	2.3	4.295	10.9	13
MW-326	01/18/2022 12:35	4.9	0.6	6.06	2.29	4.277	11.04	14.1
MW-326	01/18/2022 12:40	4.91	0.7	6.05	2.29	4.287	10.96	12.4
MW-326	01/18/2022 12:45	4.77	0.8	6.05	2.29	4.28	11.04	12.6
MW-326	01/18/2022 12:50	4.78	0.8	6.05	2.29	4.284	11.2	12.2
MW-326	04/11/2022 12:00	0.77	-45.6	6.13	1.21	2.334	15.51	21.2
MW-326	04/11/2022 12:05	0.66	-47.7	6.13	1.17	2.275	15.46	26.3
MW-326	04/11/2022 12:10	0.65	-49.1	6.16	0.99	2.036	15.28	33
MW-326	04/11/2022 12:15	0.71	-45.5	6.21	0.96	1.755	15.23	38.7
MW-326	04/11/2022 12:20	1.57	13.8	6.04	0.51	1.033	14.97	43.9
MW-326	04/11/2022 12:25	1.58	19.9	5.96	0.52	1.032	14.95	54.4
MW-326	04/11/2022 12:30	1.57	19.5	5.94	0.51	1.032	14.97	47.8
MW-326	04/11/2022 12:35	1.65	21.8	5.96	0.49	0.995	15	54.2
MW-326	04/11/2022 12:40	1.66	22.3	5.94	0.5	0.997	14.98	54.6
MW-326	04/11/2022 12:45	1.79	14	5.96	0.51	1.026	14.98	75.1
MW-327	03/13/2012 13:01	3.76	93	6.81	0.05	0.97405	18.19	10.1
MW-327	03/13/2012 13:04	1.57	52	6.71	0.06	1.18613	14.36	92.3
MW-327	03/13/2012 13:08	1.3	47	6.7	0.06	1.1873	14.27	186.7
MW-327	03/13/2012 13:12	1.18	45	6.7	0.06	1.18245	14.39	96
MW-327	03/13/2012 13:16	1.18	47	6.7	0.06	1.16488	14.88	44.8
MW-327	03/13/2012 13:19	1.12	49	6.7	0.06	1.1574	14.95	35
MW-327	03/13/2012 13:23	1.04	50	6.7	0.06	1.1551	15.15	32.9
MW-327	03/13/2012 13:27	0.95	48	6.7	0.06	1.1477	15.08	32.9
MW-327	03/13/2012 13:30	0.87	47	6.7	0.06	1.14685	15.11	34.4
MW-327	03/13/2012 13:34	0.81	46	6.7	0.06	1.13767	15.13	30.5

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-327	03/13/2012 13:38	0.82	46	6.7	0.06	1.13783	15.25	29
MW-327	03/13/2012 13:42	0.85	46	6.71	0.06	1.13004	15.25	30.7
MW-327	03/13/2012 14:05	7.49	44	7.11	0.05	0.995	16.33	25.80
MW-327	03/14/2012 10:19	1.90	31	6.40	0.10	1.180	13.10	28.20
MW-327	05/18/2012 08:31	4.16	102	6.76	0.07	1.37212	19.07	26.1
MW-327	05/18/2012 08:33	2.26	87	6.69	0.07	1.33712	16.88	28.3
MW-327	05/18/2012 08:34	1.12	77	6.67	0.07	1.33443	16.22	28.2
MW-327	05/18/2012 08:35	0.7	71	6.66	0.07	1.33037	16.04	16.7
MW-327	05/18/2012 08:37	0.57	66	6.65	0.07	1.33313	15.93	16.8
MW-327	05/18/2012 08:38	0.52	63	6.65	0.07	1.33124	15.93	14.2
MW-327	05/18/2012 08:39	0.53	60	6.65	0.07	1.32963	15.84	14.2
MW-327	05/18/2012 08:41	0.55	58	6.64	0.07	1.32879	15.87	15.7
MW-327	05/18/2012 08:42	0.55	56	6.64	0.07	1.32544	15.95	8.4
MW-327	05/18/2012 08:43	0.54	54	6.63	0.07	1.3235	15.88	10.1
MW-327	05/18/2012 08:44	0.53	53	6.63	0.07	1.32366	15.96	7.6
MW-327	05/18/2012 08:46	0.49	52	6.63	0.07	1.32376	15.93	10.5
MW-327	05/18/2012 08:47	0.46	51	6.63	0.07	1.32346	15.93	16.3
MW-327	05/18/2012 08:48	0.43	50	6.63	0.07	1.32158	15.93	7.6
MW-327	05/18/2012 08:50	0.4	49	6.62	0.07	1.32118	15.95	5.7
MW-327	05/18/2012 08:51	0.37	48	6.62	0.07	1.32074	15.92	6.6
MW-327	05/18/2012 08:52	0.34	47	6.62	0.07	1.32071	15.95	6.4
MW-327	05/18/2012 08:54	0.33	47	6.62	0.07	1.31897	16.03	6.1
MW-327	05/18/2012 08:55	0.34	46	6.62	0.07	1.319	16.29	6.194
MW-327	05/18/2012 10:27	7.63	106	7.02	0.07	1.293	20.45	40.6
MW-327	05/19/2012 11:25	3.57	14	6.66	0.1	1.36	16.99	10
MW-327	07/31/2012 08:34	2.99	-21	6.72	0.06	1.27794	24.54	19.5
MW-327	07/31/2012 08:35	2.1	-5	6.61	0.07	1.40467	22.75	61.6
MW-327	07/31/2012 08:37	1.23	1	6.59	0.07	1.40952	21.13	60.6
MW-327	07/31/2012 08:38	0.88	3	6.59	0.07	1.40015	20.72	64
MW-327	07/31/2012 08:39	0.77	3	6.59	0.07	1.39742	20.57	55
MW-327	07/31/2012 08:41	0.72	3	6.59	0.07	1.38562	20.46	42.1
MW-327	07/31/2012 08:42	0.68	3	6.59	0.07	1.38734	20.42	34.8
MW-327	07/31/2012 08:43	0.65	2	6.59	0.07	1.37809	20.35	32.6
MW-327	07/31/2012 08:45	0.62	2	6.59	0.07	1.38127	20.28	29.3
MW-327	07/31/2012 08:46	0.58	1	6.59	0.07	1.373	20.29	25
MW-327	07/31/2012 08:47	0.55	1	6.59	0.07	1.38119	20.23	22.6
MW-327	07/31/2012 08:49	0.52	1	6.6	0.07	1.37081	20.19	23.6
MW-327	07/31/2012 08:50	0.5	1	6.6	0.07	1.37643	20.11	20.7
MW-327	07/31/2012 08:51	0.47	1	6.6	0.07	1.36654	20.03	30.7
MW-327	07/31/2012 08:52	0.45	1	6.6	0.07	1.37741	20.02	17.9
MW-327	07/31/2012 08:54	0.43	0	6.6	0.07	1.36616	20.03	15.6
MW-327	07/31/2012 08:55	0.41	0	6.6	0.07	1.37095	20.05	16.2
MW-327	07/31/2012 08:56	0.39	0	6.6	0.07	1.36265	20.03	17.5
MW-327	07/31/2012 08:58	0.37	0	6.6	0.07	1.36349	19.92	13.6
MW-327	07/31/2012 08:59	0.35	0	6.6	0.07	1.36674	19.96	13
MW-327	07/31/2012 09:00	0.34	0	6.6	0.07	1.36496	19.98	15
MW-327	07/31/2012 09:02	0.33	-1	6.6	0.07	1.36636	19.89	13
MW-327	07/31/2012 09:03	0.32	-1	6.6	0.07	1.36047	19.84	12.5
MW-327	07/31/2012 09:04	0.31	-1	6.60	0.70	1.369	19.76	13.72
MW-327	07/31/2012 10:52	4.81	-20	6.94	0.60	1.272	24.59	9.70
MW-327	08/01/2012 09:12	5.80	10	6.60	0.10	1.390	24.77	17.40
MW-327	09/06/2013 09:49	0.63	-370	6.46	0.18	3.361	16.58	4.31
MW-327	11/11/2013 13:25	1.10	-294	6.22	0.21	3.935	14.38	12.11
MW-327	03/11/2014 14:10	0.72	-100	6.33	0.15	2.948	13.02	5.54
MW-327	03/11/2014 14:36	6.60	-24	7.31	0.07	1.455	15.22	9.20
MW-327	05/23/2014 09:22	1.48	-422	6.33	0.37	6.744	13.78	8.02
MW-327	08/07/2014 13:15	1.76	-456	6.48	0.09	1.794	18.20	6.92
MW-327	08/07/2014 13:47	5.98	-191	7.64	0.10	1.866	28.31	8.00
MW-327	10/23/2014 11:19	-0.10	13	6.37	0.15	2.880	11.65	69.11
MW-327	10/23/2014 11:48	8.64	14	6.70	0.14	2.698	14.32	61.10
MW-327	03/23/2015 11:01	0.74	52	6.32	0.09	1.804	9.63	29.21
MW-327	03/23/2015 11:30	9.11	103	6.32	0.06	1.300	7.15	139.50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-327	09/15/2015 09:58	7.46	217	6.17	0.22	4.175	21.81	8.6
MW-327	11/16/2015 08:59	6.97	139	6.77	0.1922	3623.6834	15.66	2.1
MW-327	11/16/2015 09:02	1.24	-25	6.48	0.2254	4214.7831	15.2	55.3
MW-327	11/16/2015 09:06	0.5	-29	6.34	0.2265	4233.7305	15.28	22.3
MW-327	11/16/2015 09:09	0.41	-29	6.29	0.1995	3755.7996	15.31	14.2
MW-327	11/16/2015 09:13	0.4	-29	6.27	0.2076	3897.9864	15.33	9.7
MW-327	11/16/2015 09:16	0.36	-30	6.27	0.2238	4184.3143	15.38	8.1
MW-327	11/16/2015 09:20	0.33	-31	6.28	0.2249	4204.5699	15.4	6.5
MW-327	11/16/2015 09:23	0.31	-31	6.28	0.2246	4198.9983	15.45	6.5
MW-327	11/16/2015 09:27	0.29	-32	6.28	0.2218	4148.2161	15.49	11.2
MW-327	11/16/2015 09:30	0.27	-32	6.29	0.1986	3738.4911	15.52	6.9
MW-327	11/16/2015 09:34	0.24	-33	6.29	0.2000	3763.0246	15.53	7.7
MW-327	11/16/2015 09:37	0.22	-34	6.3	0.2187	4094.2276	15.6	8.9
MW-327	11/16/2015 09:41	0.21	-33	6.3	0.2195	4107.2065	15.67	10.5
MW-327	11/16/2015 09:45	0.2	-34	6.3	0.2193	4103.4069	15.73	11
MW-327	11/16/2015 09:48	0.19	-35	6.3	0.1891	3567.4943	15.77	9.8
MW-327	11/16/2015 10:16	7.56	119	6.94	0.20	3.826	15.13	16.40
MW-327	01/11/2016 09:19	13.7	106	7.47	0.0946	1894.2825	5.24	7.4
MW-327	01/11/2016 09:22	6.13	62	7.22	0.0763	1516.9333	11.2	8.7
MW-327	01/11/2016 09:25	5.73	30	7.09	0.0758	1504.1642	11.89	7
MW-327	01/11/2016 09:29	2.85	10	6.93	0.0776	1538.0154	12.09	5.8
MW-327	01/11/2016 09:32	1.03	-6	6.78	0.0780	1544.5918	12.18	4.7
MW-327	01/11/2016 09:35	0.85	-15	6.68	0.0778	1541.0768	12.19	5.8
MW-327	01/11/2016 09:39	0.83	-21	6.61	0.0775	1535.1376	12.24	5.5
MW-327	01/11/2016 09:42	0.83	-26	6.56	0.0779	1544.1736	12.05	6
MW-327	01/11/2016 09:45	0.83	-29	6.53	0.0793	1571.3228	11.73	8.3
MW-327	01/11/2016 09:49	0.78	-32	6.49	0.0784	1553.0441	11.98	5.9
MW-327	01/11/2016 09:52	0.66	-34	6.47	0.0787	1558.7450	11.95	6.4
MW-327	01/11/2016 09:55	0.64	-36	6.45	0.0794	1573.3526	11.82	6.6
MW-327	01/11/2016 09:59	0.63	-38	6.45	0.2855	5295.6691	11.63	6.2
MW-327	01/11/2016 10:02	0.61	-39	6.43	0.2919	5409.3341	11.54	6.3
MW-327	01/11/2016 10:05	0.63	-40	6.42	0.2891	5357.8116	11.68	5.3
MW-327	01/11/2016 10:09	0.6	-42	6.41	0.2984	5524.3504	11.39	5.8
MW-327	01/11/2016 10:32	7.97	14	7.23	0.37	6.724	9.3	20.8
MW-327	04/12/2016 09:14	2.29	-6	6.18	0.2400	4478.9765	14.03	60.9
MW-327	04/12/2016 09:20	0.43	-33	6.1	0.2659	4942.9149	12.71	88.2
MW-327	04/12/2016 09:21	0.44	-35	6.09	0.2682	4982.8706	12.73	106.2
MW-327	04/12/2016 09:25	0.4	-41	6.1	0.2698	5008.7442	12.88	67.9
MW-327	04/12/2016 09:26	0.38	-41	6.1	0.2700	5013.8060	12.88	200.3
MW-327	04/12/2016 09:30	0.3	-46	6.11	0.2692	4998.5318	12.94	45.4
MW-327	04/12/2016 09:33	0.26	-48	6.12	0.2698	5009.6099	12.96	37.7
MW-327	04/12/2016 09:37	0.22	-51	6.13	0.2650	4925.0501	13.02	62.8
MW-327	04/12/2016 09:38	0.2	-51	NM	NM	4948.3001	13.02	27.8
MW-327	04/12/2016 09:41	0.18	-54	6.13	0.2701	5013.1972	13.05	21.7
MW-327	04/12/2016 09:42	0.17	-54	6.14	0.2710	5029.3293	13.05	21.8
MW-327	04/12/2016 09:45	0.16	-55	6.14	0.2706	5022.4895	13.07	45.5
MW-327	04/12/2016 09:48	0.13	-57	6.15	0.2730	5064.6030	13.06	24.9
MW-327	04/12/2016 09:51	0.11	-59	6.15	0.2731	5064.7911	13.08	26
MW-327	04/12/2016 09:55	0.1	-60	6.16	0.2736	5074.2172	13.08	13.5
MW-327	04/12/2016 09:58	0.09	-61	6.16	0.2744	5088.6361	13.1	20.4
MW-327	04/12/2016 10:01	0.07	-62	6.16	0.2755	5107.4458	13.11	10.2
MW-327	04/12/2016 10:36	2.37	-21	6.31	0.31	5.726	12.25	67.90
MW-327	10/21/2016 08:34	7.64	8	6.53	0.1094	2118.6282	19.1	16.4
MW-327	10/21/2016 08:38	2.53	-15	6.32	0.1152	2227.0979	17.47	243.3
MW-327	10/21/2016 08:42	1.02	-20	6.29	0.1193	2301.6895	17.3	672.7
MW-327	10/21/2016 08:45	0.88	-20	6.3	0.1526	2909.9637	16.86	1046
MW-327	10/21/2016 08:49	0.74	-23	6.32	0.1201	2318.3277	16.76	396.8
MW-327	10/21/2016 08:53	0.65	-24	6.33	0.1284	2470.7103	16.76	215.8
MW-327	10/21/2016 08:56	0.6	-27	6.34	0.1194	2304.7880	16.7	169.8
MW-327	10/21/2016 09:00	0.58	-28	6.35	0.1189	2296.7410	16.69	162.6
MW-327	10/21/2016 09:03	0.56	-29	6.36	0.1181	2281.6806	16.69	144.3
MW-327	10/21/2016 09:07	0.51	-30	6.36	0.1180	2280.6732	16.65	117.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-327	10/21/2016 09:11	0.44	-31	6.36	0.1178	2275.6762	16.65	103.9
MW-327	10/21/2016 09:14	0.46	-31	6.36	0.1182	2283.1763	16.66	90.4
MW-327	10/21/2016 09:18	0.44	-32	6.36	0.1181	2280.9230	16.65	86.6
MW-327	10/21/2016 09:21	0.43	-33	6.36	0.1179	2278.6687	16.64	85.3
MW-327	10/21/2016 09:45	5.59	-2	6.89	0.12	2.290	18.29	37.70
MW-327	01/20/2017 09:23	8.15	157	6.75	0.1088	2144.7622	7.94	17.1
MW-327	01/20/2017 09:27	2.98	55	6.62	0.1084	2118.0943	11.47	135.7
MW-327	01/20/2017 09:31	1.63	30	6.51	0.1092	2133.1982	11.59	80.5
MW-327	01/20/2017 09:34	1.2	24	6.45	0.1091	2132.7188	11.15	50.8
MW-327	01/20/2017 09:38	0.98	21	6.43	0.1088	2127.7330	11.02	40.4
MW-327	01/20/2017 09:41	0.85	22	6.41	0.1083	2118.9251	11.16	35.9
MW-327	01/20/2017 09:45	0.72	21	6.4	0.1077	2107.9596	11.11	32.1
MW-327	01/20/2017 09:49	0.61	21	6.4	0.1071	2095.9792	11.17	29.8
MW-327	01/20/2017 09:52	0.52	20	6.4	0.1064	2081.7359	11.25	30.6
MW-327	01/20/2017 09:56	0.47	20	6.4	0.1059	2072.1550	11.31	27.4
MW-327	01/20/2017 09:59	0.42	21	6.4	0.1055	2064.8989	11.33	28.7
MW-327	01/20/2017 10:03	0.39	21	6.4	0.1053	2061.0531	11.28	27.5
MW-327	01/20/2017 10:07	0.36	21	6.39	0.1050	2055.4620	11.38	25.3
MW-327	01/20/2017 10:10	0.33	21	6.39	0.1048	2051.8808	11.43	25.7
MW-327	01/20/2017 10:14	0.32	22	6.39	0.1047	2048.9192	11.46	27.5
MW-327	04/18/2017 10:35	5.66	244	7.01	0.1285	0.0247	15.97	27.4
MW-327	04/18/2017 10:39	1.54	249	6.74	0.1189	0.0230	14.1	128.8
MW-327	04/18/2017 10:42	0.45	246	6.59	0.1187	0.0230	14.04	83.6
MW-327	04/18/2017 10:46	0.25	241	6.49	0.1187	0.0230	13.96	97.8
MW-327	04/18/2017 10:49	0.17	235	6.43	0.1177	0.0228	13.93	96.7
MW-327	04/18/2017 10:52	0.12	229	6.39	0.1164	0.0226	13.97	95.8
MW-327	04/18/2017 10:56	0.09	224	6.37	0.1152	0.0224	13.91	105.2
MW-327	04/18/2017 10:59	0.07	218	6.36	0.1136	0.0221	13.98	100.4
MW-327	04/18/2017 11:02	0.06	212	6.35	0.1133	0.0220	14.03	93
MW-327	04/18/2017 11:06	0.04	207	6.34	0.1127	0.0219	14.02	94.4
MW-327	04/18/2017 11:09	0.04	201	6.34	0.1123	0.0218	13.96	86
MW-327	04/18/2017 11:13	0.04	196	6.34	0.1117	0.0217	14	76.9
MW-327	04/18/2017 11:16	0.02	190	6.34	0.1117	0.0217	13.95	73.3
MW-327	04/18/2017 11:19	0.95	185	6.34	0.1113	0.0216	14.04	75.1
MW-327	04/18/2017 11:23	0.01	180	6.34	0.1110	0.0216	13.99	67.2
MW-327	04/18/2017 11:26	0.01	176.00	6.34	0.11	2.176	13.75	67.13
MW-327	01/22/2018 09:59	7.63	172	8	0.1485	0.0287	9.17	20.6
MW-327	01/22/2018 10:03	1.88	171	7.66	0.1906	0.0362	11.88	22.8
MW-327	01/22/2018 10:06	0.85	170	7.42	0.1927	0.0365	12.48	17.9
MW-327	01/22/2018 10:09	0.57	168	7.27	0.1946	0.0368	12.56	15.9
MW-327	01/22/2018 10:13	4.19	164	7.16	0.1955	0.0370	12.64	12.9
MW-327	01/22/2018 10:16	3.41	161	7.07	0.1960	0.0371	12.75	13.5
MW-327	01/22/2018 10:19	2.15	158	6.99	0.1969	0.0372	12.79	12.9
MW-327	01/22/2018 10:23	0.4	155	6.92	0.1973	0.0373	12.87	12.4
MW-327	01/22/2018 10:26	0.72	152	6.86	0.1978	0.0374	12.94	11.2
MW-327	01/22/2018 10:30	1.28	149	6.81	0.1987	0.0375	12.96	9.8
MW-327	01/22/2018 10:33	1.38	147	6.76	0.1988	0.0376	13	10.4
MW-327	01/22/2018 10:36	0.48	145	6.72	0.1988	0.0376	13.09	77.5
MW-327	01/22/2018 10:40	0.33	142	6.69	0.1992	0.0376	13.07	10
MW-327	01/22/2018 10:43	0.18	141	6.66	0.1998	0.0377	13.08	9.6
MW-327	01/22/2018 10:46	1.21	139	6.63	0.2000	0.0378	13.09	8.7
MW-327	01/22/2018 10:50	0.37	137.00	6.60	0.20	3.798	12.9	8.71
MW-327	04/10/2018 09:09	6.22	181	7.57	0.1193	0.0023	8.85	75.6
MW-327	04/10/2018 09:12	3.01	165	6.99	0.1179	0.0023	9.46	163.5
MW-327	04/10/2018 09:16	1.36	154	6.78	0.1183	0.0023	10.1	105.7
MW-327	04/10/2018 09:20	1.21	147	6.66	0.1170	0.0023	10.17	109.4
MW-327	04/10/2018 09:23	1.19	143	6.58	0.1171	0.0023	10.2	170.1
MW-327	04/10/2018 09:27	1.29	140	6.5	0.1150	0.0022	10.26	316.9
MW-327	04/10/2018 09:31	1.31	139	6.44	0.1123	0.0022	10.31	415
MW-327	04/10/2018 09:34	1.32	137	6.38	0.1130	0.0022	10.36	447.6
MW-327	04/10/2018 09:38	1.32	136.00	6.33	0.11	2.215	10.23	443.90
MW-327	07/16/2018 10:21	4.23	-16	6.21	0.124	2.3740	29.15	8.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-327	07/16/2018 10:24	3.45	-62	6.24	0.124	2.3850	20.54	527
MW-327	07/16/2018 10:28	2.11	-84	6.19	0.123	2.3740	20.48	212.1
MW-327	07/16/2018 10:32	1.8	-91	6.19	0.123	2.3680	19.94	114.2
MW-327	07/16/2018 10:36	1.71	-99	6.19	0.122	2.3430	19.52	75.3
MW-327	07/16/2018 10:39	1.55	-103	6.19	0.121	2.3360	19.27	64.4
MW-327	07/16/2018 10:43	1.33	-106	6.2	0.120	2.3170	19.46	63
MW-327	07/16/2018 10:46	1.24	-108	6.2	0.120	2.3120	19.35	55.3
MW-327	07/16/2018 10:50	1.14	-110	6.2	0.120	2.3050	19.55	54.9
MW-327	07/16/2018 10:54	1.12	-113	6.21	0.119	2.2920	19.03	49
MW-327	07/16/2018 10:57	1.05	-114	6.21	0.118	2.2790	19.07	50.5
MW-327	07/16/2018 11:01	1.06	-116	6.21	0.118	2.2800	18.99	47.6
MW-327	10/29/2018 12:05	0.33	30.60	6.55	1.07	2.091	15.23	3.40
MW-327	04/03/2019 09:30	2.05	21.3	6.38	NM	2.137	12.26	9.7
MW-327	07/02/2019 10:05	3.91	19.9	6.42	NM	2.227	18.06	279.1
MW-327	07/02/2019 10:10	1	33.1	6.31	NM	2.259	15.89	173.4
MW-327	07/02/2019 10:15	0.91	33.2	6.32	NM	2.248	15.65	50.7
MW-327	07/02/2019 10:20	0.89	32.6	6.34	NM	2.23	15.61	33.7
MW-327	07/02/2019 10:25	0.85	31.1	6.37	NM	2.233	15.56	28.7
MW-327	07/02/2019 10:30	0.79	30.6	6.38	NM	2.225	15.56	24.3
MW-327	07/02/2019 10:35	0.75	29.3	6.39	NM	2.227	15.53	86.2
MW-327	07/02/2019 10:40	0.81	29.5	6.37	NM	2.223	15.57	106.1
MW-327	07/02/2019 10:45	0.74	31.7	6.33	NM	2.215	15.41	90
MW-327	07/02/2019 10:50	0.72	33.7	6.29	NM	2.2	15.51	94.2
MW-327	07/02/2019 11:35	0.72	33.7	6.29	NM	2.2	15.51	94.2
MW-327	10/02/2019 13:55	3.44	-20.9	6.36	NM	1.443	25.41	2.2
MW-327	10/02/2019 14:00	1.19	4.3	6.33	NM	1.415	22.51	28.8
MW-327	10/02/2019 14:05	0.56	18.4	6.32	NM	1.415	20.82	20.5
MW-327	10/02/2019 14:10	0.47	21.7	6.36	NM	1.413	20.11	3
MW-327	10/02/2019 14:15	0.44	23	6.34	NM	1.397	19.93	4.1
MW-327	10/02/2019 14:20	0.42	23.5	6.34	NM	1.389	19.93	4.3
MW-327	10/02/2019 14:25	0.4	23.6	6.34	NM	1.381	19.78	4
MW-327	01/03/2020 10:55	7.29	139	6.67	NM	1.209	10.07	21.1
MW-327	01/03/2020 11:00	6.18	127.1	6.62	NM	1.21	10.66	17.4
MW-327	01/03/2020 11:05	5.24	95.8	6.56	NM	1.219	10.9	16.1
MW-327	01/03/2020 11:10	4.26	75	6.49	NM	1.227	11.01	14.7
MW-327	01/03/2020 11:15	3.08	64.6	6.44	NM	12.3	12.27	11.5
MW-327	01/03/2020 11:20	2.6	59.1	6.42	NM	1.231	12.57	9.8
MW-327	01/03/2020 11:25	2.53	57.1	6.42	NM	1.228	12.6	9.6
MW-327	01/03/2020 11:30	2.3	55.3	6.41	NM	1.225	12.64	9.2
MW-327	01/03/2020 11:35	2.12	54.3	6.41	NM	1.221	12.75	9
MW-327	01/03/2020 11:40	2.18	54.2	6.41	NM	1.22	12.83	7.4
MW-327	04/07/2020 13:00	0.12	481	4.83	NM	1.631	16.3	10.9
MW-327	09/25/2020 13:55	NM	NM	NM	NM	NM	NM	13
MW-327	10/12/2020 13:10	0.54	87.8	6.82	0.62	1.246	17.03	21.3
MW-327	10/12/2020 13:15	0.53	90	6.64	0.62	1.246	17.04	22.9
MW-327	10/12/2020 13:20	0.51	51.5	6.28	0.62	1.243	16.63	15.5
MW-327	10/12/2020 13:25	0.53	41.8	6.26	0.62	1.243	16.27	14
MW-327	10/12/2020 13:30	0.56	39.3	6.24	0.62	1.246	15.89	80.3
MW-327	10/12/2020 13:35	0.58	40.7	6.22	0.62	1.235	15.65	14.4
MW-327	10/12/2020 13:40	0.53	39.5	6.22	0.61	1.217	15.55	16.3
MW-327	10/12/2020 13:45	0.53	39.6	6.23	0.61	1.209	15.51	12.5
MW-327	10/12/2020 13:50	0.51	39.1	6.23	0.6	1.204	15.5	13
MW-327	10/12/2020 13:55	0.51	39.1	6.22	0.6	1.204	15.49	NM
MW-327	01/08/2021 08:35	6.17	68.7	7.06	1.18	2.292	7.24	25.1
MW-327	01/08/2021 08:40	5.24	111.5	6.67	1.18	2.286	9.37	12.7
MW-327	01/08/2021 08:45	5.16	115.8	6.61	1.18	2.283	10.15	14.2
MW-327	01/08/2021 08:50	4.62	68.9	6.55	1.18	2.288	10.79	14.2
MW-327	01/08/2021 08:55	3.72	48.2	6.49	1.18	2.291	11.01	11.1
MW-327	01/08/2021 09:00	2.99	40.5	6.45	1.18	2.282	11.21	9
MW-327	01/08/2021 09:05	2.69	37.9	6.43	1.17	2.275	11.39	8.2
MW-327	01/08/2021 09:10	2.24	33.4	6.4	1.17	2.265	11.76	6.6
MW-327	01/08/2021 09:15	2	31.9	6.4	1.17	2.262	11.84	5.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-327	01/08/2021 09:20	1.93	31.3	6.39	1.17	2.26	11.57	5.4
MW-327	04/06/2021 14:00	1.57	107.7	6.28	1.22	2.358	16.18	5.3
MW-327	04/06/2021 14:05	0.58	102.4	6.18	1.22	2.346	14.78	1.8
MW-327	04/06/2021 14:10	0.44	100	6.17	1.22	2.348	14.42	3.8
MW-327	04/06/2021 14:15	0.38	96.3	6.21	1.21	2.325	14.51	38.7
MW-327	04/06/2021 14:20	0.29	92.2	6.23	1.18	2.282	14.78	26
MW-327	04/06/2021 14:25	0.27	90.6	6.27	1.16	2.255	14.78	33.4
MW-327	04/06/2021 14:30	0.25	88.4	6.28	1.14	2.243	14.76	45.7
MW-327	04/06/2021 14:35	0.23	87.2	6.28	1.15	2.235	14.74	41.1
MW-327	04/06/2021 14:40	0.22	85.7	6.29	1.15	2.222	14.81	32.2
MW-327	04/06/2021 14:45	0.22	84.5	6.29	1.14	2.216	14.97	27.3
MW-327	01/14/2022 12:25	4.43	56.6	6.03	1.13	2.187	10.87	28.7
MW-327	01/14/2022 12:30	3.28	102	5.88	1.13	2.199	11.58	16.3
MW-327	01/14/2022 12:35	3.06	116	5.85	1.14	2.211	11.7	15.7
MW-327	01/14/2022 12:40	2.61	125.1	5.78	1.14	2.216	11.74	16.2
MW-327	01/14/2022 12:45	2.42	128.6	5.77	1.14	2.218	11.39	13
MW-327	01/14/2022 12:50	2.34	127.4	5.89	1.14	2.213	11.23	12.2
MW-327	01/14/2022 12:55	2.25	129.2	5.87	1.14	2.211	10.83	11.9
MW-327	01/14/2022 13:00	2.12	133.4	5.79	1.14	2.21	11.07	12.2
MW-327	01/14/2022 13:05	1.98	135.1	5.81	1.14	2.209	10.8	11.2
MW-327	01/14/2022 13:10	1.94	134	5.84	1.14	2.208	10.61	11.5
MW-327	04/05/2022 09:10	1.64	136.4	5.93	1.19	2.29	11.37	86.3
MW-327	04/05/2022 09:15	1.33	143.8	5.93	1.19	2.3	11.86	146
MW-327	04/05/2022 09:20	1.35	139.6	5.95	1.19	2.302	11.91	132
MW-327	04/05/2022 09:25	1.53	197.7	6.1	1.19	2.306	12.38	69
MW-327	04/05/2022 09:30	1.6	169.1	6.1	1.19	2.296	12.18	109.1
MW-327	04/05/2022 09:35	1.6	58.5	6.11	1.16	2.244	12.44	140.6
MW-327	04/05/2022 09:40	1.6	56.4	6.11	1.15	2.239	12.47	141.6
MW-327	04/05/2022 09:45	1.51	39.1	6.16	1.14	2.212	12.61	63.6
MW-327	04/05/2022 09:50	1.52	38.3	6.16	1.14	2.211	12.66	66.8
MW-327	04/05/2022 09:55	1.52	64.7	6.16	1.14	2.21	12.69	37.4
MW-328	03/20/2012 10:05	2.9	-10	6.97	0.04	0.7912	15.57	290.9
MW-328	03/20/2012 10:09	1.66	-15	6.93	0.05	0.99662	14.01	1736.3
MW-328	03/20/2012 10:13	1.08	-27	6.93	0.06	1.11236	14.08	1749.2
MW-328	03/20/2012 10:17	1.14	-36	6.94	0.06	1.19924	14.09	383.5
MW-328	03/20/2012 10:21	0.92	-42	6.95	0.06	1.24841	14.16	86.3
MW-328	03/20/2012 10:25	0.89	-45	6.95	0.06	1.27838	14.32	100.5
MW-328	03/20/2012 10:29	0.99	-48	6.95	0.07	1.30221	14.25	150.4
MW-328	03/20/2012 10:33	0.99	-51	6.95	0.07	1.30934	14.41	1431
MW-328	03/20/2012 10:37	1.04	-53	6.95	0.07	1.31494	14.5	268.7
MW-328	03/20/2012 10:41	1.01	-54	6.95	0.07	1.32184	14.65	921.8
MW-328	03/20/2012 10:44	1.05	-56	6.95	0.07	1.3349	14.46	996.2
MW-328	03/20/2012 10:48	1.13	-57	6.95	0.07	1.34234	14.65	546.8
MW-328	03/20/2012 10:52	0.94	-59	6.95	0.07	1.34263	14.82	1930.5
MW-328	03/20/2012 10:53	0.94	-59	6.95	0.07	1.343	14.82	931.00
MW-328	03/20/2012 11:46	8.46	-29	7.13	0.04	0.903	16.44	73.40
MW-328	03/21/2012 10:05	1.10	-64	6.45	0.10	1.270	13.10	49.20
MW-328	05/23/2012 13:46	3.26	-34	7.04	0.07	1.45074	21.31	16.1
MW-328	05/23/2012 13:47	1.4	-48	6.6	0.07	1.46563	19.53	16.9
MW-328	05/23/2012 13:49	0.84	-55	6.58	0.07	1.45706	19.18	21.8
MW-328	05/23/2012 13:50	0.72	-60	6.6	0.07	1.45985	18.63	34.5
MW-328	05/23/2012 13:51	0.79	-64	6.61	0.07	1.45988	18.65	27.6
MW-328	05/23/2012 13:53	0.82	-67	6.61	0.07	1.45376	18.69	29.7
MW-328	05/23/2012 13:54	0.83	-69	6.62	0.07	1.45916	18.62	26
MW-328	05/23/2012 13:55	0.77	-71	6.62	0.07	1.45392	18.51	24.9
MW-328	05/23/2012 13:57	0.71	-73	6.63	0.07	1.45852	18.45	19
MW-328	05/23/2012 13:58	0.64	-75	6.63	0.07	1.45576	18.59	22.6
MW-328	05/23/2012 13:59	0.58	-76	6.63	0.07	1.4552	18.5	17.5
MW-328	05/23/2012 14:01	0.53	-77	6.64	0.07	1.45825	18.48	16.7
MW-328	05/23/2012 14:02	0.47	-79	6.64	0.07	1.45601	18.5	25.5
MW-328	05/23/2012 14:03	0.42	-80	6.64	0.07	1.45309	18.4	15.7
MW-328	05/23/2012 14:05	0.38	-81	6.65	0.07	1.44605	18.45	17.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	05/23/2012 14:06	0.34	-83	6.65	0.07	1.4516	18.43	17.9
MW-328	05/23/2012 14:07	0.31	-84	6.65	0.07	1.44746	18.55	15.9
MW-328	05/23/2012 14:09	0.28	-85	6.66	0.07	1.44947	18.4	10.5
MW-328	05/23/2012 14:10	0.25	-86	6.66	0.07	1.44721	18.35	10.7
MW-328	05/23/2012 14:11	0.23	-87	6.67	0.07	1.44727	18.27	11.6
MW-328	05/23/2012 14:13	0.22	-88	6.67	0.07	1.44746	18.31	9.3
MW-328	05/23/2012 14:14	0.2	-89	6.67	0.07	1.44386	18.42	13
MW-328	05/23/2012 14:15	0.2	-90	6.67	0.07	1.44537	18.38	12.3
MW-328	05/23/2012 14:17	0.2	-90	6.67	0.07	1.44823	18.23	10.4
MW-328	05/23/2012 14:18	0.19	-91	6.67	0.07	1.45174	18.32	11.7
MW-328	05/23/2012 14:19	0.18	-91	6.68	0.07	1.44779	18.34	11.6
MW-328	05/23/2012 14:20	0.18	-91	6.67	0.07	1.44775	18.28	15.1
MW-328	05/23/2012 14:22	0.17	-92	6.68	0.07	1.45649	18.19	12.4
MW-328	05/23/2012 14:23	0.15	-93	6.68	0.07	1.45907	18.36	9.8
MW-328	05/23/2012 14:24	0.14	-94	6.68	0.07	1.46818	18.31	8.4
MW-328	05/23/2012 14:26	0.13	-95	6.68	0.07	1.47463	18.3	9.5
MW-328	05/23/2012 14:27	0.12	-96	6.69	0.07	1.47694	18.31	7.8
MW-328	05/23/2012 14:28	0.11	-97	6.69	0.08	1.47866	18.42	7.1
MW-328	05/23/2012 14:30	0.11	-97	6.69	0.07	1.47737	18.49	8.2
MW-328	05/23/2012 14:31	0.1	-98	6.69	0.08	1.48477	18.4	6.5
MW-328	05/23/2012 14:32	0.09	-98	6.69	0.08	1.47959	18.45	6.8
MW-328	05/23/2012 14:34	0.09	-99	6.7	0.08	1.485	18.18	5.863
MW-328	05/23/2012 15:40	6	-47	6.91	0.07	1.437	20.58	30.2
MW-328	05/24/2012 10:50	3.24	-56	6.75	0	0.899	18.25	23
MW-328	07/25/2012 09:00	2.06	-88	6.77	0.08	1.482	24.61	25.9
MW-328	07/25/2012 09:02	1.78	-92	6.75	0.08	1.511	23.95	19.9
MW-328	07/25/2012 09:03	1.46	-96	6.74	0.08	1.52	22.04	9.5
MW-328	07/25/2012 09:04	1.05	-101	6.74	0.08	1.513	21.6	9.9
MW-328	07/25/2012 09:06	0.86	-105	6.74	0.08	1.514	21.45	7.1
MW-328	07/25/2012 09:07	0.76	-108	6.75	0.08	1.513	21.3	9.6
MW-328	07/25/2012 09:08	0.7	-111	6.75	0.08	1.514	21.3	9.7
MW-328	07/25/2012 09:10	0.65	-113	6.75	0.08	1.514	21.16	7.6
MW-328	07/25/2012 09:11	0.61	-114	6.75	0.08	1.516	21.13	7.3
MW-328	07/25/2012 09:12	0.57	-116	6.75	0.08	1.522	21.11	7.4
MW-328	07/25/2012 09:14	0.53	-117	6.75	0.08	1.523	21.1	6.8
MW-328	07/25/2012 09:15	0.49	-118	6.75	0.08	1.547	21.04	7.6
MW-328	07/25/2012 09:16	0.44	-119	6.75	0.08	1.56	20.94	7.8
MW-328	07/25/2012 09:18	0.41	-119	6.75	0.08	1.567	21.03	9.4
MW-328	07/25/2012 09:19	0.38	-120	6.75	0.08	1.569	20.97	7.5
MW-328	07/25/2012 09:20	0.34	-121	6.75	0.08	1.572	20.94	6.7
MW-328	07/25/2012 09:22	0.32	-122	6.75	0.08	1.575	20.98	6.4
MW-328	07/25/2012 09:23	0.29	-123	6.75	0.08	1.575	20.96	7.7
MW-328	07/25/2012 09:24	0.27	-124	6.75	0.08	1.578	20.85	4.9
MW-328	07/25/2012 09:25	0.26	-124	6.75	0.08	1.577	20.89	4.6
MW-328	07/25/2012 09:27	0.25	-125	6.75	0.08	1.576	20.9	4.8
MW-328	07/25/2012 09:28	0.23	-126	6.75	0.08	1.577	20.79	7
MW-328	07/25/2012 09:29	0.22	-126	6.75	0.08	1.579	20.73	12.5
MW-328	07/25/2012 09:31	0.21	-127	6.75	0.08	1.581	20.75	4.8
MW-328	07/25/2012 09:32	0.2	-128	6.75	0.08	1.578	20.73	5.2
MW-328	07/25/2012 09:33	0.19	-128	6.75	0.08	1.577	20.7	4.8
MW-328	07/25/2012 09:34	0.19	-128	6.75	0.80	1.577	20.70	4.85
MW-328	07/25/2012 10:50	2.00	-105	7.29	0.80	1.477	26.09	42.30
MW-328	07/26/2012 08:13	3.76	-115	6.78	0.10	1.530	27.15	23.00
MW-328	04/25/2013 08:25	5.77	-14.5	6.64	0.7	1.03	12.4	38
MW-328	04/25/2013 08:30	5.52	-22.3	6.6	0.7	1.04	12.6	50.4
MW-328	04/25/2013 08:35	2.12	-33.8	6.63	0.7	1.05	12.8	30.8
MW-328	04/25/2013 08:40	0.98	-42.5	6.68	0.7	1.05	12.9	20
MW-328	04/25/2013 08:45	0.95	-50.1	6.68	0.7	1.06	13.1	14.9
MW-328	04/25/2013 08:50	0.56	-58.1	6.69	0.7	1.05	13.1	11.2
MW-328	04/25/2013 08:55	0.43	-65.2	6.69	0.7	1.06	13.3	8.5
MW-328	04/25/2013 09:00	0.48	-68.4	6.72	0.7	1.07	13.4	8.7
MW-328	04/25/2013 09:05	0.23	-71.6	6.74	0.7	1.07	13.4	4.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	04/25/2013 09:10	0.28	-74.4	6.73	0.7	1.07	13.5	6.2
MW-328	04/25/2013 09:15	0.3	-75.5	6.73	0.7	1.08	13.6	6.8
MW-328	04/25/2013 09:20	0.32	-76.2	6.74	0.69	1.076	13.58	5.8
MW-328	04/25/2013 09:55	4.59	-66.3	6.83	0.69	1.374	14.26	56.3
MW-328	04/26/2013 10:15	10.14	-43	6.81	0.69	1.093	14.24	41.8
MW-328	06/15/2013 10:40	0.29	-52	6.13	0.75	1.492	19.70	5.10
MW-328	06/15/2013 11:30	0.10	-35	6.86	0.77	1.526	16.36	0.0000
MW-328	06/16/2013 11:40	0.18	-52	6.22	0.77	1.513	17.72	0.0000
MW-328	06/17/2013 13:44	0.60	-131	6.64	0.16	3.113	18.80	11.65
MW-328	06/17/2013 14:15	2.67	-62	6.45	0.14	2.757	23.94	31.00
MW-328	06/25/2013 10:40	0.29	-52	6.13	0.75	1.492	19.70	5.10
MW-328	06/25/2013 11:30	0.10	-35	6.86	0.77	1.526	16.36	0.0000
MW-328	06/25/2013 11:40	0.18	-52	6.22	0.77	1.513	17.72	0.0000
MW-328	09/10/2013 09:35	0.64	-209	6.74	0.15	2.909	19.17	1.36
MW-328	11/12/2013 13:33	0.90	-291	6.54	0.15	2.969	12.47	5.90
MW-328	05/23/2014 11:08	1.38	-378	6.70	0.29	5.375	18.21	6.41
MW-328	07/02/2014 10:05	0.15	-40.3	6.73	0.66	1.324	20.06	1.20
MW-328	07/02/2014 11:00	0.09	-11.8	6.63	0.67	1.334	16.38	0.0000
MW-328	07/02/2014 11:20	0.12	-21.2	6.69	0.67	1.340	17.07	0.0000
MW-328	08/01/2014 09:45	0.39	-83.2	6.45	0.67	1.344	19.72	2.00
MW-328	08/01/2014 11:10	4.91	-56.4	6.16	0.67	1.327	19.41	0.30
MW-328	08/01/2014 11:35	4.65	-63.7	6.21	0.69	1.333	19.99	11.60
MW-328	08/08/2014 09:14	1.97	-275	6.79	0.08	1.595	21.21	12.60
MW-328	08/08/2014 09:53	2.69	-223	7.32	0.08	1.523	26.05	21.20
MW-328	10/29/2014 13:38	1.81	-321	6.75	0.08	1.570	19.06	2.82
MW-328	10/29/2014 14:12	6.06	-147	6.94	0.07	1.461	19.06	60.70
MW-328	01/16/2015 09:50	0.81	-75.3	6.93	0.92	1.797	11.61	21.90
MW-328	01/16/2015 10:50	0.93	-57	6.90	0.94	1.834	13.80	1.50
MW-328	01/16/2015 11:10	0.89	-58	6.96	0.94	1.837	12.99	2.50
MW-328	03/02/2015 11:49	1.81	405	6.87	0.09	1.755	10.30	37.17
MW-328	03/02/2015 12:28	4.13	509	7.09	0.10	1.913	7.96	135.20
MW-328	03/14/2015 10:18	5.16	-17	6.77	NM	2.413	5.87	37.46
MW-328	09/16/2015 14:12	7.31	-6	7.29	0.17	3.231	24.12	25.2
MW-328	11/19/2015 08:50	6.2	-4	7.19	0.0460	926.5459	16.57	13.9
MW-328	11/19/2015 08:54	2.85	-22	6.9	0.0567	1131.5593	16.45	6.1
MW-328	11/19/2015 08:57	2.68	-34	6.84	0.0561	1121.6527	16.4	4.8
MW-328	11/19/2015 09:01	3.13	-43	6.83	0.0563	1125.6850	16.38	6.6
MW-328	11/19/2015 09:05	3.44	-50	6.83	0.0559	1118.0117	16.38	6.3
MW-328	11/19/2015 09:09	3.74	-56	6.83	0.0551	1101.4670	16.4	7.2
MW-328	11/19/2015 09:13	4.08	-61	6.84	0.0586	1168.9479	16.38	8.8
MW-328	11/19/2015 09:17	4.3	-65	6.85	0.0589	1174.1706	16.35	10.4
MW-328	11/19/2015 09:20	4.5	-68	6.85	0.0592	1180.4488	16.33	11
MW-328	11/19/2015 09:24	4.68	-72	6.86	0.0587	1171.7000	16.33	15.2
MW-328	11/19/2015 09:28	4.7	-74	6.86	0.0611	1216.9598	16.31	21.2
MW-328	11/19/2015 09:32	4.89	-76	6.86	0.0616	1226.0962	16.31	13.8
MW-328	11/19/2015 09:36	4.98	-78	6.86	0.0617	1228.1575	16.29	14.7
MW-328	11/19/2015 09:39	4.63	-79	6.85	0.0611	1216.8395	16.27	12.1
MW-328	11/19/2015 10:01	9.06	-92	7.42	0.07	1.423	16.08	122.10
MW-328	12/15/2015 11:37	0.01	-87	6.95	0.70	1.330	18.61	2.70
MW-328	12/15/2015 12:00	0.0000	-71	6.83	0.70	1.330	18.15	0.0000
MW-328	01/13/2016 09:13	9.21	-43	7.92	0.1824	3509.5636	7.44	99.9
MW-328	01/13/2016 09:17	2.13	-69	7.52	0.1921	3654.0621	10.45	49.9
MW-328	01/13/2016 09:21	1.01	-78	7.35	0.1823	3471.1063	11.26	33.1
MW-328	01/13/2016 09:25	0.74	-80	7.22	0.1395	2696.2048	10.86	17.5
MW-328	01/13/2016 09:29	0.51	-83	7.14	0.1256	2436.6077	11.54	9.1
MW-328	01/13/2016 09:33	0.5	-85	7.07	0.0294	604.3074	11.34	7.6
MW-328	01/13/2016 09:37	0.5	-88	7.02	0.0295	605.7790	11.8	7.1
MW-328	01/13/2016 09:41	0.54	-90	6.99	0.0299	614.3322	11.6	7.8
MW-328	01/13/2016 10:05	7.17	-43	7.89	0.03	0.563	10.28	197.2
MW-328	04/14/2016 10:04	5.65	-84	7.1	0.2287	4288.7535	12.66	18.7
MW-328	04/14/2016 10:07	2.79	-86	6.99	0.2244	4207.7502	13.37	37
MW-328	04/14/2016 10:11	2.51	-86	6.94	0.0651	1297.5425	13.81	24.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	04/14/2016 10:14	2.41	-85	6.92	0.0674	1341.5682	13.72	24.1
MW-328	04/14/2016 10:18	2.26	-85	6.92	0.0679	1350.6334	13.78	21.8
MW-328	04/14/2016 10:22	2	-87	6.91	0.0676	1344.0520	13.99	24.4
MW-328	04/14/2016 10:25	1.71	-89	6.9	0.0678	1347.1035	14.1	20.4
MW-328	04/14/2016 10:29	1.71	-91	6.9	0.0681	1352.5425	14.08	17.9
MW-328	04/14/2016 10:32	1.62	-93	6.89	0.2235	4188.8229	13.82	19.1
MW-328	04/14/2016 10:36	1.13	-95	6.85	0.2237	4191.9272	13.95	22.7
MW-328	04/14/2016 10:40	0.89	-97	6.84	0.2224	4168.2116	14.13	17.6
MW-328	04/14/2016 10:43	0.74	-99	6.83	0.2216	4152.1038	14.24	16.3
MW-328	04/14/2016 10:47	0.68	-100	6.83	0.2220	4159.4152	14.31	15.7
MW-328	04/14/2016 10:51	0.6	-102	6.82	0.2240	4195.1238	14.25	12.1
MW-328	04/14/2016 10:54	0.57	-103	6.82	0.2234	4183.6088	14.35	12.4
MW-328	04/14/2016 11:14	6.90	-76	7.17	0.25	4.720	12.99	172.80
MW-328	07/25/2016 10:10	4.73	-44	7.1	NM	3705.67	23.48	33
MW-328	07/25/2016 10:11	3.08	-64	6.92	NM	4003.74	22.12	46
MW-328	07/25/2016 10:13	2.69	-72	6.86	NM	4286.54	21.57	24.8
MW-328	07/25/2016 10:15	2.59	-78	6.84	NM	4439.77	21.16	17.3
MW-328	07/25/2016 10:17	1.84	-82	6.82	NM	4473.21	21.13	15.7
MW-328	07/25/2016 10:19	2.84	-86	6.82	NM	4530.42	21.04	14.1
MW-328	07/25/2016 10:21	1.94	-89	6.81	NM	4570.3	20.98	11.5
MW-328	07/25/2016 10:22	1.42	-92	6.81	NM	4621.45	20.88	13.6
MW-328	07/25/2016 10:24	1.26	-94	6.81	NM	4614	20.86	12.6
MW-328	07/25/2016 10:26	1.77	-96	6.81	NM	4644.85	20.82	12.2
MW-328	07/25/2016 10:28	1.75	-98	6.81	NM	4667.57	20.74	11.6
MW-328	07/25/2016 10:30	1.48	-101	6.81	NM	4705.15	20.65	10.6
MW-328	07/25/2016 10:32	1.31	-102	6.81	NM	4724.42	20.67	11
MW-328	07/25/2016 10:34	1.38	-104	6.81	NM	4711.23	20.71	8.9
MW-328	07/25/2016 10:35	1.2	-106	6.81	NM	4737.18	20.72	8.6
MW-328	07/25/2016 10:37	1.2	-108	6.81	NM	4732.12	20.79	8.5
MW-328	07/25/2016 10:39	1.35	-109	6.82	NM	4754.84	20.64	8.2
MW-328	07/25/2016 10:41	1.86	-110	6.82	NM	4747.82	20.64	11.5
MW-328	07/25/2016 10:43	3.38	-112	6.82	NM	4765.49	20.76	9.7
MW-328	07/25/2016 10:45	4.3	-113	6.82	NM	4772.61	20.76	10.1
MW-328	07/25/2016 10:46	4.17	-114	6.82	NM	4783.24	20.65	8.3
MW-328	07/25/2016 10:48	3.97	-115	6.82	NM	4768.83	20.83	9.8
MW-328	07/25/2016 10:50	3.8	-116	6.82	NM	4736.46	20.74	10.6
MW-328	07/25/2016 10:52	1.75	-117	6.82	NM	4806.66	20.61	8.5
MW-328	07/25/2016 10:54	1.7	-118	6.82	NM	4850.55	20.55	8.7
MW-328	07/25/2016 10:56	1.57	-119	6.82	NM	4802.45	20.61	9.4
MW-328	07/25/2016 10:58	1.59	-120	6.82	NM	4795.99	20.62	9.3
MW-328	07/25/2016 11:30	2.65	-98	7.07	0.22	4.070	26.71	73.20
MW-328	12/07/2016 08:55	8.48	-53	7.26	0.0829	1642.6613	10.51	30.8
MW-328	12/07/2016 08:59	3.84	-96	6.99	0.0805	1591.5795	12.35	31.9
MW-328	12/07/2016 09:03	2.1	-108	6.9	0.0813	1605.8223	12.75	20.6
MW-328	12/07/2016 09:07	1.51	-113	6.86	0.0817	1613.2208	12.95	18.6
MW-328	12/07/2016 09:11	1.16	-116	6.85	0.0819	1616.7323	13.06	17.4
MW-328	12/07/2016 09:15	0.95	-119	6.85	0.0824	1625.2356	13.2	15.1
MW-328	12/07/2016 09:19	0.83	-120	6.85	0.0829	1634.2603	13.57	15.4
MW-328	12/07/2016 09:23	0.79	-122	6.85	0.0832	1640.8849	13.34	16
MW-328	12/07/2016 09:27	0.65	-124	6.86	0.0833	1641.7065	13.4	16
MW-328	12/07/2016 09:31	0.62	-125	6.86	0.0836	1648.0737	13.47	15.3
MW-328	12/07/2016 09:35	0.57	-126	6.86	0.0839	1653.9699	13.44	17.2
MW-328	12/07/2016 09:40	0.5	-127	6.86	0.0843	1660.8965	13.43	13.4
MW-328	12/07/2016 09:44	0.47	-128	6.86	0.0846	1667.2545	13.32	12.8
MW-328	01/23/2017 10:05	11.04	62	6.97	0.0649	1304.6608	9.08	33.8
MW-328	01/23/2017 10:09	9.48	-16	7	0.0645	1293.3226	10.12	35.4
MW-328	01/23/2017 10:13	7.59	-22	6.96	0.0648	1295.9717	11.36	20
MW-328	01/23/2017 10:17	7.21	-22	6.94	0.0649	1297.5450	11.56	23.6
MW-328	01/23/2017 10:22	7.03	-27	6.93	0.0650	1298.6158	11.59	23.4
MW-328	01/23/2017 10:26	6.92	-32	6.92	0.0650	1299.0183	11.64	29.6
MW-328	01/23/2017 10:30	6.82	-46	6.91	0.0649	1297.2834	11.63	28.5
MW-328	01/23/2017 10:34	5.26	-95	6.82	0.0655	1309.3425	11.67	39.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	01/23/2017 10:38	3.26	-100	6.77	0.0656	1310.0019	11.6	35.5
MW-328	01/23/2017 10:42	2.35	-102	6.75	0.0659	1317.2239	11.2	30.8
MW-328	01/23/2017 10:46	1.99	-103	6.75	0.0656	1311.6206	11.13	34.8
MW-328	01/23/2017 10:50	1.97	-103	6.75	0.0656	1312.1860	11.04	31.9
MW-328	01/23/2017 10:54	1.78	-104	6.75	0.0657	1314.6846	11.2	31.2
MW-328	04/27/2017 12:53	4.6	-11	7.3	0.0833	0.0163	22.39	17.6
MW-328	04/27/2017 12:57	1.84	-3	7.25	0.1329	0.0255	16.32	43.8
MW-328	04/27/2017 13:01	1.2	1	7.15	0.1381	0.0265	16	64.1
MW-328	04/27/2017 13:05	1	3	7.09	0.1403	0.0269	15.86	51.3
MW-328	04/27/2017 13:09	0.88	3	7.04	0.1406	0.0270	15.87	56.7
MW-328	04/27/2017 13:12	0.69	4	7	0.1405	0.0269	15.95	49.8
MW-328	04/27/2017 13:16	0.59	4	6.98	0.1405	0.0269	15.99	56.5
MW-328	04/27/2017 13:20	0.5	4	6.96	0.1402	0.0269	16.02	67.3
MW-328	04/27/2017 13:24	0.48	3	6.95	0.1417	0.0271	15.93	55.5
MW-328	04/27/2017 13:28	0.32	4	6.92	0.1438	0.0275	15.9	45.4
MW-328	04/27/2017 13:32	0.2	3	6.91	0.1447	0.0277	15.98	47.6
MW-328	04/27/2017 13:36	0.17	1	6.9	0.1440	0.0276	16.12	42.4
MW-328	04/27/2017 13:40	0.13	-1	6.9	0.1453	0.0278	16.09	41.2
MW-328	04/27/2017 13:43	0.11	-3.00	6.89	0.15	2.857	15.31	38.12
MW-328	01/25/2018 12:30	10.6	34	8.61	0.1787	0.0343	8.52	25.8
MW-328	01/25/2018 12:34	7.97	25	8.62	0.2252	0.0424	11.41	20.9
MW-328	01/25/2018 12:38	7.68	27	8.43	0.2569	0.0480	11.31	16.2
MW-328	01/25/2018 12:41	7.39	28	8.32	0.9919	0.1692	11.59	19.3
MW-328	01/25/2018 12:45	6.67	30	8.23	1.0282	0.1750	11.57	31.8
MW-328	01/25/2018 12:49	2.24	32	8.11	1.0498	0.1783	11.78	49.9
MW-328	01/25/2018 12:53	1.63	32	7.99	1.0570	0.1793	11.91	42.7
MW-328	01/25/2018 12:57	1.32	33	7.88	1.0730	0.1819	11.84	33.8
MW-328	01/25/2018 13:01	1.21	34	7.79	1.0823	0.1832	12.04	27.2
MW-328	01/25/2018 13:05	1.12	35	7.71	1.0941	0.1851	11.99	24.1
MW-328	01/25/2018 13:09	0.88	36	7.64	1.0992	0.1859	12.11	23.1
MW-328	01/25/2018 13:13	0.83	37	7.59	1.1108	0.1876	12.19	19.7
MW-328	01/25/2018 13:17	1.22	38	7.53	1.1048	0.1866	12.37	20.8
MW-328	01/25/2018 13:21	0.68	39	7.49	1.1216	0.1893	12.28	18.3
MW-328	04/12/2018 11:17	8.4	-5	7.59	0.1410	0.0027	14.15	32.8
MW-328	04/12/2018 11:21	3.2	14	7.21	0.1334	0.0026	13.74	75.3
MW-328	04/12/2018 11:25	2.65	20	7.08	0.1345	0.0026	13.76	61.1
MW-328	04/12/2018 11:29	2.35	25	6.98	0.1341	0.0026	13.77	58.2
MW-328	04/12/2018 11:33	1.82	28	6.88	0.1365	0.0026	13.78	63.5
MW-328	04/12/2018 11:37	1.7	28	6.81	0.1349	0.0026	13.88	61.6
MW-328	04/12/2018 11:41	1.61	27	6.76	0.1355	0.0026	14.38	49.5
MW-328	04/12/2018 11:45	1.52	26	6.72	0.1353	0.0026	14.63	39.4
MW-328	04/12/2018 11:50	1.49	25	6.69	0.1369	0.0026	14.8	34.7
MW-328	04/12/2018 11:54	1.51	25	6.65	0.1391	0.0027	14.93	26.5
MW-328	04/12/2018 11:58	1.46	24	6.64	0.1409	0.0027	15	36.4
MW-328	04/12/2018 12:02	1.39	22	6.6	0.1399	0.0027	16.89	22.5
MW-328	04/12/2018 12:06	1.35	20.00	6.59	0.14	2.677	18.52	17.16
MW-328	07/18/2018 08:38	4.53	-3	7.31	0.157	2.9850	22.86	7.9
MW-328	07/18/2018 08:42	1.09	-70	6.94	0.172	3.2599	19.83	11.7
MW-328	07/18/2018 08:46	0.64	-91	6.87	0.174	3.2857	19.46	9.1
MW-328	07/18/2018 08:50	0.45	-102	6.83	0.175	3.3000	19.32	8.7
MW-328	07/18/2018 08:54	0.39	-109	6.81	0.174	3.2813	19.14	9.2
MW-328	07/18/2018 08:58	0.38	-114	6.8	0.174	3.2897	19.1	9.6
MW-328	07/18/2018 09:02	0.32	-118	6.79	0.174	3.2916	19.09	8.6
MW-328	07/18/2018 09:06	0.28	-122	6.78	0.174	3.2941	18.99	8.7
MW-328	07/18/2018 09:10	0.27	-124	6.77	0.175	3.3029	19.01	8.6
MW-328	07/18/2018 09:14	0.29	-127	6.77	0.174	3.2924	19.03	7.7
MW-328	07/18/2018 09:17	0.27	-130	6.77	0.175	3.3042	18.96	7.7
MW-328	07/18/2018 09:20	0.29	-132	6.77	0.175	3.2987	18.99	8
MW-328	07/18/2018 09:22	0.30	-134.00	6.77	0.18	2.923	19.11	7.55
MW-328	10/29/2018 10:35	2.86	-106.90	7.02	0.66	1.309	16	3.30
MW-328	04/05/2019 13:00	3.67	-82.9	6.97	NM	1.198	12.18	5.3
MW-328	07/05/2019 10:05	7.52	-85.1	7.21	NM	1.567	19.99	133.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	07/05/2019 10:10	1.75	-103.3	6.85	NM	1.382	16.29	18.1
MW-328	07/05/2019 10:15	1.87	-101.9	6.8	NM	1.381	16.1	16
MW-328	07/05/2019 10:20	1.2	-94.1	6.81	NM	1.386	16	3.3
MW-328	07/05/2019 10:25	1.36	-102.3	6.81	NM	1.389	16.05	15.5
MW-328	07/05/2019 10:30	1.17	-96.7	6.79	NM	1.391	15.98	23.2
MW-328	07/05/2019 10:35	1.4	-103.1	6.79	NM	1.395	16.01	25.4
MW-328	07/05/2019 10:40	1.24	-98	6.78	NM	1.396	16.02	24.7
MW-328	07/05/2019 10:45	2.65	-64.7	6.77	NM	1.398	17.02	26.9
MW-328	07/05/2019 10:50	2.5	-63.4	6.77	NM	1.404	18.29	27.9
MW-328	07/05/2019 13:25	2.5	-63.4	6.77	NM	1.404	18.29	27.9
MW-328	10/03/2019 09:15	4.73	-19.4	6.67	NM	0.713	17.3	14.9
MW-328	10/03/2019 09:20	2.56	-70.9	6.76	NM	0.692	17.15	12.1
MW-328	10/03/2019 09:25	1.07	-88.7	6.81	NM	0.692	16.85	9.2
MW-328	10/03/2019 09:30	0.75	-97.3	6.84	NM	0.691	16.58	4.7
MW-328	10/03/2019 09:35	0.6	-100.8	6.85	NM	0.684	16.46	4.5
MW-328	10/03/2019 09:40	0.55	-103.3	6.87	NM	0.683	16.32	4
MW-328	10/03/2019 09:45	0.52	-104.1	6.87	NM	0.682	16.12	3.7
MW-328	10/03/2019 09:50	0.48	-103.9	6.86	NM	0.683	16.03	2.9
MW-328	10/03/2019 09:55	0.42	-103.4	6.85	NM	0.684	16.06	2.9
MW-328	10/03/2019 10:00	0.38	-102.8	6.85	NM	0.682	16.1	2.5
MW-328	01/09/2020 12:20	4.49	-56.8	6.76	NM	0.273	10.34	22.4
MW-328	01/09/2020 12:25	1.94	-79.2	6.74	NM	0.277	11.47	10.2
MW-328	01/09/2020 12:30	0.91	-94.5	6.76	NM	0.28	13.01	3.6
MW-328	01/09/2020 12:35	0.65	-100.8	6.77	NM	0.282	13.11	1.3
MW-328	01/09/2020 12:40	0.62	-103.1	6.76	NM	0.283	13.49	0.7
MW-328	01/09/2020 12:45	0.55	-103.4	6.75	NM	0.284	13.09	0.9
MW-328	01/09/2020 12:50	0.53	-103.3	6.74	NM	0.286	12.78	0.8
MW-328	01/09/2020 12:55	0.5	-103.6	6.74	NM	0.286	13.03	0.5
MW-328	04/06/2020 10:00	1.81	-6.9	6.67	NM	0.986	14.98	18.4
MW-328	07/09/2020 08:30	6.54	75.3	6.9	0.62	1.251	22.21	32.1
MW-328	07/09/2020 08:35	5.51	81.6	6.78	0.65	1.26	22.43	13.4
MW-328	07/09/2020 08:40	5.09	81.3	6.76	0.62	1.246	22.47	8
MW-328	07/09/2020 08:45	4.82	79.8	6.75	0.62	1.238	22.43	4.6
MW-328	07/09/2020 08:50	4.36	57.2	6.73	0.61	1.233	22.38	4.9
MW-328	07/09/2020 08:55	4.17	25	6.73	0.61	1.23	22.46	3.5
MW-328	07/09/2020 09:00	3.92	-9.1	6.73	0.61	1.229	22.6	3.4
MW-328	07/09/2020 09:05	3.56	-37.7	6.73	0.61	1.229	22.77	2.3
MW-328	07/09/2020 09:10	3.33	-50.6	6.73	0.61	1.228	22.76	4
MW-328	07/09/2020 09:15	3.22	-54.3	6.73	0.61	1.227	22.81	2.5
MW-328	09/25/2020 10:00	6.53	-40.4	7.09	0.62	1.242	20.62	0
MW-328	09/25/2020 10:05	5.22	-63.7	6.72	0.62	1.233	19.11	0
MW-328	09/25/2020 10:10	5.12	-68.9	6.69	0.62	1.232	18.74	0
MW-328	09/25/2020 10:15	5.26	-72.9	6.65	0.62	1.229	18.48	0
MW-328	09/25/2020 10:20	5.53	-80.7	6.67	0.61	1.227	18.42	0
MW-328	09/25/2020 10:25	5.54	-94.7	6.69	0.61	1.221	18.19	0
MW-328	09/25/2020 10:30	5.58	-105.6	6.74	0.61	1.217	18.07	0
MW-328	09/25/2020 10:35	5.57	-106.4	6.74	0.61	1.211	18.05	0
MW-328	09/25/2020 10:40	6.44	-113.5	6.76	0.6	1.204	17.89	0
MW-328	09/25/2020 10:45	6.42	-114.4	6.77	0.6	1.202	18.02	0
MW-328	09/25/2020 11:30	5.81	-102.5	6.77	0.64	1.275	21.95	0
MW-328	09/25/2020 11:40	5.49	91.5	6.7	0.64	1.276	20.14	NM
MW-328	10/12/2020 10:15	1.18	-190.8	6.89	0.38	0.777	17.7	12.8
MW-328	10/12/2020 10:20	1.06	-184.3	6.77	0.35	0.715	16.72	13
MW-328	10/12/2020 10:25	1.06	-184.3	6.76	0.35	0.35	16.72	14.2
MW-328	10/12/2020 10:30	1.04	-185.5	6.76	0.35	0.712	16.25	14.2
MW-328	10/12/2020 10:35	1.03	-184.5	6.77	0.35	0.707	16	15.8
MW-328	10/12/2020 10:40	1.02	-185.3	6.76	0.35	0.707	15.88	14.7
MW-328	10/12/2020 10:45	1.01	-186.4	6.73	0.35	0.713	15.71	12.4
MW-328	10/12/2020 10:50	1.01	-185.9	6.71	0.35	0.717	15.73	11.3
MW-328	10/12/2020 10:55	1.01	-186.5	6.71	0.35	0.718	15.84	11.1
MW-328	10/12/2020 11:00	1.01	-185.5	6.71	0.35	0.718	15.74	NM
MW-328	10/12/2020 11:40	NM	NM	NM	NM	NM	NM	0

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	10/14/2020 11:00	NM	NM	NM	NM	NM	NM	11.2
MW-328	12/02/2020 12:05	4.16	-141.2	7.55	0.66	1.308	13.78	34.6
MW-328	12/02/2020 12:10	1.79	-127.3	7.07	0.66	1.304	12.88	21.9
MW-328	12/02/2020 12:15	0.89	-129.4	6.97	0.65	1.287	11.63	18.5
MW-328	12/02/2020 12:20	0.73	-131.6	6.95	0.64	1.279	11.04	18.1
MW-328	12/02/2020 12:25	0.6	-131.8	6.95	0.64	1.273	11.08	15.2
MW-328	12/02/2020 12:30	0.57	-133.4	6.95	0.64	1.272	11.09	14.3
MW-328	12/02/2020 12:35	0.51	-132.5	6.93	0.64	1.27	10.96	14.2
MW-328	12/02/2020 12:40	0.48	-134.4	6.92	0.64	1.267	11.01	10.3
MW-328	12/02/2020 12:45	0.47	-135.6	6.92	0.64	1.267	11.1	12.9
MW-328	12/02/2020 12:50	0.45	-136	6.9	0.64	1.266	11.05	8.9
MW-328	12/02/2020 14:15	2.1	-99.3	6.88	0.66	1.31	13.95	11.6
MW-328	12/02/2020 14:30	6.63	-63.1	7.15	0.62	1.228	13.77	54.7
MW-328	01/05/2021 10:15	10.29	-176.9	7.36	0.67	1.338	10.9	17.9
MW-328	01/05/2021 10:20	13.58	-164.7	7.29	0.65	1.291	11.6	20.9
MW-328	01/05/2021 10:25	11.44	-144.7	7.23	0.64	1.282	12.52	16.5
MW-328	01/05/2021 10:30	9.14	-126.3	7.2	0.64	1.279	13.06	15.4
MW-328	01/05/2021 10:35	14.43	-119.7	7.14	0.64	1.279	13.24	14.9
MW-328	01/05/2021 10:40	8.64	-123.3	7	0.64	1.283	13.51	15
MW-328	01/05/2021 10:45	7.63	-122.1	6.94	0.65	1.285	13.4	14.1
MW-328	01/05/2021 10:50	9.01	-121.4	6.9	0.65	1.293	13.45	12.6
MW-328	01/05/2021 10:55	10.05	-121.2	6.87	0.65	1.3	13.49	11.6
MW-328	01/05/2021 11:00	11.43	-120.3	6.85	0.66	1.307	13.5	9.1
MW-328	03/18/2021 12:25	4.76	-65.1	7.39	0.58	1.116	12.99	9.9
MW-328	03/18/2021 12:30	4.5	-66.7	7.35	0.56	1.119	12.46	6.4
MW-328	03/18/2021 12:35	4.07	-64.5	7.17	0.56	1.114	12.01	13.8
MW-328	03/18/2021 12:40	3.5	-67.4	7.07	0.56	1.113	12.07	18.2
MW-328	03/18/2021 12:45	1.82	-78.6	7.02	0.57	1.13	12.12	18.9
MW-328	03/18/2021 12:50	1.66	-79.1	7	0.57	1.133	12.09	17.9
MW-328	03/18/2021 12:55	1.63	-80.3	6.97	0.57	1.136	12.05	18.3
MW-328	03/18/2021 13:00	1.5	-80.4	6.94	0.57	1.138	12.01	15.6
MW-328	03/18/2021 13:05	1.56	-80.3	6.94	0.57	1.139	12.02	16.2
MW-328	03/18/2021 13:10	1.32	-82.9	6.92	0.57	1.146	12.16	11.6
MW-328	03/18/2021 14:35	2.87	-81.1	6.97	0.59	1.171	12.39	3
MW-328	03/18/2021 15:00	6.01	-71.5	7.19	0.55	1.103	11.77	28.3
MW-328	04/13/2021 08:40	3.89	215.6	6.63	0.67	1.329	13.08	58.7
MW-328	04/13/2021 08:45	1.89	153.1	6.69	0.63	1.259	13.39	52
MW-328	04/13/2021 08:50	1.59	88.9	6.72	0.63	1.248	13.57	55.6
MW-328	04/13/2021 08:55	1.35	31.6	6.72	0.63	1.247	13.67	47
MW-328	04/13/2021 09:00	1.28	-22.4	6.74	0.63	1.248	13.74	36.9
MW-328	04/13/2021 09:05	1.17	-42.2	6.73	0.63	1.258	13.78	32.6
MW-328	04/13/2021 09:10	0.98	-59.3	6.73	0.64	1.267	13.81	25.9
MW-328	04/13/2021 09:15	0.92	-72.4	6.73	0.64	1.277	13.89	19.4
MW-328	04/13/2021 09:20	1.01	-79.7	6.74	0.64	1.282	14.03	16.1
MW-328	04/13/2021 09:25	0.97	-81	6.74	0.65	1.284	14.03	15.1
MW-328	07/13/2021 13:15	5	-33	6.82	0.58	1.174	19.9	84
MW-328	07/13/2021 13:20	3.11	-39.7	6.59	0.58	1.157	19.75	87.7
MW-328	07/13/2021 13:25	1.97	-53.1	6.52	0.58	1.163	20.12	64
MW-328	07/13/2021 13:30	2.24	-59.7	6.53	0.58	1.164	20.21	53.8
MW-328	07/13/2021 13:35	1.36	-66.6	6.56	0.58	1.168	20.02	36.5
MW-328	07/13/2021 13:40	2.17	-69	6.59	0.58	1.169	20.04	27.3
MW-328	07/13/2021 13:45	2.38	-71.2	6.61	0.58	1.17	19.98	22.8
MW-328	07/13/2021 13:50	2.02	-73.1	6.61	0.58	1.171	20.08	20
MW-328	07/13/2021 13:55	2.03	-75.3	6.64	0.58	1.172	20.12	19.1
MW-328	07/13/2021 14:00	1.85	-75.6	6.65	0.58	1.172	20.01	19.7
MW-328	01/17/2022 12:25	7.38	-57.6	7.03	0.95	1.853	9.14	35.9
MW-328	01/17/2022 12:30	1.61	-69.5	6.89	0.82	1.625	10.6	17.7
MW-328	01/17/2022 12:35	0.95	-72.9	6.85	0.82	1.617	10.87	10.4
MW-328	01/17/2022 12:40	0.72	-70.2	6.77	0.82	1.623	11.21	6.4
MW-328	01/17/2022 12:45	0.67	-67.5	6.7	0.83	1.63	11.26	4.3
MW-328	01/17/2022 12:50	0.66	-66.1	6.65	0.83	1.636	11.01	2.6
MW-328	01/17/2022 12:55	0.61	-66	6.62	0.83	1.641	11.17	1.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-328	01/17/2022 13:00	0.58	-66.9	6.61	0.84	1.645	11.07	0.9
MW-328	01/17/2022 13:05	0.59	-67.6	6.61	0.84	1.645	11.07	0.9
MW-328	01/17/2022 13:10	0.58	-68.9	6.6	0.84	1.647	11.1	0.9
MW-328	04/12/2022 11:05	3.14	21.1	6.89	0.54	1.089	14	9.7
MW-328	04/12/2022 11:10	2.91	17.2	6.88	0.54	1.088	14.02	10.1
MW-328	04/12/2022 11:15	2.71	14.3	6.87	0.54	1.088	14.06	11.1
MW-328	04/12/2022 11:20	2.56	13.1	6.87	0.54	1.088	14.08	11.3
MW-328	04/12/2022 11:25	1.18	-28.8	6.75	0.55	1.096	14.29	7.3
MW-328	04/12/2022 11:30	0.96	-40.5	6.71	0.55	1.103	14.31	5.2
MW-328	04/12/2022 11:35	0.91	-42	6.71	0.55	1.104	14.4	4.4
MW-328	04/12/2022 11:40	0.95	-45.5	6.71	0.55	1.106	14.34	5.1
MW-328	04/12/2022 11:45	0.96	-46.2	6.7	0.55	1.106	14.4	4.2
MW-328	04/12/2022 11:50	0.98	-48.8	6.7	0.55	1.109	14.58	5.1
MW-333	05/16/2012 12:51	2.06	-64	6.85	0.19	3.58926	28.94	49.3
MW-333	05/16/2012 12:52	1.11	-75	6.84	0.2	3.7983	22.35	35.2
MW-333	05/16/2012 12:53	0.82	-79	6.88	0.2	3.79836	19.92	28.8
MW-333	05/16/2012 12:54	0.78	-81	6.9	0.2	3.75611	19.71	25.7
MW-333	05/16/2012 12:55	0.7	-83	6.9	0.2	3.76019	19.23	23.9
MW-333	05/16/2012 12:57	0.57	-85	6.9	0.2	3.75548	19.55	23.2
MW-333	05/16/2012 12:58	0.46	-87	6.9	0.2	3.75505	19.57	21.8
MW-333	05/16/2012 12:59	0.37	-88	6.9	0.2	3.75003	19.41	20.6
MW-333	05/16/2012 13:00	0.31	-89	6.9	0.2	3.74772	19.54	21.1
MW-333	05/16/2012 13:02	0.26	-91	6.9	0.2	3.75195	19.63	20.5
MW-333	05/16/2012 13:03	0.22	-91	6.9	0.2	3.7518	19.44	19.5
MW-333	05/16/2012 13:04	0.19	-92	6.91	0.2	3.74715	19.14	20.3
MW-333	05/16/2012 13:05	0.16	-92	6.91	0.2	3.7428	19.24	18.9
MW-333	05/16/2012 13:07	0.14	-93	6.91	0.2	3.7418	19.08	17.8
MW-333	05/16/2012 13:08	0.12	-94	6.9	0.2	3.73534	19.49	16
MW-333	05/16/2012 13:09	0.11	-94	6.9	0.2	3.73304	19.4	14.9
MW-333	05/16/2012 13:10	0.09	-94	6.9	0.2	3.74593	19.64	19.9
MW-333	05/16/2012 13:12	0.08	-95	6.9	0.2	3.74532	19.62	20.1
MW-333	05/16/2012 13:13	0.08	-95	6.9	0.2	3.74895	19.61	16.5
MW-333	05/16/2012 13:14	0.07	-96	6.9	0.2	3.73524	19.72	16
MW-333	05/16/2012 13:15	0.07	-96	6.91	0.2	3.74704	19.25	16
MW-333	05/16/2012 13:17	0.07	-96	6.91	0.2	3.74724	19.16	19.3
MW-333	05/16/2012 13:18	0.06	-96	6.91	0.2	3.74258	19.51	22.4
MW-333	05/16/2012 13:19	0.06	-97	6.91	0.2	3.74671	19.43	21.8
MW-333	05/16/2012 13:20	0.06	-97	6.91	0.2	3.74298	19.64	40.4
MW-333	05/16/2012 13:22	0.06	-97	6.91	0.2	3.73763	19.4	33.3
MW-333	05/16/2012 13:23	0.05	-97	6.91	0.2	3.72296	19.27	106.9
MW-333	05/16/2012 13:24	0.05	-97	6.91	0.2	3.71241	19.43	111
MW-333	05/16/2012 13:25	0.05	-97	6.91	0.2	3.7148	19.52	118.7
MW-333	05/16/2012 13:27	0.05	-97	6.91	0.2	3.715	19.52	118.7
MW-333	05/16/2012 14:50	0.77	-69	6.96	0.19	3.541	13.49	377.6
MW-333	05/17/2012 10:40	1.63	-103	6.69	0.2	3.52	14.61	60.9
MW-333	07/24/2012 13:36	1.17	-14	7.07	0.2	3.748	35.34	257.4
MW-333	07/24/2012 13:37	1.43	8	7.09	0.2	3.773	30.72	248
MW-333	07/24/2012 13:38	1.58	-56	7.1	0.2	3.726	28.73	220.9
MW-333	07/24/2012 13:40	2.08	-50	7.13	0.2	3.71	27.95	251.6
MW-333	07/24/2012 13:41	2.2	-68	7.14	0.2	3.712	27.48	271.6
MW-333	07/24/2012 13:42	2.47	-71	7.15	0.2	3.7	27.27	278.8
MW-333	07/24/2012 13:43	2.62	-77	7.16	0.2	3.704	27.09	321
MW-333	07/24/2012 13:45	2.74	-81	7.16	0.2	3.693	26.88	295.7
MW-333	07/24/2012 13:46	2.81	-82	7.16	0.2	3.698	26.64	300.4
MW-333	07/24/2012 13:47	3.01	-82	7.17	0.2	3.702	26.64	331
MW-333	07/24/2012 13:48	3.02	-85	7.16	0.2	3.699	26.56	256.2
MW-333	07/24/2012 13:50	3.03	-87	7.16	0.2	3.704	26.48	281.6
MW-333	07/24/2012 13:51	3.13	-88	7.16	0.20	3.702	26.47	271.90
MW-333	07/24/2012 14:48	1.80	-130	6.91	0.19	3.597	21.70	1976.00
MW-333	07/25/2012 10:58	3.56	-168	6.89	0.20	3.470	23.06	227.00
MW-333	03/10/2014 11:03	0.63	-159	6.90	0.25	4.650	6.70	53.92
MW-333	03/10/2014 11:31	7.91	-111	6.97	0.20	3.934	5.41	252.30

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-333	05/22/2014 11:24	1.45	-185	6.91	0.67	11.640	15.72	168.60
MW-333	08/06/2014 11:36	1.19	-390	6.81	0.18	3.394	23.81	58.09
MW-333	08/06/2014 12:11	1.67	-228	7.09	0.17	3.227	24.15	267.30
MW-333	10/30/2014 09:20	4.29	-161	7.04	0.18	3.363	18.47	808.60
MW-333	10/30/2014 09:59	2.09	-185	6.98	0.19	3.535	20.94	1331.70
MW-333	03/09/2015 14:15	2.98	-357	NM	NM	6.043	13.64	190.70
MW-334	05/17/2012 13:36	5.01	-65	6.82	0.66	11.44229	24.86	99.2
MW-334	05/17/2012 13:38	3.68	-61	6.75	0.68	11.77106	19.73	93.2
MW-334	05/17/2012 13:39	1.68	-63	6.74	0.68	11.84991	18.01	93.4
MW-334	05/17/2012 13:40	1.26	-65	6.74	0.69	11.9107	17.56	92
MW-334	05/17/2012 13:42	1.48	-67	6.74	0.69	11.91502	17.33	92
MW-334	05/17/2012 13:43	1.52	-68	6.73	0.69	11.95628	17.33	89.3
MW-334	05/17/2012 13:44	1.23	-69	6.73	0.69	12.01349	17.15	96
MW-334	05/17/2012 13:45	1.03	-70	6.72	0.69	12.03716	17.1	113.6
MW-334	05/17/2012 13:47	1.07	-71	6.72	0.7	12.09405	16.96	97.5
MW-334	05/17/2012 13:48	0.77	-72	6.72	0.7	12.11372	17.07	102.9
MW-334	05/17/2012 13:49	0.6	-72	6.72	0.7	12.15131	17.07	124.7
MW-334	05/17/2012 13:51	0.56	-73	6.72	0.7	12.16431	17.03	119.5
MW-334	05/17/2012 13:52	0.51	-73	6.72	0.7	12.13947	16.96	131.2
MW-334	05/17/2012 13:53	0.6	-74	6.72	0.71	12.26033	16.98	121.6
MW-334	05/17/2012 13:54	0.8	-74	6.72	0.71	12.30936	16.98	130
MW-334	05/17/2012 13:56	0.51	-74	6.72	0.71	12.30657	16.93	153.8
MW-334	05/17/2012 13:57	0.38	-74	6.72	0.71	12.31056	17.1	136.8
MW-334	05/17/2012 13:58	0.34	-75	6.72	0.71	12.34952	16.97	178
MW-334	05/17/2012 13:59	0.37	-75	6.72	0.71	12.35128	16.99	119
MW-334	05/17/2012 14:01	0.51	-75	6.72	0.71	12.34255	16.99	141.2
MW-334	05/17/2012 14:02	0.61	-76	6.72	0.71	12.37648	16.91	213.9
MW-334	05/17/2012 14:03	0.62	-76	6.72	0.71	12.36985	16.82	286.7
MW-334	05/17/2012 14:05	0.52	-76	6.72	0.72	12.38444	16.88	165.9
MW-334	05/17/2012 14:06	0.46	-77	6.72	0.71	12.36367	16.98	188.1
MW-334	05/17/2012 14:07	0.39	-77	6.72	0.72	12.41569	17.01	253.1
MW-334	05/17/2012 14:08	0.35	-77	6.73	0.72	12.39007	16.9	209.2
MW-334	05/17/2012 14:10	0.32	-77	6.73	0.72	12.41182	16.88	302.1
MW-334	05/17/2012 14:11	0.29	-78	6.73	0.72	12.43209	16.81	351
MW-334	05/17/2012 14:12	0.26	-78	6.72	0.72	12.466	16.81	56.9
MW-334	05/17/2012 14:13	0.23	-78	6.73	0.72	12.47045	16.9	37.3
MW-334	05/17/2012 14:15	0.2	-78	6.72	0.72	12.4991	16.96	33.4
MW-334	05/17/2012 14:16	0.18	-78	6.72	0.72	12.50007	16.92	37.2
MW-334	05/17/2012 14:17	0.16	-79	6.73	0.72	12.52853	16.84	45.4
MW-334	05/17/2012 14:19	0.15	-79	6.73	0.73	12.54981	16.79	40.7
MW-334	05/17/2012 14:20	0.15	-79	6.73	0.73	12.57651	16.77	40.9
MW-334	05/17/2012 14:21	0.14	-79	6.72	0.73	12.59563	16.86	46.7
MW-334	05/17/2012 14:22	0.13	-79	6.73	0.73	12.6076	16.89	44.2
MW-334	05/17/2012 14:24	0.12	-80	6.72	0.73	12.633	16.77	49
MW-334	05/17/2012 14:25	0.11	-80	6.72	0.73	12.65	16.79	40.22
MW-334	05/17/2012 15:28	5.17	-68	6.89	0.82	14	16.02	90.8
MW-334	05/18/2012 10:32	1.87	-113	6.73	0.6	10.3	16.86	49.4
MW-334	07/31/2012 12:56	1.33	-151	8.47	0.94	15.85471	25.59	20.6
MW-334	07/31/2012 12:57	1.05	-154	8.76	0.94	15.78981	23.96	18.9
MW-334	07/31/2012 12:59	0.78	-155	8.78	0.93	15.75904	23.95	26.8
MW-334	07/31/2012 13:00	0.6	-156	8.97	0.93	15.72609	23.9	33.7
MW-334	07/31/2012 13:01	0.48	-156	9.02	0.93	15.7692	23.87	31.9
MW-334	07/31/2012 13:02	0.42	-156	9.04	0.93	15.77935	23.79	39.3
MW-334	07/31/2012 13:03	0.36	-156	9.07	0.93	15.77553	23.76	40.4
MW-334	07/31/2012 13:05	0.32	-156	9.1	0.93	15.76348	23.71	42.2
MW-334	07/31/2012 13:06	0.29	-156	9.15	0.93	15.74784	23.66	46.7
MW-334	07/31/2012 13:07	0.27	-156	9.16	0.93	15.75762	23.65	51.2
MW-334	07/31/2012 13:08	0.26	-156	9.24	0.93	15.75869	23.49	48.2
MW-334	07/31/2012 13:10	0.25	-155	9.31	0.94	15.78705	23.34	45.2
MW-334	07/31/2012 13:11	0.23	-155	9.36	0.93	15.7847	23.28	50.6
MW-334	07/31/2012 13:12	0.22	-155	9.38	0.94	15.79677	23.25	48.5
MW-334	07/31/2012 13:13	0.22	-155	9.43	0.94	15.7916	23.26	49.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-334	07/31/2012 14:16	1.54	-148	6.87	0.93	15.740	24.19	346.70
MW-334	08/01/2012 10:25	4.34	-196	6.95	1.00	16.400	23.73	94.80
MW-334	03/10/2014 09:38	0.81	-181	6.60	0.83	14.520	8.10	73.55
MW-334	03/10/2014 10:01	6.20	-131	6.50	0.83	14.560	6.68	343.30
MW-334	05/22/2014 10:15	1.46	-383	6.63	1.49	24.420	13.59	7.18
MW-334	08/06/2014 09:31	1.31	-382	6.74	0.90	15.250	18.81	31.95
MW-334	08/06/2014 10:08	1.29	-384	7.05	0.69	11.990	22.19	150.50
MW-334	10/30/2014 13:40	1.69	-320	6.69	0.93	15.800	17.11	534.90
MW-334	10/30/2014 14:12	61.75	-193	6.67	0.99	16.640	17.41	246.70
MW-334	03/09/2015 11:17	3.75	-475	6.55	NM	16.040	6.58	44.90
MW-334	01/25/2018 10:03	0.16	60.00	6.89	2.84	45.140	7.51	33.27
MW-334R	01/15/2016 09:23	9.28	-49	7	2.1121	34373.7207	7.38	46.7
MW-334R	01/15/2016 09:25	2.58	-70	6.85	2.0751	33640.7880	8.79	114.7
MW-334R	01/15/2016 09:27	1.96	-83	6.8	2.0400	33054.0044	9.36	115.7
MW-334R	01/15/2016 09:30	1.61	-89	6.76	2.0518	33191.9409	9.7	69.3
MW-334R	01/15/2016 09:32	1.5	-93	6.75	2.0441	33048.9377	9.97	51.9
MW-334R	01/15/2016 09:35	0.91	-96	6.73	2.0535	33160.4431	10.23	49.6
MW-334R	01/15/2016 09:37	0.91	-99	6.72	2.0643	33300.9950	10.41	48.8
MW-334R	01/15/2016 09:39	0.96	-101	6.71	2.0609	33232.9749	10.59	38.7
MW-334R	01/15/2016 09:42	0.98	-103	6.71	2.0845	33582.3807	10.57	53.3
MW-334R	01/15/2016 09:44	1.03	-104	6.7	2.1042	33861.8328	10.66	45.3
MW-334R	01/15/2016 09:47	1.01	-105	6.69	2.1075	33894.6489	10.82	34
MW-334R	01/15/2016 09:49	1.1	-106	6.68	2.1348	34282.2789	10.94	48.5
MW-334R	01/15/2016 09:51	1.08	-107	6.67	2.1357	34280.2276	11.1	25.3
MW-334R	01/15/2016 09:54	1.08	-108	6.66	2.1533	34521.9597	11.25	28.2
MW-334R	01/15/2016 09:56	1.06	-109	6.65	2.1416	34345.0357	11.32	32.4
MW-334R	01/15/2016 09:59	1.1	-110	6.65	2.1644	34674.8818	11.35	21.3
MW-334R	01/15/2016 10:01	1.1	-111	6.64	2.1933	35088.5986	11.43	17.6
MW-334R	01/15/2016 10:03	1.12	-112	6.64	2.2122	35357.9825	11.48	18.4
MW-334R	01/15/2016 10:06	1.1	-113	6.63	2.3345	37126.4642	11.54	20.6
MW-334R	01/15/2016 10:08	1.09	-114	6.63	2.3777	37744.7239	11.59	14.7
MW-334R	01/15/2016 10:11	1.07	-115	6.63	2.3550	37414.2915	11.62	14
MW-334R	01/15/2016 10:13	1.08	-116	6.63	1.7590	28667.0397	11.66	13.5
MW-334R	01/15/2016 10:47	6.73	-64	6.92	0.32	5.962	5.51	98.90
MW-334R	04/13/2016 08:48	6.44	-53	6.74	1.3335	22247.8376	11.39	53.1
MW-334R	04/13/2016 08:50	1.42	-75	6.7	1.4869	24640.6210	10.64	36.3
MW-334R	04/13/2016 08:53	0.56	-83	6.72	1.5636	25847.7613	10.09	22.4
MW-334R	04/13/2016 08:55	0.33	-86	6.74	1.5882	26233.7695	9.93	21.5
MW-334R	04/13/2016 08:57	0.25	-89	6.75	1.5397	25504.1232	9.83	13.5
MW-334R	04/13/2016 09:00	0.25	-92	6.76	1.4714	24462.2940	9.84	12.1
MW-334R	04/13/2016 09:02	0.27	-93	6.77	1.4354	23907.9566	9.88	12.2
MW-334R	04/13/2016 09:05	0.31	-95	6.77	1.4172	23637.9418	9.77	11
MW-334R	04/13/2016 09:07	0.3	-96	6.78	1.4008	23382.0343	9.83	14.4
MW-334R	04/13/2016 09:09	0.27	-98	6.78	1.3840	23122.1232	9.85	7.2
MW-334R	04/13/2016 09:12	0.23	-98	6.78	1.3780	23024.3605	9.92	7.7
MW-334R	04/13/2016 09:14	0.2	-99	6.78	1.3711	22913.0063	10	10.4
MW-334R	04/13/2016 09:17	0.19	-101	6.79	1.3591	22729.3081	9.99	7.9
MW-334R	04/13/2016 09:19	0.17	-102	6.79	1.3653	22824.7225	9.99	7.9
MW-334R	04/13/2016 09:21	0.15	-103	6.79	1.3627	22782.9809	10.02	7.7
MW-334R	04/13/2016 09:24	0.13	-103	6.79	1.3671	22847.3732	10.05	10.1
MW-334R	04/13/2016 09:26	0.11	-104	6.79	1.3657	22828.5490	10.01	10.1
MW-334R	04/13/2016 09:29	0.1	-105	6.79	1.3605	22747.5415	10.04	5.6
MW-334R	04/13/2016 09:31	0.08	-105	6.79	1.3592	22716.4987	10.19	7.4
MW-334R	04/13/2016 09:33	0.08	-106	6.8	1.3740	22956.2104	10.03	5.5
MW-334R	04/13/2016 09:36	0.08	-107	6.79	1.3835	23104.3308	10	8.3
MW-334R	04/13/2016 09:56	5.78	-71	6.84	1.48	24.580	9.57	266.50
MW-334R	07/20/2016 08:46	2.19	-37	6.22	NM	18938.5	25.1	327.6
MW-334R	07/20/2016 08:48	1.37	-68	6.24	NM	19778.77	24.37	333.2
MW-334R	07/20/2016 08:49	1.06	-86	6.3	NM	20335.41	23.5	271
MW-334R	07/20/2016 08:51	0.96	-97	6.36	NM	20890.05	23.25	219.8
MW-334R	07/20/2016 08:52	0.95	-104	6.4	NM	21212.96	23.16	177.3
MW-334R	07/20/2016 08:54	0.92	-109	6.42	NM	21150.25	22.92	157.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-334R	07/20/2016 08:55	0.91	-112	6.44	NM	21418.68	22.86	134.7
MW-334R	07/20/2016 08:57	0.9	-114	6.45	NM	21833.41	22.82	132.1
MW-334R	07/20/2016 08:58	0.9	-116	6.46	NM	21689.62	22.64	129.4
MW-334R	07/20/2016 09:36	7.20	-51	6.29	1.29	21.180	24.30	730.60
MW-334R	10/17/2016 10:42	3.26	-110	6.28	0.3355	6091.1771	21.67	404.3
MW-334R	10/17/2016 10:45	0.82	-67	6.29	0.3182	5801.7012	19.78	424
MW-334R	10/17/2016 10:47	0.4	-54	6.3	0.3214	5857.9724	19.61	399.5
MW-334R	10/17/2016 10:50	0.31	-46	6.3	0.3257	5930.8166	19.7	358.1
MW-334R	10/17/2016 10:53	0.27	-40	6.31	0.3267	5947.1621	19.8	365
MW-334R	10/17/2016 10:55	0.25	-36	6.31	0.3270	5953.1831	19.81	402.6
MW-334R	10/17/2016 10:58	0.23	-33	6.32	0.3268	5949.0259	19.85	374.4
MW-334R	10/17/2016 11:01	0.21	-32	6.32	0.3271	5954.6943	19.74	360.9
MW-334R	10/17/2016 11:03	0.2	-32	6.33	0.3271	5955.0101	19.64	352.4
MW-334R	10/17/2016 11:06	0.18	-33	6.33	0.3261	5938.1359	19.68	330.2
MW-334R	10/17/2016 11:09	0.17	-35	6.34	0.3268	5949.9966	19.78	297.2
MW-334R	10/17/2016 11:11	0.16	-36	6.35	0.3272	5956.1448	19.76	293
MW-334R	10/17/2016 11:14	0.15	-39	6.35	0.3282	5973.4784	19.88	273.5
MW-334R	10/17/2016 11:16	0.14	-44	6.36	0.3317	6032.2913	20.15	239.9
MW-334R	10/17/2016 11:19	0.15	-47	6.37	0.3314	6027.0441	20.16	232.1
MW-334R	10/17/2016 11:22	0.14	-49	6.38	0.3326	6047.4671	20.15	217.7
MW-334R	10/17/2016 11:42	2.46	-134	6.35	0.29	5.295	19.14	310.20
MW-334R	01/19/2017 10:04	9.21	-171	6.39	0.7942	13859.2792	9.29	103.6
MW-334R	01/19/2017 10:07	3.7	-159	6.52	0.7944	13905.4493	8.32	74.3
MW-334R	01/19/2017 10:09	1.84	-156	6.54	0.7927	13869.3173	8.52	140.9
MW-334R	01/19/2017 10:12	1.09	-155	6.53	0.7914	13840.8591	8.66	104
MW-334R	01/19/2017 10:14	0.72	-155	6.52	0.7940	13858.6291	9.24	99.5
MW-334R	01/19/2017 10:16	0.54	-155	6.53	0.7921	13819.1033	9.46	73.9
MW-334R	01/19/2017 10:19	0.45	-155	6.54	0.7945	13848.3689	9.68	60.7
MW-334R	01/19/2017 10:21	0.32	-155	6.54	0.7917	13800.1458	9.77	70.3
MW-334R	01/19/2017 10:24	0.3	-154	6.54	0.7929	13816.2066	9.85	74.5
MW-334R	01/19/2017 10:26	0.3	-154	6.54	0.7931	13815.1555	9.95	27.6
MW-334R	01/19/2017 10:28	0.3	-154	6.54	0.7958	13857.2109	10	42.9
MW-334R	01/19/2017 10:31	0.3	-154	6.54	0.7953	13838.8132	10.27	43.3
MW-334R	01/19/2017 10:33	0.3	-154	6.55	0.7933	13810.9454	10.14	42.1
MW-334R	04/21/2017 09:06	4.03	217	6.64	0.8783	0.1507	13.19	101.5
MW-334R	04/21/2017 09:08	1.14	-39	6.68	0.8804	0.1514	12	46.8
MW-334R	04/21/2017 09:11	0.23	-70	6.69	0.8819	0.1519	11.44	26.5
MW-334R	04/21/2017 09:13	0.03	-83	6.69	0.8796	0.1516	11.27	27.1
MW-334R	04/21/2017 09:15	-0.02	-90	6.7	0.8807	0.1517	11.27	22.1
MW-334R	04/21/2017 09:18	-0.02	-96	6.7	0.8818	0.1519	11.23	21.2
MW-334R	04/21/2017 09:20	-0.06	-99	6.71	0.8822	0.1520	11.18	19.3
MW-334R	04/21/2017 09:22	-0.06	-102	6.71	0.8813	0.1518	11.2	24.6
MW-334R	04/21/2017 09:25	-0.06	-104	6.71	0.8824	0.1520	11.19	23.4
MW-334R	04/21/2017 09:27	-0.07	-105	6.71	0.8833	0.1522	11.18	36
MW-334R	04/21/2017 09:29	-0.08	-107	6.71	0.8816	0.1519	11.22	23.9
MW-334R	04/21/2017 09:32	-0.09	-108	6.72	0.8808	0.1518	11.21	20.9
MW-334R	04/21/2017 09:34	-0.09	-108	6.71	0.8811	0.1518	11.24	18.2
MW-334R	04/21/2017 09:36	-0.09	-109	6.72	0.8811	0.1518	11.22	17.7
MW-334R	04/21/2017 09:39	-0.09	-110	6.72	0.8819	0.1519	11.24	26.9
MW-334R	04/21/2017 09:41	-0.09	-110	6.72	0.8823	0.1520	11.22	22.1
MW-334R	04/21/2017 09:43	-0.09	-110	6.72	0.8820	0.1519	11.24	18.6
MW-334R	04/21/2017 09:46	-0.09	-111	6.72	0.8812	0.1518	11.25	14.7
MW-334R	04/21/2017 09:48	-0.09	-111	6.72	0.8839	0.1522	11.25	19.6
MW-334R	04/21/2017 09:51	-0.1	-111	6.72	0.8829	0.1521	11.28	15.7
MW-334R	04/21/2017 09:53	-0.09	-111	6.71	0.8812	0.1518	11.31	15.8
MW-334R	04/21/2017 09:55	-0.09	-112.00	6.72	0.88	15.410	10.93	26.26
MW-334R	01/25/2018 09:15	9.3	73	7.31	2.1492	0.3496	7.16	525.7
MW-334R	01/25/2018 09:17	1.87	71	7.16	2.3959	0.3858	7.26	21.3
MW-334R	01/25/2018 09:19	1.33	70	7.07	2.4411	0.3930	6.94	20.4
MW-334R	01/25/2018 09:22	0.85	68	7.02	2.5162	0.4047	6.53	18.5
MW-334R	01/25/2018 09:24	0.63	67	6.99	2.5311	0.4063	6.89	24
MW-334R	01/25/2018 09:27	0.54	65	6.97	2.5381	0.4071	6.99	35.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-334R	01/25/2018 09:29	0.49	65	6.96	2.6044	0.4166	7.08	38.5
MW-334R	01/25/2018 09:31	0.44	64	6.95	2.5958	0.4155	6.99	43.6
MW-334R	01/25/2018 09:34	0.43	63	6.94	2.7016	0.4310	6.91	55.4
MW-334R	01/25/2018 09:36	0.41	63	6.93	2.7642	0.4398	7.04	53.6
MW-334R	01/25/2018 09:39	0.39	63	6.93	2.8194	0.4478	7.04	53.7
MW-334R	01/25/2018 09:41	0.37	62	6.92	2.8223	0.4489	6.7	42.9
MW-334R	01/25/2018 09:43	0.36	62	6.92	2.8699	0.4566	6.31	54.8
MW-334R	01/25/2018 09:46	0.36	62	6.92	2.8535	0.4539	6.44	81.4
MW-334R	01/25/2018 09:48	0.33	62	6.91	2.8868	0.4583	6.64	75.5
MW-334R	01/25/2018 09:51	0.29	61	6.91	2.8622	0.4548	6.63	60.3
MW-334R	01/25/2018 09:53	0.25	61	6.9	2.9312	0.4644	6.77	75.1
MW-334R	01/25/2018 09:55	0.22	61	6.9	2.8074	0.4454	7.35	40.5
MW-334R	01/25/2018 09:58	0.2	61	6.89	2.9082	0.4603	7.18	52.4
MW-334R	01/25/2018 10:00	0.18	60	6.89	2.8851	0.4567	7.31	67.9
MW-334R	01/25/2018 10:03	0.16	60	6.89	2.8406	0.4496	7.65	33.3
MW-334R	04/12/2018 08:49	7.17	213	6.98	1.3984	0.0233	10.01	50.7
MW-334R	04/12/2018 08:52	1.85	102	6.81	1.4260	0.0238	9.44	20
MW-334R	04/12/2018 08:55	1.23	41	6.77	1.4777	0.0246	9.55	9.3
MW-334R	04/12/2018 08:57	1.06	13	6.75	1.4882	0.0247	9.72	11.4
MW-334R	04/12/2018 09:00	1	-1	6.73	1.5146	0.0251	9.88	7.8
MW-334R	04/12/2018 09:03	0.96	-8	6.72	1.5055	0.0250	9.95	7.1
MW-334R	04/12/2018 09:05	0.98	-13	6.73	1.4593	0.0243	9.64	20.9
MW-334R	04/12/2018 09:08	0.96	-15	6.71	1.5023	0.0249	9.94	10
MW-334R	04/12/2018 09:11	0.98	-18	6.71	1.5046	0.0250	9.84	16.8
MW-334R	04/12/2018 09:14	0.9	-19	6.7	1.4853	0.0247	9.85	17.3
MW-334R	04/12/2018 09:16	0.89	-20	6.7	1.5071	0.0250	9.87	24.4
MW-334R	04/12/2018 09:19	0.91	-21	6.69	1.4976	0.0249	9.87	20.6
MW-334R	04/12/2018 09:22	0.91	-22	6.69	1.4934	0.0248	9.88	29.4
MW-334R	04/12/2018 09:24	0.9	-22	6.69	1.4699	0.0244	9.82	40.7
MW-334R	04/12/2018 09:27	0.89	-22	6.69	1.4834	0.0246	9.83	35.9
MW-334R	04/12/2018 09:30	0.86	-22	6.68	1.4684	0.0244	9.89	36.4
MW-334R	04/12/2018 09:32	0.91	-22	6.67	1.4992	0.0249	9.92	29.1
MW-334R	04/12/2018 09:35	0.9	-22	6.67	1.4837	0.0246	9.91	40.6
MW-334R	04/12/2018 09:38	0.85	-23.00	6.67	1.51	25.070	9.82	21.41
MW-334R	07/18/2018 12:03	4.45	-73	6.81	1.295	21.2640	27.65	55.8
MW-334R	07/18/2018 12:06	1.67	-95	6.64	1.384	22.6330	23.38	18.3
MW-334R	07/18/2018 12:08	1.17	-103	6.57	1.401	22.8960	22.82	11.4
MW-334R	07/18/2018 12:10	1.03	-109	6.54	1.409	23.0170	22.54	10.1
MW-334R	07/18/2018 12:12	0.96	-113	6.53	1.412	23.0680	22.2	9
MW-334R	07/18/2018 12:15	0.95	-116	6.52	1.421	23.2110	21.68	8.7
MW-334R	07/18/2018 12:18	0.92	-119	6.51	1.435	23.4180	21.76	11.7
MW-334R	07/18/2018 12:21	0.9	-121	6.51	1.448	23.6140	21.66	8
MW-334R	07/18/2018 12:23	0.88	-123	6.5	1.452	23.6800	21.62	6.7
MW-334R	07/18/2018 12:26	0.87	-125	6.5	1.460	23.8070	21.41	6.2
MW-334R	07/18/2018 12:29	0.88	-126	6.5	1.462	23.8280	21.67	7.4
MW-334R	07/18/2018 12:32	0.88	-128	6.5	1.473	24.0070	21.03	7.4
MW-334R	07/18/2018 12:35	0.83	-130.00	6.50	1.48	24.070	21.44	6.76
MW-334R	10/26/2018 11:05	0.51	-99.70	6.52	10.30	17.400	17.45	3.80
MW-334R	04/05/2019 09:10	0.15	-135	6.77	NM	9.455	9.65	7.4
MW-334R	07/05/2019 09:15	1.66	-107.4	6.5	NM	11.85	16.56	39
MW-334R	07/05/2019 10:05	4.16	-112.5	6.69	NM	12.01	19.22	128.1
MW-334R	07/05/2019 10:10	2.68	-122.4	6.51	NM	12.29	17.07	117.7
MW-334R	07/05/2019 10:15	1.89	122.4	6.48	NM	12.05	16.59	223.6
MW-334R	07/05/2019 10:20	1.81	-112.3	6.48	NM	11.98	16.53	37.4
MW-334R	07/05/2019 10:25	1.68	-113.3	6.49	NM	11.87	16.54	38.2
MW-334R	07/05/2019 10:30	1.65	-110.4	6.49	NM	11.86	16.56	38.7
MW-334R	07/05/2019 10:35	1.66	-107.4	6.5	NM	11.85	16.56	39
MW-334R	01/09/2020 08:45	3.88	-86.7	6.3	NM	2.123	6.71	16.4
MW-334R	01/09/2020 08:50	1.6	-114.9	6.48	NM	2.124	7.92	15.9
MW-334R	01/09/2020 08:55	0.86	-123.2	6.52	NM	2.129	8.28	29.1
MW-334R	01/09/2020 09:00	0.67	-127.2	6.53	NM	2.133	8.47	28.7
MW-334R	01/09/2020 09:05	0.6	-127.8	6.53	NM	2.137	8.55	31.4

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-334R	01/09/2020 09:10	0.56	-127.3	6.54	NM	2.14	8.64	27.8
MW-334R	01/09/2020 09:15	0.55	-128.2	6.54	NM	2.148	8.69	22.3
MW-334R	01/09/2020 09:20	0.48	-129.9	6.54	NM	2.157	8.69	18.9
MW-334R	01/09/2020 09:25	0.49	-128.4	6.53	NM	2.173	8.97	13.7
MW-334R	01/09/2020 09:30	0.48	-130.5	6.5	NM	2.203	9.33	12
MW-334R	04/06/2020 13:00	0.05	-58.7	5.49	NM	7.461	13.43	8.3
MW-334R	07/09/2020 12:20	5.09	-107.1	6.54	4.83	8.713	25.26	0
MW-334R	07/09/2020 12:25	5	-109.4	6.53	4.88	8.745	25.15	0
MW-334R	07/09/2020 12:30	4.4	-123.9	6.5	5.16	9.206	24.41	0
MW-334R	07/09/2020 12:35	4.01	-128.6	6.49	5.34	9.497	24.07	0
MW-334R	07/09/2020 12:40	3.63	-128.9	6.49	5.45	9.7	23.9	0
MW-334R	07/09/2020 12:45	3.24	-122.6	6.48	5.51	9.743	23.83	0
MW-334R	07/09/2020 12:50	2.81	-120.7	6.49	5.54	9.843	23.64	0
MW-334R	07/09/2020 12:55	2.69	-117.7	6.49	5.54	9.852	23.52	0
MW-334R	07/09/2020 13:00	2.58	-114.4	6.49	5.55	9.86	23.45	0
MW-334R	07/09/2020 13:05	2.56	-115.3	6.5	5.55	9.848	23.41	0
MW-334R	09/25/2020 09:30	NM	NM	NM	NM	NM	NM	17.8
MW-334R	10/14/2020 08:45	1.63	-132.2	6.53	3.9	7.141	17.72	53.4
MW-334R	10/14/2020 08:50	1.13	-121.9	6.55	3.98	7.191	18.21	54.1
MW-334R	10/14/2020 08:55	0.8	-118.2	6.56	4.01	7.245	18.48	50.8
MW-334R	10/14/2020 09:00	1.03	-112.2	6.54	4.09	7.395	18.83	39
MW-334R	10/14/2020 09:05	1.03	-117.4	6.54	4.16	7.508	18.85	35.4
MW-334R	10/14/2020 09:10	1.2	-121	6.54	4.22	7.605	18.84	27.4
MW-334R	10/14/2020 09:15	1.11	-121.3	6.56	4.24	7.633	18.87	23.7
MW-334R	10/14/2020 09:20	1.11	-121.5	6.56	4.24	7.664	18.87	21
MW-334R	10/14/2020 09:25	1.18	-122	6.57	4.27	7.696	18.93	22.3
MW-334R	10/14/2020 09:30	1.3	-121.2	6.57	4.27	7.692	19.08	NM
MW-334R	01/12/2021 10:15	2.29	-48	6.67	4.81	8.618	9.15	20.7
MW-334R	01/12/2021 10:20	1.07	-51.7	6.7	4.93	8.8	9.42	24.1
MW-334R	01/12/2021 10:25	0.43	-56.6	6.7	5.02	8.957	9.88	60.2
MW-334R	01/12/2021 10:30	0.33	-59.2	6.71	5.06	9.018	9.51	83.8
MW-334R	01/12/2021 10:35	0.25	-59.5	6.72	5.06	9.025	10.33	10.3
MW-334R	01/12/2021 10:40	0.24	-60	6.72	5.08	9.054	10.67	8
MW-334R	01/12/2021 10:45	0.29	-60.8	6.72	5.1	9.082	11.12	5.7
MW-334R	01/12/2021 10:50	0.23	-62.2	6.72	5.12	9.016	11.04	5.1
MW-334R	01/12/2021 10:55	0.2	-62.5	6.72	5.13	9.122	10.97	14
MW-334R	01/12/2021 11:00	0.16	-62.6	6.72	5.12	9.118	10.94	30
MW-334R	04/13/2021 10:10	1.1	-101.6	6.77	4.78	8.585	11.47	64.6
MW-334R	04/13/2021 10:15	0.51	-106.3	6.75	4.85	8.673	11.03	43.6
MW-334R	04/13/2021 10:20	0.38	-107.9	6.71	4.9	8.744	11.09	28.9
MW-334R	04/13/2021 10:25	0.2	-109.3	6.7	4.9	8.745	11.33	16.4
MW-334R	04/13/2021 10:30	0.17	-110.9	6.71	4.91	8.762	11.31	22.7
MW-334R	04/13/2021 10:35	0.16	-112.4	6.69	4.92	8.793	11.32	21.6
MW-334R	04/13/2021 10:40	0.16	-112.7	6.7	4.96	8.837	11.24	22.8
MW-334R	07/15/2021 13:50	0.53	-90.7	6.53	5.49	9.633	26.47	0
MW-334R	07/15/2021 13:55	0.43	-84	6.5	5.62	9.863	25.49	0
MW-334R	07/15/2021 14:00	0.4	-80.3	6.49	5.69	10.12	25.94	0
MW-334R	07/15/2021 14:05	0.36	-85.1	6.55	5.8	10.31	26.51	0
MW-334R	07/15/2021 14:10	0.27	-86.5	6.54	5.84	10.37	26.3	0
MW-334R	07/15/2021 14:15	0.23	-99.5	6.55	5.86	10.39	25.8	15.5
MW-334R	07/15/2021 14:20	0.22	-105.6	6.56	5.85	10.23	25.2	0
MW-334R	07/15/2021 14:25	0.17	-107.4	6.57	5.89	10.42	24.77	13.8
MW-334R	07/15/2021 14:30	0.18	-108	6.57	5.89	10.42	24.37	7.1
MW-334R	07/15/2021 14:35	0.12	-108.1	6.58	5.92	10.46	23.8	19.9
MW-334R	01/17/2022 10:40	2.68	-75	6.44	6.66	11.67	8.62	50.7
MW-334R	01/17/2022 10:45	1.05	-91	6.58	6.86	12.02	8.08	25.7
MW-334R	01/17/2022 10:50	0.94	-92.1	6.58	6.88	12.04	8.27	35.8
MW-334R	01/17/2022 10:55	0.92	-93.3	6.58	6.89	12.06	8.46	29
MW-334R	01/17/2022 11:00	3.36	-93.9	6.58	6.9	12.07	8.54	40.3
MW-334R	01/17/2022 11:05	2.16	-97	6.58	6.91	12.08	8.72	34.5
MW-334R	01/17/2022 11:10	0.97	-98.3	6.58	6.93	12.11	8.59	35.8
MW-334R	01/17/2022 11:15	2.47	-98.8	6.59	6.93	12.11	8.63	37

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-334R	01/17/2022 11:20	2.02	-99.2	6.59	6.94	12.14	8.7	30.5
MW-334R	01/17/2022 11:25	2.16	-99.7	6.58	6.97	12.17	8.69	28.5
MW-334R	01/17/2022 11:30	2.1	-99.8	6.59	6.98	12.19	8.65	28.9
MW-334R	04/12/2022 09:45	1.22	-77.2	6.59	4.38	7.889	9.7	32.2
MW-334R	04/12/2022 09:50	0.8	-92.9	6.61	4.4	7.923	9.84	30.9
MW-334R	04/12/2022 09:55	0.79	-94.4	6.63	4.41	7.925	9.85	38.1
MW-334R	04/12/2022 10:00	0.77	-95.9	6.63	4.41	7.931	9.86	36.7
MW-334R	04/12/2022 10:05	0.8	-104.6	6.64	4.52	8.082	10.05	39.1
MW-334R	04/12/2022 10:10	0.8	-105.7	6.63	4.55	8.156	10.08	37.6
MW-334R	04/12/2022 10:15	0.78	-106.4	6.63	4.58	8.215	10.13	34.8
MW-334R	04/12/2022 10:20	0.78	-108.3	6.62	4.66	8.35	10.27	23.1
MW-334R	04/12/2022 10:25	0.75	-109	6.62	4.69	8.394	10.32	25.8
MW-334R	04/12/2022 10:30	0.79	-110.5	6.62	4.72	8.443	10.4	20.7
MW-336	04/17/2013 10:00	2.53	-49	6.18	0.9	1.84	11.6	270.3
MW-336	04/17/2013 10:05	1.5	-56	6.41	1	1.93	11.4	160.4
MW-336	04/17/2013 10:10	1.37	-75.9	6.37	0.9	1.93	11.4	158.7
MW-336	04/17/2013 10:15	1.15	-78.7	6.47	1	1.93	11.4	117.8
MW-336	04/17/2013 10:20	0.92	-81.9	6.52	1	1.91	11.3	61.4
MW-336	04/17/2013 10:25	0.82	-82.9	6.55	1	1.9	11.3	53.1
MW-336	04/17/2013 10:30	0.73	-83.9	6.57	1	1.89	11.3	35.4
MW-336	04/17/2013 10:35	0.71	-81.9	6.57	1	1.88	11.2	33
MW-336	04/17/2013 10:40	0.66	-80.6	6.59	1	1.86	11.4	12.2
MW-336	04/17/2013 10:45	0.58	-83.6	6.63	0.9	1.84	11.3	12.8
MW-336	04/17/2013 10:50	0.56	-84.7	6.62	0.9	1.83	11.4	8.8
MW-336	04/17/2013 10:55	0.55	-84.6	6.63	0.9	1.83	11.4	8.6
MW-336	04/17/2013 11:00	0.54	-84.9	6.61	0.94	1.833	11.42	8.5
MW-336	04/17/2013 11:45	1.95	-64.7	6.55	0.96	1.882	15.41	11
MW-336	04/18/2013 11:50	1.96	-61.7	6.54	0.9	1.883	15.38	10.7
MW-336	06/19/2013 09:35	2.68	-89	6.56	0.76	1.260	16.60	3.50
MW-336	06/19/2013 10:15	1.65	-87	6.57	0.75	1.308	18.71	1.70
MW-336	06/19/2013 10:40	1.66	-88	6.56	0.75	1.328	19.08	81.70
MW-336	06/20/2013 10:40	1.66	-88	6.56	0.75	1.328	19.08	81.70
MW-336	03/14/2014 09:16	5.87	-38.5	5.75	5.46	6.250	6.62	22.20
MW-336	03/14/2014 09:35	2.43	-9.7	5.13	13.46	22.830	8.38	98.90
MW-336	03/14/2014 09:50	2.12	-35.5	5.41	9.10	16.170	6.06	111.10
MW-336	06/26/2014 08:22	1.04	-119	6.38	6.19	10.650	21.16	27.80
MW-336	06/26/2014 08:53	0.26	-138.1	6.23	17.99	28.010	18.13	38.80
MW-336	06/27/2014 09:10	0.18	-144.6	6.27	17.87	28.900	20.56	9.80
MW-336	07/29/2014 12:10	0.09	-95.3	5.96	15.04	24.660	22.86	0.0000
MW-336	07/29/2014 12:30	0.13	-95.6	6.08	15.26	25.180	24.55	0.0000
MW-336	07/29/2014 13:05	0.11	-84.2	6.21	16.81	24.610	25.11	32.10
MW-336	01/20/2015 10:30	2.65	-126.8	6.69	18.90	25.190	8.31	116.70
MW-336	07/07/2015 11:43	0.0000	-130	6.90	1.50	2.990	28.67	38.90
MW-336	07/07/2015 12:05	3.70	-50	7.02	9.50	16.300	28.16	53.40
MW-336	12/14/2015 10:25	1.11	-249	7.01	31.70	64.100	16.72	127.00
MW-336	12/14/2015 11:15	1.06	-234	6.97	30.90	47.300	16.67	682.00
MW-336	06/15/2016 11:00	3.52	-164.7	6.92	0.0000	0.001	32.26	0.0000
MW-336	06/15/2016 11:15	4.39	-237.1	6.85	0.0000	0.001	25.08	52.40
MW-336	12/12/2016 13:00	0.97	-265.1	7.04	10.3	26.08	11.83	5.9
MW-336	12/12/2016 13:25	3.58	-276.9	6.98	9.28	15.84	12.66	612.8
MW-336	05/10/2017 10:05	0.51	-52.40	6.40	0.42	0.998	10.73	12.80
MW-336	05/10/2017 10:45	2.29	-8.20	7.08	0.97	1.656	12.258	2.40
MW-336	05/10/2017 11:05	1.80	-203.30	7.05	6.67	11.650	13.49	153.10
MW-336	10/11/2019 09:35	1.02	-105.3	6.61	NM	0.751	20.28	40
MW-336	10/11/2019 09:40	0.92	-121.9	6.64	NM	0.9	20.31	11.7
MW-336	10/11/2019 09:45	0.86	-152.3	6.7	NM	1.042	20.33	4.9
MW-336	10/11/2019 09:50	0.81	-253.7	6.9	NM	1.427	20.42	0
MW-336	10/11/2019 09:55	1.03	-345	7.11	NM	2.14	20.46	0.7
MW-336	10/11/2019 10:00	1.52	-388	7.13	NM	5.393	20.37	0.4
MW-336	10/11/2019 10:05	2.04	-400	7.13	NM	5.568	20.38	0.5
MW-336	10/11/2019 10:10	2.37	-410.2	7.12	NM	5.606	20.69	0.7
MW-336	10/11/2019 10:15	2.55	-413.2	7.12	NM	5.577	20.64	1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-336	10/11/2019 10:20	2.81	-413.7	7.13	NM	5.602	20.67	1
MW-336	10/11/2019 10:45	4.35	-341.7	7.72	3.49	6.378	20.25	20.9
MW-336	10/11/2019 11:00	5.08	-353.6	7.25	2.87	5.305	20.55	451.7
MW-336	09/24/2020 10:15	NM	NM	NM	NM	NM	NM	324.7
MW-336	09/25/2020 08:35	3.01	-54.4	6.77	0.33	0.68	20.84	100.7
MW-336	09/25/2020 08:40	1.36	-117.5	6.46	0.31	0.629	20.76	61.2
MW-336	09/25/2020 08:45	1.14	-123.7	6.49	0.31	0.63	20.91	30.8
MW-336	09/25/2020 08:50	0.87	-146.3	6.56	0.31	0.641	20.94	11.1
MW-336	09/25/2020 08:55	0.57	-183.8	6.68	0.37	0.743	21.06	8.1
MW-336	09/25/2020 09:00	0.39	-241.9	6.86	0.44	0.889	21.07	10.5
MW-336	09/25/2020 09:05	0.18	-332.9	7.2	1.68	3.144	21.06	10
MW-336	09/25/2020 09:10	0.13	-367.8	7.21	2.1	3.951	21.18	6.4
MW-336	09/25/2020 09:15	0.1	-373.4	7.21	2.17	4.076	21.32	4.5
MW-336	09/25/2020 09:20	0.09	-371.7	7.21	2.2	4.13	21.43	3.9
MW-336	09/25/2020 09:55	2.17	-347.3	7.64	2.34	4.395	22.63	12.3
MW-336	09/25/2020 10:15	3.29	-347.4	7.53	2.34	4.382	22.32	NM
MW-336	12/02/2020 08:55	1.3	-97.5	7.93	0.49	0.984	11.68	21.9
MW-336	12/02/2020 09:00	0.4	-109.9	6.92	0.43	0.862	9.9	10.7
MW-336	12/02/2020 09:05	0.74	-109.7	6.79	0.42	0.841	9.62	10.4
MW-336	12/02/2020 09:10	0.66	-117.4	6.77	0.41	0.834	9.67	8.8
MW-336	12/02/2020 09:15	0.57	-126.1	6.8	0.41	0.831	9.54	10.9
MW-336	12/02/2020 09:20	0.43	-158.7	6.83	0.63	1.24	9.69	10.6
MW-336	12/02/2020 09:25	0.21	-231.6	7.01	0.83	1.628	9.8	11.1
MW-336	12/02/2020 09:30	0.21	-266.3	7.08	0.94	1.829	9.52	6.7
MW-336	12/02/2020 09:35	0.24	-267.9	7.02	1	1.923	9.28	4.5
MW-336	12/02/2020 09:40	0.23	-276.8	7.06	1.01	1.966	9.28	1.9
MW-336	12/02/2020 10:20	0.75	-286.3	7.08	1.09	2.12	13.24	7.3
MW-336	12/02/2020 10:40	1.62	-261.9	6.98	0.73	1.438	12.93	415.8
MW-336	03/17/2021 11:20	5.42	-35.4	8.53	0.3	0.63	8.49	24.1
MW-336	03/17/2021 11:25	6.8	-19.5	7.55	0.24	0.506	8.29	12.1
MW-336	03/17/2021 11:30	6.52	-17.6	7.18	0.21	0.436	8.1	11.7
MW-336	03/17/2021 11:35	5.29	-16.2	7.04	0.2	0.407	8	20.4
MW-336	03/17/2021 11:40	8.29	-56.6	7.12	0.41	0.825	8.38	42.1
MW-336	03/17/2021 11:45	8.17	-95.9	7.33	0.53	1.058	8.38	24.5
MW-336	03/17/2021 11:50	8.16	-106.5	7.3	0.62	1.228	8.36	13.6
MW-336	03/17/2021 11:55	7.73	-116.2	7.28	0.68	1.354	8.32	7.6
MW-336	03/17/2021 12:00	7.09	-127.6	7.27	0.72	1.425	8.3	4.9
MW-336	03/17/2021 12:05	6.89	-135.4	7.25	0.74	1.47	8.33	4.2
MW-336	03/17/2021 12:40	2.29	-88.6	7.43	0.78	1.541	9.2	4.7
MW-336	03/17/2021 13:00	1.78	-91.9	7.33	0.77	1.522	9.94	475.6
MW-336	09/08/2021 13:55	1.37	-70.6	6.21	0.21	0.44	25.26	121.7
MW-336	09/08/2021 14:00	1.4	-60.1	6.04	0.21	0.436	25.63	145
MW-336	09/08/2021 14:05	1.05	-75.3	6.18	0.21	0.447	25.44	102.5
MW-336	09/08/2021 14:10	1	-92.7	6.25	0.22	0.46	25.07	57.1
MW-336	09/08/2021 14:15	1.02	-131.4	6.29	0.26	0.535	24.81	91.6
MW-336	09/08/2021 14:20	1.08	-191.7	6.5	0.39	0.804	24.62	108.8
MW-336	09/08/2021 14:25	1.4	-236.4	6.62	0.57	1.029	21.63	76
MW-336	09/08/2021 14:30	1.8	-267.8	6.68	0.59	1.185	24.56	44.4
MW-336	09/08/2021 14:35	2.01	-289.7	6.7	0.63	1.259	24.5	29.7
MW-336	09/08/2021 14:40	2.16	-304.9	6.68	0.65	1.31	24.21	20.6
MW-336	03/16/2022 09:55	6.56	95	6.41	0.14	0.288	11.85	111.5
MW-336	03/16/2022 10:00	6.07	91.7	6.14	0.14	0.288	11.85	105.5
MW-336	03/16/2022 10:05	4.98	78.4	5.76	0.14	0.285	11.99	93.9
MW-336	03/16/2022 10:10	4.21	74.4	5.61	0.14	0.285	11.92	75.1
MW-336	03/16/2022 10:15	4.51	70.8	6.03	0.15	0.304	12.54	66.5
MW-336	03/16/2022 10:20	4.23	67	5.69	0.17	0.342	12.47	61.4
MW-336	03/16/2022 10:25	6.34	59.4	5.77	0.19	0.4	12.32	43.4
MW-336	03/16/2022 10:30	6.85	58.9	5.63	0.24	0.488	12.14	30.9
MW-336	03/16/2022 10:35	9.53	36.5	5.8	0.26	0.538	13.82	29.5
MW-336	03/16/2022 10:40	7.58	34.9	5.78	0.27	0.545	14.01	27.5
MW-337	04/16/2013 13:30	3.15	-47.3	6.43	1.2	2.29	15.5	95.8
MW-337	04/16/2013 13:35	1.68	-49.6	6.25	1.2	2.34	15	45.1

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-337	04/16/2013 13:40	1.27	-52	6.22	1.2	2.37	15	33.2
MW-337	04/16/2013 13:45	1.01	-56.3	6.22	1.2	2.34	15	24.2
MW-337	04/16/2013 13:50	0.85	-56.6	6.19	1.2	2.39	14.5	15.5
MW-337	04/16/2013 13:55	6.72	-59.8	6.21	1.2	2.38	14.6	12.9
MW-337	04/16/2013 14:00	0.62	-62.1	6.24	1.2	2.37	14.7	10.5
MW-337	04/16/2013 14:05	0.54	-63.6	6.25	1.2	2.36	14.8	8.1
MW-337	04/16/2013 14:10	0.45	-64.4	6.25	1.2	2.37	14.7	6.3
MW-337	04/16/2013 14:15	0.37	-64.1	6.25	1.2	2.36	14.5	5
MW-337	04/16/2013 14:20	0.35	-64.6	6.25	1.22	2.36	14.23	3.9
MW-337	04/16/2013 15:10	1.2	-120.1	6.3	1.18	2.367	14.48	20.9
MW-337	04/17/2013 15:45	1.3	-130.1	6.41	1.22	2.347	14.59	30.7
MW-337	06/24/2013 10:00	0.45	-95	6.37	1.22	2.219	21.5	0
MW-337	06/24/2013 10:50	0.33	-93	6.35	1.18	2.077	20.07	0
MW-337	06/24/2013 11:30	0.86	-100	6.47	1.20	2.458	22.10	-1.30
MW-337	06/25/2013 11:30	0.86	-100	6.47	1.2	2.458	22.1	-1.3
MW-337	03/13/2014 14:28	0.54	221.3	12.01	38.50	58.200	8.26	5.90
MW-337	03/13/2014 14:57	0.31	200.3	12.48	29.30	46.100	11.11	34.60
MW-337	03/13/2014 15:07	0.61	214.1	12.68	30.04	30.160	5.98	46.60
MW-337	07/01/2014 12:50	0.17	-42.4	7.07	1.66	3.176	23.57	150.00
MW-337	07/01/2014 13:20	0.08	-101.6	7.48	3.32	6.075	20.52	22.60
MW-337	07/01/2014 13:35	0.10	-89.3	7.38	3.00	5.661	22.19	29.90
MW-337	07/30/2014 12:15	0.14	-139.8	7.32	1.85	3.512	22.59	8.90
MW-337	07/30/2014 12:30	0.12	-163.6	7.55	1.99	4.616	23.61	29.60
MW-337	07/30/2014 12:45	0.14	-157.3	7.59	2.87	5.239	21.78	18.00
MW-337	03/11/2015 12:00	0.0000	-183	7.77	8.50	14.500	9.20	242.00
MW-337	03/11/2015 12:20	0.0000	-246	8.29	10.60	18.400	8.71	60.40
MW-337	03/11/2015 12:40	1.05	-199	8.17	6.20	12.120	10.10	0.0000
MW-337	06/16/2015 12:40	0.0000	-242.8	7.23	9.60	16.990	16.44	60.30
MW-337	06/16/2015 12:55	0.32	-240.1	7.72	9.30	16.980	18.40	512.40
MW-337	12/11/2015 10:13	5.05	-87	7.73	23.10	36.800	15.49	185.00
MW-337	12/11/2015 10:50	2.60	-117	7.80	24.10	38.200	15.88	0.0000
MW-337	12/14/2016 11:05	2.91	-243.1	7.24	4.92	8.759	14.92	-1.4
MW-337	10/07/2019 13:00	1.95	-240	7.17	NM	10.43	22.73	83
MW-337	10/07/2019 13:05	1.02	-256.3	7.14	NM	10.34	22.8	40
MW-337	10/07/2019 13:10	0.61	-266.1	7.11	NM	10.35	23.05	15.6
MW-337	10/07/2019 13:15	0.81	-270.6	7.08	NM	10.37	23.15	7.6
MW-337	10/07/2019 13:20	0.78	-276.5	7.05	NM	10	23.2	4.5
MW-337	10/07/2019 13:25	0.54	-281.5	7.04	NM	10.4	23.14	3.3
MW-337	10/07/2019 13:30	1.28	-286.9	7.03	NM	10.42	23.11	2.6
MW-337	10/07/2019 13:35	2.12	-296.7	7.01	NM	10.41	23.19	1.6
MW-337	10/07/2019 13:40	3.22	-303.8	7	NM	10.41	23.14	1.2
MW-337	10/07/2019 13:45	5.9	-317.3	6.99	NM	10.46	23.44	0.9
MW-337	10/07/2019 14:20	3.58	-225.2	7.11	6.26	11.03	23.68	17.7
MW-337	10/07/2019 14:35	6.38	-211.3	6.9	1.53	2.941	23.29	1235.8
MW-337	09/18/2020 10:13	NM	NM	NM	NM	NM	NM	909.3
MW-337	09/24/2020 08:45	1.64	-85.6	6.15	0.83	1.637	22.35	138.2
MW-337	09/24/2020 08:50	0.83	-98.3	6.37	0.85	1.66	22.17	82.6
MW-337	09/24/2020 08:55	0.4	-196.2	7.11	1.86	3.523	21.85	36.9
MW-337	09/24/2020 09:00	0.31	-240.9	7.23	2.02	3.82	21.81	24.2
MW-337	09/24/2020 09:05	0.25	-284.4	7.28	2.11	3.977	21.81	12.4
MW-337	09/24/2020 09:10	0.09	-300.9	7.28	2.17	4.087	21.88	8.1
MW-337	09/24/2020 09:15	0.11	-310.2	7.3	2.22	4.167	21.95	4.6
MW-337	09/24/2020 09:20	0.38	-318.8	7.37	2.27	4.257	22.08	13.4
MW-337	09/24/2020 09:25	0.51	-326.9	7.32	2.3	4.309	22.12	2.8
MW-337	09/24/2020 09:30	0.55	-328.6	7.32	2.3	4.315	22.13	3.3
MW-337	09/24/2020 09:55	0.67	-325.9	7.44	2.54	4.74	23.16	8
MW-337	09/24/2020 10:13	0.07	-310.9	7.34	2.18	4.106	22.47	NM
MW-337	12/04/2020 08:25	0.48	-108.1	7.4	0.73	1.44	13.97	541.2
MW-337	12/04/2020 08:30	0.4	-122.6	7.06	0.83	1.616	14.27	384.6
MW-337	12/04/2020 08:35	0.39	-152.5	6.88	0.94	1.831	14.3	202.6
MW-337	12/04/2020 08:40	0.38	-172.2	6.81	1.03	2.014	13.95	117.2
MW-337	12/04/2020 08:45	0.37	-174.5	6.8	1.07	2.071	13.88	82.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-337	12/04/2020 08:50	0.2	-181.9	6.79	1.1	2.128	14	63.9
MW-337	12/04/2020 08:55	0.37	-187.6	6.79	1.13	2.189	13.95	45.6
MW-337	12/04/2020 09:00	0.22	-193.5	6.79	1.16	2.242	13.96	35.4
MW-337	12/04/2020 09:05	0.24	-184.8	6.79	1.18	2.274	13.98	28.2
MW-337	12/04/2020 09:10	0.34	-199.8	6.79	1.2	2.312	13.97	26.3
MW-337	12/04/2020 09:40	2.17	-161.7	6.79	1.34	2.577	13.7	15.6
MW-337	12/04/2020 10:00	1.29	-92.5	6.93	0.788	1.53	14.3	1198.2
MW-337	03/30/2021 09:00	1.39	-42.6	6.52	0.8	1.502	10.06	481
MW-337	03/30/2021 09:05	0.81	-48.9	6.52	0.82	1.575	10.45	479
MW-337	03/30/2021 09:10	0.75	-63.6	6.6	0.82	1.524	10.5	484
MW-337	03/30/2021 09:15	0.7	-80.4	6.69	0.85	1.665	10.41	323.9
MW-337	03/30/2021 09:20	0.49	-95.3	6.81	0.9	1.759	10.45	209.3
MW-337	03/30/2021 09:25	0.41	-121.5	6.87	0.98	1.814	10.38	113.4
MW-337	03/30/2021 09:30	0.37	-133.2	6.92	0.94	1.823	10.57	67.5
MW-337	03/30/2021 09:35	0.27	-127.8	6.94	0.96	1.868	10.42	48.9
MW-337	03/30/2021 09:40	0.25	-136.4	6.99	1.01	1.967	10.47	34
MW-337	03/30/2021 09:45	0.2	-155.9	7.05	1.1	2.129	10.53	22.9
MW-337	03/30/2021 10:30	10.67	-132	7.13	1.2	2.322	10.67	166.8
MW-337	03/30/2021 10:45	0.58	-99.2	7.1	0.98	1.92	10.83	345.7
MW-337	09/03/2021 12:30	5.39	-248.7	6.81	1.06	2.086	23.59	30.5
MW-337	03/10/2022 09:20	1.02	-109.6	6.97	1.09	2.135	8.96	205.8
MW-337	03/10/2022 09:25	0.43	-116.9	6.76	1.08	2.097	8.82	877.7
MW-337	03/10/2022 09:30	0.41	-132.9	6.78	1.19	2.285	9.51	1213.2
MW-337	03/10/2022 09:35	0.45	-148	6.86	1.3	2.478	10.54	873.5
MW-337	03/10/2022 09:40	0.47	-156.9	6.96	1.27	2.476	11.54	581.9
MW-337	03/10/2022 09:45	0.54	-157.8	7	1.27	2.442	12.51	427
MW-337	03/10/2022 09:50	0.55	-158.9	7.02	1.07	2.068	12.05	1114
MW-337	03/10/2022 09:55	0.51	-157.9	6.9	1.06	2.065	10.7	677.6
MW-337	03/10/2022 10:00	0.51	-162.1	6.88	1.05	2.048	10.81	425.7
MW-337	03/10/2022 10:05	0.51	-169.9	6.89	1.05	2.053	10.57	141.7
MW-338	05/06/2013 10:20	0.63	-86.8	6.35	1.6	2.38	13.3	7.1
MW-338	05/06/2013 10:25	0.62	-65.2	6.32	1.7	2.5	13.4	3.1
MW-338	05/06/2013 10:30	0.61	-72.2	6.34	1.7	2.56	13.4	0 (-1.2)
MW-338	05/06/2013 10:35	0.51	-76	6.32	1.8	2.61	13.1	2.3
MW-338	05/06/2013 10:40	0.49	-59	6.34	1.8	2.65	13.2	0.5
MW-338	05/06/2013 10:45	0.46	-61.7	6.32	1.8	2.66	13.6	0.6
MW-338	05/06/2013 10:50	0.45	-64.7	6.34	1.82	2.656	13.11	0.7
MW-338	05/06/2013 11:20	8.09	-73.4	6.28	2.64	3.758	12.79	1.2
MW-338	05/07/2013 11:45	10.82	-48.4	6.33	2.64	4.165	17.25	2.2
MW-338	06/20/2013 09:35	0	-76	6.44	1.22	2.353	17.9	14.1
MW-338	06/20/2013 10:13	0.73	-33	6.11	1.87	3.531	14.54	2.9
MW-338	06/20/2013 11:35	0.09	-56.9	6.30	1.97	3.660	21.20	40.60
MW-338	06/21/2013 11:35	0.09	-56.9	6.3	1.97	3.66	21.2	40.6
MW-338	03/11/2014 00:00	1.23	-87.8	6.61	1.13	2.163	12.81	11.60
MW-338	03/11/2014 15:09	0.76	-211.9	7.61	6.81	11.780	11.41	20.50
MW-338	03/11/2014 15:20	0.66	-168.5	7.45	6.05	10.820	14.06	28.20
MW-338	06/30/2014 12:30	0.0000	-90.3	6.75	6.53	7.337	24.83	21.60
MW-338	06/30/2014 13:05	0.03	-96.9	7.19	10.04	17.050	21.85	12.20
MW-338	06/30/2014 13:17	0.01	-150	7.25	9.52	16.540	25.40	16.30
MW-338	07/31/2014 09:40	0.07	-393	9.53	24.72	38.730	21.76	10.40
MW-338	07/31/2014 10:10	0.31	-418.7	9.67	26.33	40.990	21.05	12.40
MW-338	07/31/2014 10:45	0.28	-429.6	9.65	25.91	211.700	22.66	21.60
MW-338	01/15/2015 11:00	3.23	-315	9.61	18.35	31.310	9.37	251.80
MW-338	07/07/2015 14:20	0	-222	7.65	6.6	9.65	17.75	14.7
MW-338	12/14/2015 14:20	0.0000	-124	7.30	132.00	22.000	19.13	12.00
MW-338	12/14/2015 14:55	0.0000	-213	8.21	21.10	34.000	18.70	1000.10
MW-338	06/15/2016 14:45	0.0000	-158.2	7.31	12.38	20.180	18.16	18.10
MW-338	06/15/2016 15:00	0.74	-106.2	6.88	4.34	8.222	21.10	11.80
MW-338	12/13/2016 14:35	0.73	-156.9	8.95	26.79	41.6	14.93	8.9
MW-338	05/10/2017 11:45	0.03	-294.70	8.71	21.30	33.940	14.54	0.0000
MW-338	05/10/2017 13:45	1.40	-138.20	8.17	26.07	40.810	11.53	16.50
MW-338	05/10/2017 13:55	1.15	-104.00	7.56	1.84	3.512	11.97	14.10

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-338	01/09/2019 13:15	0.27	-235	8.52	NM	62.26	10.25	18
MW-338	01/09/2019 13:50	0.32	-256.4	8.63	45.44	67.21	11.05	18.5
MW-338	10/09/2019 12:55	11.25	-280.3	7.67	NM	27.1	18.53	68.6
MW-338	10/09/2019 13:00	12.23	-273.3	7.79	NM	30.12	18.56	15.2
MW-338	10/09/2019 13:05	0.24	-280.7	7.85	NM	28.61	18.54	2.1
MW-338	10/09/2019 13:10	12.89	-291.9	7.83	NM	31.72	18.46	0
MW-338	10/09/2019 13:15	1.39	-295.8	7.9	NM	31.86	18.48	0
MW-338	10/09/2019 13:20	12.33	-299.6	7.92	NM	24.62	18.37	0
MW-338	10/09/2019 13:25	2	-302.7	7.95	NM	24.61	18.45	0
MW-338	10/09/2019 13:30	11.88	-304.1	7.96	NM	29.73	18.48	0
MW-338	10/09/2019 13:35	0.74	-308.6	7.97	NM	30.65	18.51	0
MW-338	10/09/2019 13:40	1.96	-310.4	7.98	NM	28.44	18.46	0
MW-338	10/09/2019 14:15	1.37	-203.9	8.06	21.2	18.85	17.89	0
MW-338	10/09/2019 14:30	8.09	-219.3	6.55	2.53	4.709	19.72	34.3
MW-338	09/15/2020 13:15	2.98	-116.9	6.95	0.23	0.479	21.93	26.9
MW-338	09/15/2020 13:20	1.03	-174.2	7.37	8.75	14.92	21.02	14.3
MW-338	09/15/2020 13:25	0.89	-189.3	7.55	9.9	16.78	20.85	9.4
MW-338	09/15/2020 13:30	0.85	-206.2	7.63	10.04	17.04	20.88	9.4
MW-338	09/15/2020 13:35	0.84	-198.5	7.64	10.09	17.12	20.75	19.6
MW-338	09/15/2020 13:40	0.79	-203.4	7.7	10.33	17.52	20.85	7.3
MW-338	09/15/2020 13:45	0.76	-209.5	7.72	10.34	17.51	20.8	4.5
MW-338	09/15/2020 13:50	0.73	-202.7	7.74	10.36	17.53	20.71	3.8
MW-338	09/15/2020 13:55	0.71	-177.1	7.74	10.34	17.48	20.7	3.1
MW-338	09/15/2020 14:00	0.73	-163.2	7.76	10.43	17.64	20.62	3.4
MW-338	09/15/2020 14:01	0.73	-163.2	7.76	10.43	17.64	20.62	3.4
MW-338	09/15/2020 14:40	1.15	-49.4	8.02	11.33	19.12	22.02	42
MW-338	09/15/2020 15:10	1.53	-103.9	7.11	2.4	4.517	22.25	26.2
MW-338	12/01/2020 13:30	2.02	7.1	7.44	0.33	0.667	15.45	15.1
MW-338	12/01/2020 13:35	1.8	-94.1	7.23	9.58	15.3	15.21	22.8
MW-338	12/01/2020 13:40	0.61	-138.3	7.42	12.3	19.44	15.55	89.6
MW-338	12/01/2020 13:45	0.14	-220.2	7.85	16.06	26.07	15.82	55
MW-338	12/01/2020 13:50	0.1	-257.9	8.02	17.17	27.81	15.93	57.8
MW-338	12/01/2020 13:55	0.07	-286.2	8.13	17.82	28.75	15.35	13.8
MW-338	12/01/2020 14:00	0.07	-291.5	8.16	17.51	28.41	14.71	13.5
MW-338	12/01/2020 14:05	0.06	-294.7	8.15	16.5	26.83	14.68	20.1
MW-338	12/01/2020 14:10	0.07	-302.6	8.14	16.54	27.08	14.89	12
MW-338	12/01/2020 14:15	0.05	-312.2	8.15	16.75	27.22	14.95	15.5
MW-338	12/01/2020 14:45	0.27	-163.3	7.91	9.11	15.59	10.17	18.9
MW-338	12/01/2020 15:00	2.37	-146.6	7.94	11.19	18.79	13.81	17.7
MW-338	03/22/2021 15:50	3.1	-139.4	8.34	0.78	1.553	11.26	4.5
MW-338	03/22/2021 15:55	2.66	-155	7.9	0.69	1.382	11.68	8.2
MW-338	03/22/2021 16:00	3.45	-155	7.35	0.7	1.385	12.51	14.8
MW-338	03/22/2021 16:05	0.93	-188.9	7.01	1.87	3.087	11.06	5.8
MW-338	03/22/2021 16:10	0.56	-243.5	7.55	8.15	13.82	11.17	1
MW-338	03/22/2021 16:15	0.45	-259.2	7.76	10.38	17.43	11.11	0.8
MW-338	03/22/2021 16:20	0.35	-277.1	7.86	12.03	20.03	11.15	2.6
MW-338	03/22/2021 16:25	0.46	-284.4	7.87	12.38	20.64	11.33	0
MW-338	03/22/2021 16:30	0.33	-290.1	7.91	13.45	22.29	11.45	8.4
MW-338	03/22/2021 16:35	0.59	-293.5	7.9	13.44	22.28	11.58	0
MW-338	03/23/2021 15:30	1.18	-145.2	8.07	13.34	22.11	12.52	35.1
MW-338	03/23/2021 15:55	2.19	-147.7	8.14	12.71	21.17	12.49	0
MW-338	03/23/2021 16:10	3.36	-114.6	6.84	0.83	1.639	11.1	11.8
MW-338	06/04/2021 12:30	0.09	-181.9	7.76	10.51	17.73	17.43	2.6
MW-338	06/04/2021 12:35	0.13	-182	7.77	10.55	17.8	17.65	1.4
MW-338	06/04/2021 12:40	0.12	-180.7	7.78	10.67	17.99	17.73	1.3
MW-338	06/04/2021 12:45	0.12	-182.3	7.79	10.6	17.88	17.81	1.3
MW-338	06/04/2021 12:50	0.12	-182.9	7.78	10.63	17.89	17.9	1.2
MW-338	09/03/2021 12:55	8.47	-200	7.32	0.28	0.582	24.25	60.1
MW-338	09/03/2021 13:00	4.51	-262.3	6.71	1.22	1.921	21.58	25.9
MW-338	09/03/2021 13:05	1.19	-330.2	7.22	7.23	12.5	20.91	17.3
MW-338	09/03/2021 13:10	0.8	-352.2	7.44	10.03	16.97	20.68	34.9
MW-338	09/03/2021 13:15	0.47	-364.1	7.53	10.6	17.87	20.66	11.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-338	09/03/2021 13:20	0.45	-368.4	7.55	10.61	17.89	20.69	11.1
MW-338	09/03/2021 13:25	0.46	-366.6	7.55	10.6	17.88	20.67	10.9
MW-338	03/14/2022 12:20	3.68	-179.9	7.6	0.67	1.333	11.71	74
MW-338	03/14/2022 12:25	2.23	-200.1	6.98	0.66	1.318	11.86	16.4
MW-338	03/14/2022 12:30	2.49	-200.2	6.95	0.67	1.33	11.92	7.3
MW-338	03/14/2022 12:35	4.48	-206.9	6.9	0.69	1.373	12.12	4.4
MW-338	03/14/2022 12:40	5.93	-215.9	6.88	0.69	1.369	12.38	14.5
MW-338	03/14/2022 12:45	7.96	-221	6.88	0.68	1.357	12.79	8.8
MW-338	03/14/2022 12:50	8.7	-226	6.88	0.68	1.345	13.11	9.5
MW-338	03/14/2022 12:55	8.54	-229.5	6.85	0.65	1.297	13.05	6.6
MW-338	03/14/2022 13:00	8.21	-236	6.83	0.64	1.264	13.27	5.8
MW-338	03/14/2022 13:05	7.96	-242.8	6.83	0.62	1.242	13.58	5
MW-339	04/29/2013 09:20	0.83	-70.9	6.48	1.2	2.33	11.8	4.3
MW-339	04/29/2013 09:25	0.69	-72.1	6.43	1.3	1.93	11.8	3.4
MW-339	04/29/2013 09:30	0.64	-74.9	6.44	1.4	1.98	11.7	3.2
MW-339	04/29/2013 09:35	0.63	-75.8	6.42	1.39	1.999	11.74	3.2
MW-339	04/29/2013 10:10	2.18	-81.7	6.81	1.05	1.688	12.75	278.3
MW-339	04/30/2013 10:20	2.66	-80.3	6.7	1.05	1.567	12.74	276.9
MW-339	06/20/2013 10:05	0	-75	6.33	1.06	1.86	19.7	4
MW-339	06/20/2013 10:25	0.53	-60	6.45	1.05	1.952	22.4	-4.3
MW-339	06/20/2013 10:45	6.01	-89	5.56	0.51	0.949	20.95	169.20
MW-339	06/21/2013 10:45	6.01	-89	5.56	0.51	0.949	20.95	169.2
MW-339	07/03/2014 09:55	0.21	-52.7	6.21	8.23	14.240	26.47	-13.30
MW-339	07/03/2014 10:30	0.16	-48.3	6.27	5.95	10.540	25.93	-11.80
MW-339	07/03/2014 10:47	0.13	-51.9	6.27	6.27	10.970	27.12	-12.40
MW-339	08/01/2014 09:26	0.18	-155.5	6.73	14.73	24.430	25.64	15.10
MW-339	08/01/2014 09:50	0.08	-195.5	6.74	13.79	22.900	25.33	14.80
MW-339	08/01/2014 10:35	0.07	-200.1	6.72	13.88	22.100	25.51	15.50
MW-339	12/11/2015 10:58	-0.11	-326.7	7.11	7.35	12.74	15.3	16
MW-339	12/11/2015 11:00	-0.14	-327.4	7.12	7.35	12.75	15.27	16
MW-339	01/10/2019 13:40	8.32	-370.3	7.68	NM	13.29	8.11	NM
MW-339	01/10/2019 14:35	1.08	-338.1	7.71	7.44	12.92	10.25	3.7
MW-339	10/15/2019 12:35	0.29	-225.4	8.96	NM	41.66	20.8	22.1
MW-339	10/15/2019 12:40	0.21	-267.7	9.02	NM	46.07	20.95	8.5
MW-339	10/15/2019 12:45	0.17	-294	9.07	NM	45.34	20.89	5.1
MW-339	10/15/2019 12:50	0.14	-287	9.09	NM	44.38	20.51	2.4
MW-339	10/15/2019 12:55	0.13	-282.7	9.09	NM	44.06	20.94	1.7
MW-339	10/15/2019 13:00	0.12	-303.6	9.1	NM	44.07	20.94	2.2
MW-339	10/15/2019 13:05	0.11	-314.6	9.11	NM	43.93	20.61	2.5
MW-339	10/15/2019 13:10	0.11	-323.4	9.11	NM	43.69	20.75	2.4
MW-339	10/15/2019 13:15	0.11	-316.4	9.12	NM	43.78	20.96	1.7
MW-339	10/15/2019 13:20	0.1	-326	9.13	NM	43.72	20.55	1.4
MW-339	10/15/2019 14:00	3.18	-256.6	9	22.82	36.04	21.06	4.9
MW-339	10/15/2019 14:15	4.2	-257.7	7.55	2.64	4.934	21.13	37.9
MW-339	09/18/2020 12:05	0.32	-210.9	8.79	27.72	43.01	20.93	47.1
MW-339	09/18/2020 12:10	0.27	-216.9	8.83	27.41	42.6	20.58	24.5
MW-339	09/18/2020 12:15	0.23	-225.1	8.87	27.3	42.39	20.47	15.4
MW-339	09/18/2020 12:20	0.24	-198.8	8.89	27.26	42.3	20.94	12.6
MW-339	09/18/2020 12:25	0.23	-212.7	8.92	27.84	43.26	21.33	7.7
MW-339	09/18/2020 12:30	0.23	-210.6	8.94	27.85	43.19	21.62	6.6
MW-339	09/18/2020 12:35	0.23	-197.8	8.94	27.95	43.31	21.77	5.8
MW-339	09/18/2020 12:40	0.21	-194.2	8.96	28.05	43.47	21.65	8.2
MW-339	09/18/2020 12:45	0.23	-195.3	8.97	28.06	43.48	21.65	8
MW-339	09/18/2020 12:50	0.23	-177.4	8.97	28.05	43.46	21.69	7.7
MW-339	09/18/2020 13:40	0.23	-117.6	8.9	25.83	40.45	21.49	2.8
MW-339	09/18/2020 14:23	1.33	-128.5	7.06	3.31	6.077	22.33	NM
MW-339	09/24/2020 14:23	NM	NM	NM	NM	NM	NM	35.1
MW-339	12/07/2020 13:00	0.67	-319.8	8.26	5.13	9.135	15.63	31.3
MW-339	12/07/2020 13:05	0.42	-329.2	8.15	5	8.972	15.64	33
MW-339	12/07/2020 13:10	0.23	-346.7	7.9	4.73	8.47	15.62	34.5
MW-339	12/07/2020 13:15	0.23	-353.7	7.79	4.57	8.19	15.72	32.7
MW-339	12/07/2020 13:20	0.21	-357	7.74	4.44	7.975	15.57	30.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-339	12/07/2020 13:25	0.2	-358.8	7.72	4.39	7.878	15.64	32.1
MW-339	12/07/2020 13:30	0.18	-360.9	7.69	4.35	7.816	15.52	37
MW-339	12/07/2020 13:35	0.16	-361	7.67	4.34	7.79	15.59	38
MW-339	12/07/2020 13:40	0.14	-362.9	7.67	4.33	7.785	15.7	38.4
MW-339	12/07/2020 13:45	0.13	-365.7	7.66	4.31	7.75	15.65	38.8
MW-339	12/07/2020 14:25	0.44	-343.2	8.05	4.84	8.831	14.66	31.2
MW-339	12/07/2020 14:45	0.12	-338	7.85	5.14	9.134	14.6	21.5
MW-339	03/30/2021 11:00	0.97	-203.6	8.1	7.55	13.23	12.28	17.4
MW-339	03/30/2021 11:05	0.45	-243.8	8.16	7.3	12.72	12.7	15.4
MW-339	03/30/2021 11:10	0.38	-272.8	8.14	7.04	12.32	13.01	14.4
MW-339	03/30/2021 11:15	0.12	-318.7	8.05	6.27	11.03	12.1	7.5
MW-339	03/30/2021 11:20	0.12	-333.8	8.1	6.18	10.76	12.48	5.2
MW-339	03/30/2021 11:25	0.15	-342.5	8.11	6.18	10.87	13.16	4.4
MW-339	03/30/2021 11:30	0.12	-340.6	8.16	6.23	10.91	13.1	4
MW-339	03/30/2021 11:35	0.2	-348.3	8.15	6.43	11.24	13.19	3.4
MW-339	03/30/2021 11:40	0.2	-352.8	8.25	6.48	11.33	13.26	3.2
MW-339	03/30/2021 11:45	0.23	-354	8.18	6.52	11.39	13.24	3
MW-339	03/30/2021 12:25	0.83	-327.5	8.37	7.31	12.68	12.89	17.1
MW-339	03/30/2021 12:40	1.61	-329.5	8.29	3.32	5.984	13.99	48.9
MW-339	06/14/2021 15:15	1.95	-303.3	7.77	3.01	5.536	20.34	12.9
MW-339	06/14/2021 15:20	2.66	-307.5	7.71	3.05	5.602	20.66	10.9
MW-339	06/14/2021 15:25	2.5	-320.5	7.61	3.14	5.785	20.94	39.2
MW-339	06/14/2021 15:30	3.6	-351.8	7.49	3.07	5.659	20.14	30
MW-339	06/14/2021 15:35	5.29	-372.2	7.5	3.05	5.613	19.11	25.3
MW-339	06/14/2021 15:40	2.09	-375.5	7.5	3.05	5.618	19.06	21.6
MW-339	06/14/2021 15:45	0.84	-377.9	7.47	3.03	5.596	19.88	18.5
MW-339	06/14/2021 15:50	0.16	-378.9	7.46	3.03	5.591	20.05	17.5
MW-339	06/14/2021 15:55	0.2	-379.2	7.45	3.02	5.564	19.66	16.03
MW-339	06/14/2021 16:00	0.26	-379.2	7.45	3.02	5.57	19.45	14.6
MW-339	03/10/2022 11:35	1.34	-151.6	6.49	1.35	2.595	9.6	125.2
MW-339	03/10/2022 11:40	0.96	-161.9	6.41	1.34	2.59	9.47	122.8
MW-339	03/10/2022 11:45	0.95	-189.9	6.4	1.34	2.584	9.51	89.2
MW-339	03/10/2022 11:50	0.83	-212.5	6.4	1.34	2.584	9.55	65.6
MW-339	03/10/2022 11:55	0.85	-232.4	6.43	1.37	2.637	9.62	44
MW-339	03/10/2022 12:00	0.88	-236.3	6.45	1.38	2.64	9.65	42.9
MW-339	03/10/2022 12:05	0.9	-239.6	6.47	1.37	2.645	9.68	40.5
MW-340	04/29/2013 09:10	1.38	-53.4	6.37	1.6	2.15	11.8	5.4
MW-340	04/29/2013 09:20	2.37	-61.4	6.38	1.5	2.13	11.7	4.6
MW-340	04/29/2013 09:30	9.8	-66.2	6.39	1.5	2.13	11.7	12.4
MW-340	04/29/2013 09:40	13.96	-69.8	6.39	1.5	2.13	14.7	12.4
MW-340	04/29/2013 09:50	12.5	-72.4	6.38	1.5	2.12	11.6	12.4
MW-340	04/29/2013 10:00	13.1	-74.1	6.39	1.49	2.118	11.62	12.6
MW-340	04/29/2013 10:20	9.55	-78	6.4	1.49	2.128	11.78	12.3
MW-340	04/30/2013 10:55	1.25	-96.7	6.48	1.49	2.151	12.85	468.2
MW-340	06/25/2013 14:35	3.90	-111	6.56	1.47	2.834	26.74	3.90
MW-340	06/25/2013 15:20	1.06	-74	6.65	1.48	2.994	24.12	113.40
MW-340	06/25/2013 15:25	1.04	-78	6.67	1.56	2.998	25.60	83.80
MW-340	07/03/2014 11:40	0.07	-370	9.85	35.98	54.330	23.86	44.80
MW-340	07/03/2014 11:55	0.12	-287.9	9.67	28.74	44.320	23.15	78.60
MW-340	07/03/2014 12:10	0.11	-324.7	9.65	31.05	47.630	24.39	55.00
MW-340	08/05/2014 11:35	4.35	-273.7	8.74	33.68	51.240	27.50	91.20
MW-340	08/05/2014 12:05	0.25	-344.1	9.27	39.88	58.440	25.55	93.90
MW-340	08/05/2014 12:30	0.22	-344.2	9.18	39.90	57.250	27.11	88.10
MW-340	01/16/2015 13:25	3.45	-238.1	8.76	17.34	28.300	8.01	90.70
MW-340	12/11/2015 10:15	0.59	-309.9	7.83	21.09	33.620	13.21	0.0000
MW-340	12/11/2015 10:55	1.00	-251.9	8.14	21.69	34.390	13.67	0.0000
MW-340	04/11/2019 10:25	0.06	-370	7.61	NM	20.65	9.26	NM
MW-340	10/07/2019 10:35	0.68	-373.2	7.29	NM	-374.6	23.73	25.4
MW-340	10/07/2019 10:40	0.84	-383.6	7.31	NM	17.62	23.38	20
MW-340	10/07/2019 10:45	1	-398.1	7.36	NM	17.83	23.19	16.4
MW-340	10/07/2019 10:50	-1.05	-402.5	7.39	NM	17.95	23.09	8.1
MW-340	10/07/2019 10:55	1.12	-408.1	7.44	NM	17.94	23.06	2.5

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-340	10/07/2019 11:00	1.03	411.5	7.47	NM	18.06	23.06	1.6
MW-340	10/07/2019 11:05	1.67	-417.6	7.49	NM	18.14	22.9	1.3
MW-340	10/07/2019 11:10	1.53	-421.7	7.5	NM	18.18	22.91	1.6
MW-340	10/07/2019 11:15	1.32	-424.3	7.5	NM	18.24	22.97	1.5
MW-340	10/07/2019 11:20	1.09	-425.6	7.49	NM	18.29	22.99	1.2
MW-340	10/07/2019 11:45	0.31	-401.9	7.5	10.75	18.17	23.58	6.7
MW-340	10/07/2019 12:00	0.7	-422.5	7.55	8.17	14.11	23.9	19.7
MW-340	09/24/2020 12:25	0.25	-323.9	7.71	2.79	5.107	22.91	26.9
MW-340	09/24/2020 12:30	0.3	-361.6	7.52	6.26	10.99	22.34	3
MW-340	09/24/2020 12:35	0.4	-383.5	7.48	6.34	11.13	22.38	0
MW-340	09/24/2020 12:40	0.4	-389.3	7.49	6.34	11.14	22.44	0
MW-340	09/24/2020 12:45	0.35	-394.2	7.52	6.46	11.33	22.51	0
MW-340	09/24/2020 12:50	0.35	-392.3	7.52	6.47	11.36	22.52	0
MW-340	09/24/2020 12:55	0.36	-393.2	7.53	6.45	11.33	22.59	0
MW-340	09/24/2020 13:00	0.39	-398.5	7.54	6.49	11.38	22.67	0
MW-340	09/24/2020 13:05	0.41	-393.4	7.54	6.5	11.41	22.7	0
MW-340	09/24/2020 13:10	0.44	-392	7.55	6.5	11.4	22.7	0
MW-340	09/24/2020 13:30	0.44	-377.2	8.18	6.51	11.44	23.82	8.4
MW-340	09/24/2020 13:40	0.26	-380	8.1	6.51	11.44	23.88	8.5
MW-340	12/07/2020 09:55	3.45	-267.8	8.06	5.14	9.13	10.12	24.4
MW-340	12/07/2020 10:00	2.35	-309.9	8.1	5.24	9.209	9.32	21.1
MW-340	12/07/2020 10:05	1.19	-319.9	8.14	5.3	9.428	9.36	17.5
MW-340	12/07/2020 10:10	0.12	-331.9	8.06	6.09	10.65	9.05	8.9
MW-340	12/07/2020 10:15	0.08	-346.1	7.93	7.43	12.9	8.22	2.9
MW-340	12/07/2020 10:20	0.07	-356.1	7.9	7.82	13.55	8.14	3.3
MW-340	12/07/2020 10:25	0.09	-359.8	7.89	8.05	13.93	7.9	5
MW-340	12/07/2020 10:30	0.06	-361.5	7.9	8.18	14.15	7.83	4.1
MW-340	12/07/2020 10:35	0.06	-364.1	7.9	8.32	14.38	7.79	3.5
MW-340	12/07/2020 10:40	0.07	-365.2	7.9	8.39	14.49	7.8	2.7
MW-340	12/07/2020 11:20	0.58	-354.6	8.13	8.7	14.93	9.84	5.6
MW-340	12/07/2020 11:35	1.05	-341.4	8.08	8.94	15.27	11.72	48.9
MW-340	03/25/2021 09:45	1.83	-120.7	7.6	0.62	1.22	10.23	39.2
MW-340	03/25/2021 09:50	0.39	-252.4	7.76	1.97	3.588	10.03	4.2
MW-340	03/25/2021 09:55	0.04	-341.2	7.73	3.29	5.954	9.79	5.3
MW-340	03/25/2021 10:00	0.4	-363.7	7.78	4.54	8.097	9.6	3.2
MW-340	03/25/2021 10:05	0	-375.7	7.82	5.11	9.098	9.49	0.7
MW-340	03/25/2021 10:10	0.02	-337.4	7.9	5.28	9.397	10.15	0.7
MW-340	03/25/2021 10:15	0.52	-331.2	8	5.29	9.387	10.75	1.2
MW-340	03/25/2021 10:20	0.59	-330.5	8.06	5.29	9.388	11.12	2.1
MW-340	03/25/2021 10:25	0	-359.7	7.83	5.49	9.726	10	0
MW-340	03/25/2021 10:30	0	-367.8	7.79	5.5	9.752	9.81	0
MW-340	03/25/2021 11:00	1.01	-351.4	7.81	5.57	9.851	11.09	10.6
MW-340	03/25/2021 11:15	2.63	-331.7	7.81	3.96	7.16	11.87	19.3
MW-340	06/14/2021 13:50	1.72	-278.2	7.5	5.58	9.887	21.85	47.1
MW-340	06/14/2021 13:55	0.45	-301.5	7.53	6.03	10.55	21.78	48
MW-340	06/14/2021 14:00	0.06	-327.3	7.46	6.55	11.47	21.64	45.8
MW-340	06/14/2021 14:05	0.09	-359.3	7.43	6.71	11.73	21.6	40.1
MW-340	06/14/2021 14:10	0.11	-375.8	7.47	6.55	11.64	21.33	34.6
MW-340	06/14/2021 14:15	0.12	-382.3	7.5	6.55	11.49	20.95	34.3
MW-340	06/14/2021 14:20	0.09	-390.1	7.53	6.44	11.3	20.54	31.3
MW-340	06/14/2021 14:25	0.09	-393	7.56	6.36	11.16	20.46	26.7
MW-340	06/14/2021 14:30	0.09	-394.4	7.55	6.33	11.1	20.32	23.8
MW-340	06/14/2021 14:35	0.34	-395.6	7.55	6.3	11.06	20.3	21.1
MW-340	09/08/2021 14:05	0	-341.3	8.01	5.43	9.695	26.63	102.8
MW-340	09/08/2021 14:10	0	-344.9	7.78	5.4	9.653	27.88	107.5
MW-340	09/08/2021 14:15	0	-368.4	7.62	5.32	9.549	28.28	91.9
MW-340	09/08/2021 14:20	0	-376.9	7.61	5.31	9.512	28.29	78.5
MW-340	09/08/2021 14:25	0	-382.2	7.6	5.21	9.351	28.66	63.4
MW-340	09/08/2021 14:30	0	-390.5	7.61	5.15	9.277	28.73	51.7
MW-340	09/08/2021 14:35	0.03	-394.7	7.62	5.11	9.18	28.4	47.5
MW-340	09/08/2021 14:40	0.02	-396.7	7.63	5.09	9.109	27.85	38.4
MW-340	09/08/2021 14:45	0.03	-397.8	7.64	5.05	9.065	28.01	38.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-340	09/08/2021 14:50	0	-398.5	7.64	5.04	9.063	28.02	35.1
MW-340	03/11/2022 09:20	1.13	-500	6.44	3.4	6.267	8.89	78.3
MW-340	03/11/2022 09:25	1.27	-500	6.44	3.71	6.719	8.91	69.5
MW-340	03/11/2022 09:30	1.76	-495.5	6.46	3.91	7.09	9.03	32.3
MW-340	03/11/2022 09:35	1.83	-464.1	9.04	3.94	7.134	9.05	33.5
MW-340	03/11/2022 09:40	2.15	-393	6.46	4	7.238	9.09	26.6
MW-340	03/11/2022 09:45	3.26	-351.2	6.47	4.04	7.32	9.13	23.2
MW-340	03/11/2022 09:50	1.28	-337.4	6.47	4.06	7.336	9.19	19
MW-340	03/11/2022 09:55	-1.63	-328.8	6.48	4.07	7.362	9.22	24.4
MW-340	03/11/2022 10:00	-2.12	-325	6.48	4.08	7.38	9.32	13.9
MW-340	03/11/2022 10:05	-2.23	-327.6	6.47	4.09	7.393	9.31	20.5
MW-350	04/17/2013 14:30	1.02	10.5	5.49	1.9	3.47	19.4	8.2
MW-350	04/17/2013 14:35	0.77	30.5	4.92	1.8	3.45	14.8	12.5
MW-350	04/17/2013 14:40	0.6	36.4	4.93	1.9	3.5	15.3	11.7
MW-350	04/17/2013 14:45	0.54	38.1	4.96	1.8	3.45	15.3	6.1
MW-350	04/17/2013 14:50	0.47	39.1	4.93	1.8	3.45	15.2	5.2
MW-350	04/17/2013 14:55	0.43	38.1	5.04	1.9	3.56	15.3	4.5
MW-350	04/17/2013 15:00	0.41	35	5.13	1.93	3.645	15.27	4.9
MW-350	04/17/2013 15:30	1.59	16.8	5.9	0.96	1.883	20.63	15.2
MW-350	04/18/2013 15:55	6.8	-21.8	6.64	1.91	3.605	18.77	30.4
MW-350	06/24/2013 13:55	0.33	-56	6.01	2.33	4.271	23.63	-2.8
MW-350	06/24/2013 14:30	0.25	-55	6.01	2.34	3.86	19.5	-4.2
MW-350	06/24/2013 15:00	0.16	-66	6.05	2.40	4.446	24.29	-4.50
MW-350	06/25/2013 15:00	0.16	-66	6.05	2.4	4.446	24.29	-4.5
MW-350	03/11/2014 10:32	0.48	-199.1	7.76	7.99	13.800	9.83	12.00
MW-350	03/11/2014 10:47	0.40	-383	8.97	12.31	20.590	10.57	14.20
MW-350	03/11/2014 10:55	0.42	-223.4	7.83	7.16	12.420	11.35	143.60
MW-350	06/27/2014 10:20	0.21	-99.6	6.63	16.53	26.970	23.29	3.10
MW-350	06/27/2014 10:50	0.18	-114.9	6.63	15.54	25.450	21.99	3.10
MW-350	06/27/2014 11:02	0.24	-115.9	6.61	16.43	26.750	23.26	61.00
MW-350	07/30/2014 10:00	0.40	-84.8	6.58	13.26	22.070	25.10	6.40
MW-350	07/30/2014 10:45	0.38	-125	6.59	10.22	17.370	25.10	4.50
MW-350	07/30/2014 11:05	0.39	-113.5	6.55	11.44	21.660	26.22	10.60
MW-350	01/15/2015 13:20	2.20	-181.6	6.37	4.22	9.321	10.48	6.40
MW-350	01/15/2015 13:30	2.40	-149.6	6.39	5.92	10.460	8.61	2.20
MW-350	01/15/2015 13:35	1.22	-179.2	6.33	6.03	10.320	7.62	84.30
MW-350	12/09/2015 10:10	1.27	-210	7.35	5.90	10.400	16.34	0.0000
MW-350	12/09/2015 10:50	1.22	-239	7.75	2.50	4.630	15.32	95.80
MW-350	06/09/2016 13:50	8.94	-318.5	7.97	3.22	5.847	19.79	1.10
MW-350	06/09/2016 14:05	9.32	-335.2	7.52	3.03	5.702	23.37	1.10
MW-350	12/12/2016 11:35	0.5	332.6	7.48	4.82	8.6	12.4	1
MW-350	12/12/2016 11:55	3	-304.4	7.36	2.69	4.986	13.39	38
MW-350	10/14/2019 10:45	0.35	-321.1	7.8	NM	10.84	21.31	37.4
MW-350	10/14/2019 10:50	0.24	-351.2	7.82	NM	12.08	21.79	11.3
MW-350	10/14/2019 10:55	0.36	-359	7.76	NM	12.35	22.04	7.3
MW-350	10/14/2019 11:00	0.47	-361.1	7.74	NM	12.7	22.15	2.2
MW-350	10/14/2019 11:05	0.52	-369.1	7.72	NM	13.05	22.1	0.9
MW-350	10/14/2019 11:10	0.45	-372	7.71	NM	13.19	22.14	0.4
MW-350	10/14/2019 11:15	0.55	-373.9	7.7	NM	12.96	22.21	0.48
MW-350	10/14/2019 11:20	0.41	-377.4	7.69	NM	12.09	22.28	0
MW-350	10/14/2019 11:25	0.37	-379.2	7.68	NM	11.13	22.24	0
MW-350	10/14/2019 11:30	0.45	-381.2	7.67	NM	12.19	22.45	0
MW-350	10/14/2019 12:00	1.72	-322.3	8.11	8.18	14.11	22.67	2.4
MW-350	10/14/2019 12:15	1.22	-358	7.55	3.21	5.909	21.98	229.1
MW-350	11/04/2019 10:35	4.06	-215.8	7.87	NM	4.841	19.18	6.7
MW-350	11/04/2019 10:52	4.73	-354.5	8.04	2.77	5.126	18.98	10.1
MW-350	11/04/2019 11:10	2.7	-346.2	7.96	4.16	7.501	13.03	8.2
MW-350	09/24/2020 12:10	0.17	-289.9	7.36	3.6	6.583	22.16	11.5
MW-350	09/24/2020 12:15	0.38	-322.7	7.32	3.61	6.59	22.18	5.6
MW-350	09/24/2020 12:20	0.67	-337	7.29	3.64	6.634	22.11	3.1
MW-350	09/24/2020 12:25	0.72	-341.5	7.29	3.65	6.653	22.1	2.3
MW-350	09/24/2020 12:30	0.82	-351.2	7.26	3.64	6.645	22.12	2.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-350	09/24/2020 12:35	0.88	-354	7.25	3.55	6.483	22.17	1
MW-350	09/24/2020 12:40	0.88	-355.3	7.24	3.67	6.687	22.12	0.5
MW-350	09/24/2020 12:45	0.82	-356.4	7.23	3.86	7.005	22.05	0.3
MW-350	09/24/2020 12:50	0.77	-357.6	7.23	3.93	7.138	22.06	0.4
MW-350	09/24/2020 12:55	0.76	-360.1	7.23	3.94	7.158	22.19	1
MW-350	09/24/2020 13:25	0.43	-323.6	7.27	4.21	7.637	26.47	7.6
MW-350	09/24/2020 13:38	0.72	-317.4	7.19	1.46	2.819	24.63	NM
MW-350	10/16/2020 13:38	NM	NM	NM	NM	NM	NM	82.9
MW-350	12/02/2020 09:00	0.12	-260.3	7.32	6.38	11.26	15.62	163.7
MW-350	12/02/2020 09:05	0.05	-318.6	7.38	6.04	10.67	15.52	187.3
MW-350	12/02/2020 09:10	0.1	-333.2	7.39	5.5	9.722	15.58	64.9
MW-350	12/02/2020 09:15	0.13	-349.1	7.39	5.48	9.6	15.5	51.9
MW-350	12/02/2020 09:20	0.168	-353.4	7.37	5.64	9.972	15.44	17.4
MW-350	12/02/2020 09:25	0.35	-363.3	7.38	5.45	9.664	15.74	13.8
MW-350	12/02/2020 09:30	0.37	-370.3	7.38	5.36	9.502	15.58	10.5
MW-350	12/02/2020 09:35	0.38	-377.1	7.38	5.35	9.481	15.6	10.7
MW-350	12/02/2020 09:40	389	-381.8	7.39	5.34	9.469	15.75	11.6
MW-350	12/02/2020 09:45	0.412	-381.9	7.38	5.3	9.462	15.79	10.5
MW-350	12/02/2020 10:30	0.632	-378.6	7.46	5.99	10.56	10.67	39.6
MW-350	12/02/2020 10:50	1.33	-356.6	7.44	6.03	10.61	11.96	69.5
MW-350	03/17/2021 13:25	2.19	-194.6	7.8	0.88	1.725	11.14	4.9
MW-350	03/17/2021 13:30	0.73	-256.8	7.72	0.92	1.797	10.82	2.1
MW-350	03/17/2021 13:35	0.12	-290.8	7.57	0.95	1.853	10.51	2.3
MW-350	03/17/2021 13:40	0.11	-302.5	7.55	0.92	1.805	10.36	1
MW-350	03/17/2021 13:45	0.09	-310.2	7.54	0.93	1.813	10.31	1.2
MW-350	03/17/2021 13:50	0	-316.9	7.56	0.95	1.851	10.33	0.8
MW-350	03/17/2021 13:55	0	-321.6	7.57	0.97	1.9	10.38	0.7
MW-350	03/17/2021 14:00	0	-328.6	7.6	1	1.955	10.51	1.1
MW-350	03/17/2021 14:05	0	-331.5	7.62	1.04	2.026	10.37	3.8
MW-350	03/17/2021 14:10	0	-331.6	7.55	1.04	2.023	10.35	1.7
MW-350	03/17/2021 15:00	0.11	-301.3	8	1.14	2.207	11.79	2.5
MW-350	03/17/2021 15:20	0.02	-262.3	7.53	0.59	1.171	10.14	45.7
MW-350	03/14/2022 10:10	3.09	-212.2	7.28	0.99	1.917	8.06	67.1
MW-350	03/14/2022 10:15	2.58	-321.9	7.25	1.22	2.375	8.5	67.8
MW-350	03/14/2022 10:20	5.74	-339.5	7.24	1.32	2.554	8.67	58.4
MW-350	03/14/2022 10:25	8.56	-346.8	7.24	1.37	2.633	8.78	67.9
MW-350	03/14/2022 10:30	6.79	-355.1	7.26	1.4	2.689	8.81	65.9
MW-350	03/14/2022 10:35	2.86	-345.7	7.24	1.42	2.731	8.88	76.7
MW-350	03/14/2022 10:40	0.31	-359.2	7.24	1.43	2.754	8.88	65.8
MW-350	03/14/2022 10:45	0.16	-359	7.24	1.45	2.779	8.87	63.2
MW-350	03/14/2022 10:50	0.19	-352.9	7.21	1.45	2.785	8.83	62.3
MW-350	03/14/2022 10:55	0.19	-353.1	7.22	1.46	2.813	8.84	60.6
MW-351	04/30/2013 08:55	1.5	83.6	6.33	2.2	3.12	12.9	32.9
MW-351	04/30/2013 09:00	0.87	38.7	6.42	2.2	3.14	12.9	34.9
MW-351	04/30/2013 09:05	0.63	-9.8	6.44	2.2	3.14	12.7	37.6
MW-351	04/30/2013 09:10	0.42	-32.1	6.45	2.2	3.16	12.6	26.9
MW-351	04/30/2013 09:15	0.45	-41.5	6.45	2.3	3.22	12.6	18
MW-351	04/30/2013 09:20	0.39	-45.9	6.44	2.3	3.33	12.7	18.2
MW-351	04/30/2013 09:30	0.35	-50.5	6.43	2.4	3.41	12.7	13.5
MW-351	04/30/2013 09:35	0.34	-50.8	6.42	0.43	3.424	12.7	12.9
MW-351	04/30/2013 10:16	2.59	-2.8	6.48	2.62	3.839	13.87	7.6
MW-351	05/01/2013 11:20	2.42	-78.5	6.59	2.29	3.397	14.23	213.5
MW-351	06/25/2013 14:40	0.35	0.34	6.09	2.03	3.828	22.00	9.20
MW-351	06/25/2013 15:05	0.20	22.8	6.05	2.12	3.976	16.30	4.60
MW-351	06/25/2013 15:20	0.37	2.3	6.06	2.09	3.959	17.50	55.60
MW-351	06/26/2013 15:20	0.37	2.3	6.06	2.09	3.959	17.50	55.60
MW-351	03/11/2014 13:25	1.09	175	5.24	17.13	27.840	18.34	286.00
MW-351	03/11/2014 13:42	0.82	126.6	5.38	19.98	31.870	18.56	192.40
MW-351	03/11/2014 13:50	0.77	104.4	5.56	19.46	29.990	21.07	655.60
MW-351	06/30/2014 09:20	0.09	61.4	9.16	34.11	51.790	20.84	69.10
MW-351	06/30/2014 10:05	0.09	-282.1	8.62	27.53	42.740	19.43	79.30
MW-351	06/30/2014 10:25	0.06	-281.8	8.56	27.50	42.700	21.82	128.80

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-351	08/04/2014 09:55	0.05	-265.1	8.26	31.27	48.160	23.55	33.80
MW-351	08/04/2014 10:42	0.04	-202.5	6.97	22.44	35.550	21.22	2.70
MW-351	08/04/2014 12:05	0.05	-221.1	7.06	24.64	36.330	24.11	14.60
MW-351	01/15/2015 10:05	0.20	-141.7	6.83	5.61	10.200	10.90	17.80
MW-351	01/15/2015 10:40	0.53	-156.3	6.70	5.22	9.258	12.64	15.00
MW-351	01/15/2015 11:35	0.30	-161	6.80	4.54	8.227	12.75	98.20
MW-351	12/11/2015 09:55	2.00	-81	7.19	12.10	20.400	15.76	55.20
MW-351	12/11/2015 10:50	0.0000	-86	7.13	2.60	4.790	17.74	412.00
MW-351	06/10/2016 12:38	0.49	-112.7	6.82	2.36	4.395	16.42	3.70
MW-351	06/10/2016 12:55	0.52	-131.4	6.84	2.53	6.658	16.55	3.20
MW-351	05/10/2017 09:50	3.42	-181.70	6.80	2.40	4.490	13.89	1.60
MW-351	05/10/2017 10:25	5.13	-81.60	7.02	3.31	0.050	15.37	2.90
MW-351	05/10/2017 10:45	3.97	-135.80	6.79	0.82	1.609	15.32	14.20
MW-351	10/08/2019 08:30	0.85	-153.6	6.76	NM	2.924	18.35	23.5
MW-351	10/08/2019 08:35	0.67	-167.7	6.78	NM	2.992	18.7	11.5
MW-351	10/08/2019 08:40	0.55	-219.2	6.84	NM	3.286	18.99	5.4
MW-351	10/08/2019 08:45	0.52	-239.2	6.88	NM	3.496	19.08	7.3
MW-351	10/08/2019 08:50	0.5	-262.1	6.92	NM	3.708	19.19	16.4
MW-351	10/08/2019 08:55	0.57	-274.1	6.91	NM	3.847	19.22	27.2
MW-351	10/08/2019 09:00	0.57	-284.5	6.9	NM	3.939	19.26	32.6
MW-351	10/08/2019 09:05	0.58	-306.6	6.89	NM	4.03	19.34	37.9
MW-351	10/08/2019 09:10	0.72	-350.3	6.9	NM	4.126	19.37	41.1
MW-351	10/08/2019 09:15	1.17	-375.5	6.91	NM	4.226	19.43	40.3
MW-351	10/08/2019 10:00	5.42	-305.8	7.4	3.31	6.056	19.45	10.7
MW-351	10/08/2019 10:25	1.4	-334.6	7.11	3.77	6.841	19.24	92.3
MW-351	09/15/2020 10:00	2.31	-140.8	6.72	2.1	3.933	18.17	13.6
MW-351	09/15/2020 10:05	1.45	-138	6.91	2.19	4.112	18.72	11.7
MW-351	09/15/2020 10:10	1.29	-142.1	7	2.25	4.21	19.06	16.9
MW-351	09/15/2020 10:15	1.36	-136.9	6.97	1.62	3.164	19.52	13.1
MW-351	09/15/2020 10:20	1.26	-126.1	6.87	1.18	2.309	19.62	12.7
MW-351	09/15/2020 10:25	1.26	-126.8	6.81	1	1.95	19.78	12.1
MW-351	09/15/2020 10:30	1.3	-132.9	6.81	0.99	1.944	19.76	10.7
MW-351	09/15/2020 10:35	1.4	-139	6.83	1	1.947	19.77	10.3
MW-351	09/15/2020 10:40	1.3	-160.1	6.86	1.03	2.003	19.83	8.5
MW-351	09/15/2020 10:45	1.22	-177.3	6.89	1.05	2.058	19.83	7.1
MW-351	09/15/2020 10:46	1.22	-177.3	6.89	1.05	2.058	19.83	7.1
MW-351	09/15/2020 11:33	1.24	-198.1	7.16	1.7	3.26	22.22	3.8
MW-351	09/15/2020 12:00	3.68	-132.6	6.94	0.57	1.156	21.96	36.8
MW-351	12/01/2020 13:25	2.42	-117.3	7.13	4.9	8.708	15.87	6
MW-351	12/01/2020 13:30	0.97	-147.5	7.32	4.97	8.858	15.59	3.9
MW-351	12/01/2020 13:35	0.67	-154	7.35	4.64	8.33	14.13	3.1
MW-351	12/01/2020 13:40	0.44	-163.1	7.29	3.85	6.981	13.8	1.1
MW-351	12/01/2020 13:45	0.38	-169.5	7.26	3.59	6.538	13.76	0.9
MW-351	12/01/2020 13:50	0.32	-179.2	7.22	3.36	6.138	13.71	0.8
MW-351	12/01/2020 13:55	0.26	-195.2	7.25	3.18	5.834	13.52	1.1
MW-351	12/01/2020 14:00	0.23	-210.7	7.23	3.08	5.656	13.43	1.8
MW-351	12/01/2020 14:05	0.2	-224	7.24	3.01	5.53	13.47	4.1
MW-351	12/01/2020 14:10	0.18	-237.1	7.25	2.98	5.491	13.67	8.7
MW-351	12/01/2020 14:50	1.47	-254.3	7.46	2.88	5.32	14.62	1.7
MW-351	12/01/2020 15:10	1.04	-236.2	7.34	2.01	3.775	13.42	20.4
MW-351	03/25/2021 12:00	10.68	-130.2	9.12	0.03	0.066	17.34	0
MW-351	03/25/2021 12:05	12.01	-133	9.14	2.18	2.214	13.99	11.1
MW-351	03/25/2021 12:10	3.86	-167.3	7.05	2.14	4.026	12.65	3.7
MW-351	03/25/2021 12:15	3.63	-185.7	7.03	2.09	3.922	12.73	0
MW-351	03/25/2021 12:20	3.28	-212.7	7.02	1.93	3.648	12.88	0
MW-351	03/25/2021 12:25	4.08	-226.9	7.01	1.74	3.307	12.73	0
MW-351	03/25/2021 12:30	3.65	-235.1	7	1.65	3.148	12.79	0
MW-351	03/25/2021 12:35	5.88	-243.3	6.99	1.57	3.003	12.75	0
MW-351	03/25/2021 12:40	5.1	-252.8	6.98	1.5	2.867	12.53	0
MW-351	03/25/2021 12:45	5.78	-316.4	6.95	1.37	2.647	12.84	0
MW-351	03/25/2021 13:25	10.24	-275.1	7.1	1.35	2.59	16.74	4.2
MW-351	03/25/2021 13:50	7.98	-278.1	6.78	0.98	1.905	13.07	15

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-351	06/08/2021 12:35	0.46	-122.8	6.9	12.12	20.26	22.93	10.1
MW-351	06/08/2021 12:40	0.44	-124.3	6.93	11.32	19.13	21.26	7.2
MW-351	06/08/2021 12:45	0.53	-118.1	6.86	9	15.45	20.69	4.8
MW-351	06/08/2021 12:50	0.54	-114.6	6.8	7.38	12.85	20.22	3.5
MW-351	06/08/2021 12:55	0.43	-116.8	6.78	6.59	11.57	20.09	2.8
MW-351	06/08/2021 13:00	0.49	-122.2	6.78	6.13	10.8	19.93	3.4
MW-351	06/08/2021 13:05	0.52	-126.4	6.78	5.97	10.53	19.73	8.3
MW-351	06/08/2021 13:10	0.47	-131.2	6.79	5.89	10.38	19.85	2.6
MW-351	06/08/2021 13:15	0.45	-135.7	6.8	5.83	10.28	19.68	2.1
MW-351	06/08/2021 13:20	0.46	-139.1	6.81	5.84	10.29	19.59	2
MW-351	06/08/2021 13:25	0.44	-141	6.82	5.89	10.38	19.48	2
MW-351	03/14/2022 08:55	3.68	-21.2	7.19	1.33	2.55	8.65	57.7
MW-351	03/14/2022 09:00	1.94	-71.3	6.75	1.71	3.248	9.26	69.3
MW-351	03/14/2022 09:05	1.94	-74.6	6.75	1.62	3.105	9.15	67
MW-351	03/14/2022 09:10	1.84	-78.8	6.74	1.44	2.765	9.1	62.3
MW-351	03/14/2022 09:15	1.57	-77	6.7	1.23	2.394	9.15	70.7
MW-351	03/14/2022 09:20	1.76	-74.9	6.67	1.11	2.17	9.2	73.3
MW-351	03/14/2022 09:25	1.66	-71.9	6.65	1.04	2.026	9.33	67
MW-351	03/14/2022 09:30	1.97	-68.4	6.64	1	1.96	9.33	68.1
MW-351	03/14/2022 09:35	1.4	-66.4	6.65	0.99	1.938	9.33	67.2
MW-351	03/14/2022 09:40	1.98	-68.6	6.64	0.98	1.92	9.42	65.2
MW-352	11/08/2013 14:10	1.46	-90	6.72	1.45	2.780	14.07	38.00
MW-352	11/08/2013 14:25	0.13	-102.8	6.61	1.72	3.259	17.30	46.10
MW-352	11/08/2013 14:30	0.22	-103.7	6.64	1.52	2.969	12.07	221.40
MW-352	11/09/2013 14:30	0.22	-103.7	6.64	1.52	2.969	12.07	221.40
MW-352	03/17/2014 14:15	7.52	-23.6	6.93	1.88	3.568	4.02	140.50
MW-352	03/17/2014 14:37	2.38	-53.2	6.72	2.03	3.860	7.46	1.70
MW-352	03/17/2014 14:55	2.51	-42.4	6.74	2.03	3.851	6.27	5.60
MW-352	06/05/2014 11:50	0.37	-74	6.30	2.09	3.914	13.05	19.20
MW-352	06/05/2014 12:25	0.39	-73	6.29	2.10	3.941	13.06	36.90
MW-352	06/05/2014 12:45	1.32	-496	6.34	2.05	3.865	14.93	129.00
MW-352R	10/18/2018 10:10	4.06	-141.20	7.51	3.27	5.974	16.59	43.10
MW-352R	10/18/2018 10:50	5.02	-20.60	7.42	3.22	5.878	15.69	12.20
MW-352R	10/18/2018 11:00	4.42	145.00	7.48	3.27	5.981	17.86	146.80
MW-352R	01/17/2019 09:05	7.4	169.9	7.05	2.7	5.059	4.24	20.1
MW-352R	04/08/2019 14:30	0.77	-12	7.09	1.42	2.74	18.22	53.2
MW-352R	07/12/2019 10:50	4.19	-101.3	8.16	NM	1.922	NM	NM
MW-352R	07/12/2019 11:15	NM	NM	NM	NM	NM	24.35	33.9
MW-352R	07/12/2019 11:40	8.22	-76.1	7.22	1.63	3.123	25.37	33.1
MW-352R	07/12/2019 11:45	9.84	-75.2	7.42	1.68	3.215	23.06	30.7
MW-352R	09/30/2019 09:25	2.12	-61.7	6.8	NM	3.925	21.75	16.7
MW-352R	09/30/2019 10:05	0.57	-72.2	6.81	2.1	3.96	22.08	17.5
MW-352R	09/30/2019 13:15	2.62	-58.9	6.82	2.04	3.87	22.42	29.5
MW-352R	01/22/2020 12:05	7.64	-129.8	7.94	NM	2.674	6.34	44
MW-352R	01/22/2020 12:40	7.81	-84	7.88	1.4	2.691	8.98	16.5
MW-352R	01/22/2020 12:55	6.72	-69.5	7.63	1.39	2.669	9.17	57.7
MW-352R	03/26/2020 12:45	1.75	85.6	7.01	NM	1.023	11.35	8
MW-352R	03/26/2020 17:10	0	0	0	0	0	0	0
MW-352R	12/10/2020 09:15	3.12	6.4	8.2	3.61	6.489	10.23	148.1
MW-352R	12/10/2020 09:20	2.07	-6.6	8.25	3.62	6.589	10	148
MW-352R	12/10/2020 09:25	2.05	-17.8	8.29	3.68	6.664	9.89	145.2
MW-352R	12/10/2020 09:30	1.48	-47.3	8.4	3.71	6.761	9.58	143.3
MW-352R	12/10/2020 09:35	1.35	-67.6	8.44	3.73	6.791	9.87	139.7
MW-352R	12/10/2020 09:40	1.4	-76.5	8.47	3.73	3.73	9.6	134.6
MW-352R	12/10/2020 09:45	1.52	-85.8	8.49	3.74	6.811	9.42	129.5
MW-352R	12/10/2020 09:50	1.55	-91.9	8.52	3.73	6.78	9.4	126.3
MW-352R	12/10/2020 09:55	1.58	-96.3	8.55	3.72	6.767	9.4	124.7
MW-352R	12/10/2020 10:00	1.63	-100.9	8.58	3.7	6.745	9.35	122.6
MW-352R	12/10/2020 10:55	2.16	-53	8.24	3.94	7.121	12.18	81.8
MW-352R	12/10/2020 11:15	2.75	-54.2	8.29	3.99	7.21	12.68	92.4
MW-352R	03/15/2021 11:50	2.16	-97.4	8.46	2.19	4.106	8.35	454.8
MW-352R	03/15/2021 11:55	1.54	-94.7	8.48	2.19	4.125	8.24	463.4

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-352R	03/15/2021 12:00	2.42	-93.6	8.53	2.2	4.132	8.26	474.3
MW-352R	03/15/2021 12:05	3.03	-85.6	8.58	2.23	4.185	8.23	488.8
MW-352R	03/15/2021 12:10	2.75	-81.2	8.62	2.25	4.223	8.39	468
MW-352R	03/15/2021 12:15	2.76	-74.4	8.62	2.29	4.295	8.25	437.4
MW-352R	03/15/2021 12:20	3.12	-65.7	8.59	2.32	4.346	8.25	425.7
MW-352R	03/15/2021 12:25	3.69	-63.4	8.54	2.33	4.374	8.29	413.8
MW-352R	03/15/2021 12:30	4.57	-64	8.45	2.36	4.416	8.5	459.9
MW-352R	03/15/2021 12:35	5.37	-69.5	8.38	2.37	4.426	8.63	481.7
MW-352R	03/15/2021 13:15	7.13	-42.8	8.34	2.36	4.417	8.86	403.6
MW-352R	03/15/2021 13:25	5.04	-44.6	8.58	2.34	4.383	9.64	657.9
MW-352R	06/02/2021 12:30	1.21	-119.4	7.36	2.47	4.613	21.96	201.6
MW-352R	06/02/2021 12:35	1.44	-117	7.26	2.47	4.601	22.16	173.4
MW-352R	06/02/2021 12:40	0.96	-113.4	7.27	2.55	4.749	21.27	110
MW-352R	06/02/2021 12:45	0.64	-116.4	7.31	2.63	4.888	21.18	94
MW-352R	06/02/2021 12:50	0.41	-121.9	7.38	2.69	4.998	20.79	91
MW-352R	06/02/2021 12:55	0.34	-125.1	7.4	2.72	5.04	20.64	89.9
MW-352R	06/02/2021 13:00	0.26	-132.4	7.44	2.74	5.087	20.67	82.5
MW-352R	06/02/2021 13:05	0.2	-143.2	7.46	2.74	5.074	20.89	77.4
MW-352R	06/02/2021 13:10	0.19	-149.4	7.47	2.72	5.05	21.01	78.1
MW-352R	06/02/2021 13:15	0.19	-152.5	7.45	2.69	4.997	21.12	80.1
MW-352R	03/10/2022 10:35	3.37	31	7.2	1.24	2.399	8.19	273.3
MW-352R	03/10/2022 10:40	3.42	47.5	7.11	1.11	2.173	8.15	280.3
MW-352R	03/10/2022 10:45	3.8	69.2	7.14	1.01	1.986	8.23	329.4
MW-352R	03/10/2022 10:50	4.39	96.8	7.14	0.94	1.84	7.92	396
MW-352R	03/10/2022 10:55	5.02	118.3	7.19	0.94	1.837	7.8	431.4
MW-352R	03/10/2022 11:00	5.58	139.2	7.22	0.97	1.903	7.61	442.4
MW-352R	03/10/2022 11:05	5.67	148.4	7.24	1.01	1.97	7.61	434.1
MW-352R	03/10/2022 11:10	5.84	157.5	7.24	1.06	2.074	7.54	404.4
MW-352R	03/10/2022 11:15	5.99	164.5	7.23	1.12	2.182	7.74	413.4
MW-352R	03/10/2022 11:20	6.08	168.3	7.29	1.16	2.254	7.7	384.5
MW-352R	03/10/2022 11:25	6.12	169	7.25	1.16	2.267	7.7	382.1
MW-353	06/04/2013 10:07	0.53	-130	6.67	0.09	1.668	17.49	4.98
MW-353	06/04/2013 10:57	1.22	-77	6.42	0.11	2.080	13.94	371.20
MW-353	06/05/2013 09:43	0.35	-141.00	6.73	0.05	0.943	13.67	823.70
MW-353	09/11/2013 09:16	0.69	-260	6.72	0.09	1.820	23.57	12.28
MW-353	09/11/2013 09:43	0.79	-268	6.73	0.10	1.915	20.44	367.80
MW-353	09/12/2013 09:18	0.09	-257	6.65	0.06	1.138	20.07	720.20
MW-353	11/14/2013 09:59	1.02	-280	6.60	0.07	1.553	15.91	10.62
MW-353	11/14/2013 10:37	2.20	-176	6.83	0.07	1.466	16.85	1465.70
MW-353	11/15/2013 09:40	0.97	-257	6.51	0.12	2.384	17.68	443.40
MW-353	01/15/2014 14:11	1.23	-90	6.68	0.18	3.375	10.96	2.40
MW-353	01/15/2014 14:42	1.40	5	6.48	0.14	2.760	12.77	1785.70
MW-353	01/16/2014 11:15	1.36	34	6.79	0.21	3.979	11.76	356.90
MW-353	04/07/2014 09:39	1.00	-416	6.71	0.09	1.837	8.54	44.69
MW-353	04/07/2014 10:06	3.71	-172	6.66	0.07	1.327	9.22	307.80
MW-353	04/08/2014 09:39	2.91	-262	6.72	0.05	1.057	9.83	1100.30
MW-353	07/02/2014 16:07	0.53	-93	6.78	0.05	0.974	27.49	4.34
MW-353	07/02/2014 16:32	0.45	-61	6.81	0.05	0.974	17.39	2361.90
MW-353	07/03/2014 11:38	0.24	-43	6.67	0.04	0.852	16.45	235.60
MW-353	11/19/2014 14:54	1.99	-345	6.36	0.03	0.601	13.42	2418.00
MW-353	11/19/2014 15:22	3.89	-73	6.72	0.03	0.639	14.80	2154.40
MW-353	11/20/2014 11:11	2.88	-238	6.38	0.03	0.630	16.45	2738.80
MW-353	02/10/2015 09:30	1.63	107	6.45	0.13	2.491	5.38	5.31
MW-353	02/10/2015 10:01	4.14	-109	6.63	0.10	1.957	7.91	2702.20
MW-353	02/11/2015 10:20	1.48	-179	6.50	0.03	0.703	10.37	385.20
MW-353	05/12/2015 10:22	1.38	-50	6.23	0.02	0.492	12.24	3141.4
MW-353	05/12/2015 10:27	2.97	-109	6.47	0.05	1.026	14.85	678.3
MW-353	08/11/2015 10:03	-0.05	-12	6.19	0.09	1.827	20.34	97
MW-353	08/11/2015 10:39	2.66	-65	7.03	0.07	1.46	25.07	686.4
MW-353	10/16/2015 11:59	1	37	6.08	0.03	0.523	20.36	891.2
MW-353	10/16/2015 15:41	5.53	-77	7.16	0.05	1.022	20.37	2671.1
MW-353	05/05/2016 11:44	7.17	-135	7.17	0.03	0.660	12.79	88.00

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-353	05/05/2016 14:24	5.27	129	6.83	0.04	0.771	12.61	194.80
MW-353	10/27/2016 09:11	1.99	-124.00	6.50	0.04	0.736	19.27	65.20
MW-353	10/27/2016 10:51	4.92	-98	6.41	0.14	2.758	17.90	2276.00
MW-353	04/04/2017 09:30	0.45	-119	6.43	0.04	0.903	11.21	71.00
MW-353	04/04/2017 10:06	4.92	-31	6.82	0.06	1.155	10.97	215.40
MW-353	04/26/2017 08:34	1.01	158.00	6.76	0.07	1.487	12.11	72.40
MW-353	04/26/2017 11:20	6.12	-13.00	7.15	0.08	1.668	11.58	3061.90
MW-353	04/17/2018 12:56	4.35	13	8.63	0.0325	0.6678	9.85	8.7
MW-353	04/17/2018 12:59	1.55	12	7.06	0.0319	0.6562	9.86	6.5
MW-353	04/17/2018 13:02	0.93	11	6.68	0.0320	0.6579	10.21	4.6
MW-353	04/17/2018 13:05	0.38	11	6.5	0.0326	0.6692	10.55	5.9
MW-353	04/17/2018 13:08	0.23	11	6.41	0.0322	0.6610	10.53	6.4
MW-353	04/17/2018 13:11	0.13	17	6.31	0.0301	0.6192	10.47	4.8
MW-353	04/17/2018 13:14	0.14	18	6.24	0.0299	0.6159	10.35	5.1
MW-353	04/17/2018 13:17	0.14	16	6.2	0.0304	0.6259	10.51	5.9
MW-353	04/17/2018 13:19	0.23	16	6.17	0.0302	0.6217	10.27	7.5
MW-353	04/17/2018 13:22	0.23	16	6.14	0.0298	0.6149	10.19	6.4
MW-353	04/17/2018 13:25	0.17	14	6.11	0.0308	0.6350	10.18	5.8
MW-353	04/17/2018 13:28	0.19	11	6.1	0.0310	0.6390	10.3	6.3
MW-353	04/17/2018 13:31	0.18	8	6.11	0.0317	0.6531	10.05	6.7
MW-353	04/17/2018 13:34	0.18	7	6.07	0.0316	0.6503	10.28	2.9
MW-353	04/17/2018 13:37	0.13	4	6.09	0.0328	0.6752	10.18	2.9
MW-353	04/17/2018 13:40	1.47	7	6.04	0.0317	0.6518	10.57	2.7
MW-353	04/17/2018 13:43	2.86	8	6.07	0.0332	0.6821	10.65	7.5
MW-353	04/17/2018 13:46	0.76	7	6.05	0.0321	0.6604	10.15	1.9
MW-353	04/18/2018 11:48	8.95	-129.00	6.38	0.05	0.988	10.07	116.80
MW-353	04/18/2018 13:46	0.76	7.00	6.05	0.03	0.663	10.03	1.89
MW-353	04/18/2018 14:20	2.14	4.00	6.72	0.03	0.663	10.2	167.20
MW-353	09/05/2018 11:29	0.47	-12.00	6.40	0.02	0.418	21.7	31.20
MW-353	09/05/2018 14:18	0.53	-61.00	6.23	0.02	0.470	29.19	4.81
MW-353	09/05/2018 14:50	1.28	-25.00	7.53	0.02	0.475	22.8	33.80
MW-353	05/01/2019 13:15	0.5	29.4	6.63	NM	0.402	12.1	7.6
MW-353	05/01/2019 13:27	0.27	1.6	6.62	0.2	0.41	11.63	0.6
MW-353	08/27/2019 12:55	0.9	-93.1	6.64	NM	0.345	19.37	70.9
MW-353	08/27/2019 13:00	0.68	-86.8	6.46	NM	0.359	19.71	75.6
MW-353	08/27/2019 13:05	0.67	-87.8	6.42	NM	0.367	19.51	32.6
MW-353	08/27/2019 13:10	0.64	-89.2	6.4	NM	0.367	19.61	6.9
MW-353	08/27/2019 13:15	0.63	-89.6	6.4	NM	0.371	19.49	4.9
MW-353	08/27/2019 13:20	0.63	-89.2	6.4	NM	0.367	19.39	2.9
MW-353	08/27/2019 13:25	0.64	-88.8	6.38	NM	0.367	19.39	1.7
MW-353	08/27/2019 13:30	0.65	-88.4	6.39	NM	0.365	19.5	1.1
MW-353	08/27/2019 13:35	0.64	-88.1	6.38	NM	0.365	19.44	0.9
MW-353	08/27/2019 13:40	0.64	-87.8	6.38	NM	0.363	19.42	0.8
MW-353	08/27/2019 13:50	1.85	-56.8	6.45	0.17	0.364	22.12	1.6
MW-353	08/27/2019 14:15	3.47	-50.9	6.45	0.17	0.356	19.81	98.9
MW-353	05/05/2020 11:25	0.31	-99.3	6.43	NM	0.454	12.95	3.7
MW-353	05/05/2020 11:35	0.34	-96	6.4	0.22	0.459	12.44	5.9
MW-353	09/09/2020 08:40	2.93	-84.9	6.33	0.21	0.425	21.57	64.9
MW-353	09/09/2020 08:45	1.53	-86	6.33	0.18	0.385	21.29	53.8
MW-353	09/09/2020 08:50	1.12	-98.2	6.42	0.19	0.396	21.21	12
MW-353	09/09/2020 08:55	0.9	-103.4	6.46	0.19	0.391	21.19	6.8
MW-353	09/09/2020 09:00	0.85	-104.9	6.46	0.19	0.395	21.2	5.4
MW-353	09/09/2020 09:05	0.78	-105.9	6.47	0.19	0.392	21.19	4.2
MW-353	09/09/2020 09:10	0.79	-104.3	6.47	0.19	0.388	21.28	3.4
MW-353	09/09/2020 09:15	0.91	-95.5	6.46	21.22	0.379	21.22	4.8
MW-353	09/09/2020 09:20	1.03	-89	6.45	0.18	0.376	21.24	2.9
MW-353	09/09/2020 09:25	1.17	-83.2	6.44	0.18	0.372	21.18	3.1
MW-353	09/09/2020 09:26	1.17	-83.2	6.44	0.18	0.372	21.18	3.1
MW-353	09/09/2020 09:35	1.57	-68.4	6.39	0.17	0.383	20.86	6.1
MW-353	09/09/2020 09:50	2.57	-45.3	6.32	0.17	0.353	20.76	101.4
MW-353	03/03/2021 11:15	8.73	-68.7	7	0.27	0.562	9.48	1280
MW-353	03/03/2021 11:20	1	-78.8	6.32	0.25	0.507	8.43	149.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-353	03/03/2021 11:25	0.88	-90.2	6.39	0.25	0.508	8.71	35.8
MW-353	03/03/2021 11:30	0.73	-97.9	6.44	0.24	0.501	8.75	12
MW-353	03/03/2021 11:35	0.76	-97.9	6.44	0.24	0.5	8.86	10.5
MW-353	03/03/2021 11:40	2.18	-94.6	6.5	0.25	0.51	9.6	15.2
MW-353	03/03/2021 11:45	2.62	-78.2	6.47	0.25	0.512	10.29	18.3
MW-353	03/03/2021 11:50	3.36	-71.8	6.48	0.25	0.511	9.55	18
MW-353	03/03/2021 11:55	1.38	-88.1	6.41	0.25	0.508	9.06	6.4
MW-353	03/03/2021 12:00	0.91	-95.8	6.46	0.25	0.507	8.98	5.5
MW-353	03/03/2021 12:09	7.54	-56.6	6.55	0.31	0.63	9.47	18
MW-353	03/03/2021 12:30	4.9	-71.4	6.55	0.25	0.517	9.49	300.9
MW-353	09/30/2021 13:40	2.14	-89.6	6.73	0.16	0.329	21.53	259.6
MW-353	09/30/2021 13:45	1.38	-88.4	6.52	0.16	0.327	21.1	212
MW-353	09/30/2021 13:50	0.91	-71.5	6.21	0.15	0.318	21.08	231.9
MW-353	09/30/2021 13:55	0.83	-74.1	6.24	0.15	0.32	23.04	193.2
MW-353	09/30/2021 14:00	0.74	-80.5	6.33	0.16	0.334	23.86	130.4
MW-353	09/30/2021 14:05	0.68	-80.5	6.33	0.17	0.351	21.11	106.3
MW-353	09/30/2021 14:10	0.6	-76.2	6.22	0.17	0.354	21.74	64.6
MW-353	09/30/2021 14:15	0.56	-84.7	6.33	0.17	0.362	22.08	31.2
MW-353	09/30/2021 14:20	0.51	-82.6	6.29	0.17	0.362	20.49	22.6
MW-353	09/30/2021 14:25	0.5	-77.2	6.22	0.17	0.36	20.02	21.3
MW-354	06/04/2013 11:42	0.74	-108	6.05	0.06	1.261	19.98	32.51
MW-354	06/04/2013 12:23	1.86	-41	5.20	0.08	1.596	16.02	2413.40
MW-354	06/05/2013 10:24	0.74	-79.00	6.12	0.02	0.451	14.55	1823.60
MW-354	09/11/2013 10:45	0.75	-409	6.37	0.07	1.351	24.71	10.15
MW-354	09/11/2013 11:33	1.91	-520	6.54	0.07	1.416	17.35	1037.70
MW-354	09/12/2013 10:04	0.20	-274	6.18	0.05	0.992	19.07	1504.60
MW-354	11/14/2013 11:19	1.07	-324	6.22	0.06	1.112	15.38	18.23
MW-354	11/14/2013 12:02	2.05	-201	6.82	0.04	0.880	16.75	2379.60
MW-354	11/15/2013 10:25	0.91	-303	6.14	0.09	1.760	16.80	1665.70
MW-354	01/15/2014 10:26	2.08	-24	6.06	0.09	1.858	11.13	188.70
MW-354	01/15/2014 11:18	2.13	85	6.20	0.07	1.308	12.94	295.80
MW-354	01/16/2014 11:24	2.35	39	6.41	0.12	2.375	12.00	1580.30
MW-354	04/07/2014 10:56	1.26	-307	5.48	0.04	0.808	10.56	49.71
MW-354	04/07/2014 11:43	4.59	-63	5.67	0.03	0.711	10.46	86.90
MW-354	04/08/2014 10:40	3.85	-199	5.59	0.03	0.588	12.68	2796.60
MW-354	07/02/2014 14:07	0.91	202	5.98	0.02	0.378	28.31	8.78
MW-354	07/02/2014 14:59	1.04	290	6.05	0.02	0.343	17.30	733.00
MW-354	07/03/2014 10:50	0.44	303	5.84	0.02	0.337	16.65	1203.50
MW-354	11/19/2014 09:25	2.35	-377	6.36	0.02	0.415	8.24	11.21
MW-354	11/19/2014 10:07	2.33	1	6.36	0.02	0.458	15.73	2736.70
MW-354	11/20/2014 09:01	1.90	-389	6.23	0.02	0.392	15.74	2738.50
MW-354	02/10/2015 10:51	1.63	57	6.29	0.05	0.952	5.27	3.97
MW-354	02/10/2015 11:38	2.42	120	6.80	0.03	0.589	10.66	2351.30
MW-354	02/11/2015 10:57	-0.06	-326	6.63	0.02	0.426	10.79	1767.30
MW-354	05/12/2015 11:32	2	94	6.17	0.01	0.282	12.78	2148.9
MW-354	05/12/2015 11:59	11.65	218	6.28	0.02	0.382	13.59	1034.6
MW-354	08/11/2015 10:45	-0.08	2	6.39	0.08	1.483	18.05	1709.2
MW-354	08/11/2015 11:40	2.6	-58	7.95	0.06	1.281	18.24	862.2
MW-354	10/16/2015 11:16	1.12	49	6.13	0.02	0.368	18.73	1132.1
MW-354	10/16/2015 14:01	4.16	-59	7.41	0.04	0.773	17.97	2670.9
MW-354	05/05/2016 11:00	6.50	-102	5.97	0.02	0.386	13.17	657.10
MW-354	05/05/2016 12:20	8.63	257	6.85	0.02	0.407	12.93	593.30
MW-354	10/27/2016 09:54	2.12	32.00	6.48	0.02	0.339	17.44	517.20
MW-354	10/27/2016 12:21	6.64	40	6.41	0.10	1.967	17.23	1506.70
MW-354	04/04/2017 10:14	2.44	153	6.00	0.02	0.391	11.01	584.00
MW-354	04/04/2017 11:18	6.29	98	7.05	0.05	0.998	11.80	3383.70
MW-354	04/17/2018 11:08	4.91	183	7.16	0.0239	0.4962	10.1	1.3
MW-354	04/17/2018 11:10	1.98	211	6.74	0.0236	0.4890	10.14	11.1
MW-354	04/17/2018 11:13	1.7	226	6.48	0.0238	0.4939	10.19	5.5
MW-354	04/17/2018 11:15	1.46	235	6.28	0.0232	0.4821	10.35	4.3
MW-354	04/17/2018 11:18	1.33	238	6.13	0.0233	0.4829	10.45	3
MW-354	04/17/2018 11:20	1.23	242	6.01	0.0232	0.4808	10.38	2.9

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-354	04/17/2018 11:23	1.17	244	5.91	0.0231	0.4796	10.42	2.9
MW-354	04/17/2018 11:25	1.23	249	5.84	0.0235	0.4881	10.37	3.4
MW-354	04/17/2018 11:28	1.18	248	5.75	0.0231	0.4798	10.4	2
MW-354	04/17/2018 11:31	1.13	245	5.71	0.0231	0.4787	10.2	3
MW-354	04/17/2018 11:33	1.05	246	5.65	0.0232	0.4810	10.23	1.6
MW-354	04/17/2018 11:36	0.97	248	5.59	0.0228	0.4735	10.12	1.6
MW-354	04/17/2018 11:38	0.91	249	5.54	0.0229	0.4762	10.19	1.4
MW-354	04/17/2018 11:41	0.95	249	5.53	0.0227	0.4724	9.89	1.8
MW-354	04/18/2018 10:04	7.78	-19.00	5.85	0.02	0.336	10.93	534.70
MW-354	04/18/2018 11:41	0.95	249.00	5.53	0.02	0.474	9.77	1.81
MW-354	04/18/2018 12:08	1.89	259.00	6.75	0.02	0.500	11.36	2878.20
MW-354	09/05/2018 10:48	5.59	-79.00	8.39	0.02	0.418	28.28	1618.50
MW-354	09/05/2018 13:13	0.28	60.00	5.86	0.02	0.479	23.5	1.46
MW-354	09/05/2018 13:42	1.85	57.00	7.74	0.02	0.467	19.34	2935.10
MW-354	05/01/2019 10:00	0.35	150.4	5.55	NM	0.62	12.34	11.1
MW-354	05/01/2019 10:20	0.22	153	5.63	0.28	0.572	12.28	0.7
MW-354	08/27/2019 13:00	0.96	135.4	6.51	NM	0.774	21.39	81.8
MW-354	08/27/2019 13:05	0.49	135.1	5.54	NM	0.691	20.68	31.8
MW-354	08/27/2019 13:10	0.36	146.3	5.13	NM	0.659	19.87	6.8
MW-354	08/27/2019 13:15	0.31	144	5.18	NM	0.649	19.55	3.4
MW-354	08/27/2019 13:20	0.24	144	5.26	NM	0.614	19.12	2.5
MW-354	08/27/2019 13:25	0.22	142.1	5.32	NM	0.591	19.15	3.2
MW-354	08/27/2019 13:30	0.19	138.2	5.44	NM	0.566	18.99	2
MW-354	08/27/2019 13:35	0.17	135.2	5.51	NM	0.553	18.93	4.2
MW-354	08/27/2019 13:40	0.15	134.6	5.55	NM	0.545	18.87	1.1
MW-354	08/27/2019 13:45	0.14	132.8	5.61	NM	0.538	18.78	2.1
MW-354	08/27/2019 14:00	0.86	115.5	6.01	0.3	0.625	20.44	6.4
MW-354	08/27/2019 14:20	1.34	114.4	5.85	0.25	0.525	19.7	91.8
MW-354	05/05/2020 12:50	1.3	232	5.41	NM	0.484	14.02	55.8
MW-354	05/05/2020 13:05	0.64	225.1	5.5	0.22	0.461	13.02	15.1
MW-354	09/09/2020 10:15	2.74	42.4	6.32	0.15	0.311	21.49	8.2
MW-354	09/09/2020 10:20	0.84	68.9	6.09	0.15	0.308	20.01	7.7
MW-354	09/09/2020 10:25	0.68	75.3	6.07	0.15	0.31	19.5	6.5
MW-354	09/09/2020 10:30	0.55	83	6.04	0.15	0.316	19.16	6.5
MW-354	09/09/2020 10:35	0.48	85.6	6.04	0.15	0.319	19	5.3
MW-354	09/09/2020 10:40	0.46	87.2	6.04	0.15	0.319	18.83	5
MW-354	09/09/2020 10:45	0.44	86.7	6.07	0.15	0.321	18.72	5.2
MW-354	09/09/2020 10:46	0.44	86.7	6.07	0.15	0.321	18.72	5.2
MW-354	09/09/2020 11:10	0.37	91.8	6.03	0.16	0.324	17.94	8.9
MW-354	09/09/2020 11:20	0.44	89.3	6.06	0.15	0.323	18.37	84
MW-354	03/03/2021 08:45	9.33	91.2	6.01	0.31	0.649	8.85	253.2
MW-354	03/03/2021 08:50	4.82	103.6	5.69	0.31	0.63	9.03	146.4
MW-354	03/03/2021 08:55	2.32	120.9	5.44	0.29	0.613	8.93	54.3
MW-354	03/03/2021 09:00	1.25	149.9	5.35	0.26	0.53	8.7	6.8
MW-354	03/03/2021 09:05	1.08	155	5.46	0.25	0.509	9.09	2.4
MW-354	03/03/2021 09:10	1.06	157	5.44	0.25	0.508	9.12	2.2
MW-354	03/03/2021 09:15	0.92	167.7	5.44	0.25	0.505	9.22	2.3
MW-354	03/03/2021 09:20	0.87	175.6	5.46	0.25	0.505	9.46	2.1
MW-354	03/03/2021 09:25	0.82	180.2	5.48	0.25	0.505	9.41	2.5
MW-354	03/03/2021 09:30	0.85	178.3	5.48	0.24	0.503	9.29	2.7
MW-354	03/03/2021 09:40	4.81	181	5.61	0.26	0.531	10.33	2.9
MW-354	03/03/2021 10:04	1.33	-14.2	7.03	0.82	1.642	11.03	69.1
MW-354	04/30/2021 14:00	2.45	-27.7	6.92	0.39	0.78	19.38	856.2
MW-354	04/30/2021 14:05	1.44	-26.1	6.06	0.21	0.621	18.79	783
MW-354	04/30/2021 14:10	0.73	-27.6	5.72	0.27	0.548	15.85	296.8
MW-354	04/30/2021 14:15	0.4	-36	5.6	0.26	0.532	14.3	111.2
MW-354	04/30/2021 14:20	0.34	-47.5	5.58	0.26	0.531	14.01	62.9
MW-354	04/30/2021 14:25	0.33	-53.5	5.57	0.26	0.528	14.07	45.4
MW-354	04/30/2021 14:30	0.32	-59.8	5.53	0.25	0.521	13.38	38
MW-354	04/30/2021 14:35	0.32	-63.6	5.56	0.25	0.505	13.68	29.6
MW-354	04/30/2021 14:40	0.29	-65	5.57	0.25	0.509	14.14	24.6
MW-354	04/30/2021 14:45	0.25	-65	5.58	0.24	0.503	14.67	10.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-354	09/01/2021 10:20	4.59	114.3	5.79	0.27	0.552	20.9	229.7
MW-354	09/01/2021 10:25	1.24	153.2	5.48	0.23	0.485	19.38	133
MW-354	09/01/2021 10:30	1.06	168	5.48	0.23	0.478	19.04	68.5
MW-354	09/01/2021 10:35	0.96	178.7	5.49	0.23	0.474	18.87	29.7
MW-354	09/01/2021 10:40	0.92	184.2	5.51	0.23	0.471	18.75	17.6
MW-354	09/01/2021 10:45	0.9	186.5	5.53	0.23	0.467	18.68	15.3
MW-354	09/01/2021 10:50	0.9	186.4	5.59	0.22	0.457	18.57	31.2
MW-354	09/01/2021 10:55	0.88	186	5.62	0.22	0.452	18.53	19
MW-354	09/01/2021 11:00	0.84	185.1	5.65	0.22	0.447	18.55	14.7
MW-354	09/01/2021 11:05	0.84	183.3	5.68	0.22	0.445	18.62	15.3
MW-354	09/01/2021 11:10	0.83	182.6	5.7	0.22	0.443	18.62	15.1
MW-354	10/27/2021 10:30	2.28	178.4	5.5	0.26	0.54	18.04	432.9
MW-354	10/27/2021 10:35	1.61	268.1	5.1	0.24	0.499	18.03	222.6
MW-354	10/27/2021 10:40	1.01	279.1	5.1	0.24	0.5	17.94	144
MW-354	10/27/2021 10:45	1.23	279.5	5.09	0.24	0.5	17.9	136.1
MW-354	10/27/2021 10:50	1.32	289.8	5.07	0.24	0.497	17.56	79
MW-354	10/27/2021 10:55	1.31	290.1	5.09	0.24	0.496	17.53	87
MW-354	10/27/2021 11:00	1.24	291.6	5.09	0.24	0.491	17.47	65.4
MW-354	10/27/2021 11:05	1.2	291.7	5.07	0.23	0.481	17.44	60.3
MW-354	03/23/2022 09:40	1.55	55.2	5.48	0.28	0.409	10.49	1244.2
MW-354	03/23/2022 09:45	1.18	55.8	5.44	0.27	0.406	10.54	1244.1
MW-354	03/23/2022 09:50	0.97	58.7	5.45	0.27	0.403	10.64	1245.2
MW-354	03/23/2022 09:55	0.97	63.9	5.52	0.27	0.398	10.71	1245.7
MW-354	03/23/2022 10:00	0.99	64.5	5.52	0.27	0.397	10.72	1245.7
MW-354	03/23/2022 10:05	0.92	66.3	5.55	0.26	0.392	10.64	1243.6
MW-354	03/23/2022 10:10	0.88	70.8	5.55	0.26	0.388	10.65	508.1
MW-354	03/23/2022 10:15	0.87	78.3	5.54	0.26	0.386	10.64	181.6
MW-354	03/23/2022 10:20	0.84	84.3	5.53	0.26	0.383	10.63	112
MW-354	03/23/2022 10:25	0.8	88.9	5.53	0.26	0.382	10.64	64.5
MW-355	06/04/2013 13:47	2.00	-115	6.55	0.08	1.606	21.37	6.59
MW-355	06/04/2013 14:25	3.87	-74	6.29	0.08	1.480	21.97	9.50
MW-355	06/05/2013 11:10	2.51	-103.00	6.65	0.04	0.894	19.12	471.10
MW-355	09/11/2013 13:51	0.83	-406	6.55	0.19	3.539	28.74	13.51
MW-355	09/11/2013 14:22	2.42	-324	6.59	0.19	3.517	24.16	1925.50
MW-355	09/12/2013 11:00	0.84	-190	6.58	0.15	2.818	22.66	310.30
MW-355	11/14/2013 13:29	2.67	-206	6.73	0.14	2.759	15.97	45.22
MW-355	11/14/2013 14:02	2.23	-187	6.72	0.14	2.724	17.20	574.80
MW-355	11/15/2013 11:18	0.94	-195	6.51	0.24	4.449	16.81	2380.60
MW-355	01/15/2014 15:48	5.75	-51	6.87	0.14	2.720	7.26	38.89
MW-355	01/15/2014 16:29	5.47	85	7.09	0.13	2.480	7.44	115.50
MW-355	01/16/2014 11:37	5.51	43	7.10	0.15	2.955	8.20	278.10
MW-355	04/09/2014 09:00	5.38	-190	6.74	0.06	1.160	9.73	5.69
MW-355	04/09/2014 09:39	5.90	-175	6.88	0.04	0.908	8.99	25.40
MW-355	04/10/2014 14:10	5.28	-245	6.76	0.07	1.468	9.68	14.90
MW-355	07/02/2014 11:02	2.58	281	6.63	0.10	1.953	27.68	3.09
MW-355	07/02/2014 11:45	1.91	305	6.62	0.10	1.851	23.33	76.10
MW-355	07/03/2014 10:04	2.81	280	6.59	0.09	1.750	21.82	246.80
MW-355	11/19/2014 11:18	4.13	-243	6.89	0.04	0.808	9.41	2.04
MW-355	11/19/2014 11:51	4.89	-37	6.94	0.05	1.051	13.08	177.30
MW-355	11/20/2014 09:42	5.39	-92	6.88	0.05	0.917	14.02	517.70
MW-355	02/10/2015 13:10	3.91	90	6.92	0.06	1.280	4.61	1.81
MW-355	02/10/2015 13:46	5.43	140	7.00	0.04	0.860	4.07	7.40
MW-355	02/11/2015 14:02	1.60	-200	7.22	0.06	1.240	4.07	41.50
MW-355	05/12/2015 13:36	8.68	75	6.8	0.1	2.018	13.27	232.8
MW-355	05/12/2015 13:59	2.95	224	6.86	0.15	2.896	14.55	2879.4
MW-355	08/13/2015 12:56	326	-52	6.67	0.82	13.91	23.71	227.8
MW-355	08/13/2015 15:55	3.45	-81	7.49	0.87	14.85	22.51	580.3
MW-355	10/16/2015 10:24	6.37	1	6.74	0.04	0.871	19.92	65.8
MW-355	10/16/2015 11:47	4.19	-29	6.7	0.1	2.004	20.61	2671.1
MW-355	05/05/2016 10:18	18.26	1092	6.50	0.08	1.573	13.51	54.30
MW-355	05/05/2016 10:42	9.40	137	7.05	0.21	3.909	13.63	240.10
MW-355	10/27/2016 10:40	6.07	49.00	6.78	NM	1.409	19.26	444.20

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-355	10/27/2016 14:33	4.69	53	6.67	NM	3.756	19.20	3943.00
MW-355	04/04/2017 11:05	7.32	176	7.30	0.03	0.678	8.65	65.60
MW-355	04/04/2017 12:59	9.16	196	7.24	0.06	1.283	11.57	333.00
MW-355	04/17/2018 09:48	5.34	180	7.15	0.0622	1.2519	9.21	2.1
MW-355	04/17/2018 09:51	4.76	174	6.97	0.0639	1.2862	8.79	1.1
MW-355	04/17/2018 09:54	5.32	173	6.84	0.0646	1.2991	8.99	1.3
MW-355	04/17/2018 09:56	5.21	172	6.79	0.0609	1.2285	8.91	1
MW-355	04/17/2018 09:59	5.39	173	6.73	0.0566	1.1443	8.96	1.3
MW-355	04/17/2018 10:01	5.48	173	6.7	0.0546	1.1042	9.06	1.5
MW-355	04/17/2018 10:04	4.77	174	6.63	0.0642	1.2917	9.15	3.9
MW-355	04/17/2018 10:06	4.2	169	6.66	0.0527	1.0686	9.19	2.1
MW-355	04/17/2018 10:08	4.6	174	6.63	0.0513	1.0406	9.29	2.3
MW-355	04/17/2018 10:11	4.86	176	6.6	0.0496	1.0065	9.34	2.2
MW-355	04/17/2018 10:13	7.58	179	6.51	0.0493	1.0008	9.17	1.1
MW-355	04/17/2018 10:16	5.6	173	6.57	0.0480	0.9759	9.09	0.8
MW-355	04/17/2018 10:18	5.33	171	6.56	0.0473	0.9620	9.18	1.1
MW-355	04/17/2018 10:21	5.34	170	6.55	0.0477	0.9706	9.1	0.8
MW-355	04/18/2018 10:22	5.34	170.00	6.55	0.05	0.974	8.98	0.85
MW-355	04/18/2018 10:50	7.13	176.00	7.02	0.04	0.722	9.33	292.00
MW-355	04/18/2018 11:03	9.36	-11.00	6.78	0.02	0.441	9.48	80.40
MW-355	09/05/2018 10:04	4.25	-39.00	6.83	0.07	1.392	24.63	76.20
MW-355	09/05/2018 11:16	2.47	-4.00	6.70	0.06	1.249	26.54	0.75
MW-355	09/05/2018 11:42	3.25	17.00	7.52	0.06	1.275	24.45	571.20
MW-355	03/27/2019 11:05	3.39	0.9	7.02	NM	1.166	7.68	3.3
MW-355	03/27/2019 11:31	4.5	34.9	7.02	0.49	0.984	7.28	14.6
MW-355	09/03/2019 11:10	3.29	62.9	7.06	NM	1.211	24.5	11.8
MW-355	09/03/2019 11:15	1.42	59.1	7.12	NM	1.22	24.44	2.4
MW-355	09/03/2019 11:20	0.87	57.5	7.11	NM	1.23	24.62	4
MW-355	09/03/2019 11:25	0.64	57.6	7.09	NM	1.237	24.63	3.2
MW-355	09/03/2019 11:30	0.64	57.8	7.07	NM	1.238	24.76	2.7
MW-355	09/03/2019 11:35	0.76	58.6	7.04	NM	1.237	24.7	4.8
MW-355	09/03/2019 11:40	0.74	59.2	7.02	NM	1.242	24.64	5.4
MW-355	09/03/2019 11:45	0.86	58.7	7.01	NM	1.236	24.78	6.7
MW-355	09/03/2019 11:50	1.03	59.9	6.99	NM	1.236	24.7	6.7
MW-355	09/03/2019 11:55	1.03	60.5	6.97	NM	1.229	24.37	10.4
MW-355	09/03/2019 12:10	5.31	74.2	7.37	0.6	1.215	24.38	38.1
MW-355	09/03/2019 12:11	5.31	74.2	7.37	0.6	1.215	24.38	38.1
MW-355	09/03/2019 12:30	6.2	65.1	7.1	0.61	1.232	26.49	113.6
MW-355	02/21/2020 09:05	5.71	140	6.88	NM	0.415	4.75	1.6
MW-355	02/21/2020 09:15	5.74	137.8	6.95	0.2	0.412	5.88	4.7
MW-355	09/01/2020 12:15	4.4	34.5	6.93	0.77	1.53	23.69	3.4
MW-355	09/01/2020 12:20	3.16	39.1	6.84	0.75	1.486	23.81	0.8
MW-355	09/01/2020 12:25	2.92	45.7	6.83	0.79	1.571	24.11	0.5
MW-355	09/01/2020 12:30	2.21	50.8	6.81	0.83	1.652	24.17	0.2
MW-355	09/01/2020 12:35	1.81	52.1	6.81	0.86	1.699	24.25	0.2
MW-355	09/01/2020 12:40	1.45	54.7	6.8	0.87	1.731	24.13	0.2
MW-355	09/01/2020 12:45	1.31	55.1	6.8	0.88	1.737	24.22	0.1
MW-355	09/01/2020 12:50	1.29	58.5	6.8	0.87	1.72	24.17	0.4
MW-355	09/01/2020 12:55	1.25	60.2	6.79	0.87	1.723	24.24	0.3
MW-355	02/08/2021 00:00	NM	NM	NM	NM	NM	NM	NM
MW-355	02/08/2021 13:15	5.88	-91.8	7.78	0.42	0.861	7.39	12.8
MW-355	02/08/2021 13:20	5.16	-89.3	7.59	0.41	0.843	7.18	13
MW-355	02/08/2021 13:25	5.14	-85.1	7.43	0.41	0.829	6.76	10.7
MW-355	02/08/2021 13:30	5.21	-76.6	7.16	0.38	0.77	6.06	9.8
MW-355	02/08/2021 13:35	4.89	-77.5	7.16	0.38	0.775	5.55	8.3
MW-355	02/08/2021 13:40	4.68	-78.4	7.14	0.38	0.773	5.63	11.4
MW-355	02/08/2021 13:45	4.7	-83	7.17	0.38	0.789	5.57	11.1
MW-355	02/08/2021 13:50	4.69	-79.6	7.19	0.37	0.752	5.24	10.5
MW-355	02/08/2021 13:55	4.44	-76.5	7.07	0.37	0.755	5.23	10.3
MW-355	02/08/2021 14:00	4.31	-77.5	7.1	0.37	0.765	5.14	10.8
MW-355	02/08/2021 14:15	5.75	-78.4	7.1	0.38	0.785	4.24	1.5
MW-355	02/08/2021 14:35	7.75	-90.7	7.45	0.36	0.742	4.79	20.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-355	07/29/2021 12:15	3.48	186.7	6.43	0.29	0.596	23.84	1.3
MW-355	07/29/2021 12:20	3.03	189.3	6.41	0.29	0.591	23.97	0.6
MW-355	07/29/2021 12:25	3.08	192	6.36	0.28	0.577	24.12	0
MW-355	07/29/2021 12:30	3.08	194.7	6.3	0.28	0.578	24.14	0
MW-355	07/29/2021 12:35	2.98	196.7	6.29	0.28	0.586	24.11	0
MW-355	07/29/2021 12:40	2.91	197.5	6.29	0.29	0.598	24.32	0
MW-355	07/29/2021 12:45	2.79	198	6.27	0.29	0.603	24.44	0
MW-355	02/14/2022 10:50	6.31	2.7	7.66	0.24	0.489	6.56	71.9
MW-355	02/14/2022 10:55	5.49	11.2	7.26	0.24	0.501	5.84	13.6
MW-355	02/14/2022 11:00	5.27	14	6.97	0.25	0.516	5.78	10.9
MW-355	02/14/2022 11:05	5.19	14.2	6.99	0.25	0.517	5.85	11.5
MW-355	02/14/2022 11:10	5.61	11.1	7.05	0.26	0.533	5.87	9.4
MW-355	02/14/2022 11:15	5.31	11.4	6.93	0.26	0.535	5.82	7.5
MW-355	02/14/2022 11:20	5.06	0	6.98	0.26	0.544	5.85	6.5
MW-355	02/14/2022 11:25	5.03	0.2	6.95	0.26	0.546	5.8	6.5
MW-355	02/14/2022 11:30	5.01	10.8	6.81	0.27	0.546	5.68	5.8
MW-355	02/14/2022 11:35	5.03	11.9	6.88	0.27	0.55	5.71	5.4
MW-356	06/04/2013 15:01	2.66	-72	6.48	0.08	1.569	21.68	9.56
MW-356	06/04/2013 15:40	3.87	-36	5.90	0.09	1.775	18.81	570.90
MW-356	06/05/2013 12:00	2.17	-112.00	6.46	0.05	1.003	18.00	572.40
MW-356	09/11/2013 15:16	0.57	-335	6.82	0.09	1.674	27.47	8.94
MW-356	09/11/2013 15:42	0.86	-283	6.79	0.09	1.755	23.73	1930.70
MW-356	09/12/2013 11:50	0.08	-294	6.68	0.07	1.296	22.28	148.60
MW-356	11/14/2013 14:52	0.95	-276	6.57	0.09	1.724	16.86	16.36
MW-356	11/14/2013 15:18	2.15	-194	6.80	0.12	2.264	17.48	1794.40
MW-356	11/15/2013 12:07	0.83	-288	6.57	0.14	2.625	17.61	668.10
MW-356	01/16/2014 10:19	3.50	-55	6.66	0.16	3.153	7.75	34.61
MW-356	01/16/2014 10:59	3.93	71	6.96	0.12	2.374	8.93	41.00
MW-356	01/17/2014 10:20	2.71	47	6.69	0.15	2.828	9.64	389.00
MW-356	04/09/2014 10:42	5.57	-211	6.61	0.03	0.700	12.60	9.54
MW-356	04/09/2014 11:15	7.83	-192	6.98	0.03	0.573	8.21	252.90
MW-356	04/09/2014 14:37	2.25	-289	6.67	0.08	1.666	8.20	273.40
MW-356	07/01/2014 10:36	1.31	-47	6.78	0.03	0.532	25.75	9.49
MW-356	07/01/2014 11:10	1.65	73	6.96	0.02	0.464	19.88	61.60
MW-356	07/02/2014 13:47	1.05	-28	6.79	0.02	0.500	19.97	316.40
MW-356	11/19/2014 13:33	2.22	-308	6.77	0.03	0.589	11.79	17.17
MW-356	11/19/2014 14:07	3.11	-111	6.95	0.03	0.649	15.63	85.20
MW-356	11/20/2014 10:26	1.93	-316	6.74	0.05	1.021	15.58	743.00
MW-356	02/10/2015 14:33	2.60	-3	6.67	0.04	0.733	6.35	3.13
MW-356	02/10/2015 15:08	4.07	-56	6.89	0.03	0.684	7.22	168.10
MW-356	02/11/2015 14:32	1.43	-251	7.07	0.02	0.404	6.95	561.70
MW-356	05/12/2015 14:45	1.39	-119	6.56	0.04	0.734	12.61	713.2
MW-356	05/12/2015 15:36	-155	-154	6.7	0.12	2.333	13.58	2366.4
MW-356	08/13/2015 12:29	-0.22	-71	6.47	0.11	2.091	21.81	291.6
MW-356	08/13/2015 13:31	6.41	-93	7.12	0.2	3.708	22.48	2043.2
MW-356	10/16/2015 09:28	1.48	23	6.38	0.03	0.616	20.87	49.5
MW-356	10/16/2015 10:37	3.73	-56	6.66	0.07	1.329	21.11	507.1
MW-356	05/06/2016 09:33	12.10	995	6.27	0.03	0.578	13.18	67.80
MW-356	05/06/2016 09:39	4.73	111	7.01	0.03	0.589	12.98	408.10
MW-356	10/28/2016 09:21	0.08	-153.00	6.67	0.16	3.118	20.24	426.40
MW-356	10/28/2016 09:43	5.84	-98	6.46	0.17	3.300	19.02	129.30
MW-356	04/04/2017 11:49	4.13	110	6.55	0.02	0.366	8.92	131.20
MW-356	04/04/2017 13:56	9.72	145	7.40	0.06	1.188	10.54	187.10
MW-356	04/17/2018 08:39	6.21	121	7.57	0.0229	0.4752	10.03	1419.9
MW-356	04/17/2018 08:41	3	100	7.26	0.0225	0.4687	10.01	36.9
MW-356	04/17/2018 08:44	2.87	115	7	0.0230	0.4791	9.37	60.3
MW-356	04/17/2018 08:46	2.47	99	6.86	0.0232	0.4836	8.82	13
MW-356	04/17/2018 08:49	3.28	116	6.71	0.0227	0.4729	8.79	9.6
MW-356	04/17/2018 08:51	3.99	117	6.7	0.0225	0.4688	8.65	10.6
MW-356	04/17/2018 08:54	4.23	117	6.61	0.0219	0.4568	8.64	6
MW-356	04/17/2018 08:56	4.24	112	6.59	0.0217	0.4518	8.78	6
MW-356	04/17/2018 08:59	4.35	112	6.54	0.0215	0.4480	8.74	5.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-356	04/18/2018 08:59	4.35	112.00	6.54	0.02	0.449	8.62	5.88
MW-356	04/18/2018 09:08	6.87	-94.00	6.80	0.05	1.087	9.94	39.10
MW-356	04/18/2018 09:30	7.21	158.00	7.02	0.02	0.367	9.32	42.80
MW-356	09/05/2018 09:21	0.13	-95.00	6.88	0.07	1.308	21.77	80.20
MW-356	09/05/2018 09:42	0.59	-102.00	6.68	0.08	1.599	26.47	0.23
MW-356	09/05/2018 10:14	1.12	-20.00	7.23	0.07	1.290	22.8	43.80
MW-356	03/27/2019 11:15	5.01	-27.6	6.9	NM	0.554	9.52	1.7
MW-356	03/27/2019 11:30	7.6	-36.2	6.91	0.43	0.857	9.23	11.7
MW-356	09/03/2019 10:55	3.91	-156.2	9.93	NM	1.007	23.93	20.6
MW-356	09/03/2019 11:00	0.95	-139.4	7.25	NM	1.316	23.56	6.5
MW-356	09/03/2019 11:05	0.61	-139.8	6.89	NM	1.736	23.56	3.7
MW-356	09/03/2019 11:10	0.6	-139.3	6.87	NM	1.726	23.48	3.4
MW-356	09/03/2019 11:15	0.55	-134.3	6.84	NM	1.707	23.56	1
MW-356	09/03/2019 11:20	0.51	-135.9	6.84	NM	1.646	23.71	0
MW-356	09/03/2019 11:25	0.5	-136	6.91	NM	1.583	24.01	2
MW-356	09/03/2019 11:30	0.48	-138.1	6.92	NM	1.544	24.08	1.6
MW-356	09/03/2019 11:35	0.47	-126.9	6.92	NM	1.513	23.93	1.3
MW-356	09/03/2019 11:40	0.46	-134.9	6.93	NM	1.493	23.99	1.3
MW-356	09/03/2019 12:00	2.5	-134.8	7.17	0.81	1.626	30.33	18.1
MW-356	09/03/2019 12:25	3.25	-102.3	6.86	0.4	0.821	23.77	214.7
MW-356	02/21/2020 11:00	1.51	-94	6.93	NM	0.474	8.45	0.6
MW-356	02/21/2020 11:10	1.7	-83.2	6.94	0.2	0.408	9.02	4.8
MW-356	09/01/2020 11:25	1.6	-114.6	7.03	0.9	1.747	23.27	16.9
MW-356	09/01/2020 11:30	0.92	-122.9	6.85	0.9	1.773	22.85	5.9
MW-356	09/01/2020 11:35	0.8	-131.4	6.84	0.92	1.805	22.46	1.3
MW-356	09/01/2020 11:40	0.78	-136.4	6.84	0.96	1.881	22.56	0.3
MW-356	09/01/2020 11:45	0.77	-137.7	6.84	0.96	1.88	22.55	0.1
MW-356	09/01/2020 11:50	0.77	-136.2	6.84	0.95	1.874	22.57	0.2
MW-356	02/08/2021 13:20	2.06	-76.3	6.83	0.88	1.743	7.41	37.2
MW-356	02/08/2021 13:25	1.6	-74.1	6.78	0.88	1.736	7.47	32.4
MW-356	02/08/2021 13:30	0.79	-80.9	6.66	0.91	1.781	7.6	20.4
MW-356	02/08/2021 13:35	0.62	-89.6	6.72	0.82	1.624	7.58	27.2
MW-356	02/08/2021 13:40	0.61	-89.6	6.72	0.8	1.588	7.68	27.9
MW-356	02/08/2021 13:45	0.61	-90	6.73	0.8	1.582	7.51	29.6
MW-356	02/08/2021 13:50	0.56	-95.3	6.78	0.72	1.443	7.63	38.1
MW-356	02/08/2021 13:55	0.51	-100.1	6.82	0.67	1.334	7.92	17.6
MW-356	02/08/2021 14:00	0.46	-102.5	6.85	0.63	1.251	7.67	19.8
MW-356	02/08/2021 14:05	0.45	-102.6	6.85	0.62	1.247	7.63	11.2
MW-356	02/08/2021 14:15	0.4	-83.2	6.89	0.62	1.35	7.94	10
MW-356	02/08/2021 14:25	2.27	-70.3	7.03	0.64	1.283	8.06	13.5
MW-356	07/29/2021 14:00	1.93	-104.2	6.7	0.52	1.059	22.58	301.5
MW-356	07/29/2021 14:05	1.36	-103.1	6.58	0.55	1.114	22.47	137.4
MW-356	07/29/2021 14:10	1.18	-108.7	6.65	0.57	1.155	22.5	112.1
MW-356	07/29/2021 14:15	1.15	-112.7	6.68	0.6	1.194	22.35	101.1
MW-356	07/29/2021 14:20	1.08	-117.2	6.71	0.62	1.247	21.99	67.5
MW-356	07/29/2021 14:25	0.92	-117	6.71	0.64	1.277	21.62	48
MW-356	07/29/2021 14:30	1.09	-119.4	6.72	0.64	1.281	21.72	40.3
MW-356	07/29/2021 14:35	1.06	-120.4	6.73	0.64	1.274	22.02	24
MW-356	07/29/2021 14:40	1.1	-122.3	6.74	0.63	1.265	22.38	27.5
MW-356	07/29/2021 14:45	1.09	-122.1	6.74	0.63	1.256	22.73	16
MW-356	02/14/2022 12:40	2.42	-27.1	6.92	0.43	0.877	7.48	572.9
MW-356	02/14/2022 12:45	1.97	-14.7	6.61	0.35	0.713	7.19	141.4
MW-356	02/14/2022 12:50	1.89	-14.2	6.62	0.34	0.698	6.77	134.2
MW-356	02/14/2022 12:55	2.32	-12.3	6.54	0.33	0.686	4.57	120.1
MW-356	02/14/2022 13:00	2.09	-11.4	6.52	0.33	0.679	4.65	109.1
MW-356	02/14/2022 13:05	2.11	-12.7	6.53	0.31	0.641	5.4	76.8
MW-356	02/14/2022 13:10	2.95	-12.4	6.59	0.3	0.612	5.27	55.5
MW-356	02/14/2022 13:15	2.46	-11	6.56	0.29	0.605	5.43	51.9
MW-356	02/14/2022 13:20	2.62	-8.6	6.56	0.27	0.552	6.03	38.2
MW-356	02/14/2022 13:25	2.62	-8.4	6.55	0.27	0.552	6.05	38.3
MW-357	06/05/2013 09:54	0.4	-139	6.9	0.27	4.981	17.89	19.64
MW-357	06/05/2013 10:16	1.23	-93	6.83	0.27	4.991	15.61	1670.2

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-357	06/06/2013 10:01	0.77	-119	6.66	0.29	5.265	15.7	205.3
MW-357	09/12/2013 09:25	0.68	-299	6.94	0.13	2.563	23.63	3.50
MW-357	09/12/2013 09:49	4.01	-159	6.92	0.09	1.722	22.55	251.10
MW-357	09/13/2013 09:26	0.39	-420	6.81	0.23	4.278	22.01	276.50
MW-357	11/18/2013 10:07	0.85	-218	6.91	0.13	2.433	18.46	3.23
MW-357	11/18/2013 10:35	3.68	-89	6.27	0.12	2.348	17.73	156.30
MW-357	11/19/2013 09:34	2.00	-268	6.76	0.26	4.789	17.38	285.20
MW-357	01/16/2014 13:33	1.13	-90	7.20	1.78	29.250	8.90	17.94
MW-357	01/16/2014 14:07	1.43	-60	7.36	0.38	6.901	11.62	2654.00
MW-357	01/17/2014 11:03	0.90	29	6.94	0.40	7.204	11.72	215.90
MW-357	05/05/2014 09:16	1.11	-390	7.09	0.08	1.565	13.55	4.82
MW-357	05/05/2014 09:43	4.01	-187	7.00	0.07	1.348	13.55	78.60
MW-357	05/06/2014 08:52	3.25	-225	6.93	0.05	1.004	12.91	435.30
MW-357	07/01/2014 09:09	0.95	-87	7.03	0.09	1.700	23.45	5.79
MW-357	07/01/2014 09:44	0.59	-10	6.88	0.09	1.707	18.45	2726.60
MW-357	07/02/2014 13:25	0.31	5	6.79	0.08	67.000	18.93	1.66
MW-357	11/24/2014 09:12	2.23	-269	6.86	0.11	2.075	17.07	23.04
MW-357	11/24/2014 09:39	2.50	-169	6.77	0.11	2.135	16.75	1986.90
MW-357	11/25/2014 10:50	0.42	-130	6.73	0.10	1.909	16.40	386.40
MW-357	02/11/2015 14:57	1.37	-109	6.59	0.22	4.294	6.45	9.04
MW-357	02/11/2015 15:22	2.65	26	5.05	0.16	3.093	9.25	2843.80
MW-357	02/12/2015 11:50	0.40	3.66	6.35	0.09	1.741	9.15	71.40
MW-357	05/13/2015 10:09	0.84	-137	6.62	0.18	3.429	13.16	835.8
MW-357	05/13/2015 10:39	6.38	-53	6.99	0.08	1.666	17.63	29.2
MW-357	08/13/2015 11:18	2.33	-83	7.2	0.12	2.33	21.47	480
MW-357	08/13/2015 12:00	1.21	-73	6.72	0.18	3.385	20.49	124.1
MW-357	10/27/2015 12:01	0.78	159	6.57	0.07	1.436	19.75	54.4
MW-357	10/27/2015 13:59	2.74	-49	6.6	0.07	1.458	19.65	99.1
MW-357	05/06/2016 11:47	5.51	588	6.60	0.06	1.248	13.21	44.40
MW-357	05/06/2016 15:12	4.19	105	6.99	0.16	3.051	13.73	342.10
MW-357	10/28/2016 10:13	0.12	-125.00	6.81	0.16	2.998	20.14	139.20
MW-357	10/28/2016 11:04	4.62	-91	6.57	0.19	3.593	18.44	645.30
MW-357	04/05/2017 12:01	0.92	-120	6.64	0.05	1.085	10.75	17.90
MW-357	04/05/2017 14:31	3.86	-26	7.00	0.13	2.586	10.40	29.70
MW-357	04/24/2018 13:13	6.06	-166	6.68	0.0565	1.1268	20.19	19.3
MW-357	04/24/2018 13:16	1.29	-159	6.85	0.0586	1.1702	15.32	6.5
MW-357	04/24/2018 13:19	1.27	-156	6.91	0.0584	1.1658	15.32	5.9
MW-357	04/24/2018 13:21	1.05	-155	6.93	0.0573	1.1445	15.25	5.7
MW-357	04/24/2018 13:24	0.95	-155	6.94	0.0565	1.1303	14.98	5.4
MW-357	04/24/2018 13:27	0.85	-157	6.94	0.0565	1.1314	14.84	6.8
MW-357	04/24/2018 13:29	0.63	-159	6.95	0.0562	1.1257	14.73	6.8
MW-357	04/24/2018 13:32	0.69	-161	6.95	0.0559	1.1199	14.64	6.8
MW-357	04/24/2018 13:35	0.54	-163	6.95	0.0558	1.1185	14.33	7.8
MW-357	04/24/2018 13:37	0.5	-165	6.96	0.0559	1.1188	14.38	8.3
MW-357	04/24/2018 13:40	0.56	-167	6.96	0.0558	1.1179	14.28	8.4
MW-357	04/24/2018 13:43	0.44	-168	6.94	0.0545	1.0924	14.34	9
MW-357	04/24/2018 13:45	0.5	-170	6.92	0.0536	1.0758	14.44	19.4
MW-357	04/24/2018 13:48	0.48	-173	6.91	0.0531	1.0663	14.43	10.7
MW-357	04/24/2018 13:51	0.4	-174	6.89	0.0527	1.0574	14.78	12.7
MW-357	04/24/2018 13:53	0.4	-175	6.89	0.0530	1.0638	14.7	13.6
MW-357	04/24/2018 13:56	0.37	-178	6.89	0.0527	1.0578	14.59	14.7
MW-357	04/24/2018 13:58	0.36	-181	6.89	0.0530	1.0624	14.72	37.8
MW-357	04/24/2018 14:01	0.32	-185	6.9	0.0529	1.0611	14.37	16.8
MW-357	04/24/2018 14:04	0.31	-187	6.91	0.0531	1.0655	14.52	18.5
MW-357	04/25/2018 11:50	1.70	-185.00	6.95	0.06	1.166	11.15	10.30
MW-357	04/25/2018 14:04	0.31	-187.00	6.91	0.05	1.069	14.4	18.55
MW-357	04/25/2018 14:35	1.23	-164.00	6.96	0.06	1.168	12.27	114.90
MW-357	10/03/2018 13:15	0.98	-113.00	6.94	0.67	1.341	24.38	0.0000
MW-357	10/03/2018 13:30	0.79	-121.60	7.02	0.67	1.349	23.98	0.0000
MW-357	10/03/2018 13:40	3.77	-130.40	6.99	0.67	1.333	24.16	0.0000
MW-357	05/03/2019 10:55	0.37	-19.2	7.23	NM	1.094	12.91	17.6
MW-357	05/03/2019 11:03	0.26	-22.3	7.23	0.51	1.014	12.85	16.6

Appendix B6 Main Yard
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Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-357	08/29/2019 12:45	2.29	-127.9	7.01	NM	1.347	21.23	4.4
MW-357	08/29/2019 12:50	2.05	-137.7	6.96	NM	1.322	21.59	13.8
MW-357	08/29/2019 12:55	2.68	-139.9	6.94	NM	1.331	21.47	11.9
MW-357	08/29/2019 13:00	3.01	-143.9	6.98	NM	1.326	20.7	21.4
MW-357	08/29/2019 13:05	3.33	144	6.97	NM	1.327	20.67	16.5
MW-357	08/29/2019 13:10	2.87	-145	6.96	NM	1.332	20.34	10.4
MW-357	08/29/2019 13:15	3.68	-144.5	6.98	NM	1.338	19.78	19.3
MW-357	08/29/2019 13:20	3.59	-144.1	6.95	NM	1.33	19.84	12.5
MW-357	08/29/2019 13:25	4.02	-124.8	6.93	NM	1.326	20.41	1.7
MW-357	08/29/2019 13:30	4.1	-105.6	6.93	NM	1.33	21.9	3.5
MW-357	08/29/2019 13:40	4.55	-102.3	6.97	0.67	1.336	22.12	0.3
MW-357	08/29/2019 14:00	4.01	-97.8	6.98	0.35	0.721	21.81	43.7
MW-357	05/01/2020 11:00	2.22	-154.2	7.03	NM	0.489	12.84	5.7
MW-357	05/01/2020 11:20	2.56	-163	7.03	0.24	0.49	12.76	7.9
MW-357	11/24/2020 08:45	9.83	-112	7.53	0.66	1.302	13.64	26.3
MW-357	11/24/2020 08:50	3.32	-107.3	7.12	0.66	1.311	14.73	22.1
MW-357	11/24/2020 08:55	0.44	-106.9	7.08	0.66	1.309	14.64	19.6
MW-357	11/24/2020 09:00	0.71	-108.9	7.06	0.66	1.303	14.77	18.4
MW-357	11/24/2020 09:05	2.39	-109.4	7.05	0.65	1.3	14.61	17.8
MW-357	11/24/2020 09:10	5.24	-110.9	7.05	0.65	1.298	14.54	17.5
MW-357	11/24/2020 09:15	7.02	-112.5	7.04	0.65	1.293	14.68	17.3
MW-357	11/24/2020 09:20	7.28	-112.3	7.04	0.64	1.281	14.74	17
MW-357	11/24/2020 09:25	6.98	-112.4	7.04	0.64	1.273	14.65	16.9
MW-357	11/24/2020 09:30	4.98	-112.5	7.04	0.64	1.27	14.73	17
MW-357	11/24/2020 09:40	4.87	-91.3	7.14	0.64	1.271	12.09	11.2
MW-357	11/24/2020 09:50	2.05	-102.1	7.02	0.64	1.273	12.05	10.4
MW-357	06/25/2021 10:30	1.7	-29.1	6.3	0.51	1.025	22.86	47.5
MW-357	06/25/2021 10:35	1.58	-28.1	6.27	0.51	1.025	23.16	41.7
MW-357	06/25/2021 10:40	1.47	-11.9	6.14	0.51	1.025	23.65	42.8
MW-357	06/25/2021 10:45	1.53	-2.4	6.04	0.51	1.03	23.83	38.8
MW-357	06/25/2021 10:50	1.38	7.7	5.92	0.51	1.032	24.21	27.8
MW-357	06/25/2021 10:55	1.32	19.2	5.8	0.51	1.037	24.19	16.2
MW-357	06/25/2021 11:00	1.33	23.4	5.75	0.51	1.034	24.32	8.3
MW-357	06/25/2021 11:05	1.2	27.6	5.71	0.51	1.042	24.28	7.2
MW-357	06/25/2021 11:10	1.34	30.1	5.68	0.51	1.044	24.4	5.5
MW-357	06/25/2021 11:15	1.27	32.7	5.65	0.52	1.046	24.6	5.1
MW-357	12/27/2021 11:30	2.7	-63	6.78	0.62	1.243	10.24	37.9
MW-357	12/27/2021 11:35	1.23	-79.1	6.85	0.6	1.21	10.85	43.4
MW-357	12/27/2021 11:40	0.81	-88.1	6.89	0.6	1.188	11.62	38.5
MW-357	12/27/2021 11:45	0.88	-96.7	6.93	0.59	1.187	11.82	22.9
MW-357	12/27/2021 11:50	0.62	-107.4	6.97	0.59	1.173	12.01	12.5
MW-357	12/27/2021 11:55	0.64	-111.1	6.96	0.59	1.177	11.96	14.2
MW-357	12/27/2021 12:00	0.62	-111.8	6.96	0.6	1.188	11.59	11.7
MW-358	06/05/2013 13:13	3.64	135	7.07	0.10	1.281	19.09	1.92
MW-358	06/18/2013 15:29	4.47	-83	6.89	0.06	1.245	19.51	2084.60
MW-358	06/26/2013 11:57	1.44	-229	7.09	0.18	3.456	20.95	50.41
MW-358	06/26/2013 12:12	4.48	-141	7.23	0.12	2.348	22.93	184.60
MW-358	06/27/2013 10:23	2.06	-148.00	7.16	0.08	1.592	18.50	443.70
MW-358	09/12/2013 10:44	5.03	-253	7.27	0.07	1.449	25.36	497.60
MW-358	09/13/2013 10:17	4.10	-220	7.27	0.14	2.704	22.45	763.10
MW-358	11/18/2013 11:06	0.91	-143	6.67	0.21	3.990	18.27	121.60
MW-358	11/18/2013 11:40	5.43	-100	6.70	10.19	3.664	18.02	350.60
MW-358	11/19/2013 10:27	1.96	-168	6.77	0.38	6.906	17.76	206.40
MW-358	01/28/2014 10:09	4.49	-57	7.44	0.23	4.465	1.50	72.84
MW-358	01/29/2014 09:50	8.34	11	7.30	0.12	2.426	9.45	1086.40
MW-358	05/05/2014 10:47	1.07	-346	7.31	0.05	1.077	15.37	10.49
MW-358	05/05/2014 11:12	4.36	-121	7.50	0.04	0.801	15.81	473.10
MW-358	05/06/2014 09:40	6.17	-203	7.28	0.04	0.849	15.54	1950.80
MW-358	07/02/2014 09:34	1.57	215	7.14	0.04	0.715	26.67	156.60
MW-358	07/02/2014 10:16	4.90	246	7.29	0.04	0.783	23.22	495.90
MW-358	07/03/2014 09:16	3.53	265	6.99	0.03	0.665	20.49	521.60
MW-358	11/24/2014 10:41	2.28	-350	7.40	0.06	1.209	16.85	26.05

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-358	11/24/2014 11:09	5.91	-126	7.41	0.05	1.067	17.78	727.10
MW-358	11/25/2014 11:20	3.28	-47	7.32	0.04	0.780	14.15	457.20
MW-358	02/11/2015 13:48	1.31	-121	7.35	0.10	1.893	9.65	9.61
MW-358	02/11/2015 14:12	4.65	-67	7.27	0.07	1.411	8.10	950.70
MW-358	02/12/2015 11:07	13.05	122	5.79	0.15	30.210	1.75	62.40
MW-358	05/13/2015 11:05	6.31	94	7.42	0.08	1.488	17.23	316.8
MW-358	05/13/2015 11:39	4.45	-76	7.11	0.07	1.374	18.3	2989.4
MW-358	08/13/2015 10:19	3.48	-8	6.71	0.09	1.78	21.45	2028.3
MW-358	08/13/2015 11:18	0.23	-13	6.68	0.2	3.775	20	54.8
MW-358	10/27/2015 12:54	4	69	6.75	0.09	1.713	19.45	55.7
MW-358	10/27/2015 14:51	3.25	-84	7.02	0.06	1.236	19.52	1247.3
MW-358	05/06/2016 11:05	6.93	168	6.93	0.04	0.844	13.60	553.70
MW-358	05/06/2016 13:52	6.66	9.5	7.37	0.02	0.405	13.63	2153.40
MW-358	10/28/2016 10:54	0.39	-93.00	6.84	0.24	4.537	19.91	82.50
MW-358	10/28/2016 12:58	6.29	-40	6.73	0.25	4.669	18.61	604.90
MW-358	04/05/2017 11:13	4.60	198	7.02	0.05	1.011	10.06	185.00
MW-358	04/05/2017 12:22	3.92	89	7.51	0.12	2.281	10.64	2987.40
MW-358	04/24/2018 12:06	3.97	-96	6.9	0.0360	0.7321	15.69	369.8
MW-358	04/24/2018 12:09	1.15	-133	7.1	0.0358	0.7275	15.87	158
MW-358	04/24/2018 12:12	0.82	-146	7.17	0.0356	0.7231	16.03	68.3
MW-358	04/24/2018 12:14	0.74	-153	7.22	0.0352	0.7162	15.83	44.2
MW-358	04/24/2018 12:17	0.73	-156	7.26	0.0352	0.7159	15.64	37.5
MW-358	04/24/2018 12:20	0.66	-161	7.28	0.0353	0.7176	15.54	26
MW-358	04/24/2018 12:22	0.64	-167	7.3	0.0353	0.7187	15.4	26.5
MW-358	04/24/2018 12:25	0.59	-170	7.31	0.0354	0.7204	15.38	26.3
MW-358	04/24/2018 12:28	0.55	-172	7.32	0.0354	0.7200	15.46	27
MW-358	04/24/2018 12:30	0.56	-173	7.33	0.0354	0.7191	15.64	26.3
MW-358	04/25/2018 11:07	4.08	-40.00	7.22	0.04	0.778	10.78	339.60
MW-358	04/25/2018 12:30	0.56	-173.00	7.33	0.04	0.716	15.82	26.33
MW-358	04/25/2018 13:00	11.34	-72.00	6.87	0.04	0.889	13.64	289.10
MW-358	10/02/2018 09:15	2.41	-85.40	7.40	0.39	0.770	22.46	70.80
MW-358	10/02/2018 09:45	2.11	-90.60	7.38	0.40	0.791	21.21	38.10
MW-358	10/02/2018 09:55	3.95	-92.40	7.44	0.39	0.763	23.041	112.10
MW-358	04/25/2019 13:00	0.8	-121.9	7.35	NM	0.553	14.22	16.8
MW-358	04/25/2019 13:18	0.91	-80.3	7.32	0.28	0.568	14.41	60.1
MW-358	08/29/2019 10:05	8.11	-32.4	7.08	NM	0.613	26.55	7.9
MW-358	08/29/2019 10:10	8.15	-61.8	7.08	NM	0.61	26.65	6.1
MW-358	08/29/2019 10:15	9.11	-70.9	7.22	NM	0.613	28.48	5.7
MW-358	08/29/2019 10:20	9.3	-66.3	7.24	NM	0.616	28.21	4.7
MW-358	08/29/2019 10:25	8.86	-47.9	7.2	NM	0.608	26.31	3.1
MW-358	08/29/2019 10:30	8.87	-34.2	7.22	NM	0.61	27.48	1.5
MW-358	08/29/2019 10:35	8.8	-24.6	7.3	NM	0.611	28.43	1.4
MW-358	08/29/2019 10:40	10.4	-13.3	7.38	NM	0.613	28.84	0.2
MW-358	08/29/2019 10:45	10.69	-5	7.45	NM	0.615	29.55	0.3
MW-358	08/29/2019 10:50	10.33	1	7.49	NM	0.618	30.2	2.5
MW-358	08/29/2019 13:48	3.72	-80.6	7.27	0.52	1.057	25.58	41.5
MW-358	08/29/2019 14:39	5.42	-6.3	7.49	0.43	0.884	24.29	972.8
MW-358	04/27/2020 10:35	0.14	-102	7.28	NM	0.518	11.28	211.3
MW-358	04/28/2020 08:35	5.13	135.5	6.94	0.32	0.658	12.04	9.8
MW-358	11/23/2020 09:50	2.23	47.1	7.81	0.28	0.583	14.09	200.9
MW-358	11/23/2020 09:55	1.15	10.5	7.63	0.27	0.558	13.93	90.9
MW-358	11/23/2020 10:00	0.93	-7.5	7.61	0.27	0.55	13.99	55.9
MW-358	11/23/2020 10:05	0.7	-32.3	7.61	0.26	0.543	14.08	33.3
MW-358	11/23/2020 10:10	0.56	-30.8	7.61	0.26	0.538	14.19	20.6
MW-358	11/23/2020 10:15	0.57	-22.9	7.61	0.26	0.535	14.19	17.9
MW-358	11/23/2020 10:20	0.55	-14.5	7.62	0.26	0.532	14.35	18
MW-358	11/23/2020 10:25	0.67	-4.8	7.58	0.26	0.532	14.55	35.3
MW-358	11/23/2020 10:30	3.96	14.1	7.62	0.26	0.508	13.9	40.9
MW-358	11/23/2020 10:35	6.27	29.8	7.73	0.25	0.508	13.51	32.3
MW-358	11/24/2020 08:15	6.1	24.9	8.41	0.36	0.728	15.25	136.5
MW-358	11/24/2020 08:25	5.18	60.5	7.8	0.35	0.722	15.11	120.7
MW-358	03/04/2021 00:00	NM	NM	NM	NM	NM	NM	NM

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-358	03/04/2021 12:40	7.61	-69.3	7.58	0.24	0.48	8.88	1296.4
MW-358	03/04/2021 12:45	2.57	-104.7	7.49	0.2	0.407	8.62	1293.7
MW-358	03/04/2021 12:50	2.09	-110.7	7.47	0.19	0.397	8.37	633.2
MW-358	03/04/2021 12:55	2.32	-103.1	7.46	0.19	0.393	7.94	242.1
MW-358	03/04/2021 13:00	3.16	-99.8	7.51	0.19	0.388	8.14	168
MW-358	03/04/2021 13:05	1.73	-96.9	7.48	0.19	0.388	8.31	163.8
MW-358	03/04/2021 13:10	2.02	-80.3	7.5	0.19	0.388	8.33	134
MW-358	03/04/2021 13:15	2.12	-79.8	7.49	0.19	0.388	8.81	154.9
MW-358	03/04/2021 13:20	2.59	-56.4	7.49	0.19	0.394	8.53	191.1
MW-358	03/04/2021 13:25	4.08	-49.7	7.51	0.19	0.395	9.6	148.2
MW-358	03/05/2021 08:36	0	0	0	0	0	0	0
MW-358	03/05/2021 08:41	9.94	1.2	8.45	0.37	0.754	7.87	84.9
MW-358	03/05/2021 09:03	7.06	57.1	7.64	0.33	0.668	7.14	571.8
MW-358	05/04/2021 13:20	6.91	12.8	7.71	0.62	1.209	18.16	136.8
MW-358	05/04/2021 13:25	2.07	-84.3	7.27	0.53	1.062	14.91	36.8
MW-358	05/04/2021 13:30	1.26	-77.2	7.28	0.51	1.027	15.63	16.2
MW-358	05/04/2021 13:35	1.26	-85.3	7.4	0.51	1.028	15.28	38.6
MW-358	05/04/2021 13:40	1.08	-77.8	7.46	0.51	1.019	15.36	8.7
MW-358	05/04/2021 13:45	0.99	-84.4	7.53	0.51	1.024	16.26	12
MW-358	05/04/2021 13:50	0.75	-91.8	7.55	0.52	1.044	16.4	42.1
MW-358	05/04/2021 13:55	0.77	-93	7.57	0.52	1.052	17.94	31.1
MW-358	05/04/2021 14:00	0.93	-92.8	7.51	0.52	1.049	16.48	16.6
MW-358	05/04/2021 14:05	1.44	-75.2	7.52	0.52	1.054	18.73	14.1
MW-358	10/27/2021 12:20	1.66	-81.2	6.9	0.3	0.625	18.9	204.2
MW-358	10/27/2021 12:25	1.67	-98.4	6.92	0.31	0.626	18.94	221.7
MW-358	10/27/2021 12:30	2.82	-70.8	6.72	0.27	0.573	18.86	74.5
MW-358	10/27/2021 12:35	1.6	-147.3	6.99	0.31	0.644	19.07	55.3
MW-358	10/27/2021 12:40	0.95	-152.3	6.8	0.31	0.633	19.23	10
MW-358	10/27/2021 12:45	1	-141.2	7.12	0.31	0.631	19.39	32.3
MW-358	10/27/2021 12:50	0.88	-131.6	7.4	0.31	0.628	19.24	64.9
MW-358	10/27/2021 12:55	1.01	-128.3	6.89	0.31	0.628	19.23	64.2
MW-358	10/27/2021 13:00	1.12	-126.5	7.27	0.31	0.627	19.22	64.3
MW-358	10/27/2021 13:05	1.27	-121.8	7.28	0.3	0.627	19.31	72.4
MW-358	04/18/2022 13:15	1.13	-95.2	7.3	0.24	0.5	11.16	1344.4
MW-358	04/18/2022 13:20	1.12	-102.1	7.3	0.24	0.5	11.13	1344.2
MW-358	04/18/2022 13:25	1.12	-106.1	7.31	0.24	0.498	11.18	1344.3
MW-358	04/18/2022 13:30	1.2	-115.9	7.34	0.24	0.49	11.35	718.2
MW-358	04/18/2022 13:35	1.37	-119.1	7.34	0.24	0.491	11.4	366.9
MW-358	04/18/2022 13:40	1.47	-114.6	7.31	0.24	0.494	11.26	476.3
MW-358	04/18/2022 13:45	2.47	-79.8	7.16	0.24	0.5	11.3	573.7
MW-358	04/18/2022 13:50	3.32	-67.1	7.09	0.24	0.499	11.31	539.4
MW-358	04/18/2022 13:55	3.69	-62.3	7.08	0.24	0.5	11.31	485.7
MW-358	04/18/2022 14:00	4.18	-56.4	7.05	0.24	0.5	11.34	464.6
MW-373	01/08/2014 10:30	1.13	-297	12.47	0.44	8.068	8.68	8.40
MW-373	01/08/2014 11:23	2.55	-223	8.63	0.33	6.035	15.06	53.10
MW-373	01/09/2014 10:37	0.68	-287	6.43	0.21	3.880	15.66	30.80
MW-373	04/14/2014 15:52	0.06	-423	6.46	0.68	11.770	14.68	20.81
MW-373	04/14/2014 16:20	1.89	-165	6.52	0.13	2.449	15.78	435.40
MW-373	04/15/2014 11:29	3.21	-239	6.48	0.07	1.317	15.02	54.10
MW-373	07/09/2014 15:47	0.68	-48	6.29	0.13	2.480	25.77	10.40
MW-373	07/09/2014 16:36	1.20	93	6.58	0.14	2.727	18.78	861.50
MW-373	07/10/2014 12:50	0.46	-13	6.38	0.11	2.195	17.69	9.20
MW-373	11/24/2014 13:01	2.29	-298	6.39	0.16	3.099	21.87	0.69
MW-373	11/24/2014 13:43	4.36	-121	6.40	0.15	2.930	20.12	220.30
MW-373	11/25/2014 15:30	2.58	-75	6.51	0.14	2.630	18.46	35.10
MW-373	04/09/2015 09:18	3.24	-83	6.24	0.13	2.525	9.65	15.75
MW-373	04/09/2015 10:58	5.90	-76	6.25	0.13	2.542	10.13	22.30
MW-373	04/10/2015 09:24	3.39	-28	6.35	0.12	2.297	11.74	48.10
MW-373	06/12/2015 09:21	-1.23	-87	6.38	0.17	3.202	15.71	11.1
MW-373	06/12/2015 10:30	5.43	-105	6.3	0.16	3.082	18.49	364.1
MW-373	08/25/2015 09:47	0.11	-44	6.33	1.24	20.51	21.31	12.1
MW-373	08/25/2015 10:33	1.86	-71	6.65	1.57	25.41	21.36	180.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-373	10/29/2015 12:00	1.12	146	6.07	0.12	2.262	21.81	31.7
MW-373	10/29/2015 15:03	2.24	85	6.45	0.16	3.005	19.44	60.7
MW-373	05/12/2016 11:48	3.79	780	6.21	0.12	2.321	15.33	8.10
MW-373	05/12/2016 14:36	2.43	108	6.59	0.17	3181.000	18.29	18.50
MW-373	11/11/2016 11:36	0.0000	-68.00	6.42	0.24	4.533	21.06	36.10
MW-373	11/11/2016 13:55	1.68	-60	6.42	0.20	3.771	19.51	1808.30
MW-373	03/21/2017 10:54	4.37	-83	6.57	0.12	2.258	13.26	83.30
MW-373	03/21/2017 11:55	6.01	-119	6.67	0.11	2.229	14.06	812.30
MW-373	03/27/2018 13:11	2.10	17.00	6.22	0.22	3.923	12.79	1.90
MW-373	03/27/2018 13:12	1.35	6.00	6.34	0.14	1.963	12.34	6.10
MW-373	03/27/2018 13:53	6.95	10.00	6.58	0.21	3.860	14.35	12.90
MW-373	08/09/2018 09:47	1.29	-60.00	6.58	0.09	1.807	21.13	7.50
MW-373	08/09/2018 10:39	0.88	-59.00	6.49	0.12	2.239	25.69	1.09
MW-373	08/09/2018 11:19	3.24	-54.00	6.69	0.11	2.183	24.19	40.30
MW-373	03/25/2019 13:20	0.56	-61.8	6.51	NM	1.732	11.93	8.5
MW-373	03/25/2019 13:50	5.45	-50.4	6.68	1.03	2.015	13.84	86.6
MW-373	08/20/2019 12:15	0.4	-67.6	6.52	NM	2.118	28.38	6.9
MW-373	08/20/2019 12:20	0.37	-66.4	6.52	NM	2.118	28.57	7.2
MW-373	08/20/2019 12:25	0.37	-60.3	6.51	NM	2.066	27.76	16.4
MW-373	08/20/2019 12:30	0.25	-62.2	6.51	NM	2.061	31.32	8.2
MW-373	08/20/2019 12:35	0.21	-59.4	6.51	NM	2.016	28.02	9.7
MW-373	08/20/2019 12:40	0.17	-50.8	6.53	NM	1.959	27.53	12.3
MW-373	08/20/2019 12:45	0.15	-42.5	6.54	NM	1.942	27.43	11.9
MW-373	08/20/2019 12:50	0.14	-40.9	6.54	NM	1.935	27.29	17.6
MW-373	08/20/2019 12:55	0.14	-47.2	6.55	NM	1.894	27.37	5.5
MW-373	08/20/2019 13:00	0.13	-55.9	6.55	NM	1.875	27.03	11.4
MW-373	08/20/2019 13:55	1.42	-85.5	6.65	1.14	2.221	22.04	5
MW-373	08/20/2019 14:05	6.48	-50.2	6.86	1.08	2.1	21.5	616.6
MW-373	03/26/2020 12:45	1.21	10.5	7.19	NM	1.789	14.31	NM
MW-373	03/26/2020 13:10	1.08	11.9	7.23	0.93	1.778	14.28	0
MW-373	03/05/2021 09:30	10.32	-83.6	7.48	1.01	1.966	10.08	32.8
MW-373	03/05/2021 09:35	4.48	-93.2	7.01	1.02	1.997	10.46	15.6
MW-373	03/05/2021 09:40	4.48	-93.2	7.01	1.02	1.997	10.46	15.6
MW-373	03/05/2021 09:45	1.64	-96.5	6.66	1.04	2.027	10.95	5.2
MW-373	03/05/2021 09:50	1.72	-95.8	6.64	1.04	2.027	10.75	5.4
MW-373	03/05/2021 09:55	1.63	-95.6	6.63	1.04	2.035	10.18	5.8
MW-373	03/05/2021 10:00	1.57	-94.9	6.61	1.04	2.029	10.38	8.3
MW-373	03/05/2021 10:05	1.07	-94.9	6.6	1.04	2.023	10.63	4.6
MW-373	03/05/2021 10:10	1.38	-93.7	6.56	1.04	2.026	10.45	2.9
MW-373	03/05/2021 10:15	0.86	-92	6.57	1.04	2.018	9.83	2.3
MW-373	03/05/2021 10:34	8.74	-77.8	6.83	1.13	2.186	10.56	16.9
MW-373	03/05/2021 10:50	6.25	-46.5	6.71	1.03	2.006	12.58	232.5
MW-374	04/10/2014 15:13	2.36	-410	6.65	1.15	19.300	12.98	-0.50
MW-374	04/10/2014 16:05	6.85	-329	6.77	0.18	3.412	10.76	8.00
MW-374	04/11/2014 09:37	2.72	-331	6.79	0.66	11.650	10.01	21.80
MW-374	07/09/2014 14:23	0.82	-100	6.58	0.33	5.972	26.35	870.80
MW-374	07/09/2014 15:12	1.32	-45	6.64	0.28	5.202	22.45	129.90
MW-374	07/10/2014 12:02	0.77	-75	6.62	0.31	5.737	22.45	139.40
MW-374	08/15/2014 09:30	0.08	-190.6	6.50	3.23	5.932	21.46	0.0000
MW-374	08/15/2014 09:50	0.0000	-195.4	6.50	3.23	5.940	21.47	0.0000
MW-374	08/15/2014 10:05	0.0000	-199.1	6.50	3.22	5.823	21.46	112.80
MW-374	11/17/2014 13:40	2.31	-340	6.61	0.39	7.210	8.85	0.99
MW-374	11/17/2014 14:44	5.33	-137	6.62	0.31	5.817	10.55	90.80
MW-374	11/18/2014 11:12	2.56	-316	6.66	0.31	5.745	9.29	90.60
MW-374	12/04/2014 12:10	2.39	-100.3	6.68	NM	6.002	8.97	87.70
MW-374	12/04/2014 12:50	1.30	-157	6.39	NM	6.335	9.13	2.40
MW-374	12/04/2014 13:35	4.72	-153.1	6.33	NM	6.329	9.10	12.00
MW-374	04/09/2015 11:45	5.64	-68	6.54	0.25	3.105	5.86	6.47
MW-374	04/09/2015 13:33	5.10	-69	6.58	0.12	2.283	6.55	7.20
MW-374	04/10/2015 10:12	1.98	-99	6.66	0.23	4.335	6.89	69.20
MW-374	06/12/2015 10:21	0.19	-141	6.65	0.31	5.586	21.38	65.3
MW-374	06/12/2015 12:09	9.9	-117	6.63	0.33	5.959	21.71	198.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-374	08/25/2015 11:25	2.62	-146	6.65	2.71	41.68	24.09	193.2
MW-374	08/25/2015 12:03	1.84	-111	6.81	2.7	41.55	25.11	106.3
MW-374	10/30/2015 10:48	5.54	286	6.55	0.28	5.094	15.3	23
MW-374	10/30/2015 11:41	9.37	-164	6.61	0.33	5.999	16.96	68.1
MW-374	05/11/2016 10:24	2.80	113	6.88	0.40	7.270	13.57	56.80
MW-374	05/11/2016 11:34	-0.20	93	6.60	0.23	4.274	13.64	18.90
MW-374	11/04/2016 10:52	0.13	-118.00	6.83	0.50	8.924	15.40	32.50
MW-374	11/04/2016 13:37	1.79	-111	6.79	0.44	7.874	16.94	98.30
MW-374	01/31/2017 00:00	1.89	-141	6.75	0.11	2.260	4.94	13.50
MW-374	01/31/2017 14:12	6.78	-90	6.66	0.11	2.190	6.31	71.60
MW-374	05/03/2017 12:57	0.0000	-75.00	6.77	0.17	3.344	14.32	2.81
MW-374	02/05/2018 10:25	10.75	0	6.79	0.1448	2.8622	3.54	452.2
MW-374	02/05/2018 10:27	4.52	-7	6.78	0.1455	2.8747	3.6	410.3
MW-374	02/05/2018 10:29	2.86	-11	6.74	0.1430	2.8312	3.41	361.2
MW-374	02/05/2018 10:31	2.11	-13	6.71	0.1425	2.8170	3.72	321.3
MW-374	02/05/2018 10:33	1.93	-16	6.7	0.1420	2.8090	3.6	272.3
MW-374	02/05/2018 10:36	1.7	-19	6.69	0.1420	2.8050	3.92	244.9
MW-374	02/05/2018 10:38	1.57	-22	6.68	0.1430	2.8301	3.47	189.5
MW-374	02/05/2018 10:40	1.47	-25	6.68	0.1429	2.8318	3.28	156.2
MW-374	02/05/2018 10:42	1.45	-27	6.67	0.1427	2.8265	3.34	137.5
MW-374	02/05/2018 10:44	1.4	-29	6.66	0.1428	2.8267	3.42	118.7
MW-374	02/05/2018 10:46	1.38	-31	6.66	0.1426	2.8203	3.59	107.9
MW-374	02/05/2018 10:49	1.37	-31	6.66	0.1430	2.8276	3.64	96.5
MW-374	02/05/2018 10:51	1.38	-31	6.65	0.1434	2.8369	3.53	84.9
MW-374	02/05/2018 10:53	1.48	-32	6.65	0.1441	2.8508	3.43	68
MW-374	02/05/2018 10:55	1.51	-33	6.65	0.1442	2.8527	3.44	60
MW-374	02/05/2018 10:57	1.55	-33	6.65	0.1446	2.8599	3.45	54.8
MW-374	02/05/2018 10:59	1.51	-34	6.65	0.1441	2.8525	3.4	50.2
MW-374	02/05/2018 11:02	1.44	-34	6.65	0.1439	2.8472	3.48	49.8
MW-374	02/06/2018 00:00	NM	NM	NM	NM	NM	NM	NM
MW-374	02/06/2018 10:51	8.01	93.00	7.29	0.06	1.193	1.72	134.20
MW-374	02/06/2018 11:02	1.44	-34.00	6.65	0.14	2.858	3.36	49.77
MW-374	02/06/2018 11:25	10.90	3.00	7.29	0.09	1.763	2.58	212.10
MW-374	05/08/2018 09:29	5.89	-141	6.79	0.1017	1.9820	15.34	8.4
MW-374	05/08/2018 09:31	2.1	-181	6.8	0.0990	1.9367	13.63	4.3
MW-374	05/08/2018 09:34	1.79	-195	6.81	0.0944	1.8506	13.71	4.4
MW-374	05/08/2018 09:37	1.68	-202	6.83	0.0928	1.8207	13.57	3.7
MW-374	05/08/2018 09:39	1.32	-206	6.84	0.0930	1.8241	13.6	3.9
MW-374	05/08/2018 09:42	1.2	-209	6.84	0.0926	1.8169	13.63	3.7
MW-374	05/08/2018 09:45	1.24	-211	6.85	0.0934	1.8317	13.65	3.1
MW-374	05/08/2018 09:47	1.18	-213	6.86	0.0946	1.8543	13.64	2.8
MW-374	05/08/2018 09:50	1.1	-215	6.86	0.0950	1.8616	13.72	3.4
MW-374	05/08/2018 09:53	1.1	-217	6.87	0.0957	1.8739	13.74	3.4
MW-374	05/08/2018 09:55	1.15	-219	6.87	0.0960	1.8801	13.36	2.9
MW-374	05/08/2018 09:58	1.06	-221	6.87	0.0963	1.8862	13.36	3.4
MW-374	05/08/2018 10:00	1.03	-223	6.87	0.0970	1.8995	13.38	4.2
MW-374	05/08/2018 10:03	1.02	-226	6.88	0.0977	1.9123	13.46	3.9
MW-374	05/08/2018 10:06	1.02	-228	6.88	0.0977	1.9125	13.43	3.8
MW-374	05/08/2018 10:08	1.05	-230	6.88	0.0977	1.9126	13.55	3.7
MW-374	05/08/2018 10:09	1.05	-230.00	6.88	0.10	1.904	13.7	3.66
MW-374	07/23/2018 08:56	1.49	-126	6.77	0.1514	2.8780	23.63	9.4
MW-374	07/23/2018 08:59	0.46	-162	6.65	0.1587	3.0090	22.78	7.5
MW-374	07/23/2018 09:01	0.31	-172	6.66	0.1567	2.9730	22.8	7.4
MW-374	07/23/2018 09:03	0.24	-175	6.67	0.1497	2.8480	22.84	9.9
MW-374	07/23/2018 09:06	0.23	-176	6.68	0.1425	2.7170	22.92	7.9
MW-374	07/23/2018 09:08	0.22	-177	6.68	0.1399	2.6700	22.97	7.9
MW-374	07/23/2018 09:11	0.19	-179	6.68	0.1393	2.6600	22.94	10.1
MW-374	07/23/2018 09:13	0.18	-181	6.69	0.1389	2.6530	22.87	7.3
MW-374	07/23/2018 09:15	0.15	-182	6.7	0.1387	2.6490	22.85	7.2
MW-374	07/23/2018 09:18	0.16	-184	6.71	0.1388	2.6510	22.86	6.6
MW-374	07/23/2018 09:20	0.15	-185	6.72	0.1395	2.6630	22.86	6.3
MW-374	07/23/2018 09:21	0.15	-185.00	6.72	0.14	2.663	23.04	6.27

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-374	07/23/2018 09:29	1.49	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:31	0.46	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:34	0.31	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:37	0.24	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:39	0.23	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:42	0.22	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:45	0.19	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:47	0.18	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:50	0.15	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:53	0.16	NM	NM	NM	NM	NM	NM
MW-374	07/23/2018 09:55	0.15	NM	NM	NM	NM	NM	NM
MW-374	07/24/2018 00:00	NM	NM	6.72	NM	NM	NM	NM
MW-374	07/24/2018 09:29	NM	NM	6.77	0.151	2.878	23.63	9.4
MW-374	07/24/2018 09:31	NM	NM	6.65	0.159	3.009	22.78	7.5
MW-374	07/24/2018 09:34	NM	NM	6.66	0.157	2.973	22.8	7.4
MW-374	07/24/2018 09:37	NM	NM	6.67	0.150	2.848	22.84	9.9
MW-374	07/24/2018 09:39	NM	NM	6.68	0.142	2.717	22.92	7.9
MW-374	07/24/2018 09:42	NM	NM	6.68	0.140	2.670	22.97	7.9
MW-374	07/24/2018 09:45	NM	NM	6.68	0.139	2.660	22.94	10.1
MW-374	07/24/2018 09:47	NM	NM	6.69	0.139	2.653	22.87	7.3
MW-374	07/24/2018 09:50	NM	NM	6.7	0.139	2.649	22.85	7.2
MW-374	07/24/2018 09:53	NM	NM	6.71	0.139	2.651	22.86	6.6
MW-374	07/24/2018 09:55	NM	NM	NM	0.139	2.663	22.86	6.3
MW-374	10/31/2018 12:15	1.59	-80.4	7.01	1.73	3.273	15.91	4.3
MW-374	10/31/2018 12:20	0.48	-109	6.81	1.69	3.217	15.78	2.1
MW-374	10/31/2018 12:25	0.4	-117.1	6.81	1.67	3.187	15.82	1.7
MW-374	10/31/2018 12:30	0.31	-125.7	6.79	1.66	3.168	15.87	1.8
MW-374	10/31/2018 12:35	0.25	-131.6	6.76	1.65	3.144	15.92	1.7
MW-374	10/31/2018 12:40	0.24	-136	6.74	1.66	3.155	15.99	1.1
MW-374	10/31/2018 12:45	0.23	-139.00	6.73	1.66	3.166	16.04	1.10
MW-374	10/31/2018 12:55	0.25	-130.00	6.69	1.69	3.206	15.96	0.90
MW-374	10/31/2018 13:05	0.22	-127.40	6.64	1.71	3.147	15.72	0.80
MW-374	07/23/2019 09:29	NM	-126	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:31	NM	-162	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:34	NM	-172	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:37	NM	-175	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:39	NM	-176	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:42	NM	-177	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:45	NM	-179	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:47	NM	-181	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:50	NM	-182	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:53	NM	-184	NM	NM	NM	NM	NM
MW-374	07/23/2019 09:55	NM	-185	NM	NM	NM	NM	NM
MW-374	05/03/2021 13:30	0.6	-212.7	7.15	3.53	6.419	12.39	35
MW-374	05/03/2021 13:35	0.1	-251.5	7.25	3.58	6.514	11.92	18.5
MW-374	05/03/2021 13:40	0.06	-268.3	7.2	3.64	6.612	11.94	8.5
MW-374	05/03/2021 13:45	0.08	-272.4	7.22	3.65	6.634	11.87	5.4
MW-374	05/03/2021 13:50	0.08	-276.6	7.19	3.66	6.639	11.92	2.5
MW-374	05/03/2021 13:55	0.11	-280.1	7.19	3.66	6.647	11.98	1.5
MW-374	05/03/2021 14:00	0.12	-284	7.19	3.67	6.66	12	1.4
MW-374	05/03/2021 14:05	0.08	-286.4	7.19	3.66	6.654	11.87	0.7
MW-374	05/03/2021 14:10	0.05	-289.9	7.18	3.64	6.634	11.84	0.2
MW-374	05/03/2021 14:15	0.09	-288.3	7.17	3.65	6.632	11.76	0.2
MW-374	03/18/2022 10:50	2.95	-25	7.63	1.4	2.677	10.48	162.5
MW-374	03/18/2022 10:55	0.69	-112.1	6.75	1.31	2.529	7.98	29.8
MW-374	03/18/2022 11:00	0.59	-113.6	6.77	1.31	2.539	7.97	27.2
MW-374	03/18/2022 11:05	0.59	-123.7	6.8	1.33	2.56	7.96	18.6
MW-374	03/18/2022 11:10	0.33	-139.8	6.88	1.37	2.633	7.91	12.6
MW-374	03/18/2022 11:15	0.18	-158.3	6.92	1.41	2.711	7.89	7.4
MW-374	03/18/2022 11:20	0.18	-174.5	6.97	1.46	2.809	7.89	5.5
MW-374	03/18/2022 11:25	0.19	-175	6.99	1.47	2.821	7.9	5.3
MW-374	03/18/2022 11:30	0.13	-187.3	7.02	1.52	2.906	7.94	4.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-374	03/18/2022 11:35	0.18	-188.2	7.02	1.52	2.919	7.93	4.6
MW-375	01/10/2014 11:23	1.26	-284	6.71	0.31	5.764	6.41	4.77
MW-375	01/10/2014 12:30	4.76	-197	10.85	0.26	4.983	5.85	11.20
MW-375	01/10/2014 12:55	1.47	-219	10.41	0.32	6.097	5.25	956.60
MW-375	04/10/2014 12:11	1.08	-376	6.66	0.18	3.418	11.84	26.61
MW-375	04/10/2014 13:13	5.75	-323	6.94	0.12	2.340	10.16	16.10
MW-375	04/11/2014 10:05	0.97	-394	6.81	0.14	2.695	9.82	155.40
MW-375	07/09/2014 11:23	1.04	-92	6.52	0.10	1.879	24.88	11.98
MW-375	07/09/2014 12:13	1.45	21	6.61	0.10	1.911	25.04	28.00
MW-375	07/10/2014 11:41	0.84	-44	6.64	0.10	1.952	24.38	159.70
MW-375	11/17/2014 11:11	2.21	-321	6.77	0.09	1.845	9.41	2.66
MW-375	11/17/2014 12:18	2.58	-145	6.74	0.10	1.931	11.24	14.00
MW-375	11/18/2014 10:20	1.66	-442	6.73	0.09	1.697	12.42	358.10
MW-375	04/14/2015 13:54	-0.64	-120	6.70	0.09	1.687	11.49	10.84
MW-375	04/14/2015 14:20	3.63	-75	6.64	0.06	1.197	10.37	129.50
MW-375	04/15/2015 11:19	2.15	-102	6.60	0.04	0.865	10.00	245.50
MW-375	06/12/2015 10:50	0.26	-141	6.57	0.1	1.949	22.83	192.8
MW-375	06/12/2015 14:21	1.66	-89	6.57	10	1.896	22.5	122
MW-375	08/25/2015 14:10	0.84	-91	6.82	0.2	3.769	27.1	333.7
MW-375	08/25/2015 15:55	1.63	-110	6.48	0.19	3.518	25.67	401.4
MW-375	10/30/2015 11:48	1.07	229	6.43	0.06	1.161	16.65	220.8
MW-375	10/30/2015 14:29	2.33	-132	6.56	0.07	1.389	17.95	387.9
MW-375	05/11/2016 11:50	4.91	87	7.15	0.12	2.391	13.90	169.10
MW-375	05/11/2016 11:57	1.04	443	6.48	0.05	1.004	14.61	43.00
MW-375	11/04/2016 10:05	0.68	-112.00	6.70	0.37	6.640	17.07	140.60
MW-375	11/04/2016 11:29	1.46	-108	6.69	0.32	5.788	17.68	322.00
MW-375	06/09/2017 09:11	0.04	34.00	6.85	0.15	2.858	16.83	395.00
MW-375	06/09/2017 09:47	0.12	-8.00	6.77	0.12	2.261	17.66	5.52
MW-375	06/09/2017 10:16	4.04	-57.00	7.74	0.10	1.939	18.15	260.70
MW-376	01/14/2014 14:00	1.41	-35	6.79	0.78	30.090	8.58	43.08
MW-376	01/14/2014 14:43	2.78	58	7.12	0.42	7.592	11.06	1358.10
MW-376	01/15/2014 12:25	6.92	11	6.85	2.55	40.910	7.28	15.50
MW-376	04/16/2014 09:30	1.83	-389	6.70	0.43	7.919	7.17	16.52
MW-376	04/16/2014 10:30	6.75	-152	6.77	0.08	1.634	8.72	112.70
MW-376	04/17/2014 12:20	4.98	-174	6.77	0.10	1.950	10.35	61.90
MW-376	07/16/2014 09:12	0.35	42	6.62	0.27	4.967	20.62	6.63
MW-376	07/16/2014 10:21	1.30	182	6.64	0.27	5.049	17.13	5.60
MW-376	07/17/2014 15:08	0.58	31	6.85	0.27	4.948	25.32	47.70
MW-376	11/18/2014 15:06	1.94	-362	6.78	0.13	2.600	9.31	27.29
MW-376	11/18/2014 16:18	5.22	-229	7.06	0.14	2.633	16.22	34.30
MW-376	11/19/2014 10:45	0.77	-97	6.74	0.08	1.594	11.72	28.90
MW-376	12/08/2014 10:15	2.06	-21.4	6.89	NM	1.960	9.56	31.20
MW-376	12/08/2014 10:30	1.00	-61.7	7.00	NM	1.853	9.40	33.90
MW-376	12/08/2014 11:40	3.65	-40.9	6.92	NM	2.046	8.96	128.00
MW-376	04/13/2015 13:42	0.31	-82	6.76	0.15	2.959	14.18	32.02
MW-376	04/13/2015 14:22	6.38	-91	6.66	0.16	3.056	9.31	1850.30
MW-376	04/14/2015 11:46	5.00	-65	6.72	0.08	1.551	8.33	219.50
MW-376	05/15/2015 11:35	8.96	-30	6.93	0.13	2.429	14.21	165.7
MW-376	05/15/2015 15:28	6.24	-103	6.35	0.13	2.437	13.64	32.1
MW-376	09/01/2015 11:59	3.21	1202	6.77	0.17	3.209	22.63	30.4
MW-376	09/01/2015 14:23	3.72	1131	7.55	0.1	1.875	19.6	2731.1
MW-376	11/03/2015 12:21	3.05	199	6.63	0.12	2.247	15.97	34.3
MW-376	11/03/2015 15:37	4.07	-97	6.8	0.14	2.759	16.05	54
MW-376	05/17/2016 09:12	15.01	227	6.62	0.11	2.061	14.27	163.00
MW-376	05/17/2016 10:13	6.66	111	7.26	0.25	4.672	12.46	425.10
MW-376	11/03/2016 10:17	1.44	-55.00	6.74	0.07	1.441	16.19	69.90
MW-376	11/03/2016 11:47	2.15	-78	6.66	0.38	6.815	18.39	761.10
MW-376	03/21/2017 09:12	4.84	-139	7.20	0.10	1.918	6.48	41.30
MW-376	03/21/2017 09:33	10.88	-87	6.99	0.08	1.709	4.50	147.20
MW-376	03/20/2018 09:16	10.09	250	7.33	0.120	2.368	6.52	34.2
MW-376	03/20/2018 09:19	4.69	226	6.94	0.122	2.405	7.2	177.8
MW-376	03/20/2018 09:21	3.69	202	6.8	0.123	2.415	6.74	274.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-376	03/20/2018 09:23	3.37	177	6.74	0.124	2.431	6.55	114.5
MW-376	03/20/2018 09:26	3.26	155	6.71	0.123	2.415	6.58	85.5
MW-376	03/20/2018 09:28	3.28	138	6.69	0.123	2.421	6.35	74.6
MW-376	03/20/2018 09:31	3.39	124	6.67	0.122	2.410	6.29	60.9
MW-376	03/20/2018 09:33	3.27	113	6.65	0.122	2.414	6.23	29.1
MW-376	03/20/2018 09:35	3.18	103	6.64	0.122	2.402	6.32	45.3
MW-376	03/20/2018 09:38	3.24	94	6.63	0.121	2.394	6.35	88.9
MW-376	03/20/2018 09:40	3.2	86	6.62	0.121	2.393	6.19	18.7
MW-376	03/20/2018 09:43	3.31	80	6.62	0.121	2.395	6.13	14.3
MW-376	03/20/2018 09:45	3.24	74	6.61	0.122	2.399	6.18	24.6
MW-376	03/20/2018 09:47	3.21	68	6.61	0.121	2.394	6.29	23.5
MW-376	03/20/2018 09:50	3.20	64.00	6.60	0.12	2.406	6.21	25.04
MW-376	03/20/2018 10:21	4.60	105.00	6.98	0.13	2.463	8.94	526.80
MW-376	03/20/2018 13:26	7.77	84.00	6.87	0.10	1.928	5.82	35.20
MW-376	08/09/2018 10:36	0.83	3.00	7.04	0.09	1.815	26.13	32.30
MW-376	08/09/2018 12:51	0.57	-87.00	6.82	0.12	2.375	25.19	0.79
MW-376	08/09/2018 13:32	1.36	-114.00	7.18	0.11	2.100	22.6	226.70
MW-376	03/15/2019 10:35	0.45	-106	7.04	NM	2.046	9.84	11.5
MW-376	03/15/2019 11:13	0.66	-117.1	7.11	0.99	1.945	7.14	5.2
MW-376	08/27/2019 09:15	1.58	0.7	6.58	NM	2.503	21.18	2.5
MW-376	08/27/2019 09:20	2.21	-70	6.7	NM	2.369	21.84	1.5
MW-376	08/27/2019 09:25	3.02	-73.7	6.73	NM	2.393	21.92	2.9
MW-376	08/27/2019 09:30	5.67	-84.2	6.77	NM	2.356	21.98	1
MW-376	08/27/2019 09:35	7.59	-88.6	6.8	NM	2.297	21.9	0.9
MW-376	08/27/2019 09:40	7.95	-86.7	6.8	NM	2.31	21.81	0.4
MW-376	08/27/2019 09:45	8.06	-82	6.8	NM	2.312	21.81	0
MW-376	08/27/2019 10:15	4.52	-59.7	6.76	1.28	2.47	20.47	7.1
MW-376	08/27/2019 10:33	3.54	-75.5	6.96	1.2	2.324	21.98	57.4
MW-376	02/14/2020 10:00	0.39	-131.4	6.99	NM	1.602	5.9	50.8
MW-376	02/14/2020 10:25	0.22	-139.5	7.1	0.7	1.385	7.42	9.5
MW-376	03/29/2021 10:10	2.48	-64.4	6.66	1.17	2.275	9.53	303.7
MW-376	03/29/2021 10:15	3.75	-69.4	6.68	1.16	2.257	9.39	611
MW-376	03/29/2021 10:20	4.79	-74.8	6.72	1.16	2.242	9.19	160.7
MW-376	03/29/2021 10:25	5.61	-85.1	6.77	1.12	2.175	9.17	70.7
MW-376	03/29/2021 10:30	6.59	-101.5	6.86	1.04	2.035	9.14	30.2
MW-376	03/29/2021 10:35	6.58	-108.5	6.9	1.02	1.982	9.15	20.8
MW-376	03/29/2021 10:40	6.95	-115	6.93	0.99	1.932	9.06	16.2
MW-376	03/29/2021 10:45	6.61	-120.7	6.96	0.96	1.884	9.07	10.5
MW-376	03/29/2021 10:50	6.36	-124.8	6.99	0.95	1.858	9.11	8.6
MW-376	03/29/2021 10:55	6.06	-127.8	7	0.94	1.84	9.13	7
MW-376	03/29/2021 11:10	6.75	-115.5	6.99	0.92	1.808	8.66	8.9
MW-376	03/29/2021 11:20	8.72	-115.4	7.05	0.89	1.732	8.98	27.3
MW-376	05/25/2021 12:35	2.7	-63.8	7.22	1.1	2.132	21.81	11
MW-376	05/25/2021 12:40	1.04	-50.7	6.84	1.19	2.312	19.89	6.3
MW-376	05/25/2021 12:45	0.82	-50.3	6.8	1.19	2.309	19.48	4.9
MW-376	05/25/2021 12:50	0.77	-53.8	6.82	1.19	2.286	19.35	3.9
MW-376	05/25/2021 12:55	0.74	-57.2	6.84	1.18	2.285	19.56	2.4
MW-376	05/25/2021 13:00	0.75	-59.2	6.84	1.18	2.284	19.63	1.2
MW-376	05/25/2021 13:05	0.74	-61.8	6.85	1.17	2.268	19.48	1.2
MW-376	05/25/2021 13:10	0.72	-62.2	6.85	1.16	2.257	19.37	1.1
MW-376	03/18/2022 12:15	0.44	-39.7	7.07	1.43	2.746	11.81	265.5
MW-376	03/18/2022 12:20	0.14	-54.5	6.78	1.41	2.715	10.52	174
MW-376	03/18/2022 12:25	0.14	-55.9	6.78	1.41	2.715	10.41	120.5
MW-376	03/18/2022 12:30	0.16	-69.8	6.81	1.4	2.69	11.72	70.6
MW-376	03/18/2022 12:35	0.14	-71.9	6.81	1.39	2.669	11.47	59.6
MW-376	03/18/2022 12:40	0.17	-79.3	6.76	1.33	2.563	11.7	45.3
MW-376	03/18/2022 12:45	0.17	-98.8	6.83	1.27	2.454	11.67	19.8
MW-376	03/18/2022 12:50	0.15	-99.3	6.85	1.27	2.449	11.64	17.6
MW-376	03/18/2022 12:55	0.18	-104.3	6.86	1.25	2.417	11.59	16.1
MW-376	03/18/2022 13:00	0.16	-105.3	6.85	1.25	2.413	11.44	13.6
MW-377	01/14/2014 15:16	1.58	-86	7.13	2.37	38.060	8.41	50.26
MW-377	01/14/2014 15:54	2.56	63	7.43	2.00	32.180	12.14	2450.70

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-377	01/15/2014 12:40	1.27	-65	7.10	1.87	30.730	7.58	124.50
MW-377	04/16/2014 11:09	2.12	-219	7.09	0.53	9.509	8.89	67.40
MW-377	04/16/2014 12:09	6.48	-190	7.03	0.33	6.094	9.50	35.07
MW-377	04/17/2014 12:32	4.36	-201	7.03	0.49	8.868	9.78	46.30
MW-377	07/16/2014 11:21	0.50	-42	6.93	0.41	0.742	19.91	9.47
MW-377	07/16/2014 12:21	1.88	97	7.02	0.03	0.686	20.01	29.30
MW-377	07/17/2014 15:35	0.71	-7	7.08	0.36	6.582	23.44	79.60
MW-377	11/18/2014 13:05	2.00	-357	7.03	0.16	3.140	6.10	7.05
MW-377	11/18/2014 14:05	6.27	-173	7.28	0.17	3.255	10.12	331.70
MW-377	11/19/2014 10:17	0.80	-126	6.89	0.08	1.601	13.55	27.10
MW-377	04/08/2015 13:52	1.47	-156	7.10	0.18	3.488	8.44	1.39
MW-377	04/08/2015 14:47	2.00	-142	6.94	0.18	3.375	8.16	46.40
MW-377	04/09/2015 11:38	1.72	-134	7.14	0.12	2.350	8.01	147.50
MW-377	05/13/2015 10:50	1.93	-161	6.57	1.30	2.600	10.33	109.00
MW-377	05/15/2015 12:01	1.37	-116	7.13	0.16	2.98	14.18	456.1
MW-377	05/15/2015 15:50	2.88	-97	7.08	0.19	3.572	11.07	2072.1
MW-377	09/01/2015 12:26	5.68	1200	7.03	0.22	4.098	23.24	264.1
MW-377	09/01/2015 15:35	3.9	1163	7.29	0.12	2.371	18.23	2731.1
MW-377	10/14/2015 10:40	0.52	-107.1	6.88	0.86	1.691	18.91	4
MW-377	10/14/2015 11:20	1.08	-105.1	6.93	0.86	1.7	19.32	8
MW-377	11/03/2015 12:48	4.57	157	6.85	0.14	2.63	16.87	92.4
MW-377	11/03/2015 13:31	8.48	-149	6.79	0.17	3.144	17.52	844.2
MW-377	05/17/2016 09:51	11.18	244	6.87	0.17	3.306	13.37	157.30
MW-377	05/17/2016 11:13	3.49	108	7.31	0.29	5.412	12.77	1763.60
MW-377	11/03/2016 09:32	0.16	-124.00	6.84	0.07	1.387	17.40	135.50
MW-377	11/03/2016 10:04	2.52	-67	6.95	0.38	6.846	18.47	1886.70
MW-377	03/21/2017 10:00	8.65	-149	7.26	0.18	3.385	7.73	110.20
MW-377	03/21/2017 10:43	8.21	-148	6.90	0.18	3.217	10.52	283.70
MW-377	03/20/2018 10:31	10.13	74	7.2	0.127	2.505	5.5	15.8
MW-377	03/20/2018 10:33	4.47	43	7.09	0.127	2.481	7.28	12.2
MW-377	03/20/2018 10:36	3.75	22	7.06	0.127	2.484	7.22	8.8
MW-377	03/20/2018 10:38	3.31	10	7.05	0.127	2.482	7.32	8
MW-377	03/20/2018 10:41	3.16	2	7.05	0.129	2.533	7.43	7.2
MW-377	03/20/2018 10:44	3.05	-4	7.06	0.130	2.545	7.54	15
MW-377	03/20/2018 10:46	3.07	-8	7.07	0.129	2.516	7.6	6.2
MW-377	03/20/2018 10:49	3.02	-11	7.07	0.129	2.525	7.73	5.8
MW-377	03/20/2018 10:52	2.99	-14	7.07	0.128	2.511	7.91	6.7
MW-377	03/20/2018 10:54	2.96	-16	7.07	0.130	2.534	7.97	6.6
MW-377	03/20/2018 10:57	2.94	-18	7.07	0.129	2.522	8.04	6
MW-377	03/20/2018 11:00	2.89	-19	7.08	0.129	2.521	8.14	5.8
MW-377	03/20/2018 11:02	2.87	-21.00	7.07	0.13	2.548	8.12	6.29
MW-377	03/20/2018 11:33	6.32	35.00	7.25	0.11	2.118	10.85	1234.80
MW-377	03/20/2018 14:04	2.86	5.00	7.03	0.13	2.586	9.04	150.50
MW-377	08/09/2018 11:09	1.05	-89.00	7.14	0.14	2.593	24.81	63.80
MW-377	08/09/2018 14:28	0.34	-141.00	7.12	0.16	2.944	25.1	12.01
MW-377	08/09/2018 14:58	1.00	-114.00	7.38	0.12	2.324	17.34	37.00
MW-377	03/15/2019 13:11	0.25	-155.4	7.33	NM	3.16	11.47	2.5
MW-377	03/15/2019 13:48	0.34	-145.8	7.28	1.46	2.796	10.72	5.4
MW-377	07/11/2019 10:05	1.52	-118.9	8.02	NM	1.589	22.75	8.6
MW-377	07/11/2019 10:10	0.75	-105.8	7.46	NM	1.324	20.91	5.7
MW-377	07/11/2019 10:15	1.15	-112.9	7.37	NM	1.324	21.79	4.4
MW-377	07/11/2019 10:20	0.93	-110.6	7.32	NM	1.306	21.36	3.2
MW-377	07/11/2019 10:25	0.78	-103.5	7.25	NM	1.3	20.9	2.9
MW-377	07/11/2019 10:30	0.87	-104.9	7.25	NM	1.304	20.63	3.2
MW-377	07/11/2019 10:35	0.68	-103.9	7.23	NM	1.303	20.56	3.4
MW-377	07/11/2019 10:40	0.86	-106	7.23	NM	1.307	20.4	4.2
MW-377	07/11/2019 10:45	0.94	-110.7	7.23	NM	1.309	20.31	3.6
MW-377	07/11/2019 10:50	0.81	-112.8	7.23	NM	1.31	20.25	3.6
MW-377	07/11/2019 13:30	0.81	-112.8	7.23	NM	1.31	20.25	3.6
MW-377	07/11/2019 14:00	2.22	-113.7	7.33	0.66	1.36	20.25	7.4
MW-377	07/11/2019 14:10	3.27	-110	7.51	0.64	1.26	20.21	18.9
MW-377	08/27/2019 09:10	3.21	-76.2	7.51	NM	1.945	16.36	7.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-377	08/27/2019 09:15	0.68	-104.4	6.92	NM	1.669	16.01	3
MW-377	08/27/2019 09:20	0.58	-114.5	6.95	NM	1.654	16	2.5
MW-377	08/27/2019 09:25	0.51	-120.8	6.97	NM	1.658	16.02	2.9
MW-377	08/27/2019 09:30	0.5	-123.7	6.99	NM	1.663	16.02	2.1
MW-377	08/27/2019 09:35	0.48	-126.4	7	NM	1.669	15.99	1.8
MW-377	08/27/2019 09:40	0.49	-127.9	7.01	NM	1.675	16.01	2.4
MW-377	08/27/2019 09:45	0.49	-129.1	7.02	NM	1.678	15.99	2.4
MW-377	08/27/2019 09:50	0.49	-130.1	7.02	NM	1.681	16.01	2.3
MW-377	08/27/2019 10:25	2.34	-79.3	7.17	0.9	1.759	16.85	6.1
MW-377	08/27/2019 10:40	3.19	-95.1	7.16	0.88	1.733	18.52	13.2
MW-377	03/06/2020 12:50	0.4	-153.6	7.05	NM	2.149	8.86	1.2
MW-377	03/06/2020 13:20	0.49	-182.3	7.12	1.2	2.223	8.93	3.3
MW-377	10/16/2020 08:40	10.5	-14.2	6.66	1.27	2.456	17.7	9.9
MW-377	10/16/2020 08:45	10.12	-88.1	6.83	1.28	2.468	17.76	9.1
MW-377	10/16/2020 08:50	11.21	-121.3	6.98	1.29	2.481	17.74	8.1
MW-377	10/16/2020 08:55	12.13	-126.2	7.03	1.29	2.494	17.12	8
MW-377	10/16/2020 09:00	12.32	-126.2	7.04	1.3	2.498	17.33	7.3
MW-377	10/16/2020 09:05	12.32	-148.5	7.02	1.31	2.531	17.29	9.3
MW-377	10/16/2020 09:10	12.44	-153.8	7.02	1.33	2.553	17.32	9.5
MW-377	10/16/2020 09:15	12.67	-156.7	7.02	1.33	2.566	17.35	9.2
MW-377	10/16/2020 10:00	10.03	-129.6	7.16	1.17	2.27	17.34	7.7
MW-377	10/16/2020 10:15	9.78	-116.3	7.17	1.14	2.206	17.08	NM
MW-377	10/30/2020 10:15	NM	NM	NM	NM	NM	NM	13.2
MW-377	01/11/2021 11:35	0.15	-138.2	7.64	1.39	2.668	10.34	39.8
MW-377	01/11/2021 11:40	0.09	-147.4	7.62	1.4	2.676	10.52	32.5
MW-377	01/11/2021 11:45	0.05	-155.4	7.6	1.39	2.673	10.74	23.3
MW-377	01/11/2021 11:50	0.03	-153	7.56	1.4	2.683	10.1	11.6
MW-377	01/11/2021 11:55	0.02	-147.4	7.56	1.4	2.682	10.18	12.7
MW-377	01/11/2021 12:00	0.02	-152.6	7.55	1.39	2.674	10.08	9.6
MW-377	01/11/2021 12:05	0.02	-144.5	7.54	1.36	2.626	10.27	8.7
MW-377	01/11/2021 12:10	0.02	-141.6	7.53	1.35	2.593	10.28	7.9
MW-377	01/11/2021 12:15	0.02	-146.8	7.52	1.33	2.568	10.34	6.8
MW-377	01/11/2021 12:20	0.03	-141.5	7.51	1.33	2.561	10.36	6.9
MW-377	01/11/2021 12:47	0.44	-109.6	7.65	1.24	2.392	10.19	11.9
MW-377	01/11/2021 13:02	2.22	-108	7.42	1.32	2.552	9.51	85.6
MW-377	04/08/2021 09:15	4.33	-98.4	7.27	1.55	2.906	14.4	69.2
MW-377	04/08/2021 09:20	0.6	-124.2	7.15	1.57	3.003	11.75	68.7
MW-377	04/08/2021 09:25	0.52	-129	7.16	1.57	2.998	11.68	48.9
MW-377	04/08/2021 09:30	0.45	-132.5	7.19	1.56	2.977	11.55	32.4
MW-377	04/08/2021 09:35	0.42	-133.8	7.21	1.53	2.922	11.58	24.7
MW-377	04/08/2021 09:40	0.39	-134	7.24	1.49	2.848	11.47	16.8
MW-377	04/08/2021 09:45	0.38	-134	7.25	1.47	2.819	11.56	142.9
MW-377	04/08/2021 09:50	0.37	-133.8	7.25	1.48	2.838	11.43	128.8
MW-377	04/08/2021 09:55	0.35	-133.4	7.25	1.44	2.766	11.45	105.4
MW-377	04/08/2021 10:00	0.35	-133.1	7.24	1.42	2.731	11.47	67.3
MW-377	07/15/2021 13:00	3.65	-120.9	6.96	0.97	1.934	27.26	84.6
MW-377	07/15/2021 13:05	1.64	-119	6.79	1.02	2.002	25.68	103.5
MW-377	07/15/2021 13:10	1.18	-118.9	6.72	1.04	2.036	24.7	97
MW-377	07/15/2021 13:15	1	-118.3	6.68	1.04	2.047	23.82	85.5
MW-377	07/15/2021 13:20	0.84	-118.4	6.66	1.05	2.052	23.12	61.1
MW-377	07/15/2021 13:25	0.83	-119.2	6.69	1.05	2.05	22.94	64.2
MW-377	07/15/2021 13:30	0.78	-118.1	6.68	1.05	2.053	22.52	62.3
MW-377	01/28/2022 13:05	4.96	-157.3	7.53	1.56	2.991	9.24	111.7
MW-377	01/28/2022 13:10	2.17	-158.7	7.31	1.52	2.906	9.01	119
MW-377	01/28/2022 13:15	1.03	-154.8	7.26	1.47	2.823	8.14	117.8
MW-377	01/28/2022 13:20	0.86	-148.2	7.11	1.45	2.793	7.49	86.6
MW-377	01/28/2022 13:25	0.8	-145.9	7.08	1.45	2.782	7.37	63.1
MW-377	01/28/2022 13:30	0.79	-145.6	7.07	1.44	2.776	7.4	53.5
MW-377	01/28/2022 13:35	0.75	-146.8	7.07	1.44	2.777	7.3	45.8
MW-377	01/28/2022 13:40	0.76	-146.7	7.06	1.44	2.777	7.09	36.7
MW-377	01/28/2022 13:45	0.71	-147	7.05	1.44	2.777	6.93	36.2
MW-377	01/28/2022 13:50	0.71	-147.2	7.05	1.44	2.778	6.85	38.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-377	04/13/2022 12:45	0.96	-151.6	8.47	0.69	1.366	15.74	30.4
MW-377	04/13/2022 12:50	0.44	-158.4	7.64	0.74	1.461	15.4	11.4
MW-377	04/13/2022 12:55	0.31	-159.3	7.48	0.75	1.476	15.7	7.9
MW-377	04/13/2022 13:00	0.28	-159.6	7.41	0.75	1.482	15.94	0
MW-377	04/13/2022 13:05	0.18	-161.3	7.35	0.75	1.487	16.12	0
MW-377	04/13/2022 13:10	0.14	-164.2	7.33	0.75	1.485	16.32	0
MW-377	04/13/2022 13:15	0.12	-165.7	7.29	0.75	1.481	16.03	0
MW-377	04/13/2022 13:20	0.09	-166.9	7.27	0.75	1.48	16.04	0
MW-377	04/13/2022 13:25	0.07	-168.8	7.25	0.75	1.48	16.65	0
MW-377	04/13/2022 13:30	0.08	-169.8	7.23	0.75	1.483	17.18	0
MW-378	05/05/2014 15:23	1.21	-338	6.44	0.08	1.642	17.57	16.18
MW-378	05/05/2014 15:56	4.55	-170	6.51	0.08	1.539	15.59	303.20
MW-378	05/06/2014 11:22	2.34	-225	6.37	0.05	0.949	16.35	806.40
MW-378	07/10/2014 15:46	0.61	-64	6.56	0.10	1.949	17.64	44.08
MW-378	07/10/2014 16:37	1.02	-5	6.44	0.08	1.639	17.94	23.80
MW-378	07/11/2014 11:21	0.67	-34	6.21	0.08	1.626	17.00	38.30
MW-378	11/24/2014 15:08	2.12	-178	6.53	0.13	2.501	19.50	36.23
MW-378	11/24/2014 15:50	3.31	-144	6.48	0.15	2.924	16.98	339.90
MW-378	11/25/2014 15:50	2.39	-228	6.47	0.13	2.570	15.49	125.10
MW-378	04/13/2015 14:58	0.48	-238	6.39	0.09	1.859	15.78	7.74
MW-378	04/13/2015 15:30	0.36	-175	6.47	0.11	2.063	12.51	997.50
MW-378	04/14/2015 12:28	0.39	-123	6.39	0.06	1.217	10.69	266.40
MW-378	09/03/2015 15:12	1.73	934	7.17	0.01	0.23	21.03	797.8
MW-378	11/05/2015 11:03	1.56	17	6.37	0.22	4.049	17.65	82
MW-378	11/05/2015 11:26	4.24	-117	6.62	1.48	24.13	18.31	340.5
MW-378	05/17/2016 10:38	8.77	207	6.17	0.08	1.663	13.24	51.10
MW-378	05/17/2016 13:47	5.61	94	7.05	0.19	3.546	14.68	114.60
MW-378	11/03/2016 11:13	0.54	-203.00	6.51	0.06	1.204	17.85	14.50
MW-378	11/03/2016 14:11	0.13	-132	6.65	0.36	6.540	19.36	686.10
MW-378	06/14/2017 10:49	0.52	-187.00	6.44	0.08	1.613	15.92	24.30
MW-378	06/14/2017 11:47	0.71	-71.00	6.65	0.13	2.531	24.99	23.16
MW-378	06/14/2017 12:28	1.35	-74.00	7.26	0.23	4.354	18.74	70.40
MW-378	06/21/2017 13:38	0.15	-54.00	6.68	0.29	5.307	19.94	8.19
MW-378	01/11/2019 08:35	2.95	-139.9	6.9	NM	1.759	7.82	7.3
MW-378	01/11/2019 09:30	6.37	-114.2	6.8	0.41	0.836	7.98	2.6
MW-378	04/11/2019 09:05	0.47	-105.7	6.72	NM	1.337	10.3	NM
MW-378	10/14/2019 13:10	1.07	-156.4	6.67	NM	2.05	20.83	21.8
MW-378	10/14/2019 13:15	0.58	-153.3	6.62	NM	1.914	20.94	0
MW-378	10/14/2019 13:20	0.5	-153.4	6.65	NM	1.825	21.29	0.2
MW-378	10/14/2019 13:25	0.47	-143.8	6.68	NM	1.73	21.66	0
MW-378	10/14/2019 13:30	0.47	-146.4	6.69	NM	1.715	21.55	0
MW-378	10/14/2019 13:35	0.4	-146.6	6.67	NM	1.691	21.76	0
MW-378	10/14/2019 13:40	0.47	-145.2	6.68	NM	1.62	21.74	0
MW-378	10/14/2019 13:45	0.47	-137.8	6.68	NM	1.482	21.26	0
MW-378	10/14/2019 13:50	0.46	-148.7	6.67	NM	1.383	21.63	0
MW-378	10/14/2019 13:55	0.45	-143.9	6.65	NM	1.282	21.93	0
MW-378	10/14/2019 14:20	2.81	-89	6.76	0.73	1.452	20.48	7.4
MW-378	10/14/2019 14:35	1.95	-86.4	6.61	0.6	1.206	19.91	73.3
MW-378	03/23/2022 11:35	1.07	-73.6	6.45	0.33	0.487	10.64	57.5
MW-378	03/23/2022 11:40	1.01	-85.8	6.5	0.33	0.485	10.65	29.7
MW-378	03/23/2022 11:45	0.89	-88.4	6.51	0.31	0.468	10.62	25
MW-378	03/23/2022 11:50	1.06	-103.3	6.55	0.3	0.445	10.57	17.5
MW-378	03/23/2022 11:55	1.02	-112.9	6.57	0.31	0.465	10.55	11.5
MW-378	03/23/2022 12:00	0.94	-125.1	6.61	0.33	0.485	10.6	5
MW-378	03/23/2022 12:05	0.93	-126.5	6.62	0.33	0.489	10.67	12.3
MW-378	03/23/2022 12:10	1.21	-129.7	6.63	0.33	0.493	10.66	3.8
MW-378	03/23/2022 12:15	1.11	-133.7	6.65	0.33	0.496	10.71	0.7
MW-378	03/23/2022 12:20	1.19	-133.7	6.65	0.34	0.5	10.88	0.7
MW-379	01/14/2014 10:59	4.35	15	6.58	0.01	0.206	8.84	2451.00
MW-379	01/14/2014 12:55	10.55	80	7.44	0.08	1.515	7.17	34.14
MW-379	01/15/2014 12:00	6.01	-24	6.89	0.07	1.463	5.56	42.80
MW-379	04/14/2014 09:43	0.23	-360	6.04	0.03	0.607	13.51	27.61

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-379	04/14/2014 10:12	1.00	-373	6.43	0.03	0.595	12.39	110.10
MW-379	04/15/2014 09:18	1.69	-286	5.98	0.03	0.572	12.08	41.90
MW-379	07/10/2014 14:13	0.68	19	5.89	0.01	0.261	23.02	33.48
MW-379	07/10/2014 15:04	1.22	-17	6.45	0.02	0.315	25.96	41.20
MW-379	07/11/2014 10:28	0.85	-3	8.89	0.02	0.331	24.49	22.00
MW-379	04/13/2015 09:04	0.42	104	6.21	0.01	0.191	10.81	17.38
MW-379	04/13/2015 09:54	2.33	41	6.03	0.01	0.289	10.30	81.70
MW-379	04/14/2015 10:01	0.54	5	6.03	0.01	0.158	10.50	60.00
MW-379	06/16/2015 11:10	7.33	12	5.71	0.03	0.669	22.78	14.8
MW-379	06/16/2015 14:27	9.26	-38	6.01	0.01	0.031	25.57	137.9
MW-379	08/27/2015 10:56	3.62	208	4.49	0.07	1.324	21.8	123.2
MW-379	08/27/2015 11:56	10.97	28	7.73	0.08	1.5	18.81	2658
MW-379	10/29/2015 10:50	4.17	156	5.85	0.01	0.197	17.91	18.7
MW-379	10/29/2015 13:26	2.98	-15	6.18	0.02	0.451	18.78	2706.2
MW-379	05/12/2016 09:37	4.86	726	5.75	0.01	0.235	15.25	9.90
MW-379	05/12/2016 09:41	2.81	139	6.46	0.01	0.225	15.78	161.40
MW-379	11/09/2016 10:37	2.22	3.00	6.15	0.01	0.285	18.80	27.10
MW-379	11/09/2016 13:53	4.66	-98	7.02	0.10	1.993	19.96	563.10
MW-379	03/22/2017 10:22	7.88	120	7.89	0.01	0.127	6.24	23.50
MW-379	03/22/2017 11:36	12.21	119	7.85	0.01	0.138	6.05	165.40
MW-379	05/01/2018 09:02	3.47	243	7.93	0.012	0.248	16.23	8
MW-379	05/01/2018 09:04	2.42	236	7.68	0.008	0.161	15.39	7
MW-379	05/01/2018 09:06	1.99	226	7.6	0.008	0.160	14.61	7.1
MW-379	05/01/2018 09:08	1.69	219	7.54	0.008	0.160	14.48	5.7
MW-379	05/01/2018 09:10	1.54	212	7.56	0.008	0.159	14.35	6.1
MW-379	05/01/2018 09:13	1.45	209	7.51	0.007	0.158	14.36	4.4
MW-379	05/01/2018 09:15	1.38	205	7.47	0.007	0.157	14.51	4.5
MW-379	05/01/2018 09:17	1.32	201	7.46	0.007	0.157	14.57	5
MW-379	05/01/2018 09:19	1.34	200	7.4	0.007	0.158	14.53	5.8
MW-379	05/01/2018 09:21	1.31	199	7.32	0.008	0.160	14.51	6.5
MW-379	05/01/2018 09:23	1.3	197	7.31	0.008	0.161	14.45	6.2
MW-379	05/01/2018 09:26	1.24	195	7.28	0.008	0.163	14.51	4.5
MW-379	05/01/2018 09:28	1.19	192	7.25	0.008	0.160	14.7	4.8
MW-379	05/01/2018 09:30	1.18	190	7.23	0.008	0.162	14.72	4
MW-379	05/01/2018 09:32	1.17	190	7.18	0.008	0.161	14.73	5.4
MW-379	05/01/2018 09:34	1.18	188	7.17	0.008	0.160	14.84	4.8
MW-379	05/01/2018 09:36	1.19	187	7.16	0.008	0.162	14.83	3.8
MW-379	05/01/2018 09:39	1.17	189	7.1	0.008	0.165	14.74	4.1
MW-379	05/01/2018 09:41	1.17	187	7.09	0.008	0.161	14.74	5.4
MW-379	05/01/2018 09:43	1.17	187	7.05	0.008	0.161	14.79	3.1
MW-379	05/01/2018 09:45	1.15	185	7.06	0.008	0.163	14.8	4.6
MW-379	05/01/2018 09:47	1.1	184	7.06	0.008	0.163	14.88	4.4
MW-379	05/01/2018 09:49	1.12	183	7.06	0.008	0.165	14.91	4.3
MW-379	05/02/2018 09:05	10.00	-83.00	6.40	0.01	0.201	13.67	7.40
MW-379	05/02/2018 09:49	1.12	183.00	7.06	0.01	0.166	14.79	4.33
MW-379	05/02/2018 12:05	3.02	-16.00	7.78	0.01	0.183	14.53	14.20
MW-379	08/16/2018 09:09	0.74	30.00	6.37	0.01	0.183	25.6	7.40
MW-379	08/16/2018 09:18	1.41	29.00	6.19	0.01	0.146	24.61	3.74
MW-379	08/16/2018 09:45	1.19	57.00	6.93	0.01	0.175	26.15	14.40
MW-379	05/29/2019 09:40	1.22	79.2	6.66	NM	0.134	17.42	0.5
MW-379	05/29/2019 10:04	1.13	54.1	6.57	0.07	0.15	18.33	5.9
MW-379	10/22/2019 12:40	7.25	70.1	6.71	NM	0.167	17.57	111
MW-379	10/22/2019 12:45	3.36	65.2	6.49	NM	0.139	18.17	116.6
MW-379	10/22/2019 12:50	3.31	59.9	6.43	NM	0.13	18.45	104.6
MW-379	10/22/2019 12:55	3	57.5	6.45	NM	0.126	18.53	94.6
MW-379	10/22/2019 13:00	2.89	56.3	6.43	NM	0.116	18.61	108.6
MW-379	10/22/2019 13:05	3.41	51.2	6.47	NM	0.116	18.9	118.4
MW-379	10/22/2019 13:10	2.65	41.9	6.48	NM	0.116	19.03	128.2
MW-379	10/22/2019 13:15	2.73	25.9	6.52	NM	0.116	19.09	133.6
MW-379	10/22/2019 13:20	2.25	9.4	6.53	NM	0.112	19.22	143.1
MW-379	10/22/2019 13:25	2.11	-1.5	6.56	NM	0.111	19.26	144.3
MW-379	10/22/2019 13:50	2.17	-7.6	6.54	0.05	0.107	19.58	143.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-379	10/22/2019 14:05	3.06	3.8	6.43	0.05	0.109	18.88	164.2
MW-379	06/23/2020 12:45	1.26	42.4	6.06	0.08	0.169	19.76	1.5
MW-379	06/23/2020 12:50	1.1	53.6	6.45	0.08	0.166	19.68	5.2
MW-379	06/23/2020 12:55	1.11	47.3	6.6	0.08	0.163	20.35	1.4
MW-379	06/23/2020 13:00	1.12	41.9	6.76	0.08	0.162	20.45	0.5
MW-379	06/23/2020 13:05	1.13	47	6.77	0.08	0.167	20.36	0.2
MW-379	06/23/2020 13:10	1.14	57.2	6.69	0.08	0.173	19.83	0.2
MW-379	06/23/2020 13:15	1.12	60.7	6.76	0.08	0.173	18.93	0.9
MW-379	06/23/2020 13:20	1.1	56.9	6.79	0.08	0.175	18.86	1.3
MW-379	06/23/2020 13:25	1.11	53.2	6.87	0.08	0.169	18.72	3.7
MW-379	06/23/2020 13:30	1.11	50	6.93	0.08	0.173	18.66	3
MW-379	06/23/2020 13:31	1.11	50	6.93	0.08	0.173	18.66	3
MW-379	06/23/2020 13:55	0.99	50.9	6.88	0.08	0.177	18.94	4.2
MW-379	06/23/2020 14:05	1.06	48.3	6.72	0.09	0.177	18.94	0.9
MW-379	10/30/2020 09:20	5	59.4	6.8	0.08	0.163	14.81	30.3
MW-379	10/30/2020 09:25	2.61	80.8	6.6	0.08	0.161	14.63	17.7
MW-379	10/30/2020 09:30	2.2	90.3	6.57	0.07	0.152	14.8	5.5
MW-379	10/30/2020 09:35	2.28	85	6.6	0.07	0.146	14.84	4.6
MW-379	10/30/2020 09:40	2.49	88.7	6.59	0.07	0.143	14.78	3.5
MW-379	10/30/2020 09:45	2.64	90.6	6.6	0.07	0.14	14.73	3.8
MW-379	10/30/2020 09:50	2.7	92.2	6.61	0.06	0.137	14.56	3.6
MW-379	10/30/2020 09:55	2.93	94.1	6.6	0.06	0.133	14.49	4
MW-379	10/30/2020 10:00	3.05	94.7	6.61	0.06	0.131	14.4	3.9
MW-379	10/30/2020 10:05	3.21	94.5	6.61	0.06	0.131	14.29	4.9
MW-379	10/30/2020 10:35	2.99	90.2	6.67	0.09	0.216	14.4	0
MW-379	10/30/2020 10:45	4.23	100.3	6.94	0.07	0.206	15.13	2.8
MW-380	01/14/2014 09:45	1.42	-110	6.92	0.13	2.590	9.96	41.77
MW-380	01/14/2014 10:31	2.86	93	6.49	0.12	2.286	8.31	36.30
MW-380	01/15/2014 11:45	1.60	6	7.01	0.10	1.921	5.88	10.20
MW-380	04/14/2014 14:18	0.13	-378	6.96	0.05	1.096	13.55	9.23
MW-380	04/14/2014 14:41	1.94	-243	7.11	0.04	0.857	11.93	375.60
MW-380	04/15/2014 10:43	1.29	-387	6.84	0.04	0.825	10.64	65.20
MW-380	07/10/2014 09:45	0.31	-62	6.57	0.03	0.527	21.27	16.07
MW-380	07/10/2014 10:33	0.62	-45	6.69	0.03	0.560	24.73	15.80
MW-380	07/11/2014 08:59	0.74	-56	6.54	0.02	0.485	24.85	22.90
MW-380	04/13/2015 11:01	0.14	-172	6.95	0.02	0.439	13.91	9.42
MW-380	04/13/2015 11:46	5.40	-167	6.66	0.03	0.522	10.03	9.20
MW-380	04/14/2015 10:47	0.31	-135	6.71	0.01	0.302	9.77	38.60
MW-380	08/27/2015 11:28	1.12	-115	6.48	0.11	2.132	24.71	178.7
MW-380	08/27/2015 13:58	7.24	-92	7.25	0.12	2.246	22.22	1314.5
MW-380	10/29/2015 10:10	2.75	235	6.35	0.02	0.393	17.64	12.80
MW-380	10/29/2015 11:16	0.69	-167	6.80	0.04	0.871	19.60	435.80
MW-380	05/12/2016 11:02	5.05	0.46	6.27	0.02	0.384	15.22	38.40
MW-380	05/12/2016 12:27	1.39	86	7.17	0.02	0.426	14.26	306.70
MW-380	06/10/2016 09:47	2.24	-146	6.51	0.05	0.952	17.48	106.2
MW-380	06/10/2016 12:29	3.51	-107	6.61	0.04	0.906	15.93	1526.4
MW-380	11/08/2016 09:52	1.62	-101	6.86	0.25	4.627	19.09	158.70
MW-380	11/08/2016 09:59	1.30	-172.00	6.87	0.04	0.898	19.06	40.60
MW-380	03/22/2017 11:11	9.62	-59	6.75	0.03	0.661	7.03	3.00
MW-380	03/22/2017 13:40	6.54	-135	7.11	0.04	0.799	10.93	99.30
MW-380	05/01/2018 10:05	4.38	-97	7.69	0.015	0.308	15.64	15.8
MW-380	05/01/2018 10:07	1.65	-61	7.25	0.014	0.290	14.18	2.9
MW-380	05/01/2018 10:10	1.16	-62	7.26	0.014	0.291	13.83	5
MW-380	05/01/2018 10:12	0.93	-63	7.29	0.014	0.285	14.1	3.6
MW-380	05/01/2018 10:14	0.82	-61	7.22	0.014	0.284	13.96	3.4
MW-380	05/01/2018 10:16	0.81	-66	7.28	0.014	0.285	14.42	3.4
MW-380	05/01/2018 10:18	0.75	-65	7.23	0.014	0.285	14.66	4
MW-380	05/01/2018 10:20	0.74	-64	7.18	0.014	0.287	14.81	3.6
MW-380	05/01/2018 10:23	0.7	-63	7.13	0.014	0.288	15.07	3.9
MW-380	05/01/2018 10:25	0.72	-61	7.06	0.014	0.290	15.18	3.6
MW-380	05/01/2018 10:27	0.69	-58	6.98	0.014	0.296	14.99	4.2
MW-380	05/01/2018 10:29	0.71	-57	6.95	0.014	0.292	14.65	3.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-380	05/01/2018 10:31	0.68	-58	6.94	0.014	0.287	14.68	4.6
MW-380	05/01/2018 10:33	0.67	-63	7.03	0.014	0.288	14.94	4.2
MW-380	05/01/2018 10:36	0.66	-60	6.94	0.014	0.291	14.92	4
MW-380	05/01/2018 10:38	0.65	-61	6.93	0.014	0.291	15.11	3.9
MW-380	05/02/2018 09:33	9.20	-81.00	6.24	0.01	0.308	12.93	13.20
MW-380	05/02/2018 10:38	0.65	-61.00	6.93	0.01	0.359	14.99	3.89
MW-380	05/02/2018 11:41	4.63	-25.00	7.44	0.02	0.367	15.4	87.30
MW-380	08/16/2018 10:29	0.44	-56.00	6.31	0.01	0.305	25.3	22.80
MW-380	08/16/2018 12:46	0.54	-85.00	6.54	0.02	0.362	25.92	1.34
MW-380	08/16/2018 13:14	0.96	-86.00	6.98	0.02	0.367	20.76	91.00
MW-380	05/29/2019 11:10	0.24	-79.7	6.84	NM	0.308	15.9	7.7
MW-380	05/29/2019 11:34	0.04	-116.5	6.91	0.19	0.387	15.29	4.7
MW-380	10/22/2019 09:05	3.27	75.8	6.86	NM	0.201	18.21	7.3
MW-380	10/22/2019 09:10	0.92	-46.5	6.77	NM	0.167	18.49	5.7
MW-380	10/22/2019 09:15	2.28	-96	6.79	NM	0.163	19.01	3.1
MW-380	10/22/2019 09:20	1.2	-102	6.8	NM	0.159	19.3	1.5
MW-380	10/22/2019 09:25	0.49	-113.1	6.84	NM	0.161	19.51	2
MW-380	10/22/2019 09:30	0.36	-118.3	6.86	NM	0.08	19.53	1.9
MW-380	10/22/2019 09:35	1.07	23.1	6.07	NM	0.123	19.45	41.8
MW-380	10/22/2019 09:40	0.5	-49.7	6.59	NM	0.122	19.49	46.2
MW-380	10/22/2019 09:45	0.32	-97	6.8	NM	0.117	19.55	41.8
MW-380	10/22/2019 09:50	0.47	-105.2	6.82	NM	0.124	19.56	41.3
MW-380	10/22/2019 10:05	4.24	29.6	6.19	0.06	0.122	19.44	5.9
MW-380	10/22/2019 10:25	5.57	-79.1	6.84	0.06	0.13	19.64	4
MW-380	06/25/2020 08:55	3.05	-96.7	6.58	0.17	0.348	20.87	6.9
MW-380	06/25/2020 09:00	1.11	-99.4	6.13	0.16	0.338	20.26	5.9
MW-380	06/25/2020 09:05	0.87	-108.9	6.17	0.16	0.345	19.68	4.4
MW-380	06/25/2020 09:10	0.62	-120.4	6.29	0.16	0.339	18.98	4
MW-380	06/25/2020 09:15	0.57	-126.2	6.33	0.16	0.34	18.8	3.1
MW-380	06/25/2020 09:20	0.56	-130.4	6.35	0.16	0.342	18.61	3.2
MW-380	06/25/2020 09:25	0.52	-136.1	6.39	0.16	0.341	18.42	3.2
MW-380	06/25/2020 09:30	0.51	-137	6.4	0.16	0.341	18.36	3.1
MW-380	06/25/2020 09:31	0.51	-137	6.4	0.16	0.341	18.36	3.1
MW-380	06/25/2020 09:50	0.34	-132.8	6.11	0.17	0.188	18.72	4.3
MW-380	06/25/2020 10:00	2.36	-121.5	6.31	0.17	0.199	19.05	5.9
MW-380	10/29/2020 09:10	NM	NM	NM	NM	NM	NM	0
MW-380	10/30/2020 07:55	7.38	7.1	6.64	0.21	0.42	14.51	2.8
MW-380	10/30/2020 08:00	4.95	-68.2	7.27	0.2	0.423	14.73	0
MW-380	10/30/2020 08:05	4.7	-80.3	7.36	0.2	0.408	15.39	0
MW-380	10/30/2020 08:10	4.71	-83.2	7.36	0.19	0.402	15.44	0
MW-380	10/30/2020 08:15	5.08	-86	7.35	0.2	0.404	15.64	0
MW-380	10/30/2020 08:20	5.53	-86.7	7.35	0.2	0.408	15.63	0
MW-380	10/30/2020 08:25	5.73	-87.7	7.33	0.2	0.412	15.86	0
MW-380	10/30/2020 08:30	5.76	-88.3	7.33	0.2	0.416	16.02	0
MW-380	10/30/2020 09:00	4.87	-90.5	7.41	0.23	0.443	15.98	0
MW-380	10/30/2020 09:10	6.64	-95.3	7.4	0.2	0.518	15.99	NM
MW-383	04/14/2014 11:18	0.12	-442	6.97	0.15	2.718	13.56	10.03
MW-383	04/14/2014 11:44	2.57	-210	6.93	0.06	1.254	12.93	39.20
MW-383	04/15/2014 10:00	1.52	-421	6.88	0.10	2.017	9.48	27.50
MW-383	07/10/2014 11:24	1.33	-77	6.84	0.10	2.016	19.86	4.82
MW-383	07/10/2014 12:21	1.36	-17	6.80	0.07	1.473	17.46	19.60
MW-383	07/11/2014 09:45	0.62	-24	6.72	0.07	1.301	21.19	18.50
MW-383	04/08/2015 11:34	1.88	-151	6.90	0.08	1.646	10.22	1.07
MW-383	04/08/2015 12:24	3.61	-146	6.68	0.08	1.773	10.51	26.00
MW-383	04/09/2015 10:50	3.43	-146	6.95	0.07	1.321	10.02	57.00
MW-383	06/16/2015 11:38	2.05	-127	6.58	0.09	1.756	19.03	83.9
MW-383	06/16/2015 15:30	2.83	-148	6.62	0.19	3.642	14.14	857.9
MW-383	08/27/2015 11:55	0.73	70	2.8	1.02	17.08	23.24	103.5
MW-383	08/27/2015 15:35	1.29	-10	7.36	1.5	24.45	17.2	829.9
MW-383	10/29/2015 09:40	2.05	278	6.88	0.06	1.127	17.82	83.3
MW-383	10/29/2015 09:57	1.75	-175	6.73	0.08	1.663	17.95	836.6
MW-383	05/12/2016 10:19	4.08	817	6.42	0.05	0.981	14.41	42.07

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-383	05/12/2016 11:07	0.92	139	6.91	0.16	3.043	13.29	410.50
MW-383	11/08/2016 10:48	1.54	-164.00	6.93	0.06	1.272	17.62	19.90
MW-383	11/08/2016 11:54	5.16	-116	6.83	0.33	5.982	17.74	54.60
MW-383	03/22/2017 11:58	3.40	-80	6.87	0.07	1.446	8.95	35.00
MW-383	03/22/2017 14:52	7.47	-159	6.97	0.08	1.638	12.58	134.90
MW-383	05/01/2018 10:59	4.62	-107	7.6	0.061	1.213	19.51	3.8
MW-383	05/01/2018 11:01	2.12	-82	7.05	0.062	1.231	15.85	3.1
MW-383	05/01/2018 11:03	1.29	-78	6.97	0.061	1.223	14.63	4.1
MW-383	05/01/2018 11:06	1.05	-80	7	0.060	1.201	14.43	3.4
MW-383	05/01/2018 11:08	0.92	-83	7.01	0.058	1.158	14.51	3.2
MW-383	05/01/2018 11:10	0.83	-88	7.07	0.060	1.205	14.48	4.5
MW-383	05/01/2018 11:12	0.77	-86	7.01	0.059	1.177	14.26	5.9
MW-383	05/01/2018 11:14	0.75	-86	6.96	0.061	1.209	14.41	3.4
MW-383	05/01/2018 11:16	0.68	-90	7	0.063	1.254	14.7	3.5
MW-383	05/01/2018 11:18	0.65	-90	6.98	0.063	1.252	14.81	3.5
MW-383	05/01/2018 11:21	0.65	-90	6.97	0.063	1.256	14.62	3.8
MW-383	05/02/2018 10:04	5.78	-127.00	6.64	0.05	1.028	12.39	33.40
MW-383	05/02/2018 11:21	0.65	-90.00	6.97	0.06	1.260	14.5	3.76
MW-383	05/02/2018 11:54	2.75	-35.00	7.03	0.07	1.449	12.57	242.60
MW-383	08/16/2018 09:59	1.00	-128.00	6.74	0.06	1.251	21.36	11.70
MW-383	08/16/2018 10:53	0.74	-120.00	6.68	0.06	1.111	20.79	2.54
MW-383	08/16/2018 12:36	2.06	-119.00	7.14	0.07	1.427	17.36	143.70
MW-383	05/17/2019 13:15	0.3	-133	6.87	NM	0.328	14.41	4.2
MW-383	05/17/2019 13:39	0.31	-125.5	6.86	0.18	0.364	13.83	2.1
MW-383	10/21/2019 13:24	4.06	-79.1	6.76	NM	0.77	18.55	10.6
MW-383	10/21/2019 13:29	0.99	-127	6.73	NM	0.753	18.4	4.2
MW-383	10/21/2019 13:34	0.62	-114.6	6.62	NM	0.635	18.24	0.8
MW-383	10/21/2019 13:39	0.34	-121.9	6.64	NM	0.648	18.21	0.7
MW-383	10/21/2019 13:44	0.25	-133.7	6.69	NM	0.72	18.15	0.8
MW-383	10/21/2019 13:49	0.25	-136.6	6.7	NM	0.744	18.15	0.5
MW-383	10/21/2019 13:54	0.37	-143.6	6.73	NM	0.774	17.99	0.5
MW-383	10/21/2019 13:59	0.4	-146.1	6.74	NM	0.785	17.93	0.9
MW-383	10/21/2019 14:04	0.21	-147.4	6.75	NM	0.793	17.87	0.5
MW-383	10/21/2019 14:09	0.18	-147.3	6.76	NM	0.797	17.77	0.6
MW-383	10/21/2019 14:27	0.11	-143.5	6.8	0.4	0.81	17.64	1.5
MW-383	10/21/2019 14:40	0.14	-138.8	6.8	0.4	0.81	17.88	14.5
MW-383	05/15/2020 09:20	1.15	-99.4	6.85	NM	1.046	13.68	0.9
MW-383	05/15/2020 09:35	1.01	-103.1	6.87	0.55	1.099	13.09	8.2
MW-383	11/13/2020 12:50	0.22	-89.6	6.61	0.2	0.41	15.05	36.7
MW-383	11/13/2020 12:55	0.03	-95.7	6.63	0.2	0.41	15.07	21.9
MW-383	11/13/2020 13:00	0.02	-96.1	6.66	0.2	0.412	14.9	14.7
MW-383	11/13/2020 13:05	0.02	-93.5	6.63	0.2	0.411	14.88	9.6
MW-383	11/13/2020 13:10	0.02	-92.1	6.64	0.2	0.408	14.9	6.6
MW-383	11/13/2020 13:15	0.02	-94	6.63	0.2	0.408	14.92	6.8
MW-383	11/13/2020 13:20	0.02	-92.7	6.64	0.2	0.409	14.94	6.5
MW-383	11/13/2020 13:50	0.06	-114.4	6.72	0.25	0.512	16.23	11.2
MW-383	11/13/2020 14:00	0.44	-102	6.81	0.24	0.499	15.83	30.8
MW-391	06/25/2014 09:35	4.10	-170.9	6.97	0.79	1.571	17.32	37.60
MW-391	06/25/2014 09:55	3.43	-167.5	6.78	0.76	1.503	14.58	15.90
MW-391	06/25/2014 10:55	1.39	-169.9	7.09	0.79	1.571	19.32	191.80
MW-391	08/19/2014 11:45	3.79	-168.6	7.11	0.81	1.598	23.13	10.10
MW-391	08/19/2014 12:25	2.97	-172.2	7.14	0.85	1.551	22.79	0.0000
MW-391	08/19/2014 12:55	3.66	159.1	7.09	0.87	1.671	25.01	9.60
MW-391	12/11/2014 12:20	33.00	-128.5	7.72	NM	1.953	10.29	2.70
MW-391	12/11/2014 12:30	0.22	-267.5	7.46	NM	2.515	11.31	1.80
MW-391	12/11/2014 13:00	12.22	-30.4	7.08	NM	0.015	7.28	13.40
MW-391	08/09/2018 08:50	4.16	-68.60	7.98	0.86	1.697	21.23	43.90
MW-391	08/09/2018 09:40	2.58	-79.50	6.91	0.68	1.349	17.42	5.50
MW-391	08/09/2018 09:50	2.47	-68.70	7.20	0.76	1.505	21.41	59.00
MW-391	11/05/2018 10:15	6.34	-91.80	7.72	0.71	1.401	14.03	31.10
MW-391	11/05/2018 11:00	3.64	-116.00	7.14	0.67	1.323	14.6	6.20
MW-391	11/05/2018 11:15	4.88	-129.10	7.38	0.67	1.334	15.51	90.90

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-391	02/04/2019 09:45	6.10	-25.80	8.28	0.65	1.299	8	79.00
MW-391	02/04/2019 10:10	4.92	-106.90	7.87	0.67	1.327	11.45	98.20
MW-391	02/04/2019 10:20	5.52	-113.20	7.93	0.67	1.325	9.89	128.70
MW-391	05/01/2019 10:40	9.82	-140.2	7.9	0.68	1.358	11.98	4.2
MW-391	07/10/2019 09:25	4.15	-145.9	7.71	0.63	1.244	17.82	230.9
MW-391	07/10/2019 09:35	5.62	-139	7.87	0.62	1.247	21.34	78.7
MW-391	07/10/2019 10:50	3.62	-103.5	7.74	NM	1.491	20.62	24.4
MW-391	04/09/2021 08:25	2.19	-109.7	6.99	27.54	43.07	11.92	116.1
MW-391	04/09/2021 08:30	1.05	-114	7.03	24.9	42.24	11.25	150.4
MW-391	04/09/2021 08:35	0.97	-109.7	7.11	25.41	39.92	11.25	122.7
MW-391	04/09/2021 08:40	1.06	-101.7	7.04	27.2	42.42	11.17	163.6
MW-391	04/09/2021 08:45	0.47	-92.9	6.95	31.22	48.13	11.12	185.3
MW-391	04/09/2021 08:50	0.51	-94.4	6.91	32.53	49.92	11.08	137.7
MW-391	04/09/2021 08:55	0.25	-97.4	6.92	32.55	49.98	11.15	114.4
MW-391	04/09/2021 09:00	0.21	-107.3	6.97	32.58	50.02	11.32	97
MW-391	04/09/2021 09:05	0.18	-118.4	7.05	31.44	48.37	10.99	75.5
MW-391	04/09/2021 09:10	0.15	-121.3	7.08	30.69	47.28	10.9	70.4
MW-391	01/27/2022 08:35	46.1	-136.7	7.08	34.09	53.65	7.31	71.3
MW-391	01/27/2022 08:40	0.62	-149.2	7.28	23.32	37.41	5.4	328.3
MW-391	01/27/2022 08:45	0.57	-149.6	7.24	22.8	36.64	5.16	164
MW-391	01/27/2022 08:50	0.54	-156.7	7.27	24.87	39.55	5.5	118.1
MW-391	01/27/2022 08:55	0.56	-159.8	7.28	26.34	41.68	5.92	137.6
MW-391	01/27/2022 09:00	0.56	-160.5	7.29	26.7	42.1	6.22	62.1
MW-391	01/27/2022 09:05	0.64	-166.4	7.32	30.24	46.88	6.97	161.3
MW-391	01/27/2022 09:10	0.67	-168.7	7.35	32.03	49.41	7.08	64.9
MW-391	01/27/2022 09:15	0.74	-173.4	7.37	33.62	51.74	7.62	104.8
MW-391	01/27/2022 09:20	0.78	-174.7	7.37	34.01	52.29	7.99	101.5
MW-391	04/11/2022 08:50	0.88	-140.7	7.44	12.52	20.83	10.6	17.4
MW-391	04/11/2022 08:55	0.28	-146	7.31	12.85	21.42	10.22	17.2
MW-391	04/11/2022 09:00	0.17	-148	7.3	12.7	21.19	10.13	15.8
MW-391	04/11/2022 09:05	0.16	-141.5	7.29	12.49	20.88	10.11	19.6
MW-391	04/11/2022 09:10	0.14	-141.9	7.3	12.3	20.58	10.25	18.6
MW-391	04/11/2022 09:15	0.13	-143.3	7.3	12.22	20.44	10.32	18.4
MW-391	04/11/2022 09:20	0.13	-142.1	7.3	12.19	20.38	10.35	18.7
MW-391R	09/24/2020 15:15	NM	NM	NM	NM	NM	NM	176.3
MW-391R	10/20/2020 13:45	4.15	60.3	6.44	22.84	36.05	20.01	21.6
MW-391R	10/20/2020 13:50	1.49	95.4	6.44	22.95	36.26	19.67	20
MW-391R	10/20/2020 13:55	0.85	113.6	6.47	22.85	36.11	19.45	25.7
MW-391R	10/20/2020 14:00	0.62	129	6.54	22.37	35.43	19.15	32.9
MW-391R	10/20/2020 14:05	0.59	130.1	6.61	22.14	35.08	18.98	36
MW-391R	10/20/2020 14:10	0.3	125	6.67	22.03	34.91	19.06	31.5
MW-391R	10/20/2020 14:15	0.27	109.2	6.69	22.24	35.22	19.06	26.3
MW-391R	10/20/2020 14:20	0.25	84.8	6.68	22.34	35.37	19.05	21.8
MW-391R	10/20/2020 14:25	0.26	55	6.7	22.39	35.44	19.13	16.2
MW-391R	10/20/2020 14:30	0.26	32.3	6.73	22.19	35.26	19.1	12.6
MW-391R	10/20/2020 15:05	1.29	196.1	6.53	23.81	37.48	20.06	87.6
MW-391R	10/20/2020 15:15	1.43	183.1	6.68	23.96	37.69	19.68	NM
MW-391R	01/14/2021 09:05	3.13	-106.8	7.04	23.24	36.78	10.32	10.8
MW-391R	01/14/2021 09:10	1.44	-126.5	7.06	23.8	37.73	10.42	9.7
MW-391R	01/14/2021 09:15	0.58	-143.2	7.11	23.61	37.5	9.19	12.9
MW-391R	01/14/2021 09:20	0.41	-150.9	7.14	21.89	35.05	8.41	28.6
MW-391R	01/14/2021 09:25	0.25	-152.3	7.14	21.3	34.16	8.51	34
MW-391R	01/14/2021 09:30	0.09	-151.2	7.16	20.66	33.19	8.44	39.8
MW-391R	01/14/2021 09:35	0.08	-140.6	7.18	20.25	32.63	8.51	42.9
MW-391R	01/14/2021 09:40	0.09	-133.7	7.19	19.98	32.2	8.54	37.4
MW-391R	01/14/2021 09:45	0.12	-127.2	7.21	19.72	31.82	8.51	41
MW-391R	01/14/2021 09:50	0.1	-122.5	7.22	19.51	31.49	8.45	38.3
MW-391R	01/14/2021 10:50	2.58	-120.3	7.28	23.06	36.57	10.94	22.8
MW-391R	01/14/2021 11:05	2.88	-102.6	7.23	22.9	36.31	10.69	65.2
MW-392	08/19/2014 10:05	3.22	-175.4	7.40	1.13	2.201	22.84	12.30
MW-392	08/19/2014 10:45	7.44	-157.2	7.43	1.14	2.223	24.16	15.10
MW-392	08/19/2014 11:15	4.47	-163.1	7.44	1.14	2.222	25.00	21.60

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-392	12/11/2014 10:10	1.04	-118.7	7.55	NM	2.488	11.01	10.80
MW-392	12/11/2014 10:28	0.27	-138.6	7.55	NM	2.419	11.35	11.20
MW-392	12/11/2014 10:45	0.98	-132.1	7.51	NM	2.437	11.40	176.00
MW-393	09/12/2014 10:50	1.90	-30.6	6.31	2.24	4.206	22.05	69.70
MW-393	09/12/2014 11:30	15.94	-29.1	6.23	2.08	3.930	22.45	9.80
MW-393	09/12/2014 11:40	4.21	-33	6.25	2.24	3.998	21.96	19.60
MW-393	05/13/2015 11:45	10.62	16	6.25	2.01	4.040	12.70	0.0000
MW-395	05/05/2014 13:24	1.15	-391	6.76	0.54	9.477	15.36	46.99
MW-395	05/05/2014 14:10	8.24	-209	6.80	0.61	10.730	12.26	11.60
MW-395	07/09/2014 09:07	0.71	-45	6.70	0.30	5.457	26.07	26.07
MW-395	07/09/2014 10:16	2.43	77	6.73	0.30	5.413	18.65	16.30
MW-395	11/17/2014 09:28	2.11	-331	6.71	0.30	5.634	9.10	9.10
MW-395	04/09/2015 14:36	4.52	-128	6.73	0.26	9.698	6.80	61.98
MW-395	04/09/2015 16:32	3.46	-99	6.91	0.20	3.867	7.62	23.40
MW-395	08/25/2015 15:40	0.02	-112	6.91	4.56	66.57	18.7	538
MW-395	10/30/2015 15:18	9.64	-149	6.81	0.3	5.461	16.28	609.3
MW-395	05/11/2016 12:20	0.75	76	6.65	0.23	4.282	13.13	67.80
MW-395	05/11/2016 14:22	2.82	106	6.88	0.39	6.995	13.02	254.40
MW-395	11/04/2016 09:19	0.11	-124.00	6.82	0.58	10.250	15.77	126.30
MW-395	11/04/2016 10:10	2.60	-96	6.76	0.49	8.689	16.26	437.90
MW-395	06/09/2017 09:41	0.10	-84.00	6.98	1.74	28.140	15.3	96.50
MW-395	06/09/2017 11:16	0.12	-88.00	6.89	1.32	21.970	15.99	12.10
MW-395	06/09/2017 11:41	0.59	-89.00	7.24	1.32	21.830	16.38	236.40
MW-396	03/18/2014 09:26	0.54	-54.2	6.79	7.18	12.690	3.44	-11.10
MW-396	03/18/2014 09:42	1.63	-85.5	7.04	11.21	18.900	3.85	55.60
MW-396	06/12/2014 13:05	0.12	-121.4	6.64	6.46	11.180	18.10	7.60
MW-396	06/12/2014 13:30	0.14	-119.6	6.64	6.52	11.200	18.83	12.20
MW-396	06/13/2014 09:40	0.20	132.2	6.72	5.75	9.120	18.18	19.30
MW-396R	10/18/2018 09:00	0.54	-117.90	7.04	7.92	13.640	14.75	241.10
MW-396R	10/18/2018 10:00	2.79	-114.30	7.08	4.95	8.829	16.8	24.70
MW-396R	10/18/2018 10:10	4.27	-109.80	7.35	4.67	8.334	17.32	145.00
MW-396R	04/09/2019 10:40	1.43	-85	6.92	2.48	4.71	9.95	3.7
MW-396R	07/12/2019 08:35	5.76	-120.7	7.09	NM	2.382	23.09	3.1
MW-396R	07/12/2019 09:00	5.72	-118.7	7.25	1.81	3.46	25.09	0.1
MW-396R	07/12/2019 09:15	6.12	-90	7.48	1.84	3.507	25.77	24
MW-396R	09/30/2019 10:20	4.73	-94.2	6.58	NM	4.927	22.45	25.7
MW-396R	09/30/2019 11:05	0.56	-193.9	6.72	3.41	6.173	22.1	13.3
MW-396R	09/30/2019 13:45	2.3	-104.6	6.73	3.17	5.87	22.4	94.7
MW-396R	01/23/2020 10:10	7.36	-128.7	6.65	NM	3.201	7.81	109
MW-396R	01/23/2020 10:45	7.53	-90.1	7.12	0.93	1.834	8.06	16.7
MW-396R	01/23/2020 10:55	5.79	-105.9	7.16	1.82	3.457	7.95	12.4
MW-396R	03/26/2020 09:40	0.46	-2.8	7	NM	2.358	9.16	34
MW-396R	03/26/2020 10:30	4.87	25.2	7.06	1.54	2.943	10.66	4.9
MW-396R	12/11/2020 08:40	8.05	151.9	7.42	2.07	3.89	9.61	58.4
MW-396R	12/11/2020 08:45	7.43	137.2	7.34	2.07	3.897	9.97	56.4
MW-396R	12/11/2020 08:50	8.6	123.8	7.36	2.06	3.88	9.56	59.7
MW-396R	12/11/2020 08:55	8.78	96.9	7.38	2.03	3.82	9.32	63.6
MW-396R	12/11/2020 09:00	8.87	65.7	7.39	1.97	3.735	9.4	58.5
MW-396R	12/11/2020 09:05	8.87	57.7	7.42	1.89	3.586	9.49	51.5
MW-396R	12/11/2020 09:10	8.93	30.3	7.44	1.88	3.56	9.43	48.1
MW-396R	12/11/2020 09:15	8.97	21.2	7.46	1.86	3.532	9.21	46.7
MW-396R	12/11/2020 09:20	8.76	18.3	7.47	1.86	3.515	9.27	44.2
MW-396R	12/11/2020 09:25	8.65	12.5	7.48	1.85	3.497	9.35	42.8
MW-396R	12/11/2020 10:15	5.45	5.2	6.9	2.33	4.349	13.39	7.9
MW-396R	12/11/2020 10:30	4.43	21.1	7.44	2.5	4.647	12.91	18.2
MW-396R	03/15/2021 09:35	5.2	13.9	6.6	1.52	2.922	5.73	6.3
MW-396R	03/15/2021 09:40	3.01	8.9	6.61	1.5	2.905	5.66	5.4
MW-396R	03/15/2021 09:45	1.02	2.6	6.74	1.48	2.852	5.53	5.2
MW-396R	03/15/2021 09:50	0.84	-0.8	6.78	1.46	2.822	5.74	5
MW-396R	03/15/2021 09:55	0.76	-2.6	6.86	1.48	2.868	4.17	7.7
MW-396R	03/15/2021 10:00	0.76	-34.1	7.02	1.47	2.854	3.77	12.1
MW-396R	03/15/2021 10:05	0.47	-152.5	6.89	1.43	2.768	4.69	19

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-396R	03/15/2021 10:10	0.38	-183.7	6.93	1.42	2.758	4.85	22.3
MW-396R	03/15/2021 10:15	0.48	-217.9	6.99	1.38	2.679	5.25	17.7
MW-396R	03/15/2021 10:20	0.45	-229.7	7.03	1.39	2.687	5.49	11.5
MW-396R	03/15/2021 11:00	6.01	-237.3	7.14	1.57	3.012	6.92	7.2
MW-396R	03/15/2021 11:10	5.81	-248.7	7.22	1.74	3.316	6.8	6.7
MW-396R	08/27/2021 12:30	0.96	-63.6	6.65	2.14	4.058	28.46	93.6
MW-396R	08/27/2021 12:35	0.99	-69	6.65	2.11	4.015	28.42	79.1
MW-396R	08/27/2021 12:40	0.86	-70.3	6.63	2.09	3.973	28.49	69.3
MW-396R	08/27/2021 12:45	0.99	-69.3	6.61	2.08	3.964	28.63	60.5
MW-396R	08/27/2021 12:50	1.05	-69.4	6.6	2.08	3.958	28.85	54.3
MW-396R	08/27/2021 12:55	1.06	-68.8	6.59	2.08	3.958	29	48.9
MW-396R	03/04/2022 11:40	2.05	3.6	6.77	0.55	1.1	6.73	24.9
MW-396R	03/04/2022 11:45	1.52	27.5	6.34	0.53	1.064	6.25	42
MW-396R	03/04/2022 11:50	1.27	43.9	6.13	0.52	1.047	6.5	26.4
MW-396R	03/04/2022 11:55	1.49	54	6.04	0.52	1.046	6.46	19.7
MW-396R	03/04/2022 12:00	1.4	63.9	5.91	0.52	1.044	6.3	15
MW-396R	03/04/2022 12:05	1.81	70.1	5.87	0.52	1.043	6.34	11.2
MW-396R	03/04/2022 12:10	1.26	75	5.83	0.52	1.054	6.05	8.9
MW-396R	03/04/2022 12:15	0.79	73.7	5.81	0.53	1.064	6.17	6.2
MW-396R	03/04/2022 12:20	1.22	72.9	5.82	0.53	1.068	6.4	4.9
MW-396R	03/04/2022 12:25	0.77	70.2	5.81	0.54	1.09	6.31	3.2
MW-397	03/18/2014 13:58	0.97	-51	6.58	1.54	2.958	7.60	89.70
MW-397	03/18/2014 14:17	0.53	-66.8	6.63	1.54	2.983	8.26	3.10
MW-397	03/18/2014 14:27	0.63	-54.3	6.14	1.50	2.730	8.98	4.30
MW-397	06/06/2014 12:15	6.67	-52.3	6.14	1.12	2.180	14.44	23.10
MW-397	06/06/2014 12:45	9.18	-44.8	6.07	1.11	2.148	11.25	16.40
MW-397	06/06/2014 14:30	20.99	-36.2	6.59	1.14	2.210	15.51	135.40
MW-397	10/17/2018 09:50	5.17	-115.60	7.18	0.62	1.248	18.27	60.50
MW-397	10/17/2018 10:50	7.22	-54.90	6.85	0.38	0.768	19.42	6.80
MW-397	10/17/2018 11:00	6.78	-33.70	6.81	0.50	0.996	18.79	261.20
MW-397	04/09/2019 09:30	0.7	-42	11.9	0.3	0.617	11.92	0
MW-397	07/12/2019 09:15	5.43	-118.8	7.14	NM	2.39	22.38	18.4
MW-397	07/12/2019 09:40	4.94	-107.8	6.78	4.02	7.264	19.76	18
MW-397	07/12/2019 09:45	4.36	-106.1	6.96	4.08	7.381	19.78	129.9
MW-397	09/30/2019 11:20	6.19	-147.2	6.61	NM	1.043	23	159.2
MW-397	09/30/2019 12:06	0.2	-119	6.74	0.28	0.574	20.84	8.7
MW-397	09/30/2019 12:45	0.34	-88.5	6.73	0.27	0.566	22.66	12
MW-397	01/23/2020 09:05	7.28	-120.7	7.98	NM	0.976	8.19	23.2
MW-397	01/23/2020 09:50	7.1	-70.1	6.99	0.33	0.68	10.44	4.1
MW-397	01/23/2020 10:00	8.7	-105.5	6.88	0.36	0.731	8.7	82.1
MW-397	12/11/2020 10:45	3.88	-4.9	7.79	0.8	1.571	12.98	25.6
MW-397	12/11/2020 10:50	3.28	-6.7	7.72	0.8	1.576	12.65	17.7
MW-397	12/11/2020 10:55	2.9	-11.9	7.68	0.78	1.546	12.05	13.7
MW-397	12/11/2020 11:00	2.58	-15.6	7.64	0.78	1.544	11.9	19.8
MW-397	12/11/2020 11:05	2.25	-26.1	7.61	0.78	1.532	12.07	10.8
MW-397	12/11/2020 11:10	1.98	-29.6	7.59	0.77	1.526	12.09	10.3
MW-397	12/11/2020 11:15	1.72	-34.9	7.58	0.77	1.517	12.23	8.8
MW-397	12/11/2020 11:20	1.53	-41	7.6	0.77	1.52	12.38	8.4
MW-397	12/11/2020 11:25	1.32	-48.3	7.58	0.78	1.536	12.52	7.4
MW-397	12/11/2020 11:30	1.14	-53.5	7.63	0.78	1.544	12.66	8.5
MW-397	12/11/2020 12:05	0.84	-77.3	7.42	1.87	3.541	15.74	0.5
MW-397	12/11/2020 12:15	1.67	-11.1	7.21	1.19	2.309	14.82	68.7
MW-397	03/16/2021 14:00	3.14	-12.5	7.55	0.81	1.598	8.18	18.4
MW-397	03/16/2021 14:05	1.78	-3.8	7.09	0.8	1.588	7.43	11.4
MW-397	03/16/2021 14:10	1.6	-7.9	6.95	0.78	1.538	7.2	5.5
MW-397	03/16/2021 14:15	1.49	-12.3	6.96	0.77	1.529	7.35	4.8
MW-397	03/16/2021 14:20	1.13	-21.3	7.07	1.58	3.007	7.88	4.1
MW-397	03/16/2021 14:25	1.57	-26	7.09	2.34	4.362	8.18	2.2
MW-397	03/16/2021 14:30	2.21	-27.7	7.08	2.63	4.883	8.13	1.6
MW-397	03/16/2021 14:35	2.79	-28.4	7.05	2.93	5.395	8.18	1.4
MW-397	03/16/2021 14:40	3.52	-30.5	7.01	3.45	6.308	8.4	1.3
MW-397	03/16/2021 14:45	3.78	-30.8	6.99	3.64	6.641	8.44	1.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-397	03/16/2021 15:20	2.82	-22	6.95	4.77	8.547	8.15	5.8
MW-397	03/16/2021 15:31	3.21	-27.5	7.17	0.97	1.912	7.06	88.8
MW-397	03/04/2022 10:20	2.04	-104.7	6.84	0.88	1.716	8.81	1.6
MW-397	03/04/2022 10:25	1.02	-94.6	6.73	0.77	1.528	8.2	8.6
MW-397	03/04/2022 10:30	0.73	-92.1	6.69	0.67	1.337	8.05	0
MW-397	03/04/2022 10:35	0.62	-94.9	6.67	0.65	1.311	8.91	0
MW-397	03/04/2022 10:40	0.46	-98.9	6.66	0.65	1.304	9.18	0
MW-397	03/04/2022 10:45	0.47	-103.4	6.67	0.66	1.32	9.39	0
MW-397	03/04/2022 10:50	0.39	-105	6.67	0.67	1.324	9.27	0
MW-397	03/04/2022 10:55	0.37	-107	6.68	0.7	1.398	9.19	0
MW-397	03/04/2022 11:00	0.47	-107.8	6.66	0.73	1.449	9.35	0
MW-398	06/11/2014 14:15	0.20	-85.9	6.75	4.54	8.109	15.71	42.60
MW-398	06/11/2014 14:55	0.18	-92.9	6.73	4.58	8.202	14.03	188.30
MW-398	06/12/2014 11:00	0.31	-79.8	6.72	4.44	8.111	15.05	218.10
MW-398	09/24/2014 10:20	0.95	-56.6	7.01	4.59	8.241	21.63	33.20
MW-398	09/24/2014 10:50	0.36	-76.8	6.81	4.77	8.530	20.73	38.70
MW-398	09/24/2014 11:05	0.91	-80.1	6.95	4.76	7.993	21.05	69.40
MW-398	10/17/2018 08:30	0.14	-150.10	6.95	5.37	9.518	17.16	78.10
MW-398	10/17/2018 09:30	3.38	-93.00	6.74	5.26	9.305	18.06	136.50
MW-398	10/17/2018 09:40	1.28	-115.70	6.87	7.39	12.810	18.56	83.60
MW-398	01/18/2019 11:00	6.06	-103.4	7.05	4.81	8.603	10.3	14.3
MW-398	04/08/2019 10:05	1.43	-100	6.98	4.07	7.43	14.1	21.6
MW-398	07/11/2019 09:10	4.19	-110.9	7.75	NM	6.392	20.52	49.4
MW-398	07/11/2019 09:40	3.37	113.3	7.59	3.63	6.621	20.81	15.5
MW-398	07/11/2019 09:50	4.05	-121.4	7.47	3.69	6.725	18.93	48.2
MW-398	09/30/2019 14:05	1.26	-96.2	6.59	NM	8.542	20.68	20.4
MW-398	09/30/2019 14:45	0.4	-106.3	6.57	3.49	6.382	20.85	22
MW-398	09/30/2019 15:15	0.64	-97.8	6.59	3.81	7.382	20.41	55
MW-398	01/14/2020 10:20	10.29	97.2	9.3	NM	2.616	10.11	155.6
MW-398	01/14/2020 11:15	4.81	55.5	7.06	1.12	2.169	10.32	23
MW-398	01/14/2020 11:25	11.8	29	7.4	0.97	1.893	10.32	104.2
MW-398	03/24/2020 10:45	0.52	-104.4	7.08	NM	4.349	10.54	18.3
MW-398	03/24/2020 11:10	4.18	-48.8	7.46	2.83	5.238	11.51	17.9
MW-398	12/14/2020 12:00	1.34	-103	6.92	4.72	8.432	12.75	18.1
MW-398	12/14/2020 12:05	0.46	107.3	6.84	4.7	8.403	12.41	24.8
MW-398	12/14/2020 12:10	0.4	110.3	6.81	4.59	8.334	12.51	19.5
MW-398	12/14/2020 12:15	0.4	-113.7	6.8	4.69	8.389	12.64	22.6
MW-398	12/14/2020 12:20	0.33	-115.6	6.78	4.69	8.38	12.18	23.5
MW-398	12/14/2020 12:25	0.33	-116.8	6.79	4.69	8.379	12.09	23.4
MW-398	12/14/2020 12:30	0.27	-117.8	6.79	4.67	8.351	12.61	20.4
MW-398	12/14/2020 12:35	0.26	-120.9	6.79	4.67	8.359	12.73	19.7
MW-398	12/14/2020 12:40	0.24	-121.5	6.78	4.68	8.371	12.07	19.5
MW-398	12/14/2020 12:45	0.24	-122	6.79	4.7	8.393	11.72	21.9
MW-398	12/14/2020 13:30	0.73	-93.9	6.89	4.68	8.374	12.36	44.1
MW-398	12/14/2020 13:45	2.27	-93.6	6.88	13.79	8.517	4.77	93.4
MW-398	03/16/2021 08:45	3.57	-6.9	6.89	4.57	8.231	8.15	19
MW-398	03/16/2021 08:50	3.26	-15.4	6.97	4.52	8.143	7.45	21.9
MW-398	03/16/2021 08:55	2.21	-20.6	7.03	4.46	8.05	7.13	18.6
MW-398	03/16/2021 09:00	2.19	-22.9	7.04	4.4	7.951	7.02	17.1
MW-398	03/16/2021 09:05	1.72	-24.4	7.06	4.37	7.896	7.01	15.3
MW-398	03/16/2021 09:10	1.16	-27.1	7.07	4.35	7.857	7.1	10.4
MW-398	03/16/2021 09:15	0.78	-26.9	7.1	4.35	7.87	7.31	7.6
MW-398	03/16/2021 09:20	0.54	-27.1	7.11	4.37	7.899	7.24	7.1
MW-398	03/16/2021 09:25	0.48	-26.7	7.13	4.38	7.905	7.33	6.2
MW-398	03/16/2021 09:30	0.47	-25.6	7.13	4.38	7.917	7.31	6
MW-398	03/16/2021 10:05	3.86	-1.8	7.32	4.38	7.91	8.18	11
MW-398	03/16/2021 10:20	2.7	-19.4	7.38	3.99	7.252	7.13	44.6
MW-398	03/10/2022 12:15	2.32	-119.6	6.91	5.15	9.163	10.26	25.8
MW-398	03/10/2022 12:20	1.45	-119.5	6.92	5.14	9.156	10.89	25.1
MW-398	03/10/2022 12:25	1.1	-113.6	6.94	5.14	9.135	10.43	18.6
MW-398	03/10/2022 12:30	1.02	-113.5	6.94	5.13	9.135	10.55	17.6
MW-398	03/10/2022 12:35	0.98	-109.9	6.94	5.12	9.118	10.38	16.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-398	03/10/2022 12:40	0.96	-109.3	6.94	5.02	9.091	10.38	16.3
MW-398	03/10/2022 12:45	0.96	-108.8	6.93	5.1	9.014	10.26	15.6
MW-398	03/10/2022 12:50	0.97	-108.9	6.93	5.1	9.081	10.32	15.2
MW-402	09/26/2014 09:34	0.54	242	6.35	0.26	4.739	19.60	407.80
MW-402	09/26/2014 10:15	0.57	81	6.45	0.21	3.883	21.66	78.50
MW-402	10/28/2014 14:13	1.64	-314	6.26	0.25	4.654	19.25	51.65
MW-402	10/28/2014 14:44	2.54	-152	6.34	0.23	4.347	19.67	44.10
MW-402	03/10/2015 14:31	1.02	-176	6.60	0.33	6.148	10.24	21.71
MW-402	03/10/2015 14:58	2.94	-114	6.67	0.31	5.788	10.20	41.60
MW-402	09/17/2015 14:38	3.43	-52	6.44	0.53	9.295	20.36	39.7
MW-402	11/17/2015 13:21	2.6	-59	6.42	0.0942	1840.7292	16.71	12.7
MW-402	11/17/2015 13:23	0.67	-81	6.39	0.0950	1853.4952	17.47	11.1
MW-402	11/17/2015 13:26	0.46	-93	6.39	0.0952	1857.6619	17.6	9.7
MW-402	11/17/2015 13:29	0.41	-101	6.4	0.0950	1852.6541	17.6	10.6
MW-402	11/17/2015 13:31	0.38	-107	6.41	0.0945	1844.0710	17.6	10.2
MW-402	11/17/2015 13:34	0.33	-112	6.41	0.0947	1848.6937	17.57	12.2
MW-402	11/17/2015 13:37	0.31	-116	6.41	0.0945	1843.6725	17.61	12.4
MW-402	11/17/2015 13:39	0.28	-119	6.41	0.0939	1833.1781	17.84	11.5
MW-402	11/17/2015 13:42	0.25	-120	6.41	0.0937	1828.2664	17.84	14.4
MW-402	11/17/2015 13:45	0.22	-121	6.39	0.0934	1823.2054	17.79	13.7
MW-402	11/17/2015 13:47	0.22	-120	6.37	0.0915	1788.6096	17.8	9.4
MW-402	11/17/2015 13:50	0.2	-118	6.34	0.0909	1776.2937	17.77	7.2
MW-402	11/17/2015 13:53	0.19	-117	6.33	0.0906	1771.0584	17.93	7.4
MW-402	11/17/2015 13:55	0.18	-116	6.31	0.0900	1760.2878	17.94	8
MW-402	11/17/2015 13:58	0.17	-114	6.3	0.0894	1747.9908	17.73	7.1
MW-402	11/17/2015 14:01	0.17	-113	6.29	0.0890	1741.7030	17.56	7
MW-402	11/17/2015 14:03	0.16	-112	6.28	0.0890	1741.3471	17.85	5.5
MW-402	11/17/2015 14:06	0.15	-112	6.29	0.0889	1739.5143	17.95	5.3
MW-402	11/17/2015 14:09	0.14	-111	6.29	0.0890	1741.5451	17.96	7
MW-402	11/17/2015 14:11	0.14	-111	6.29	0.0884	1730.1517	17.99	4.8
MW-402	11/17/2015 14:31	5.05	-107	6.55	0.09	1.799	17.72	27.60
MW-402	01/12/2016 13:42	7.44	402	7.13	4.0884	61867.0520	9.71	163.7
MW-402	01/12/2016 13:45	1.38	388	6.78	2.3953	37980.8758	11.76	78.3
MW-402	01/12/2016 13:47	0.81	372	6.66	2.1566	34474.2738	12.28	73.6
MW-402	01/12/2016 13:50	0.63	354	6.6	1.9414	31323.0637	12.27	58.9
MW-402	01/12/2016 13:53	0.58	337	6.58	1.9627	31650.8999	12.11	61.2
MW-402	01/12/2016 13:55	0.56	323	6.55	1.9684	31733.1616	12.12	47.7
MW-402	01/12/2016 13:58	0.64	312	6.53	1.9713	31772.4934	12.16	47.5
MW-402	01/12/2016 14:01	0.52	298	6.5	1.9724	31791.2894	12.13	35.6
MW-402	01/12/2016 14:03	0.44	288	6.48	1.9868	32011.8817	12.02	33.6
MW-402	01/12/2016 14:06	0.43	279	6.46	1.9826	31938.8915	12.16	29.1
MW-402	01/12/2016 14:09	0.41	270	6.44	1.9904	32058.5051	12.1	23.5
MW-402	01/12/2016 14:11	0.38	264	6.43	2.0035	32262.0942	11.97	24.8
MW-402	01/12/2016 14:14	0.36	255	6.42	1.9987	32189.0224	11.99	21.4
MW-402	01/12/2016 14:17	0.32	247	6.41	2.0029	32229.4249	12.26	20.4
MW-402	01/12/2016 14:19	0.31	241	6.41	2.0238	32541.1108	12.2	19
MW-402	01/12/2016 14:22	0.31	234	6.42	2.0352	32705.6947	12.22	17
MW-402	01/12/2016 14:25	0.29	229	6.43	2.0419	32790.0583	12.39	15
MW-402	01/12/2016 14:27	0.29	225	6.43	2.0417	32772.3525	12.57	13.1
MW-402	01/12/2016 14:30	0.28	219	6.44	2.0619	33078.0262	12.44	12.3
MW-402	01/12/2016 14:49	2.12	245	6.81	1.96	31.44	14.74	43.6
MW-402	04/07/2016 08:52	4.81	-122	6.2	0.4146	7493.5325	13.12	46.2
MW-402	04/07/2016 08:55	2.01	-127	6.24	0.5507	9776.3437	12.69	26.2
MW-402	04/07/2016 08:58	2.4	-132	6.26	0.6419	11278.1091	12.62	22.6
MW-402	04/07/2016 09:00	1.27	-135	6.26	0.6867	12009.0773	12.58	33.5
MW-402	04/07/2016 09:02	0.98	-136	6.26	0.7061	12322.4357	12.6	22.9
MW-402	04/07/2016 09:05	0.76	-138	6.26	0.7258	12640.9345	12.61	19.4
MW-402	04/07/2016 09:07	0.7	-139	6.26	0.7377	12833.5819	12.63	19.7
MW-402	04/07/2016 09:09	0.64	-139	6.26	0.7534	13086.4732	12.66	19.3
MW-402	04/07/2016 09:12	0.62	-140	6.27	0.7617	13219.0907	12.68	17.5
MW-402	04/07/2016 09:14	0.57	-141	6.27	0.7728	13396.9310	12.7	18.2
MW-402	04/07/2016 09:16	0.58	-141	6.27	0.7859	13606.9930	12.72	20.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-402	04/07/2016 09:19	0.52	-142	6.27	0.7950	13753.3811	12.73	18.4
MW-402	04/07/2016 09:21	0.48	-142	6.27	0.7998	13829.0526	12.75	19.5
MW-402	04/07/2016 09:23	0.48	-142	6.27	0.8063	13932.1913	12.78	17.4
MW-402	04/07/2016 09:26	0.43	-143	6.27	0.8098	13989.2928	12.76	17.3
MW-402	04/07/2016 09:28	0.39	-143	6.28	0.8143	14063.7981	12.7	18.8
MW-402	04/07/2016 09:30	0.36	-143	6.28	0.8187	14135.3073	12.67	18
MW-402	04/07/2016 09:33	0.33	-144	6.28	0.8237	14215.5638	12.62	17.1
MW-402	04/07/2016 09:35	0.31	-144	6.28	0.8300	14318.4192	12.59	16.1
MW-402	04/07/2016 09:38	0.28	-144	6.28	0.8306	14326.5632	12.6	16.8
MW-402	04/07/2016 09:40	0.27	-144	6.28	0.8332	14368.0299	12.61	16.7
MW-402	04/07/2016 10:00	2.73	-123	6.23	0.57	10.130	11.69	11.73
MW-402	07/21/2016 11:53	3.18	-113	6.41	NM	8592.31	26.89	23.1
MW-402	07/21/2016 11:55	2.25	-120	6.38	NM	9189.51	25.34	17.2
MW-402	07/21/2016 11:56	1.72	-123	6.36	NM	9457.08	25.41	16.5
MW-402	07/21/2016 11:58	1.42	-125	6.35	NM	9555.84	25.22	13.7
MW-402	07/21/2016 11:59	1.25	-126	6.35	NM	9541.44	25.26	15.9
MW-402	07/21/2016 12:01	1.16	-127	6.35	NM	9551.47	25.02	16.9
MW-402	07/21/2016 12:02	1.09	-127	6.35	NM	9515.81	25.02	19.3
MW-402	07/21/2016 12:03	1.03	-128	6.35	NM	9488.48	24.96	18.9
MW-402	07/21/2016 12:05	1	-129	6.36	NM	9462.12	24.94	20.6
MW-402	07/21/2016 12:06	0.98	-130	6.37	NM	9452.59	24.89	18.9
MW-402	07/21/2016 12:34	1.29	-114	6.42	0.66	11.500	19.31	11.80
MW-402	10/12/2016 11:24	2.93	-97	7.75	0.2470	4568.9374	22.46	47.5
MW-402	10/12/2016 11:26	0.89	-98	7.37	0.2575	4752.8240	21.58	10.9
MW-402	10/12/2016 11:28	0.56	-101	7.21	0.2678	4931.5723	21.31	9.2
MW-402	10/12/2016 11:31	0.5	-103	7.1	0.2723	5009.0033	21.23	15.3
MW-402	10/12/2016 11:33	0.48	-103	7.01	0.2742	5041.4161	21.44	6.7
MW-402	10/12/2016 11:36	0.47	-103	6.95	0.2753	5060.4767	21.54	7.5
MW-402	10/12/2016 11:38	0.46	-103	6.91	0.2763	5077.4915	21.56	6.7
MW-402	10/12/2016 11:40	0.46	-103	6.88	0.2752	5058.2964	21.55	6.6
MW-402	10/12/2016 11:43	0.45	-103	6.85	0.2742	5041.9535	21.57	6.7
MW-402	10/12/2016 12:04	0.85	-108	7.13	0.25	4.541	21.59	15.30
MW-402	01/19/2017 09:11	8.72	-146	6.29	0.2115	3977.9096	13.58	39.9
MW-402	01/19/2017 09:13	3.01	-135	6.39	0.2091	3934.4360	13.79	37.5
MW-402	01/19/2017 09:15	1.55	-131	6.41	0.2097	3944.6016	13.91	36.4
MW-402	01/19/2017 09:18	1.04	-129	6.41	0.2098	3946.7031	13.71	36
MW-402	01/19/2017 09:20	0.78	-127	6.42	0.2088	3928.6422	13.88	37.3
MW-402	01/19/2017 09:23	0.68	-127	6.42	0.2094	3939.0550	13.79	35.9
MW-402	01/19/2017 09:25	0.65	-126	6.43	0.2089	3932.3592	13.44	34.5
MW-402	01/19/2017 09:27	0.63	-125	6.43	0.2071	3899.8898	13.42	33.6
MW-402	03/22/2017 11:45	10.19	-81.00	6.33	1.80	3.500	8.74	15.80
MW-402	03/22/2017 13:35	13.03	-76.00	6.27	0.80	3.220	17.71	88.10
MW-402	03/22/2017 13:50	8.03	-81.00	6.23	1.70	3.200	12.46	47.20
MW-402	04/24/2017 08:34	4.35	236	6.38	0.2076	0.0391	13.44	30.1
MW-402	04/24/2017 08:37	1.03	134	6.35	0.2114	0.0398	12.96	36.4
MW-402	04/24/2017 08:39	0.51	43	6.37	0.2129	0.0401	12.67	39.7
MW-402	04/24/2017 08:42	0.38	2	6.38	0.2132	0.0402	12.54	33
MW-402	04/24/2017 08:44	0.34	-18	6.38	0.2122	0.0400	12.47	43.4
MW-402	04/24/2017 08:46	0.3	-31	6.38	0.2118	0.0399	12.4	37.1
MW-402	04/24/2017 08:49	0.27	-39	6.38	0.2119	0.0399	12.36	37.5
MW-402	04/24/2017 08:51	0.24	-46	6.38	0.2120	0.0400	12.27	42.5
MW-402	04/24/2017 08:54	0.22	-51	6.39	0.2122	0.0400	12.25	36.5
MW-402	04/24/2017 08:56	0.21	-55	6.39	0.2112	0.0398	12.24	42.7
MW-402	04/24/2017 08:58	0.2	-57	6.37	0.2086	0.0394	12.27	40.4
MW-402	04/24/2017 09:01	0.16	-57	6.34	0.2060	0.0389	12.21	35.3
MW-402	04/24/2017 09:03	0.14	-56	6.31	0.2030	0.0384	12.1	29.3
MW-402	04/24/2017 09:06	0.12	-55	6.27	0.2008	0.0380	12.1	23.2
MW-402	04/24/2017 09:08	0.13	-54	6.25	0.1989	0.0376	12.02	46.3
MW-402	04/24/2017 09:10	0.13	-49	6.19	0.1958	0.0371	12.06	59.7
MW-402	04/24/2017 09:13	0.18	-45	6.14	0.1938	0.0367	12.08	115.6
MW-402	04/24/2017 09:15	0.23	-43	6.1	0.1924	0.0365	12.1	146.9
MW-402	04/24/2017 09:18	0.28	-41	6.08	0.1919	0.0364	12.15	155.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-402	04/24/2017 09:20	0.32	-40	6.07	0.1915	0.0363	12.21	160.2
MW-402	04/24/2017 09:22	0.35	-38.00	6.06	0.19	3.659	11.77	152.10
MW-402	01/24/2018 11:31	5.77	86	7.47	1.1304	0.1911	11.21	15.6
MW-402	01/24/2018 11:34	1.32	81	7.29	1.3310	0.2213	12.95	14.6
MW-402	01/24/2018 11:37	0.4	79	7.1	1.3671	0.2267	13.14	16.6
MW-402	01/24/2018 11:39	0.22	78	6.97	1.3925	0.2306	13.09	12.7
MW-402	01/24/2018 11:42	0.11	77	6.89	1.4581	0.2407	12.87	11.4
MW-402	01/24/2018 11:45	0.02	76	6.83	1.4367	0.2374	12.93	9.4
MW-402	01/24/2018 11:47	-0.06	76	6.79	1.5670	0.2575	12.27	9.3
MW-402	01/24/2018 11:50	-0.11	75	6.75	1.5374	0.2529	12.44	9.2
MW-402	01/24/2018 11:53	-0.14	74	6.72	1.6163	0.2648	12.39	8
MW-402	01/24/2018 11:55	-0.16	73	6.7	1.5795	0.2591	12.62	5.9
MW-402	01/24/2018 11:58	-0.17	73	6.68	1.6204	0.2651	12.83	5.4
MW-402	01/24/2018 12:01	-0.17	72	6.67	1.5951	0.2614	12.69	6.6
MW-402	01/24/2018 12:03	-0.17	72	6.65	1.6228	0.2655	12.9	5.1
MW-402	01/24/2018 12:06	-0.19	71	6.65	1.6038	0.2628	12.53	4.7
MW-402	01/24/2018 12:08	-0.19	71	6.63	1.6190	0.2650	12.65	4.4
MW-402	01/24/2018 12:11	-0.2	70	6.63	1.5835	0.2596	12.85	3.8
MW-402	01/24/2018 12:14	-0.2	70	6.62	1.6083	0.2633	12.93	4
MW-402	01/24/2018 12:16	-0.2	70	6.61	1.5813	0.2591	13.07	3.8
MW-402	01/24/2018 12:17	-0.20	70.00	6.61	1.58	26.000	12.93	3.84
MW-402	04/11/2018 12:41	6.11	95	7.32	0.1327	0.0026	11.6	142.5
MW-402	04/11/2018 12:43	1.53	47	6.92	0.1264	0.0025	11.45	163.1
MW-402	04/11/2018 12:46	0.98	30	6.74	0.1336	0.0026	11.18	190.4
MW-402	04/11/2018 12:49	0.84	23	6.62	0.1274	0.0025	11.2	172.4
MW-402	04/11/2018 12:51	0.86	18	6.54	0.1315	0.0025	11.16	193
MW-402	04/11/2018 12:54	0.83	16	6.47	0.1340	0.0026	11.29	187.4
MW-402	04/11/2018 12:57	0.78	13	6.42	0.1295	0.0025	11.55	191.5
MW-402	04/11/2018 12:59	0.81	11	6.39	0.1325	0.0026	11.22	177.7
MW-402	04/11/2018 13:00	0.81	11.00	6.39	0.13	2.573	11.1	177.70
MW-402	07/17/2018 11:31	1.28	-101	6.24	0.154	2.9310	33.27	36.2
MW-402	07/17/2018 11:33	1.82	-113	6.31	0.156	2.9660	20.82	66.4
MW-402	07/17/2018 11:36	1.53	-118	6.3	0.159	3.0120	19.52	62.4
MW-402	07/17/2018 11:39	1.33	-121	6.3	0.158	2.9970	19.29	62
MW-402	07/17/2018 11:42	1.27	-123	6.31	0.158	2.9990	19.15	62
MW-402	07/17/2018 11:45	1.2	-125	6.3	0.156	2.9610	19.32	59.8
MW-402	07/17/2018 11:47	1.15	-126	6.31	0.153	2.9080	19.52	55.6
MW-402	07/17/2018 11:50	1.11	-127	6.31	0.145	2.7660	19.68	44.5
MW-402	07/17/2018 11:52	1.09	-127	6.31	0.138	2.6480	19.98	38.5
MW-402	07/17/2018 11:55	1.06	-126	6.27	0.144	2.7490	20.1	26.4
MW-402	07/17/2018 11:57	1.07	-126	6.25	0.147	2.8000	19.87	24.3
MW-402	07/17/2018 12:00	1.05	-125	6.24	0.150	2.8540	19.78	17.6
MW-402	07/17/2018 12:02	1.01	-125	6.21	0.153	2.9140	19.47	15.1
MW-402	07/17/2018 12:05	0.99	-125	6.2	0.154	2.9380	19.37	14.5
MW-402	07/17/2018 12:08	0.98	-125	6.19	0.156	2.9680	19.08	11.5
MW-402	07/17/2018 12:11	0.96	-126	6.19	0.156	2.9650	19.09	14.7
MW-402	07/17/2018 12:14	0.94	-127	6.19	0.156	2.9730	19.08	11.9
MW-402	07/17/2018 12:19	0.94	-128.00	6.20	0.16	2.985	18.69	15.98
MW-402	10/25/2018 12:35	11.15	-96.10	6.45	2.46	4.586	18.84	16.80
MW-402	04/02/2019 13:25	7.3	-58.6	6.69	NM	2.816	10.69	43.1
MW-402	07/01/2019 10:05	1.49	-93.1	6.42	NM	3.009	17.2	815.9
MW-402	07/01/2019 10:10	0.87	-103.2	6.42	NM	2.91	17.09	346.7
MW-402	07/01/2019 10:15	0.57	-112.4	6.44	NM	2.874	17.06	347.6
MW-402	07/01/2019 10:20	0.38	-118	6.45	NM	2.832	16.99	440.7
MW-402	07/01/2019 10:25	0.27	-120.4	6.46	NM	2.831	16.94	1280.9
MW-402	07/01/2019 10:30	0.21	-117	6.47	NM	2.788	16.95	1730.6
MW-402	07/01/2019 10:35	0.18	-98.6	6.44	NM	2.92	16.98	622
MW-402	07/01/2019 10:40	0.16	-87.7	6.44	NM	2.973	16.97	411.2
MW-402	07/01/2019 10:45	0.15	-81	6.44	NM	2.997	16.8	360.6
MW-402	07/01/2019 10:50	0.12	-76.9	6.45	NM	3.005	16.61	300.6
MW-402	07/01/2019 11:05	0.12	-76.9	6.45	NM	3.005	16.61	300.6
MW-402	09/25/2019 09:25	4.15	-223.7	6.15	NM	2.226	16.96	41.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-402	09/25/2019 09:30	3.37	-240	6.26	NM	2.135	16.67	39.5
MW-402	09/25/2019 10:10	2.88	-182.4	6.32	NM	2.128	20.29	43.6
MW-402	09/25/2019 10:15	2.86	-192.2	6.31	NM	2.098	19.56	47.5
MW-402	09/25/2019 10:20	6.05	-151	6.25	NM	1.151	21.28	19.1
MW-402	09/25/2019 10:25	3.76	-167	6.28	NM	2.129	21.25	27.3
MW-402	09/25/2019 10:30	2.52	-182.4	6.29	NM	2.108	20.36	22.3
MW-402	09/25/2019 10:35	2.89	-189.3	6.29	NM	2.1	20.43	23.5
MW-402	09/25/2019 10:40	2.89	-192.2	6.29	NM	2.093	20.35	20.8
MW-402	09/25/2019 10:45	2.91	-193.6	6.29	NM	2.099	20.44	21.1
MW-402	01/06/2020 09:35	1.81	-101.8	6.27	NM	1.277	9.4	955.6
MW-402	01/06/2020 09:40	1.17	-109.3	6.32	NM	1.255	9.74	640.3
MW-402	01/06/2020 09:45	1.01	-112	6.35	NM	1.248	9.75	377.6
MW-402	01/06/2020 09:50	0.92	-111.5	6.37	NM	1.239	9.86	192
MW-402	01/06/2020 09:55	0.86	-110	6.39	NM	1.235	9.74	108.6
MW-402	01/06/2020 10:00	1.07	-108.4	6.39	NM	1.23	9.79	74.8
MW-402	01/06/2020 10:05	0.78	-107.3	6.41	NM	1.231	9.72	59.7
MW-402	01/06/2020 10:10	0.85	-106.2	6.42	NM	1.228	9.87	55.6
MW-402	01/06/2020 10:15	0.84	-105.1	6.42	NM	1.226	9.95	43.6
MW-402	01/06/2020 10:20	0.81	-104.8	6.41	NM	1.224	9.94	31.5
MW-402	04/03/2020 09:55	1.69	-67.5	6.46	NM	1.283	11.12	6.9
MW-402	07/08/2020 12:40	4.35	-90.6	6.33	1.63	3.12	20.34	774.8
MW-402	07/08/2020 12:45	4.68	-89.4	6.32	1.64	3.116	20.09	817.1
MW-402	07/08/2020 12:50	4.47	-90.2	6.34	1.63	3.112	19.97	850.1
MW-402	07/08/2020 12:55	7.48	-91.7	6.43	1.6	3.056	19.75	660.7
MW-402	07/08/2020 13:00	9.01	-94.9	6.46	1.59	3.038	19.87	345.3
MW-402	07/08/2020 13:05	7.86	-100.3	6.45	1.61	3.074	20.08	35.9
MW-402	07/08/2020 13:10	8.79	-102.9	6.42	1.63	3.106	19.69	18.5
MW-402	07/08/2020 13:15	6.55	-104.9	6.4	1.64	3.121	19.22	77.6
MW-402	07/08/2020 13:20	7.93	-104.7	6.38	1.64	3.125	18.88	68.7
MW-402	07/08/2020 13:25	7.78	-104.9	6.38	1.64	3.128	18.87	58.1
MW-402	09/24/2020 08:50	2.18	-120.2	6.51	1.87	3.578	19.7	68.1
MW-402	09/24/2020 08:55	0.73	-112.8	6.31	1.64	3.114	19.74	68.5
MW-402	09/24/2020 09:00	0.6	-115.3	6.32	1.58	3.022	19.92	96
MW-402	09/24/2020 09:05	0.58	-115.5	6.32	1.57	3.016	20.01	95.9
MW-402	09/24/2020 09:10	0.57	-115.3	6.31	1.57	3.007	20.18	82.9
MW-402	09/24/2020 09:15	0.57	-113.9	6.33	1.58	3.015	20.28	66.9
MW-402	09/24/2020 09:20	0.59	-112	6.29	1.58	3.029	20.32	47.3
MW-402	09/24/2020 09:25	0.61	-109.1	6.31	1.6	3.059	20.29	26.7
MW-402	09/24/2020 09:30	0.61	-105.8	6.21	1.62	3.093	20.19	16.2
MW-402	09/24/2020 09:35	0.65	-105.5	6.22	1.62	3.099	20.1	17.4
MW-402	09/24/2020 10:25	3.16	-91.3	6.21	1.86	3.522	20.65	52.5
MW-402	09/24/2020 10:35	1.51	-95.1	6.31	1.95	3.709	20.2	NM
MW-402	10/02/2020 11:35	NM	NM	NM	NM	NM	NM	52
MW-402	10/14/2020 10:35	NM	NM	NM	NM	NM	NM	65.7
MW-402	10/14/2020 10:50	1.69	6.47	6.46	1.11	2.165	19.33	108
MW-402	10/14/2020 10:55	1.19	-93.2	6.46	1.09	2.124	19.61	101.2
MW-402	10/14/2020 11:00	0.95	-96.4	6.46	1.08	2.107	19.87	113.7
MW-402	10/14/2020 11:05	0.89	-97.4	6.46	1.08	2.102	20.03	122.6
MW-402	10/14/2020 11:10	0.81	-98.6	6.46	1.07	2.093	20.23	134.6
MW-402	10/14/2020 11:15	0.79	-98.5	6.46	1.07	2.09	20.34	134.7
MW-402	10/14/2020 11:20	0.76	-72.2	6.52	1.07	2.1	20.66	128.6
MW-402	10/14/2020 11:25	0.77	-82.9	6.42	1.08	2.099	20.2	118.9
MW-402	10/14/2020 11:30	0.74	-81.7	6.37	1.08	2.103	19.83	65.1
MW-402	10/14/2020 11:35	0.69	-122.9	6.43	1.02	2.094	19.98	NM
MW-402	12/08/2020 09:45	2.2	-73.4	6.5	1.44	2.686	11.19	27.9
MW-402	12/08/2020 09:50	2.11	-82.9	6.59	1.45	2.669	10.89	23.8
MW-402	12/08/2020 09:55	1.7	-93	6.65	1.41	2.713	10.4	15
MW-402	12/08/2020 10:00	1.45	-96.1	6.68	1.43	2.755	9.38	13.6
MW-402	12/08/2020 10:05	1.29	-96.5	6.66	1.39	2.669	10.52	16.5
MW-402	12/08/2020 10:10	1.2	-97.1	6.69	1.4	2.691	10.64	15.3
MW-402	12/08/2020 10:15	1.18	-96.9	6.69	1.4	2.682	10.71	19.5
MW-402	12/08/2020 10:20	1.24	-96.6	6.69	1.38	2.648	10.83	27

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-402	12/08/2020 10:25	1.22	-96.3	6.69	1.36	2.611	10.93	32.9
MW-402	12/08/2020 10:30	1.32	-94.1	6.69	1.31	2.52	11.2	40.6
MW-402	12/08/2020 11:40	2.67	-73	6.82	1.13	2.2	12.19	18.4
MW-402	12/08/2020 12:03	2.13	-92.7	6.8	1.88	3.558	11.99	1371.8
MW-402	01/07/2021 12:35	3.21	-109.4	6.38	1.75	3.317	11.46	174.1
MW-402	01/07/2021 12:40	1.64	-125.9	6.47	1.77	3.355	11.82	95
MW-402	01/07/2021 12:45	1.37	-137	6.5	1.78	3.382	12.09	64.6
MW-402	01/07/2021 12:50	1.14	-142.1	6.51	1.79	3.395	12.08	62.3
MW-402	01/07/2021 12:55	1.23	-148.6	6.46	1.79	3.387	12.31	58.5
MW-402	01/07/2021 13:00	1.25	-150.1	6.51	1.79	3.39	12.04	46.2
MW-402	01/07/2021 13:05	1.25	-149.4	6.52	1.77	3.361	12.26	40.4
MW-402	01/07/2021 13:10	1.16	-148	6.45	1.77	3.358	12.23	35.2
MW-402	01/07/2021 13:15	1.17	-145.6	6.45	1.76	3.342	12.27	29.3
MW-402	01/07/2021 13:20	1.13	-144.2	6.47	1.76	3.332	12.36	27.8
MW-402	03/25/2021 14:05	6.28	-168.2	6.49	1.18	2.28	13.48	53.2
MW-402	03/25/2021 14:10	5.5	-164.2	6.41	1.18	2.284	15.02	36.9
MW-402	03/25/2021 14:15	5.23	-165.4	6.45	1.18	2.29	16.07	31.7
MW-402	03/25/2021 14:20	5.91	-176.4	6.42	1.23	2.368	14.59	9.7
MW-402	03/25/2021 14:25	6.69	-185.5	6.38	1.23	2.368	13.94	1.8
MW-402	03/25/2021 14:30	5.89	-190.9	6.36	1.2	2.33	13.68	15.6
MW-402	03/25/2021 14:35	6.44	-155.3	6.35	0.7	1.403	13.26	41.5
MW-402	03/25/2021 14:40	9.97	-144.4	6.24	0.55	1.099	12.6	30.5
MW-402	03/25/2021 14:45	9.73	-144.3	6.25	0.55	1.095	12.56	33.4
MW-402	03/25/2021 14:50	9.78	-148.9	6.19	0.64	1.283	12.37	13.4
MW-402	03/25/2021 15:45	7.34	-88.3	6.7	1.39	2.661	14.09	0
MW-402	03/25/2021 16:00	6.65	-74	6.52	1.55	2.96	13.82	245.3
MW-402	04/02/2021 13:35	3.43	-121.6	6.5	2.42	4.508	10.79	56.6
MW-402	04/02/2021 13:40	2.69	-129.4	6.46	2.39	4.466	10.9	48.1
MW-402	04/02/2021 13:45	2.43	-137.8	6.41	2.32	4.339	10.87	52.4
MW-402	04/02/2021 13:50	1.66	-140.2	6.35	2.26	4.233	10.77	77.7
MW-402	04/02/2021 13:55	1.9	-138.4	6.33	2.22	4.158	10.66	56.6
MW-402	04/02/2021 14:00	1.73	-97.7	6.02	1.96	3.683	10.47	11.2
MW-402	04/02/2021 14:05	1.03	-122.1	6.27	2.24	4.197	10.85	5.7
MW-402	04/02/2021 14:10	0.97	-121.7	6.31	2.31	4.318	10.52	5
MW-402	04/02/2021 14:15	1.24	-99.5	6.33	2.37	4.419	10.69	5.1
MW-402	04/02/2021 14:20	1.2	-97.7	6.34	2.41	4.472	10.69	5.4
MW-402	01/14/2022 10:20	1.97	-80.4	6.62	0.9	1.771	12.35	110.1
MW-402	01/14/2022 10:25	1.29	-82	6.65	0.9	1.769	11.74	124
MW-402	01/14/2022 10:30	0.8	-79.1	6.63	0.9	1.766	11.49	143.4
MW-402	01/14/2022 10:35	0.73	-78.6	6.63	0.9	1.766	11.37	141.9
MW-402	01/14/2022 10:40	0.73	-78.3	6.61	0.9	1.761	11.53	124.2
MW-402	01/14/2022 10:45	0.67	-78.4	6.59	0.9	1.771	11.4	114.2
MW-402	01/14/2022 10:50	0.68	-79.1	6.58	0.91	1.776	11.6	107.7
MW-402	01/14/2022 10:55	0.63	-78.4	6.57	0.9	1.769	11.61	112.5
MW-402	04/05/2022 10:45	1.14	-95.6	6.23	1.36	2.612	12.56	15.1
MW-402	04/05/2022 10:50	1.05	-103.3	6.27	1.36	2.616	12.55	18.3
MW-402	04/05/2022 10:55	1.12	-111.9	6.44	0.9	1.804	12.33	43.5
MW-402	04/05/2022 11:00	12.9	-106.3	6.44	0.87	1.708	12.32	50
MW-402	04/05/2022 11:05	1.03	-89.1	6.24	1.15	2.23	12.19	11
MW-402	04/05/2022 11:10	0.98	-90.7	6.24	1.18	2.295	12.11	7.6
MW-402	04/05/2022 11:15	0.95	-91.7	6.24	1.22	2.343	12.09	7.7
MW-402	04/05/2022 11:20	0.86	-110.2	6.26	1.31	2.515	12.21	5.2
MW-402	04/05/2022 11:25	0.85	-101	6.27	1.32	2.53	12.18	4
MW-402	04/05/2022 11:30	0.84	-101.6	6.27	1.33	2.548	12.17	4.1
MW-403	06/06/2014 10:10	1.48	-118.6	5.67	7.99	13.650	14.31	8.80
MW-403	06/06/2014 11:00	22.69	-36.3	6.03	7.03	13.650	17.69	13.10
MW-403	06/06/2014 15:35	24.66	-48.2	6.16	7.84	12.440	16.54	28.40
MW-403	07/28/2014 11:42	4.28	200.8	6.54	10.12	0.917	19.73	230.30
MW-403	07/28/2014 12:30	9.86	126.2	6.86	10.88	0.148	21.58	2.60
MW-403	07/28/2014 12:55	8.99	174.6	6.86	10.22	0.111	20.55	12.50
MW-403	12/04/2014 10:05	11.51	-254.2	6.60	NM	17.150	13.25	2.90
MW-403	12/04/2014 10:50	1.42	-270.5	6.48	NM	20.080	15.31	3.60

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-403	12/04/2014 11:10	7.96	-232	6.53	NM	19.670	14.31	13.10
MW-403R	10/18/2018 11:05	3.60	-62.00	7.49	7.84	13.500	16.18	49.90
MW-403R	10/18/2018 12:20	1.98	-91.60	7.81	7.85	13.540	17.61	21.90
MW-403R	10/18/2018 12:30	1.83	-138.50	9.10	3.98	7.174	18.12	34.10
MW-403R	01/17/2019 11:05	4.19	148	8.07	9.7	16.44	11.33	8.2
MW-403R	04/08/2019 13:40	3.61	-24	7.45	15.01	24.7	21.16	0
MW-403R	07/12/2019 10:15	5.46	-57.8	6.98	NM	9.287	21.53	22.5
MW-403R	07/12/2019 11:00	4.29	-105.3	7.43	12.29	12.32	19.04	2.3
MW-403R	07/12/2019 11:10	6.47	-95.8	7.79	6.18	10.88	19.41	5.1
MW-403R	10/01/2019 08:20	1.4	-163.3	7.16	NM	9.238	19.79	17.2
MW-403R	10/01/2019 09:35	0.53	-257.4	6.83	7.92	13.65	18.19	7.8
MW-403R	10/01/2019 10:00	0.95	-265.7	6.82	8.04	13.83	18.47	17.6
MW-403R	01/22/2020 13:00	4.33	-27.8	7.91	NM	14.5	9.5	5.2
MW-403R	01/22/2020 14:05	3.4	-150.4	7.87	12.08	20.16	13.3	0
MW-403R	01/22/2020 14:15	5.81	-81.2	7.75	11.65	19.55	12.6	14.4
MW-403R	03/25/2020 09:30	0.25	-33.4	7.22	NM	18.95	9.95	9.1
MW-403R	03/25/2020 10:40	2.65	3.8	7.42	10.91	18.38	12.16	6.3
MW-403R	12/10/2020 12:15	6.66	297.9	12.79	82.53	111.2	14.59	48
MW-403R	12/10/2020 12:20	6.84	322.2	12.96	83.86	113.1	14.37	40.5
MW-403R	12/10/2020 12:25	6.07	343.8	13.11	84.1	113.7	14.7	34.6
MW-403R	12/10/2020 12:30	4.36	361.2	13.14	85.01	114.1	15.83	52.9
MW-403R	12/10/2020 12:35	3.51	409.5	13.26	84.15	113.3	14.93	110.7
MW-403R	12/10/2020 12:40	4.23	398.8	13.27	84.03	113.5	14.92	87.3
MW-403R	12/10/2020 12:45	4.65	378.9	13.19	83.02	113.6	9.95	62.5
MW-403R	12/10/2020 12:50	4.56	376.9	13.21	6.56	113.5	9.94	67.2
MW-403R	12/10/2020 12:55	4.45	382.3	13.2	6.34	113.1	9.89	68.2
MW-403R	12/10/2020 13:00	4.43	383.4	12.98	6.34	112.6	9.86	66.5
MW-403R	12/11/2020 14:00	1.21	467.2	13.43	121.54	152.2	17.76	1388.6
MW-403R	12/11/2020 14:25	1.09	398.8	13.56	120.24	151	17.43	1384.7
MW-403R	03/15/2021 13:50	4.82	42.2	14.46	104.42	127.4	8.29	22.2
MW-403R	03/15/2021 13:55	4.31	46.7	14.49	104.55	137.4	8.57	21.9
MW-403R	03/15/2021 14:00	3.58	53.6	14.51	104.77	137.4	9.2	21.3
MW-403R	03/15/2021 14:05	3.24	58.7	14.53	105.01	137.5	9.9	20
MW-403R	03/15/2021 14:10	2.68	60.5	14.59	105.07	137.4	10.18	19.7
MW-403R	03/15/2021 14:15	2.59	62.7	14.6	105.07	137.3	10.17	19.1
MW-403R	03/15/2021 14:20	2.54	65.6	14.6	105.03	136.5	10.52	23.9
MW-403R	03/15/2021 14:25	3.64	69.8	14.6	104.27	136.3	11.03	25
MW-403R	03/15/2021 14:30	3.64	70	14.6	104.33	136.2	11.09	24.5
MW-403R	03/22/2021 13:45	7.23	-73.9	13.17	104.87	136.1	14.31	791.2
MW-403R	03/22/2021 13:50	6.37	-38.4	13.13	105.16	136.2	14.58	1270.9
MW-403R	03/22/2021 13:55	4.79	-23.5	13.17	106	137.1	15.02	1316
MW-403R	03/22/2021 14:00	3.46	-34.2	13.24	105.67	136.7	15.1	1317
MW-403R	03/22/2021 14:05	1.82	-32.5	13.34	104.55	135.7	15.06	1315.4
MW-403R	03/22/2021 14:10	1.42	-34.1	13.39	26.2	135.2	15.19	580.9
MW-403R	03/22/2021 14:15	1.05	-37	13.45	104.02	134.9	15.31	396.3
MW-403R	03/22/2021 14:20	0.81	-37.2	13.47	103.18	134	15.46	198
MW-403R	03/22/2021 14:25	0.61	-36.1	13.52	103.51	13.42	16.21	177.1
MW-403R	03/22/2021 14:30	0.68	-37.3	13.55	103.87	134.5	16.76	139.6
MW-403R	05/06/2021 12:25	7.49	5	12.88	52.55	74.49	17.5	1.1
MW-403R	05/06/2021 12:30	10.02	10.6	13.2	56.38	79.51	16.55	0
MW-403R	05/06/2021 12:35	11.44	9.4	13.28	58.31	82.71	15.97	1.2
MW-403R	05/06/2021 12:40	12.27	6.8	13.31	59.01	83.83	15.7	1.4
MW-403R	05/06/2021 12:45	12.94	-2.2	13.35	58.97	83.68	15.02	0.4
MW-403R	05/06/2021 12:50	10.51	-17.7	13.33	56.02	80.35	14.63	15
MW-403R	05/06/2021 12:55	9.35	-21	13.3	54.35	78.39	14.32	10.6
MW-403R	05/06/2021 13:00	8.72	-23.9	13.29	54.13	77.87	14.94	14.2
MW-403R	05/06/2021 13:05	8.01	-27.2	13.29	54.57	78.37	15.01	14.9
MW-403R	05/06/2021 13:10	6.88	-33.6	13.3	56.37	80.77	15.28	20.5
MW-403R	03/10/2022 09:05	0.86	-176.2	13.96	67.22	94.08	12.07	48
MW-403R	03/10/2022 09:10	0.93	-177.5	13.97	67.87	91.77	11.99	43.7
MW-403R	03/10/2022 09:15	0.54	-182	14.02	69.74	97.33	11.75	43.8
MW-403R	03/10/2022 09:20	0.3	-199.5	14.07	73.92	101.6	11.32	42.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-403R	03/10/2022 09:25	0.1	-246.8	14.16	79.16	108.4	11.35	34.1
MW-403R	03/10/2022 09:30	0.25	-263	14.19	79.26	108.8	10.95	33.5
MW-403R	03/10/2022 09:35	0.24	-285.5	14.19	78.3	107.6	11.03	31.1
MW-403R	03/10/2022 09:40	0.2	-296.4	14.18	7.56	106.8	10.99	28.4
MW-403R	03/10/2022 09:45	0.19	-294.8	14.18	76.73	105.9	10.88	27
MW-403R	03/10/2022 09:50	0.16	-252.4	14.19	75.64	105	10.93	25.5
MW-404	06/23/2014 12:45	1.53	-19.7	5.23	5.06	8.882	19.26	29.50
MW-404	06/23/2014 13:10	0.96	-18.7	5.05	5.35	8.988	18.56	48.20
MW-404R	04/26/2017 13:40	1.01	-54.40	6.78	1.09	2.766	13.55	0.0000
MW-404R	04/26/2017 14:10	3.09	-78.20	6.85	1.59	3.027	13.23	19.70
MW-404R	04/26/2017 14:20	3.47	-82.40	6.88	1.60	3.111	13.26	53.20
MW-404R	09/05/2018 09:50	2.40	-101.60	6.85	2.56	4.787	23.89	4.60
MW-404R	09/05/2018 11:10	1.24	-106.90	6.89	2.53	4.755	29.12	125.10
MW-404R	09/05/2018 11:20	1.79	-102.10	6.78	2.66	4.958	23.23	15.20
MW-404R	12/10/2018 09:55	7.27	-88.50	6.95	1.21	2.349	10.72	16.80
MW-404R	12/10/2018 10:15	7.39	-81.20	6.97	1.20	2.242	10.21	40.10
MW-404R	12/10/2018 10:25	7.65	-74.30	6.98	1.16	2.248	9.36	147.90
MW-404R	02/22/2019 12:10	3.13	-90.00	7.21	2.35	4.394	9.93	15.00
MW-404R	02/22/2019 12:35	5.03	-68.20	6.69	2.33	4.372	8.84	24.00
MW-404R	02/22/2019 12:50	5.22	-71.30	6.75	2.33	4.356	8.89	27.20
MW-404R	06/10/2019 09:15	0.2	-100.9	6.78	NM	4.291	16.74	3.4
MW-404R	06/10/2019 09:45	7.87	-66.7	7.24	2	3.458	16.83	41.8
MW-404R	06/10/2019 09:55	5.19	-71.3	7.22	0.021	3.67	16.14	61.5
MW-404R	06/10/2019 10:05	1.36	-91.2	6.77	NM	4.526	15.47	6.6
MW-404R	06/10/2019 10:10	0.78	-96.3	6.75	NM	4.494	15.89	0.1
MW-404R	06/10/2019 10:15	0.61	-98	6.75	NM	4.481	16.16	0
MW-404R	06/10/2019 10:20	0.46	-98.4	6.75	NM	4.445	16.39	0.7
MW-404R	06/10/2019 10:25	0.32	-93.7	6.74	NM	4.376	16.58	2.8
MW-404R	06/10/2019 10:30	0.28	-93.4	6.75	NM	4.277	16.73	4.7
MW-404R	06/10/2019 10:35	0.25	-92.3	6.75	NM	4.239	16.79	6
MW-404R	06/10/2019 10:40	0.23	-95.4	6.76	NM	4.236	16.8	4.4
MW-404R	06/10/2019 10:45	0.22	-96.2	6.77	NM	4.259	16.71	4.1
MW-404R	06/10/2019 10:50	0.2	-100.9	6.78	NM	4.291	16.74	3.4
MW-404R	09/12/2019 10:35	2.61	-103.8	6.78	NM	4.577	23.66	7.5
MW-404R	09/12/2019 11:15	2.6	-109.4	6.82	2.75	5.103	26.72	23.2
MW-404R	09/12/2019 11:45	4.42	-100.9	6.83	1.47	2.841	24.96	107.9
MW-404R	12/13/2019 08:55	18.56	132.6	5.95	NM	2.991	10.87	14.1
MW-404R	12/13/2019 09:00	6.28	63.6	6.57	NM	3.097	11.32	20.8
MW-404R	12/13/2019 09:05	4.72	24.8	6.67	NM	2.923	12.17	25.6
MW-404R	12/13/2019 09:10	25.45	-0.5	6.74	NM	3.139	11.2	22.9
MW-404R	12/13/2019 09:15	42.89	-9.9	6.83	NM	3.149	10.63	20.2
MW-404R	12/13/2019 09:20	19.73	-18.4	6.86	NM	3.128	11.09	17.8
MW-404R	12/13/2019 09:25	5.37	-31.1	6.81	NM	3.229	12.86	16.9
MW-404R	12/13/2019 09:30	29.79	-40.6	6.86	NM	3.305	12.76	14.8
MW-404R	12/13/2019 09:35	28.85	-44.9	6.91	NM	3.272	12.87	4.7
MW-404R	12/13/2019 09:40	8.21	-56.1	6.89	NM	3.425	13.79	8.4
MW-404R	12/13/2019 10:40	5.42	-8.5	7.47	1.95	3.67	12.64	121.4
MW-404R	12/13/2019 11:05	3.06	-54.9	7.02	1.97	3.712	10.31	71.1
MW-404R	06/19/2020 09:20	1.32	-53.6	6.81	2.18	4.106	21.78	0
MW-404R	06/19/2020 09:25	0.58	-78.6	6.75	2.14	4.039	21.47	0
MW-404R	06/19/2020 09:30	0.4	-90	6.74	2.06	3.936	21.83	0
MW-404R	06/19/2020 09:35	0.42	-90.5	6.74	2.04	3.866	22.4	0
MW-404R	06/19/2020 09:40	0.36	-92	6.75	1.96	3.72	22.37	0
MW-404R	06/19/2020 09:45	0.3	-97	6.77	1.98	3.744	22.05	0
MW-404R	06/19/2020 09:50	0.28	-100.9	6.78	2.05	3.845	21.5	0
MW-404R	06/19/2020 09:55	0.27	-104.3	6.78	2.11	3.973	21.08	0
MW-404R	06/19/2020 10:00	0.28	-103.7	6.78	2.18	4.1	20.78	0
MW-404R	06/19/2020 10:05	0.28	-103.3	6.78	2.21	4.148	20.5	2.2
MW-404R	06/19/2020 10:06	0.28	-103.3	6.78	2.21	4.148	20.5	2.2
MW-404R	06/19/2020 10:35	0.22	-110.8	6.8	2.19	3.987	19.03	0
MW-404R	06/19/2020 10:45	3.28	-128.3	6.77	2.19	3.997	19.45	0
MW-404R	10/02/2020 10:10	3.22	-7.9	6.89	2.83	5.246	20.47	7.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-404R	10/02/2020 10:25	4.53	-10.8	6.92	2.83	5.237	20.28	NM
MW-404R	10/06/2020 10:25	NM	NM	NM	NM	NM	NM	10.3
MW-404R	12/18/2020 09:55	10.86	55.5	7.43	0.01	0.025	12.25	4
MW-404R	12/18/2020 10:00	10.78	38.9	7.41	1.4	0.059	10.8	7.6
MW-404R	12/18/2020 10:05	1.84	-5.2	6.91	2.71	5.028	8.81	8.4
MW-404R	12/18/2020 10:10	0.93	-22.7	6.83	2.66	4.947	8.81	8.8
MW-404R	12/18/2020 10:15	0.9	-32.5	6.8	2.65	4.942	7.66	8.9
MW-404R	12/18/2020 10:20	2.08	-34.2	6.79	2.64	4.922	7.19	9.7
MW-404R	12/18/2020 10:25	2.85	-34.8	6.79	2.63	4.912	6.94	9.9
MW-404R	12/18/2020 10:30	3.48	-34.5	6.81	2.63	4.904	6.69	10.2
MW-404R	12/18/2020 10:35	4.05	-33.8	6.82	2.62	4.895	6.47	10.6
MW-404R	12/18/2020 10:40	4.55	-33	6.83	2.62	4.887	6.3	10.9
MW-404R	12/18/2020 11:20	5.68	0.6	6.98	2.64	4.899	10.17	11.4
MW-404R	12/18/2020 11:30	7.65	-15.7	7.02	2.47	5.023	9.34	13.5
MW-404R	03/12/2021 12:20	0.95	-60.7	6.79	1.27	2.459	11.1	0
MW-404R	03/12/2021 12:25	0.84	-65.2	6.78	1.28	2.471	12.16	0
MW-404R	03/12/2021 12:30	1.01	-71.2	6.79	1.29	2.487	13.86	0
MW-404R	03/12/2021 12:35	0.98	-73.7	6.8	1.29	2.489	14.5	0
MW-404R	03/12/2021 12:40	0.61	-74.8	6.77	1.21	2.361	12.27	1.3
MW-404R	03/12/2021 12:45	0.47	-71.4	6.84	1.14	2.214	10.61	0
MW-404R	03/12/2021 12:50	0.4	-73	6.83	1.18	2.282	10.28	0
MW-404R	03/12/2021 12:55	0.28	-81.2	6.83	1.3	2.488	10.49	0
MW-404R	03/12/2021 13:00	1.56	-80.3	6.84	1.31	2.532	11.55	0
MW-404R	03/12/2021 13:05	2.88	-81.6	6.9	1.28	2.527	12.84	0
MW-404R	03/12/2021 13:45	2.75	-102.5	6.87	1.36	2.622	12.98	8.9
MW-404R	03/12/2021 14:00	4.7	-107.3	6.99	1.3	2.498	16.27	38.1
MW-404R	05/26/2021 13:40	3.57	-99.5	7.41	2.16	4.06	22.15	26.7
MW-404R	05/26/2021 13:45	2.97	-93.8	7.09	2.19	4.131	21.12	17.8
MW-404R	05/26/2021 13:50	2.01	-92.8	6.95	2.26	4.239	21.6	12.1
MW-404R	05/26/2021 13:55	1.52	-94.1	6.91	2.25	4.23	22.54	10.1
MW-404R	05/26/2021 14:00	1.25	-98.8	6.89	2.22	4.176	22.92	9.7
MW-404R	05/26/2021 14:05	1.19	-99.6	6.89	2.2	4.142	23	9.7
MW-404R	05/26/2021 14:10	1.14	-99.7	6.88	2.16	4.085	23.06	9.5
MW-404R	03/04/2022 09:20	1.11	-110.7	6.53	1.9	3.604	6.97	-20.7
MW-404R	03/04/2022 09:25	1.08	-116.4	6.5	1.85	3.513	7.03	-19.2
MW-404R	03/04/2022 09:30	1.12	-118.3	6.59	1.69	3.226	6.85	-18.6
MW-404R	03/04/2022 09:35	1.11	-117	6.48	1.68	3.208	6.8	-18.5
MW-404R	03/04/2022 09:40	1.05	-110.9	6.58	1.65	3.172	5.65	0
MW-404R	03/04/2022 09:45	1.04	-109.9	6.58	1.65	3.16	5.51	0
MW-404R	03/04/2022 09:50	1.06	-109.4	6.57	1.64	3.156	5.45	0
MW-404R	03/04/2022 09:55	1.05	-107.3	6.57	1.64	3.145	5.17	0
MW-404R	03/04/2022 10:00	1.03	-105.9	6.55	1.62	3.121	4.81	0
MW-404R	03/04/2022 10:05	1.01	-105	6.57	1.61	3.105	4.62	0
MW-405	08/15/2014 12:45	0.25	-58.2	6.40	0.83	1.647	23.68	21.60
MW-405	08/15/2014 13:10	0.22	-61.1	6.44	0.88	1.655	23.08	12.10
MW-405	08/15/2014 13:30	1.07	-78.7	6.40	0.80	1.648	24.11	122.40
MW-405	12/10/2014 09:25	7.27	-67.7	7.14	NM	1.111	9.97	10.20
MW-405	12/10/2014 09:40	0.77	-92.4	6.99	NM	1.162	10.75	204.10
MW-405	12/10/2014 10:00	5.38	-30.8	6.84	NM	1.287	11.17	987.30
MW-405	12/11/2014 14:13	0.52	-98	6.63	0.11	2.236	12.26	1107.40
MW-405	12/12/2014 11:14	-0.24	-177	7.13	0.11	2.091	10.01	16.30
MW-405	05/09/2017 10:49	1.75	-152.00	6.87	0.11	2.183	13.64	38.40
MW-405	05/09/2017 13:22	1.58	-44.00	7.07	0.09	1.852	12.52	1065.90
MW-405	02/13/2018 12:40	1.16	-140.40	7.65	0.45	0.952	6.17	8.10
MW-405	02/13/2018 13:50	1.77	-104.90	7.97	5.54	1.087	8.88	5.70
MW-405	02/13/2018 14:05	3.75	-111.80	8.17	0.89	1.618	10.07	56.80
MW-405	05/21/2018 10:35	1.85	-125	6.8	0.127	2.445	22.27	7.1
MW-405	05/21/2018 10:37	1.06	-130	6.86	0.122	2.342	18.19	14.3
MW-405	05/21/2018 10:39	0.12	-129	6.82	0.123	2.368	17.07	12.4
MW-405	05/21/2018 10:41	-0.25	-130	6.84	0.120	2.308	16.99	13.3
MW-405	05/21/2018 10:43	-0.19	-131	6.85	0.119	2.296	16.92	11
MW-405	05/21/2018 10:45	-0.35	-132	6.87	0.118	2.283	16.93	9.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-405	05/21/2018 10:48	-0.51	-132	6.87	0.119	2.294	17.1	9.9
MW-405	05/21/2018 10:50	-0.42	-133	6.88	0.122	2.349	16.88	9
MW-405	05/21/2018 10:52	-0.53	-133	6.87	0.121	2.341	16.99	8.3
MW-405	05/21/2018 10:54	-0.57	-134	6.88	0.122	2.351	16.67	9.1
MW-405	05/21/2018 10:56	-0.62	-134	6.88	0.121	2.342	17.01	7.5
MW-405	05/21/2018 10:58	-0.56	-135	6.88	0.123	2.375	16.78	7.2
MW-405	05/21/2018 11:01	-0.64	-135	6.89	0.122	2.354	16.65	7
MW-405	05/22/2018 11:01	-0.64	-135.00	6.89	0.12	2.344	16.83	6.98
MW-405	05/22/2018 11:16	0.22	-139.00	6.90	0.05	1.085	15.38	9.10
MW-405	05/22/2018 11:25	1.90	-87.00	6.92	0.36	6.645	13.31	1706.70
MW-405	08/29/2018 13:00	2.78	-73.80	6.13	0.76	1.510	23.57	5.30
MW-405	08/29/2018 13:40	4.08	-24.70	6.01	0.81	1.621	24.56	3.30
MW-405	08/29/2018 14:00	4.27	-25.50	6.26	0.76	1.513	24.41	240.70
MW-405	11/19/2018 13:35	3.33	-127.50	6.96	0.74	1.472	15.29	5.90
MW-405	11/19/2018 14:10	3.07	21.30	6.84	0.82	1.613	16.01	21.40
MW-405	11/19/2018 14:20	3.77	-81.90	6.83	0.81	1.599	16.06	167.40
MW-405	02/26/2019 13:05	2.47	-46.2	6.56	NM	1.893	7.46	65.6
MW-405	02/26/2019 14:00	3.23	-7.4	6.75	0.86	1.692	9.4	81.8
MW-405	09/03/2019 10:05	1.22	-160.1	6.35	NM	1.418	24.56	5.3
MW-405	09/03/2019 10:10	1	-177.7	6.44	NM	1.295	25.03	3
MW-405	09/03/2019 10:15	1.02	-178.1	6.48	NM	1.272	25.28	3.2
MW-405	09/03/2019 10:20	0.74	-179.3	6.5	NM	1.258	25.18	4.2
MW-405	09/03/2019 10:25	0.94	-166.6	6.53	NM	1.225	25.3	5.2
MW-405	09/03/2019 10:30	0.76	-161.3	6.5	NM	1.258	25.36	7.1
MW-405	09/03/2019 10:35	0.74	-158.9	6.47	NM	1.293	25.34	12
MW-405	09/03/2019 10:40	1.05	-167.1	6.43	NM	1.367	24.68	8.9
MW-405	09/03/2019 10:45	1.16	-161.7	6.43	NM	1.348	24.77	9.4
MW-405	09/03/2019 10:50	1.55	-156.4	6.43	NM	1.346	24.82	9.9
MW-405	09/03/2019 14:46	1.55	-156.4	6.43	NM	1.346	24.82	9.9
MW-405	09/03/2019 16:20	0	0	0	0	0	0	0
MW-405	09/03/2019 16:24	0	0	0	0	0	0	0
MW-405	04/09/2020 11:05	0.41	-80.3	6.73	NM	1.818	11.24	0.9
MW-405	04/09/2020 11:30	3.22	-36.9	6.65	0.97	1.901	12.72	23.3
MW-405	10/01/2020 14:00	NM	NM	NM	NM	NM	NM	14.2
MW-405	10/06/2020 12:35	0.53	-3.1	8.44	0.52	1.046	23.93	22.8
MW-405	10/06/2020 12:40	1.1	2.2	6.9	1.05	2.056	22.8	20.5
MW-405	10/06/2020 12:45	1.03	18.2	6.34	1.02	1.991	21.61	16.1
MW-405	10/06/2020 12:50	1.04	16.2	6.35	1.01	1.983	21.6	15
MW-405	10/06/2020 12:55	1.09	-7	6.27	0.99	1.947	21.4	13.3
MW-405	10/06/2020 13:00	1.21	-37.7	6.21	0.97	1.913	21.48	12.3
MW-405	10/06/2020 13:05	1.87	-55.3	6.17	0.98	1.913	21.25	11.7
MW-405	10/06/2020 13:10	8.69	-69.8	6.14	0.98	1.918	21.32	11.6
MW-405	10/06/2020 13:15	12.16	-77.9	6.1	0.98	1.929	21.64	11.5
MW-405	10/06/2020 13:20	12.79	-75.3	6.1	0.99	1.933	21.63	11.6
MW-405	10/06/2020 13:50	0.99	-7.8	7.86	1.05	2.061	21.98	14.8
MW-405	10/06/2020 14:00	3.85	-98.9	7.85	1.06	2.074	21.53	NM
MW-406	06/20/2014 10:30	0.64	-34.3	6.34	0.56	1.111	18.52	30.70
MW-406	06/20/2014 11:05	0.40	-28	6.46	0.51	1.016	15.84	32.90
MW-406	06/20/2014 12:15	0.42	-50.7	6.45	0.63	1.236	20.03	628.40
MW-406	08/12/2014 11:05	0.78	-41.7	6.39	0.61	1.236	23.57	5.80
MW-406	08/12/2014 11:40	0.59	-33.3	6.32	0.63	1.269	24.12	15.80
MW-406	08/13/2014 09:05	0.76	-40.4	6.35	0.61	1.259	25.11	28.80
MW-406	12/03/2014 10:30	2.47	-59.9	6.56	0.48	0.957	12.02	14.10
MW-406	12/03/2014 11:10	0.37	-85.8	6.42	0.60	1.193	14.40	16.60
MW-406	12/03/2014 11:22	0.78	-83.9	6.46	0.58	1.172	11.12	23.20
MW-406	03/11/2015 09:15	0.43	-59	7.55	0.40	0.779	6.27	31.70
MW-406	03/11/2015 09:45	0.0000	-57	6.42	0.40	0.782	7.05	54.80
MW-406	03/11/2015 09:55	16.24	-58	6.44	0.40	0.794	7.91	552.00
MW-406	03/08/2017 11:20	8.13	27.7	8.01	0.46	0.914	13.49	18.40
MW-406	03/08/2017 11:30	8.06	-1.1	7.55	0.44	0.897	17.52	170.00
MW-406	09/04/2018 13:25	0.22	-30.60	6.39	0.52	1.064	25.44	7.30
MW-406	09/04/2018 14:05	0.55	-39.30	6.51	0.59	1.196	22.55	10.90

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-406	09/04/2018 14:15	0.31	-34.50	6.54	0.55	1.110	28.2	16.20
MW-406	12/10/2018 13:05	7.86	-60.4	6.63	NM	0.515	10.87	26.2
MW-406	12/10/2018 13:20	10.74	-28.50	6.53	0.28	0.566	13.57	32.00
MW-406	12/10/2018 13:50	12.72	-65.10	6.57	0.35	0.704	16.36	15.30
MW-406	12/10/2018 14:00	14.74	-46.10	6.66	0.31	0.632	15.02	23.80
MW-406	02/25/2019 10:10	3.33	61.20	6.71	0.37	0.757	9.22	74.50
MW-406	02/25/2019 11:00	5.35	-38.00	6.91	0.47	0.954	9.59	8.80
MW-406	02/25/2019 11:10	4.72	-44.10	6.95	0.49	0.978	10.61	29.70
MW-406	06/06/2019 10:05	0.75	-11.5	6.59	NM	1.018	18.61	403.9
MW-406	06/06/2019 10:10	0.53	-38.8	6.59	NM	1.006	19.35	332.2
MW-406	06/06/2019 10:15	0.43	-64.1	6.61	NM	0.946	19.62	151
MW-406	06/06/2019 10:20	0.39	-70.4	6.67	NM	0.699	20.39	156.4
MW-406	06/06/2019 10:25	0.36	-68.2	6.67	NM	0.586	20.9	55.5
MW-406	06/06/2019 10:30	0.28	-68.1	6.67	NM	0.552	21.5	70
MW-406	06/06/2019 10:35	0.24	-74.2	6.67	NM	0.639	20.58	66.4
MW-406	06/06/2019 10:40	0.24	-81.2	6.68	NM	0.762	20.06	52.1
MW-406	06/06/2019 10:45	0.25	-87.7	6.7	NM	0.869	19.55	35.8
MW-406	06/06/2019 10:50	0.27	-94.3	6.74	NM	0.954	19.37	1.2
MW-406	06/06/2019 13:10	0.27	-94.3	6.74	NM	0.954	19.37	1.2
MW-406	06/06/2019 14:05	3.17	-25.9	6.88	0.52	1.053	16.85	34.9
MW-406	06/06/2019 14:15	5.17	-42.2	6.71	0.52	1.046	15.41	21.1
MW-406	09/11/2019 12:30	2.69	-61.8	6.5	NM	0.91	22.96	2.9
MW-406	09/11/2019 13:36	4.25	-39	6.39	0.23	0.902	24.11	4.7
MW-406	09/11/2019 13:53	3.33	-45.2	6.39	0.45	0.94	23.29	4.5
MW-406	12/09/2019 13:45	1.86	10.1	6.87	NM	0.88	15.35	7.4
MW-406	12/09/2019 13:50	1.83	-52.7	6.55	NM	0.847	15.95	2.7
MW-406	12/09/2019 13:55	1.9	-59.4	6.53	NM	0.843	15.66	1.8
MW-406	12/09/2019 14:00	2.2	-61.9	6.53	NM	0.837	15.68	2.5
MW-406	12/09/2019 14:05	1.57	-61.3	6.48	NM	0.81	15.54	1.4
MW-406	12/09/2019 14:10	0.93	-52.7	6.36	NM	0.779	15.19	2.1
MW-406	12/09/2019 14:15	0.78	-48	6.28	NM	0.784	15.03	1.2
MW-406	12/09/2019 14:20	0.66	-45.8	6.23	NM	0.789	14.92	2
MW-406	12/09/2019 14:25	0.5	-49.6	6.25	NM	0.82	15.47	2
MW-406	12/09/2019 14:30	0.42	-52.6	6.25	NM	0.851	15.59	1.4
MW-406	12/09/2019 14:55	3.25	-32.8	6.6	0.44	0.891	14.41	5
MW-406	12/09/2019 15:05	1.6	-63.8	6.54	0.45	0.905	15.64	673
MW-406	06/18/2020 13:00	5.26	-18.1	8	0.6	0.885	20.1	1.4
MW-406	06/18/2020 13:05	1.12	-62.7	6.95	0.53	1.06	19.07	0.3
MW-406	06/18/2020 13:10	0.66	-63.4	6.81	0.5	1.013	18.53	0.6
MW-406	06/18/2020 13:15	0.57	-66.7	6.78	0.49	0.995	18.3	0
MW-406	06/18/2020 13:20	0.49	-69.9	6.78	0.49	0.988	18.37	0
MW-406	06/18/2020 13:25	0.5	-70.9	6.77	0.48	0.969	18.49	0
MW-406	06/18/2020 13:30	0.5	-66.2	6.72	0.47	0.948	18.5	0
MW-406	06/18/2020 13:35	0.49	-65.6	6.71	0.47	0.949	18.6	0
MW-406	06/18/2020 13:36	0.49	-65.6	6.71	0.47	0.949	18.6	0
MW-406	06/18/2020 13:55	2.95	-37.6	6.67	0.54	1.078	17.5	2.1
MW-406	06/18/2020 14:05	1.99	-51	6.65	0.54	1.077	18.94	2.3
MW-406	10/01/2020 13:00	4.37	-18.8	7.15	0.69	1.379	19.6	6.7
MW-406	10/01/2020 13:15	3.81	-27.7	6.84	0.69	1.383	21.35	NM
MW-406	10/02/2020 13:15	NM	NM	NM	NM	NM	NM	25.7
MW-406	12/15/2020 13:00	3.84	-41	7.21	0.54	1.078	14.41	14.7
MW-406	12/15/2020 13:05	2.05	-39.8	7	0.54	1.08	13.94	12.4
MW-406	12/15/2020 13:10	1.62	-43.1	6.9	0.54	1.073	12.76	9.7
MW-406	12/15/2020 13:15	1.36	-46.3	6.86	0.53	1.072	12.39	9.1
MW-406	12/15/2020 13:20	1.04	-49.2	6.83	0.54	1.073	12.2	8.7
MW-406	12/15/2020 13:25	0.85	-51.3	6.82	0.53	1.066	11.9	7.5
MW-406	12/15/2020 13:30	0.76	-51.7	6.81	0.53	1.059	11.81	7.3
MW-406	12/15/2020 13:35	0.72	-51.9	6.8	0.52	1.051	11.89	7.5
MW-406	12/15/2020 13:40	0.67	-51.8	6.78	0.52	1.038	11.92	7.6
MW-406	12/15/2020 13:45	0.6	-50.4	6.75	0.51	1.026	12.1	7.2
MW-406	12/15/2020 14:10	4.05	-33.3	6.86	0.53	1.057	13.62	133.6
MW-406	12/15/2020 14:20	3.28	-41.3	6.82	0.53	1.063	13.72	102.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-406	03/10/2021 10:40	1.03	-99.3	7.09	0.47	0.945	9.03	5.8
MW-406	03/10/2021 10:45	0.88	-107.1	7.03	0.47	0.95	9.05	0.7
MW-406	03/10/2021 10:50	0.53	-110.4	7.01	0.47	0.948	9.03	0
MW-406	03/10/2021 10:55	0.49	-111.8	6.99	0.47	0.945	9.06	0
MW-406	03/10/2021 11:00	0.32	-111.5	6.98	0.47	0.941	9.21	0
MW-406	03/10/2021 11:05	0.29	-107.2	6.94	0.46	0.937	9.64	0
MW-406	03/10/2021 11:10	0.33	-97.4	6.89	0.46	0.932	9.47	0
MW-406	03/10/2021 11:15	0.39	90	6.82	0.45	0.911	9.48	0
MW-406	03/10/2021 11:20	0.37	-71.4	6.67	0.43	0.872	9.49	0
MW-406	03/10/2021 11:25	0.37	-61.7	6.56	0.42	0.852	9.64	0
MW-406	03/10/2021 12:00	2.08	-52.9	6.85	0.49	0.99	11.01	34.5
MW-406	03/10/2021 12:05	2.82	-23.1	6.97	0.49	0.98	10.45	13
MW-406	04/01/2022 12:10	1.15	-94.3	6.75	0.33	0.678	10.08	135.4
MW-406	04/01/2022 12:15	0.56	-58	6.29	0.32	0.656	10.21	125
MW-406	04/01/2022 12:20	0.5	-73.3	6.43	0.32	0.655	10.2	143.7
MW-406	04/01/2022 12:25	0.44	-96.6	6.63	0.35	0.714	10.17	88.3
MW-406	04/01/2022 12:30	0.44	-98	6.65	0.36	0.73	10	86.9
MW-406	04/01/2022 12:35	0.43	-99.4	6.64	0.4	0.809	9.38	47.4
MW-406	04/01/2022 12:40	0.43	-99.1	6.64	0.4	0.813	9.41	40.2
MW-406	04/01/2022 12:45	0.44	-98.7	6.65	0.43	0.867	9.56	34.4
MW-406	04/01/2022 12:50	0.47	-99.1	6.67	0.45	0.905	9.43	32
MW-406	04/01/2022 12:55	0.48	-98.8	6.67	0.45	0.909	9.42	26.3
MW-407	06/25/2014 11:05	0.25	-104.5	6.10	2.61	4.881	18.98	60.00
MW-407	06/25/2014 11:30	0.25	-61.2	5.24	2.54	4.716	18.08	222.70
MW-407	03/09/2017 11:00	6.21	68.5	7.25	2.46	4.580	13.80	25.30
MW-407	03/09/2017 11:10	8.24	37.2	7.32	2.46	4.598	13.42	28.60
MW-407	09/04/2018 09:55	0.62	-47.70	6.55	2.54	4.757	26.97	217.60
MW-407	09/04/2018 11:15	1.05	-76.60	6.61	2.03	3.835	21.58	151.80
MW-407	09/04/2018 11:25	0.78	-71.10	6.55	1.99	3.750	19.43	773.20
MW-407	12/11/2018 13:00	10.19	-65.90	6.68	2.17	4.068	12.27	80.80
MW-407	12/11/2018 13:20	1.36	-89.20	6.78	2.22	4.195	14.39	541.30
MW-407	12/11/2018 13:30	2.22	-103.40	6.75	2.26	4.232	14.35	670.20
MW-407	02/22/2019 12:50	7.46	-26.60	7.78	0.37	0.745	11	692.70
MW-407	02/22/2019 13:00	2.19	-5.10	6.46	0.48	0.970	10.61	1100.40
MW-407	02/22/2019 13:10	0.64	-16.30	6.49	0.48	0.958	11.1	137.70
MW-407	06/13/2019 10:05	0.8	-75	6.54	NM	3.25	16.73	48.5
MW-407	06/13/2019 10:10	0.54	-70.5	6.51	NM	2.676	17.76	53.5
MW-407	06/13/2019 10:15	0.49	-51.8	6.43	NM	2.098	18.62	60.6
MW-407	06/13/2019 10:20	0.39	-44.8	6.38	NM	1.756	18.71	62.1
MW-407	06/13/2019 10:25	0.35	-41.2	6.35	NM	1.661	18.89	29.5
MW-407	06/13/2019 10:30	0.29	-45.2	6.37	NM	1.802	18.68	24.9
MW-407	06/13/2019 10:35	0.27	-57	6.43	NM	2.183	18.29	51
MW-407	06/13/2019 10:40	0.23	-67.3	6.48	NM	2.594	17.71	14.2
MW-407	06/13/2019 10:45	0.22	-75.3	6.51	NM	2.898	17.56	12.8
MW-407	06/13/2019 10:50	0.2	-81.5	6.53	NM	3.143	17.59	12.5
MW-407	06/13/2019 13:30	0.2	-81.5	6.53	NM	3.143	17.59	12.5
MW-407	06/14/2019 08:40	4.96	-62.1	6.54	1.09	2.121	15.52	443.8
MW-407	06/14/2019 08:50	4.69	-39.3	6.44	0.67	1.332	16.37	887.6
MW-407	09/11/2019 12:20	1.57	-100.5	6.49	NM	3.327	22.48	10
MW-407	09/11/2019 12:25	1.29	-107.3	6.49	NM	3.375	21.96	14.4
MW-407	09/11/2019 12:30	1.31	-110	6.52	NM	3.393	24.31	15
MW-407	09/11/2019 12:35	1.53	-107.5	6.49	NM	3.413	23.78	596
MW-407	09/11/2019 12:40	1.61	-111.3	6.49	NM	3.423	25.27	439.1
MW-407	09/11/2019 12:45	1.29	-112.3	6.49	NM	3.473	24.45	1711.6
MW-407	09/11/2019 12:50	1.33	-139.9	6.45	NM	3.412	24.87	1315.7
MW-407	09/11/2019 12:55	1.49	-115.7	6.47	NM	3.455	24.31	1522.8
MW-407	09/11/2019 13:00	1.53	-114.5	6.46	NM	3.402	24.2	1614.9
MW-407	09/11/2019 13:05	1.68	-110.1	6.41	NM	3.35	23.56	890.9
MW-407	09/11/2019 14:54	0.09	-86.4	6.7	1.73	3.291	20.69	1608.4
MW-407	09/11/2019 15:06	0.26	-96.4	6.69	1.7	3.261	22.81	1672.4
MW-407	12/09/2019 11:55	0.52	-71.2	6.54	NM	2.86	16.06	114.7
MW-407	12/09/2019 12:00	0.54	-88.8	6.48	NM	2.866	16.32	233.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-407	12/09/2019 12:05	0.65	-95.8	6.44	NM	2.847	15.51	156.9
MW-407	12/09/2019 12:10	0.62	-97.5	6.43	NM	2.843	15.18	148.8
MW-407	12/09/2019 12:15	0.62	-99.8	6.41	NM	2.832	14.74	307.2
MW-407	12/09/2019 12:20	0.55	-100.6	6.4	NM	2.829	14.57	310
MW-407	12/09/2019 12:25	0.54	-101.3	6.39	NM	2.828	14.25	300.3
MW-407	12/09/2019 12:30	0.51	-101.8	6.37	NM	2.813	14.23	293.8
MW-407	12/10/2019 09:15	0.94	-76.3	6.78	NM	3.32	16.37	234.8
MW-407	12/10/2019 09:20	2.59	-67.8	6.8	1.54	2.947	16.48	1466.6
MW-407	12/10/2019 09:35	1.31	-71.5	6.54	1.56	2.986	16.51	1543
MW-407	06/17/2020 13:10	1.55	-80	6.52	2.12	3.996	20.68	30.5
MW-407	06/17/2020 13:15	0.36	-86.5	6.59	2.09	3.941	20.09	24.3
MW-407	06/17/2020 13:20	0.33	-87.8	6.6	2.12	3.981	18.92	19.3
MW-407	06/17/2020 13:25	0.28	-88.2	6.6	2.13	3.993	18.58	11.8
MW-407	06/17/2020 13:30	0.22	-88.1	6.6	2.11	3.975	18.82	14.3
MW-407	06/17/2020 13:35	0.25	-89.5	6.62	2.11	3.978	18.82	14
MW-407	06/17/2020 13:40	0.26	-90.3	6.63	2.11	3.984	18.82	14.1
MW-407	06/17/2020 13:45	0.27	-90.4	6.64	2.12	3.987	18.83	14.2
MW-407	10/02/2020 08:45	3.32	-14.2	6.5	1.1	2.142	18.17	25
MW-407	10/02/2020 09:00	3.75	-5.7	6.63	1.74	3.31	17.61	158.2
MW-407	12/15/2020 11:35	4.18	-23.8	7.93	0.07	0.145	13.54	21.4
MW-407	12/15/2020 11:40	2.69	-25.3	7.75	0.11	0.143	11.75	49.9
MW-407	12/15/2020 11:45	0.63	-38	7.57	1.39	2.67	11.61	55
MW-407	12/15/2020 11:50	0.72	-58.4	7.26	2.69	4.978	12.01	67.3
MW-407	12/15/2020 11:55	1.13	-73	7.05	2.68	4.965	12.24	34.8
MW-407	12/15/2020 12:00	1.56	-79.8	6.97	2.67	4.942	12.24	16.8
MW-407	12/15/2020 12:05	1.78	-82.9	6.93	2.66	4.936	12.01	17.4
MW-407	12/15/2020 12:10	1.97	-85.4	6.89	2.66	4.926	11.91	15.5
MW-407	12/15/2020 12:15	2.1	-87	6.86	2.65	4.923	11.62	118.4
MW-407	12/15/2020 12:20	2.16	-87.8	6.83	2.65	4.91	11.28	110.3
MW-407	12/15/2020 12:30	3.23	-97.8	6.95	2.66	5.023	11.02	120.6
MW-407	12/15/2020 12:40	0.68	-70.7	6.96	2.74	5.066	12.76	46.8
MW-407	03/11/2021 13:15	1.54	-98.8	6.68	2.65	4.913	14.89	18.9
MW-407	03/11/2021 13:20	1.09	-98.8	6.66	2.65	4.914	15.87	5.8
MW-407	03/11/2021 13:25	1.08	-99.5	6.67	2.64	4.9	17.17	5.5
MW-407	03/11/2021 13:30	0.82	-98.7	6.65	2.65	4.896	15.46	4.6
MW-407	03/11/2021 13:35	0.57	-98.6	6.64	2.6	4.878	15.97	6.3
MW-407	03/11/2021 13:40	0.55	-99	6.65	2.44	4.526	17.75	8.1
MW-407	03/11/2021 13:45	0.45	-99.6	6.66	2.63	4.885	19.06	8.2
MW-407	03/11/2021 13:50	0.45	-99.9	6.66	0.45	4.816	19.55	7.2
MW-407	03/11/2021 13:55	0.44	-100	6.66	2.63	4.774	19.89	6.5
MW-407	03/11/2021 14:00	0.46	-100.7	6.66	2.63	4.823	20.18	5.8
MW-407	03/12/2021 14:00	0.46	-100.7	6.66	2.63	4.823	20.18	5.8
MW-407	03/12/2021 14:20	2.65	-84.8	6.68	2.46	4.594	13.68	7
MW-407	03/12/2021 14:35	2.75	-84	6.67	2.49	4.641	13.24	110.1
MW-407	05/28/2021 12:30	2.93	-76.7	6.73	1.81	3.417	20.23	70.4
MW-407	05/28/2021 12:35	1.13	-79.2	6.67	1.87	3.532	19.25	86.9
MW-407	05/28/2021 12:40	0.7	-82.8	6.66	1.87	3.549	19.76	71.8
MW-407	05/28/2021 12:45	0.57	-82.4	6.66	1.88	3.564	19.94	42
MW-407	05/28/2021 12:50	0.53	-75.5	6.66	1.89	3.579	20.24	47.8
MW-407	05/28/2021 12:55	0.51	-74.3	6.66	1.89	3.581	20.28	45.1
MW-407	05/28/2021 13:00	0.5	-71.9	6.66	1.89	3.588	20.19	45
MW-415	05/29/2015 11:39	0.32	-287	6.40	1.80	3.460	17.00	0.0000
MW-415	05/29/2015 12:11	3.89	-260	6.40	2.00	3.750	17.56	120.00
MW-415	08/26/2015 13:30	0.06	4	7.06	1.45	28.060	25.55	-29.10
MW-415	08/26/2015 13:50	0.0000	-284.2	7.02	0.95	2.877	26.97	16.10
MW-419	12/10/2015 14:45	5.27	-58	7.39	1.40	2.760	18.80	0.0000
MW-419	07/21/2016 10:50	0.22	-61.6	6.30	1.36	2.623	20.29	0.0000
MW-419	07/21/2016 11:22	0.50	-47.2	6.30	1.37	2.642	19.86	12.20
MW-419	10/25/2018 13:20	10.56	-145.60	8.82	0.99	1.934	18.26	35.50
MW-419	10/25/2018 14:05	9.94	-143.40	8.30	1.06	2.070	19.09	2.70
MW-419	10/25/2018 14:15	9.93	-106.70	7.49	0.93	1.829	19.38	149.00
MW-419	01/15/2019 12:20	5.04	-58.50	7.50	0.81	1.590	9.04	21.50

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-419	01/15/2019 13:20	3.60	-31.60	7.04	0.79	1.556	10.61	2.90
MW-419	01/15/2019 13:35	5.07	-20.30	6.86	0.80	1.569	10.7	90.30
MW-420	12/02/2015 13:20	2.69	-247.8	9.77	2.48	4.611	15.93	30.60
MW-420	12/02/2015 13:45	0.95	-280.8	9.78	2.53	4.707	14.98	204.80
MW-420	08/01/2016 15:11	2.46	-291.4	9.89	1.01	1.978	18.77	30.10
MW-420	08/01/2016 15:38	2.71	-262.3	9.97	1.12	2.168	18.21	121.20
MW-420	10/25/2018 11:05	7.58	-273.10	8.35	2.02	3.812	16.49	29.70
MW-420	10/25/2018 11:50	4.11	-37.40	9.12	2.06	3.880	17.34	21.80
MW-420	10/25/2018 12:00	6.41	-283.30	9.03	0.70	1.387	16.55	33.00
MW-420	01/14/2019 13:30	7.8	-40.6	9.93	0.75	1.496	6.42	27.8
MW-421	12/03/2015 11:40	0.22	-292.1	6.62	1.66	3.157	14.16	6.30
MW-421	12/03/2015 12:12	0.23	-271.2	6.63	1.63	3.109	13.62	6.10
MW-421	07/20/2016 14:45	5.16	-97.1	6.46	1.04	2.118	27.32	24.60
MW-421	07/20/2016 14:57	4.35	-104.7	640.00	1.12	2.209	31.08	30.30
MW-421	10/25/2018 10:00	4.97	-185.10	9.05	4.02	7.260	16.78	35.90
MW-421	10/25/2018 10:40	3.59	-283.60	8.40	1.33	2.569	17.81	6.00
MW-421	10/25/2018 10:50	9.34	-256.20	10.20	1.24	2.692	18.3	30.20
MW-421	01/15/2019 08:45	5.73	-121.80	7.37	2.01	3.794	8.68	35.20
MW-421	01/15/2019 09:45	9.38	-219.60	7.88	0.55	1.110	10.07	7.90
MW-421	01/15/2019 09:55	12.37	-180.10	8.05	0.43	0.866	9.85	24.10
MW-422	10/12/2015 11:05	0	-141.5	7.03	1.26	2.437	22.72	5.8
MW-422	10/12/2015 11:25	0.03	-117.1	7	1.24	2.416	22.96	20.7
MW-422	12/03/2015 14:15	0.18	-190.4	7.07	1.56	2.984	16.62	0.70
MW-422	12/03/2015 14:45	0.17	-190.8	7.07	1.56	2.982	15.58	0.60
MW-422	07/22/2016 10:32	0.43	-108.6	6.93	1.26	2.440	21.06	0.0000
MW-422	07/22/2016 10:59	0.85	-88.1	7.02	1.31	2.536	22.30	0.70
MW-422	10/22/2018 12:10	6.22	-92.70	7.63	1.47	2.824	18.58	12.20
MW-422	10/22/2018 12:40	6.36	-119.90	7.31	1.04	2.019	20.08	11.70
MW-422	10/22/2018 12:50	6.38	-125.40	7.47	0.83	1.643	19.39	57.10
MW-422	01/15/2019 08:40	3.85	18.00	6.72	0.92	1.835	3.05	50.00
MW-422	01/15/2019 09:20	7.63	-11.40	6.92	1.03	2.002	8.23	4.60
MW-422	01/15/2019 09:35	3.80	-78.10	7.06	0.89	1.752	6.93	5.40
MW-423	10/12/2015 12:25	0	-130.8	7.19	0.63	1.269	22.78	5.8
MW-423	10/12/2015 12:33	0.01	-120.9	7.18	0.63	1.269	23.21	5.1
MW-423	12/10/2015 11:30	154.00	-80	6.35	0.70	1.390	24.30	303.00
MW-423	12/10/2015 12:00	7.49	-118	6.28	0.70	1.370	21.70	342.00
MW-423	07/18/2016 15:40	0.10	-130.8	7.11	0.80	1.596	23.78	4.60
MW-423	07/18/2016 16:00	0.09	-129.2	7.11	0.78	1.434	23.02	35.90
MW-423	10/19/2018 08:40	0.62	-108.70	7.22	4.97	8.895	17.78	341.40
MW-423	10/19/2018 09:50	5.40	-132.70	7.23	0.51	1.031	20.6	20.00
MW-423	10/19/2018 10:00	3.96	-178.10	7.38	0.37	0.745	20.06	118.80
MW-423	01/14/2019 09:10	2.46	-91.8	7.03	0.32	0.661	6.92	9.3
MW-423	11/19/2020 14:55	11.1	-58	7.27	0.32	0.005	15.32	5.8
MW-423	11/19/2020 15:15	3.24	-117.2	7.54	0.32	0.645	15.48	58.6
MW-423	02/25/2021 11:55	5.48	-44.8	7.43	0.3	0.611	13.09	2.8
MW-423	02/25/2021 12:00	0.85	-82.5	7.34	0.29	0.59	13.26	3.1
MW-423	02/25/2021 12:05	0.53	-102.8	7.34	0.29	0.589	13.28	1.5
MW-423	02/25/2021 12:10	0.5	-108.6	7.33	0.29	0.586	13.21	0.9
MW-423	02/25/2021 12:15	0.53	-113.4	7.33	0.29	0.586	13.13	0.8
MW-423	02/25/2021 12:20	0.41	-113.8	7.32	0.29	0.585	12.79	0.7
MW-423	02/25/2021 12:25	0.38	-113.8	7.32	0.29	0.584	12.92	0.5
MW-423	02/25/2021 12:30	0.37	-116	7.33	0.29	0.584	13.15	0.4
MW-423	02/25/2021 12:45	0.35	-121	7.31	0.29	0.601	13.38	0.9
MW-423	02/25/2021 12:55	0.35	-123.1	7.29	0.3	0.608	13.46	1.5
MW-423	05/07/2021 09:45	9.66	-69.1	7.34	0.43	0.545	16.5	21.2
MW-423	05/07/2021 09:50	4.44	-122.8	6.83	0.4	0.814	16.3	16.1
MW-423	05/07/2021 09:55	1.66	-118.6	6.7	0.35	0.714	14.79	0.4
MW-423	05/07/2021 10:00	3.36	-121.2	6.73	0.35	0.715	14.65	1
MW-423	05/07/2021 10:05	4.11	-124.6	6.79	0.35	0.715	14.74	1.6
MW-423	05/07/2021 10:10	4.82	-126.2	6.84	0.35	0.715	15.05	2.1
MW-423	05/07/2021 10:15	4.75	-126.8	6.85	0.35	0.715	14.83	2.2
MW-423	05/07/2021 10:20	5.28	-128.6	6.87	0.35	0.715	15.07	2.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-423	05/07/2021 10:25	6.29	-130.9	6.88	0.35	0.715	15.06	1.2
MW-423	05/07/2021 10:30	7.3	-128.1	6.9	0.35	0.714	15.18	2.3
MW-424	09/15/2015 12:20	1.07	-75.3	6.25	0.86	1.699	24.79	1.50
MW-424	09/15/2015 12:35	1.34	-63.4	6.29	0.86	1.713	26.39	27.50
MW-424	12/16/2015 14:30	0.34	-122.9	6.62	0.92	1.797	11.25	6.30
MW-424	12/16/2015 14:50	1.87	-95	6.63	0.90	1.772	11.02	122.30
MW-433	08/26/2015 10:25	0.24	-37.3	6.07	1.99	3.766	23.22	175.20
MW-433	08/26/2015 11:30	0.32	-23.9	6.13	1.98	3.729	23.25	42.80
MW-466	12/03/2015 11:05	0.12	-206.5	7.86	1.91	3.614	16.21	97.2
MW-466	12/03/2015 12:30	0.13	-155.2	7.86	1.98	3.726	15.69	208
MW-466	08/02/2016 11:36	1.84	-124.6	7.72	0.77	1.526	19.80	1.10
MW-466	08/02/2016 11:51	2.01	-126.4	7.69	0.76	1.526	19.79	2.10
MW-466	10/25/2018 08:40	4.13	-73.80	10.15	1.32	2.569	15.4	32.70
MW-466	10/25/2018 09:30	5.22	52.00	11.46	0.97	1.894	18.68	50.80
MW-466	10/25/2018 09:40	8.40	-70.60	10.64	0.71	1.410	18.39	116.00
MW-466	01/15/2019 11:10	10.2	-125.4	8.58	0.74	1.454	12.2	47
MW-467	12/02/2015 11:25	1.25	-119.5	7.19	2.08	3.902	16.68	18.10
MW-467	12/02/2015 11:50	0.25	-134.9	7.12	2.16	4.062	14.82	62.20
MW-467	08/01/2016 11:36	3.26	-127.6	7.04	0.85	1.721	19.01	2.40
MW-467	08/01/2016 11:51	3.31	-129.7	7.11	0.85	1.720	19.06	2.60
MW-467	10/22/2018 13:30	7.43	-91.90	7.31	2.02	3.894	18.15	59.60
MW-467	10/22/2018 14:10	6.89	-96.20	7.32	1.84	3.489	19.17	66.30
MW-467	10/22/2018 14:20	6.11	-91.80	7.34	1.89	3.755	19.11	71.00
MW-467	01/14/2019 13:50	5.72	-91	7.12	2.19	4.107	13.94	128.3
MW-467	06/10/2021 12:55	7.79	55.9	7.67	0.04	0.025	30.6	16.8
MW-467	06/10/2021 13:00	0.78	-136.5	7.2	8.57	14.76	23.48	6.4
MW-467	06/10/2021 13:05	0.72	-148.6	7.33	8.55	14.7	22.07	4.5
MW-467	06/10/2021 13:10	0.83	-164.1	7.31	8.51	14.6	20.3	3.4
MW-467	06/10/2021 13:15	0.83	-173.4	7.39	8.45	14.53	19.16	30.1
MW-467	06/10/2021 13:20	0.67	-177.6	7.29	8.41	14.43	20.17	4.7
MW-467	06/10/2021 13:25	0.61	-183.4	7.33	8.42	14.49	21.3	4
MW-467	06/10/2021 13:30	0.52	-187.8	7.35	8.42	14.47	21.3	4
MW-467	06/10/2021 13:35	0.5	-192	7.32	8.4	14.44	21.26	4
MW-467	06/10/2021 13:40	0.54	-195.3	7.33	8.38	14.41	21.18	4.2
MW-474	01/08/2016 09:46	7.27	39	6.85	0.4299	7888.9380	6.63	331.9
MW-474	01/08/2016 09:48	2.11	-7	6.73	0.4650	8478.6516	7.02	375
MW-474	01/08/2016 09:50	1.04	-29	6.68	0.4842	8804.4931	7.07	344.4
MW-474	01/08/2016 09:52	0.75	-40	6.65	0.4903	8899.5373	7.34	393.2
MW-474	01/08/2016 09:54	0.67	-45	6.63	0.4880	8854.4348	7.5	397.2
MW-474	01/08/2016 09:57	0.71	-48	6.61	0.4855	8807.2676	7.69	364.4
MW-474	01/08/2016 09:59	0.73	-51	6.59	0.4876	8837.2587	7.86	331.2
MW-474	01/08/2016 10:01	0.76	-53	6.58	0.4877	8836.5451	7.95	324
MW-474	01/08/2016 10:03	0.75	-59	6.57	0.4874	8830.9936	8	293.9
MW-474	01/08/2016 10:05	0.75	-58	6.56	0.4879	8836.1229	8.06	285.4
MW-474	01/08/2016 10:07	0.81	-58	6.56	0.4883	8843.0339	8.11	259
MW-474	01/08/2016 10:09	0.77	-59	6.55	0.4891	8852.4684	8.22	208.1
MW-474	01/08/2016 10:12	0.75	-59	6.55	0.4900	8867.5421	8.24	260.1
MW-474	01/08/2016 10:14	0.72	-60	6.55	0.4898	8861.8818	8.31	209.4
MW-474	01/08/2016 10:16	0.7	-61	6.54	0.4893	8852.8820	8.32	222.3
MW-474	01/08/2016 10:18	0.68	-62	6.54	0.4877	8822.1803	8.46	98.1
MW-474	01/08/2016 10:20	0.65	-62	6.54	0.4887	8839.0133	8.49	89.3
MW-474	01/08/2016 10:22	0.65	-63	6.54	0.4877	8820.0279	8.53	80.7
MW-474	01/08/2016 10:25	0.63	-63	6.54	0.4865	8799.0719	8.59	62.1
MW-474	01/08/2016 10:27	0.6	-64	6.54	0.4856	8782.1807	8.64	75.6
MW-474	01/08/2016 10:29	0.59	-65	6.54	0.4850	8768.4245	8.74	94.3
MW-474	01/08/2016 10:31	0.57	-66	6.54	0.4836	8745.9002	8.72	90.9
MW-474	01/08/2016 10:33	0.54	-66	6.54	0.4821	8718.4182	8.79	86.1
MW-474	01/08/2016 11:03	2.27	-73	6.59	0.53	9.535	7.48	395.5
MW-474	04/13/2016 10:15	4.11	-57	6.87	0.6591	11611.4253	10.64	524
MW-474	04/13/2016 10:17	1.31	-66	6.72	0.7425	12990.9949	10.04	176.7
MW-474	04/13/2016 10:19	0.66	-72	6.66	0.8155	14182.9587	9.82	138.6
MW-474	04/13/2016 10:21	0.48	-77	6.62	0.8491	14724.6646	9.8	129.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-474	04/13/2016 10:23	0.36	-80	6.61	0.8548	14817.3689	9.77	153.8
MW-474	04/13/2016 10:26	0.29	-83	6.61	0.8474	14697.7050	9.79	66.9
MW-474	04/13/2016 10:28	0.22	-85	6.6	0.8376	14537.8242	9.84	65.7
MW-474	04/13/2016 10:30	0.2	-87	6.6	0.8300	14416.6898	9.81	57.3
MW-474	04/13/2016 10:32	0.17	-88	6.6	0.8268	14367.7085	9.74	79.3
MW-474	04/13/2016 10:34	0.22	-88	6.6	0.8209	14272.6869	9.75	50.6
MW-474	04/13/2016 10:36	0.2	-89	6.6	0.8157	14190.8825	9.68	46.1
MW-474	04/13/2016 10:39	0.11	-90	6.6	0.8122	14132.9537	9.71	103.5
MW-474	04/13/2016 10:41	0.1	-92	6.61	0.8077	14056.9480	9.79	99.1
MW-474	04/13/2016 10:43	0.1	-93	6.61	0.8052	14014.9400	9.84	105.7
MW-474	04/13/2016 10:45	0.11	-95	6.61	0.8008	13943.4781	9.87	98.2
MW-474	04/13/2016 10:47	0.1	-95	6.61	0.7923	13802.8373	9.93	76.8
MW-474	04/13/2016 10:49	0.09	-96	6.61	0.7897	13758.0970	10.01	97.5
MW-474	04/13/2016 10:52	0.08	-97	6.61	0.7900	13765.3891	9.94	79.6
MW-474	04/13/2016 10:54	0.06	-98	6.6	0.7923	13803.5253	9.93	71
MW-474	04/13/2016 10:56	0.05	-99	6.6	0.7922	13800.1448	9.96	69.5
MW-474	04/13/2016 10:58	0.05	-99	6.6	0.7868	13710.8497	10.01	64.9
MW-474	04/13/2016 11:00	0.04	-100	6.6	0.7847	13678.8479	9.97	77.1
MW-474	04/13/2016 11:02	0.03	-100	6.6	0.7789	13579.2660	10.12	49.4
MW-474	04/13/2016 11:05	0.03	-100	6.6	0.7825	13640.3618	10.06	69.4
MW-474	04/13/2016 11:23	5.72	-76	7.00	0.61	10.840	9.53	965.80
MW-474	07/20/2016 10:03	4.03	-124	6.49	NM	11872.98	28.42	960.9
MW-474	07/20/2016 10:05	3.61	-123	6.51	NM	11865.18	28.08	1054.3
MW-474	07/20/2016 10:06	3.06	-116	6.51	NM	12538.59	26.21	1088.2
MW-474	07/20/2016 10:08	2.56	-110	6.47	NM	12902.04	25.46	939.8
MW-474	07/20/2016 10:09	2.17	-107	6.44	NM	12995.18	25.31	891.3
MW-474	07/20/2016 10:10	1.98	-104	6.43	NM	13059.29	25.03	774.1
MW-474	07/20/2016 10:12	1.82	-103	6.42	NM	13551.12	24.92	739.9
MW-474	07/20/2016 10:13	1.75	-101	6.41	NM	13217.13	24.9	841
MW-474	07/20/2016 10:15	1.71	-101	6.41	NM	13230.8	24.71	776.5
MW-474	07/20/2016 10:16	1.63	-100	6.41	NM	13230.64	24.55	689.7
MW-474	07/20/2016 10:18	1.57	-100	6.41	NM	13319.21	24.32	631.7
MW-474	07/20/2016 10:19	1.53	-100	6.4	NM	13746.28	24.17	637.9
MW-474	07/20/2016 10:21	1.47	-100	6.4	NM	13736.56	24.08	621
MW-474	07/20/2016 10:56	1.71	-102	6.49	0.86	14.620	24.99	825.70
MW-474	10/17/2016 09:37	3.57	-142	6.49	0.2561	4729.8776	20.78	441.1
MW-474	10/17/2016 09:39	0.89	-106	6.53	0.2566	4742.8221	19.06	304.3
MW-474	10/17/2016 09:41	0.43	-96	6.54	0.2613	4825.8977	18.6	168.2
MW-474	10/17/2016 09:43	0.3	-93	6.54	0.2639	4872.9276	18.45	116.5
MW-474	10/17/2016 09:46	0.25	-91	6.55	0.2652	4893.9190	18.46	92.5
MW-474	10/17/2016 09:48	0.24	-89	6.55	0.2657	4903.0179	18.58	80.3
MW-474	10/17/2016 09:50	0.24	-89	6.55	0.2654	4897.6083	18.72	60.3
MW-474	10/17/2016 09:52	0.24	-89	6.55	0.2645	4881.8626	18.79	52.4
MW-474	10/17/2016 09:54	0.23	-89	6.55	0.2637	4866.7980	18.84	43.5
MW-474	10/17/2016 09:56	0.22	-90	6.55	0.2627	4849.8425	18.92	37.6
MW-474	10/17/2016 09:59	0.22	-91	6.55	0.2621	4839.5159	18.96	35.4
MW-474	10/17/2016 10:01	0.24	-92	6.55	0.2615	4828.6045	19.06	27.6
MW-474	10/17/2016 10:03	0.22	-93	6.55	0.2609	4817.7634	19.12	23.4
MW-474	10/17/2016 10:05	0.22	-94	6.55	0.2601	4803.7832	19.16	21.8
MW-474	10/17/2016 10:07	0.21	-95	6.55	0.2598	4797.7441	19.2	21.9
MW-474	10/17/2016 10:27	2.11	-137	6.48	0.24	4.480	18.89	325.80
MW-474	01/19/2017 11:04	10.16	-116	6.84	0.1452	2818.4563	8.26	302.4
MW-474	01/19/2017 11:06	4.76	-129	6.83	0.1446	2821.1372	6.83	273.2
MW-474	01/19/2017 11:08	2.47	-127	6.76	0.1499	2915.9834	7.06	218.4
MW-474	01/19/2017 11:11	1.49	-126	6.72	0.1532	2975.5235	7.23	164.1
MW-474	01/19/2017 11:13	0.95	-125	6.7	0.1544	2993.5156	7.71	98.4
MW-474	01/19/2017 11:15	0.66	-125	6.69	0.1557	3014.7983	7.96	86.8
MW-474	01/19/2017 11:17	0.47	-124	6.68	0.1570	3038.2479	8.04	80
MW-474	01/19/2017 11:19	0.36	-124	6.67	0.1601	3092.1140	8.26	76.6
MW-474	01/19/2017 11:21	0.28	-124	6.67	0.1616	3122.3590	8.08	59.6
MW-474	01/19/2017 11:24	0.23	-123	6.66	0.1624	3133.9816	8.41	50.8
MW-474	01/19/2017 11:26	0.19	-124	6.66	0.1652	3184.4569	8.53	36.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-474	01/19/2017 11:28	0.16	-123	6.66	0.1658	3195.7431	8.38	34.5
MW-474	01/19/2017 11:30	0.14	-123	6.65	0.1683	3239.5105	8.57	31.2
MW-474	01/19/2017 11:32	0.12	-123	6.65	0.1682	3239.3079	8.5	36.3
MW-474	01/19/2017 11:34	0.12	-123	6.64	0.1730	3327.9599	8.37	22.6
MW-474	01/19/2017 11:37	0.1	-123	6.63	0.1747	3354.9549	8.74	31.2
MW-474	01/19/2017 11:39	0.09	-124	6.63	0.1758	3373.5380	8.92	15.8
MW-474	01/19/2017 11:41	0.08	-124	6.63	0.1755	3368.0242	8.83	23.5
MW-474	01/19/2017 11:43	0.09	-124	6.62	0.1781	3417.9148	8.61	19.2
MW-474	01/19/2017 11:45	0.07	-124	6.61	0.1797	3444.1175	8.84	14.9
MW-474	01/19/2017 11:47	0.06	-125	6.61	0.1817	3481.3278	8.85	13.7
MW-474	01/19/2017 11:50	0.06	-125	6.6	0.1824	3493.6362	8.93	10.1
MW-474	01/19/2017 11:52	0.05	-125	6.61	0.1803	3455.8926	8.76	20.8
MW-474	01/19/2017 11:54	0.07	-125	6.59	0.1840	3523.0013	8.82	14.2
MW-474	04/20/2017 09:51	4.66	19	6.76	0.2387	0.0445	14.23	550.3
MW-474	04/20/2017 09:53	1.11	-45	6.76	0.2350	0.0440	13.23	485.1
MW-474	04/20/2017 09:55	0.29	-59	6.76	0.2350	0.0440	12.9	265.1
MW-474	04/20/2017 09:57	0.04	-65	6.76	0.2376	0.0445	12.42	133.3
MW-474	04/20/2017 09:59	-0.07	-70	6.76	0.2408	0.0451	11.77	82.5
MW-474	04/20/2017 10:01	-0.14	-73	6.77	0.2426	0.0455	11.24	43.6
MW-474	04/20/2017 10:04	-0.19	-75	6.78	0.2427	0.0455	10.94	37.6
MW-474	04/20/2017 10:06	-0.22	-76	6.78	0.2425	0.0455	10.8	35.6
MW-474	04/20/2017 10:08	-0.22	-77	6.79	0.2424	0.0455	10.79	32.6
MW-474	04/20/2017 10:10	-0.22	-77	6.79	0.2421	0.0454	10.74	31.2
MW-474	04/20/2017 10:12	-0.23	-78	6.79	0.2423	0.0455	10.69	24.6
MW-474	04/20/2017 10:14	-0.24	-78	6.79	0.2422	0.0455	10.7	25.7
MW-474	04/20/2017 10:17	-0.24	-78	6.79	0.2422	0.0455	10.69	22.4
MW-474	04/20/2017 10:19	-0.24	-78	6.79	0.2422	0.0455	10.68	21.4
MW-474	04/20/2017 10:21	-0.23	-78	6.79	0.2423	0.0455	10.67	19.3
MW-474	04/20/2017 10:23	-0.24	-78	6.79	0.2421	0.0455	10.64	17.1
MW-474	04/20/2017 10:25	-0.24	-78	6.79	0.2418	0.0454	10.67	14.8
MW-474	04/20/2017 10:27	-0.24	-78	6.79	0.2425	0.0455	10.61	17.8
MW-474	04/20/2017 10:30	-0.24	-78	6.79	0.2424	0.0455	10.61	14.2
MW-474	04/20/2017 10:32	-0.24	-78	6.78	0.2422	0.0455	10.61	14.6
MW-474	04/20/2017 10:34	-0.24	-78	6.78	0.2423	0.0455	10.58	12.1
MW-474	04/20/2017 10:36	-0.24	-78	6.78	0.2421	0.0454	10.64	11.9
MW-474	04/20/2017 10:38	-0.24	-78.00	6.78	0.24	4.591	10.26	11.64
MW-474	01/25/2018 10:30	6.62	43	7.87	1.7091	0.2881	3.75	233.2
MW-474	01/25/2018 10:33	1.62	44	7.79	2.1597	0.3563	4.15	173
MW-474	01/25/2018 10:35	0.77	45	7.71	2.2530	0.3696	4.53	138.3
MW-474	01/25/2018 10:38	0.45	45	7.64	2.2104	0.3629	4.66	121.6
MW-474	01/25/2018 10:40	0.38	44	7.58	2.2257	0.3648	4.87	104.3
MW-474	01/25/2018 10:42	0.35	44	7.53	2.2502	0.3685	4.89	98.3
MW-474	01/25/2018 10:45	0.33	44	7.49	2.3082	0.3771	4.93	82.1
MW-474	01/25/2018 10:47	0.33	44	7.46	2.2878	0.3739	5	75
MW-474	01/25/2018 10:49	0.34	44	7.43	2.3076	0.3767	5.08	66.7
MW-474	01/25/2018 10:52	0.36	44	7.41	2.4137	0.3924	5.12	62.8
MW-474	01/25/2018 10:54	0.37	44	7.38	2.4209	0.3933	5.2	60.2
MW-474	01/25/2018 10:56	0.37	44	7.36	2.3567	0.3836	5.29	51.2
MW-474	01/25/2018 10:59	0.39	44	7.34	2.3490	0.3826	5.22	44.4
MW-474	01/25/2018 11:01	0.39	44	7.32	2.3463	0.3818	5.43	36.3
MW-474	01/25/2018 11:03	0.4	44	7.31	2.4122	0.3915	5.42	37.2
MW-474	01/25/2018 11:06	0.42	44	7.29	2.4576	0.3984	5.34	44.3
MW-474	01/25/2018 11:08	0.42	45	7.28	2.4394	0.3953	5.54	35.4
MW-474	01/25/2018 11:10	0.42	45	7.26	2.6251	0.4228	5.47	39.3
MW-474	01/25/2018 11:13	0.47	45	7.25	2.6385	0.4248	5.46	43.4
MW-474	01/25/2018 11:15	0.46	46	7.23	2.6475	0.4261	5.47	34.4
MW-474	01/25/2018 11:17	0.48	46	7.22	2.5986	0.4192	5.34	37
MW-474	01/25/2018 11:20	0.47	46	7.21	2.5587	0.4130	5.47	34.6
MW-474	01/25/2018 11:22	0.46	46	7.2	2.5564	0.4128	5.43	37.4
MW-474	04/12/2018 10:05	9.52	16	7.42	0.2723	0.0051	10.45	36.7
MW-474	04/12/2018 10:07	2.07	10	7.12	0.3039	0.0056	9.81	16
MW-474	04/12/2018 10:09	1.33	3	7	0.3630	0.0067	9.73	22

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-474	04/12/2018 10:12	1.29	0	6.91	0.4131	0.0075	9.9	13.7
MW-474	04/12/2018 10:14	1.06	-1	6.84	0.4374	0.0079	10.22	18.5
MW-474	04/12/2018 10:17	0.97	-2	6.79	0.4524	0.0082	10.39	12.3
MW-474	04/12/2018 10:19	0.96	-2	6.75	0.4708	0.0085	9.82	12.6
MW-474	04/12/2018 10:21	0.98	-3	6.72	0.4850	0.0087	10.21	13.3
MW-474	04/12/2018 10:24	0.98	-3	6.7	0.4708	0.0085	10.31	9.6
MW-474	04/12/2018 10:26	0.99	-3	6.68	0.4924	0.0089	10.18	12.4
MW-474	04/12/2018 10:28	0.92	-4	6.66	0.4888	0.0088	10.19	8.5
MW-474	04/12/2018 10:31	1	-4	6.65	0.4921	0.0089	9.97	7.5
MW-474	04/12/2018 10:33	0.96	-5	6.64	0.4953	0.0089	9.89	7.4
MW-474	04/12/2018 10:35	1	-5	6.64	0.4880	0.0088	9.94	9.6
MW-474	04/12/2018 10:38	0.93	-5	6.63	0.4921	0.0089	9.96	8.2
MW-474	04/12/2018 10:40	0.95	-5	6.62	0.4814	0.0087	9.75	8
MW-474	04/12/2018 10:42	0.98	-6	6.62	0.4988	0.0090	9.84	6.3
MW-474	04/12/2018 10:45	0.93	-6	6.61	0.4837	0.0087	10.08	5.1
MW-474	04/12/2018 10:47	0.97	-6	6.61	0.4968	0.0089	9.85	6.7
MW-474	04/12/2018 10:49	0.94	-6	6.6	0.4905	0.0088	9.87	6
MW-474	04/12/2018 10:52	0.95	-6.00	6.60	0.48	8.764	9.67	6.72
MW-474	07/18/2018 10:04	2.61	-47	6.79	0.530	9.3190	25.99	73.4
MW-474	07/18/2018 10:06	0.7	-76	6.52	0.534	9.3910	23.38	22
MW-474	07/18/2018 10:08	0.78	-84	6.46	0.532	9.3610	22.61	19.6
MW-474	07/18/2018 10:10	1.04	-92	6.43	0.537	9.4460	21.89	16.3
MW-474	07/18/2018 10:13	1.23	-97	6.42	0.541	9.5190	21.8	18.3
MW-474	07/18/2018 10:15	1.33	-102	6.42	0.544	9.5660	21.46	25.7
MW-474	07/18/2018 10:17	1.45	-105	6.42	0.544	9.5630	21.27	14.4
MW-474	07/18/2018 10:20	1.43	-109	6.42	0.544	9.5740	21.18	10.9
MW-474	07/18/2018 10:22	1.66	-111	6.42	0.546	9.6070	21.13	10.7
MW-474	07/18/2018 10:25	1.97	-113	6.43	0.546	9.6020	21.07	12
MW-474	07/18/2018 10:28	2.19	-115	6.43	0.547	9.6140	21.02	12
MW-474	07/18/2018 10:32	2.44	-117	6.43	0.547	9.6100	20.96	12.6
MW-474	07/18/2018 10:36	2.67	-120.00	6.43	0.55	9.623	21.2	12.90
MW-474	01/09/2019 13:40	0.51	-74.40	6.57	0.52	7.517	12.27	6.10
MW-474	04/05/2019 10:35	1.63	-104.1	6.8	NM	4.058	7.43	5.8
MW-474	07/05/2019 10:05	3.92	-90.1	6.56	NM	7.859	21.65	472.9
MW-474	07/05/2019 10:10	1.37	-92.5	6.45	NM	4.499	18.87	185.2
MW-474	07/05/2019 10:15	1.25	-97.9	6.44	NM	4.519	18.71	142
MW-474	07/05/2019 10:20	1.24	-99	6.44	NM	4.516	18.53	122.1
MW-474	07/05/2019 10:25	1.18	-102	6.45	NM	4.553	18.37	94.5
MW-474	07/05/2019 10:30	1.1	-105.5	6.44	NM	4.581	18.37	48.2
MW-474	07/05/2019 10:35	1.08	-106.6	6.45	NM	4.593	18.35	2.4
MW-474	07/05/2019 10:40	1.04	-109.2	6.45	NM	4.613	18.38	44.9
MW-474	07/05/2019 10:45	1.02	-110.1	6.45	NM	4.622	18.6	10.3
MW-474	07/05/2019 10:50	0.96	-112.4	6.44	NM	4.625	18.58	5
MW-474	07/05/2019 10:55	0.96	-112.4	6.44	NM	4.625	18.58	5
MW-474	10/03/2019 12:35	3.57	-105.4	6.48	NM	2.401	17.9	34.9
MW-474	10/03/2019 12:40	2.14	-97.4	6.51	NM	2.419	18.72	108.4
MW-474	10/03/2019 12:45	1.25	-92.4	6.51	NM	2.409	19.82	39.6
MW-474	10/03/2019 12:50	0.93	-88	6.5	NM	2.38	19.87	9.5
MW-474	10/03/2019 12:55	0.89	-86.7	6.49	NM	2.364	19.81	28.6
MW-474	10/03/2019 13:00	0.62	-86	6.48	NM	2.356	19.86	14
MW-474	10/03/2019 13:05	0.82	-86.2	6.48	NM	2.534	19.8	15.6
MW-474	10/03/2019 13:10	0.7	-85.7	6.48	NM	2.35	19.81	5.4
MW-474	10/03/2019 13:15	0.7	-85.9	6.48	NM	2.354	19.89	5.2
MW-474	10/03/2019 13:20	0.78	-85.4	6.48	NM	2.351	19.87	30.1
MW-474	01/08/2020 12:55	3.24	-100.4	6.8	NM	0.677	6.47	85.4
MW-474	01/08/2020 13:00	1.82	-113.7	6.73	NM	0.851	7.45	36.2
MW-474	01/08/2020 13:05	1.23	-123.4	6.73	NM	0.997	8.18	21
MW-474	01/08/2020 13:10	0.85	-129.8	6.73	NM	1.025	8.37	14.1
MW-474	01/08/2020 13:15	0.68	-135.2	6.74	NM	1.033	8.36	8.1
MW-474	01/08/2020 13:20	0.62	-138.2	6.74	NM	1.047	8.21	11.4
MW-474	01/08/2020 13:25	0.59	-139.3	6.72	NM	1.056	8.19	4.9
MW-474	01/08/2020 13:30	0.55	-139.7	6.72	NM	1.067	8.13	4.6

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-474	01/08/2020 13:35	0.55	-140	6.71	NM	1.077	8.08	4.8
MW-474	04/06/2020 11:35	0.05	-48.5	5.95	NM	3.133	11.47	6.1
MW-474	07/09/2020 09:40	5.78	-82.3	6.42	2.09	3.939	24.43	67.3
MW-474	07/09/2020 09:45	4.45	-99.1	6.38	2.13	4.028	24.2	35.9
MW-474	07/09/2020 09:50	3.96	-100.3	6.39	2.15	4.053	23.74	26.7
MW-474	07/09/2020 09:55	3.55	-105.6	6.4	2.15	4.061	23.7	22.1
MW-474	07/09/2020 10:00	3.15	-105.6	6.4	2.16	4.081	23.62	22.6
MW-474	07/09/2020 10:05	2.66	-108.8	6.41	2.16	4.075	23.16	21
MW-474	07/09/2020 10:10	2.64	-108.9	6.41	2.16	4.074	23.15	19.2
MW-474	07/09/2020 10:15	2.39	-109.6	6.42	2.16	4.072	23.51	15
MW-474	07/09/2020 10:20	2.19	-108.5	6.42	2.17	4.091	23.5	8.1
MW-474	07/09/2020 10:25	2.06	-110.8	6.42	2.17	4.086	23.71	10
MW-474	10/05/2020 15:00	NM	NM	NM	NM	NM	NM	34.2
MW-474	10/12/2020 14:15	1.76	-65.1	6.47	2.17	4.075	17.43	257.6
MW-474	10/12/2020 14:20	1.35	-66.9	6.46	2.18	4.099	17.38	243.5
MW-474	10/12/2020 14:25	1.2	-69	6.45	2.19	4.112	17.38	178.1
MW-474	10/12/2020 14:30	1.18	-71.3	6.44	2.2	4.12	17.42	134.2
MW-474	10/12/2020 14:35	1.13	-72.8	6.44	2.2	4.124	17.46	93
MW-474	10/12/2020 14:40	1.06	-73.5	6.43	2.2	4.128	17.44	77.1
MW-474	10/12/2020 14:45	1.07	-74.4	6.43	2.2	4.125	17.48	57.3
MW-474	10/12/2020 14:50	1.01	-75	6.43	2.2	4.126	17.54	38.3
MW-474	10/12/2020 14:55	1.05	-75.5	6.42	2.21	4.133	17.56	40.3
MW-474	10/12/2020 15:00	1	-76.2	6.42	2.21	4.136	17.55	NM
MW-474	01/08/2021 10:50	6.23	-59	6.63	1.55	2.972	7.1	117.3
MW-474	01/08/2021 10:55	2.59	-97.6	6.76	1.69	3.241	7.8	92.7
MW-474	01/08/2021 11:00	3.25	-104.1	6.77	1.72	3.295	7.67	72.1
MW-474	01/08/2021 11:05	3.09	-105.9	6.77	1.75	3.339	7.32	51.9
MW-474	01/08/2021 11:10	2.79	-109.6	6.76	1.77	3.371	7.79	31.6
MW-474	01/08/2021 11:15	2.55	-111.7	6.76	1.79	3.409	7.8	24.5
MW-474	01/08/2021 11:20	2.31	-114.7	6.73	1.82	3.457	7.91	26.5
MW-474	01/08/2021 11:25	2.13	-117.4	6.75	1.84	3.501	8.4	32.5
MW-474	01/08/2021 11:30	2.16	-118.6	6.75	1.86	3.543	8.46	34.9
MW-474	01/08/2021 11:35	2.14	-118.9	6.72	1.87	3.554	8.64	37.7
MW-474	04/14/2021 09:00	2.26	-109.7	6.46	1.89	3.598	12.63	135.7
MW-474	04/14/2021 09:05	0.31	-105.7	6.51	2.03	3.289	10.78	23
MW-474	04/14/2021 09:10	0.24	-106.4	6.51	2.04	3.838	10.48	3.5
MW-474	04/14/2021 09:15	0.12	-107.4	6.52	2.04	3.845	10.46	1.7
MW-474	04/14/2021 09:20	0.1	-108.9	6.52	2.05	3.854	10.41	2.8
MW-474	04/14/2021 09:25	0.09	-110.8	6.52	2.04	3.844	10.47	0.9
MW-474	04/14/2021 09:30	0.09	-111.8	6.52	2.04	3.851	10.46	1.5
MW-474	04/14/2021 09:35	0.08	-112.9	6.52	2.06	3.871	10.46	4.3
MW-474	04/14/2021 09:40	0.08	-115.6	6.55	2.06	3.876	10.57	2.4
MW-474	04/14/2021 09:45	0.08	-118.2	6.56	2.06	3.875	10.55	0.8
MW-474	07/12/2021 12:55	0.97	-59.9	6.38	1.93	3.674	25.54	36.2
MW-474	07/12/2021 13:00	0.78	-62.4	6.37	1.94	3.684	25.33	30
MW-474	07/12/2021 13:05	0.64	-64.9	6.34	1.94	3.689	25.6	27.2
MW-474	07/12/2021 13:10	0.51	-71.6	6.33	1.96	3.727	25.17	19.8
MW-474	07/12/2021 13:15	0.46	-76.3	6.34	1.96	3.73	24.64	15.4
MW-474	07/12/2021 13:20	0.44	-79.4	6.35	1.97	3.747	24.75	2.2
MW-474	07/12/2021 13:25	0.4	-83.3	6.36	1.98	3.771	25.17	9.6
MW-474	07/12/2021 13:30	0.42	-87.1	6.39	2	3.797	24.98	37
MW-474	07/12/2021 13:35	0.4	-92.3	6.39	2	3.8	24.84	29.8
MW-474	07/12/2021 13:40	0.42	-92.8	6.4	2.01	3.815	24.44	30.2
MW-474	01/19/2022 08:45	5.29	-76.5	6.41	3.42	6.197	6.39	1.9
MW-474	01/19/2022 08:50	0.97	-91.9	6.53	3.98	7.219	7.99	0.1
MW-474	01/19/2022 08:55	0.96	-96.6	6.55	4.09	7.402	8.21	4.5
MW-474	01/19/2022 09:00	0.98	-100	6.55	4.18	7.552	8.64	0
MW-474	01/19/2022 09:05	1.04	-102.8	6.54	4.31	7.757	8.86	0
MW-474	01/19/2022 09:10	0.89	-105.6	6.54	4.4	7.912	8.94	3.3
MW-474	01/19/2022 09:15	0.9	-106.9	6.54	4.44	7.997	8.54	0.9
MW-474	01/19/2022 09:20	1.02	-108.1	6.54	4.48	8.063	8.85	0
MW-474	01/19/2022 09:25	0.98	-109.5	6.53	4.49	8.105	8.88	0

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-474	01/19/2022 09:30	0.94	-111.3	6.53	4.5	8.176	8.85	0
MW-474	04/06/2022 11:50	0.08	-66.4	6.41	1.99	3.758	9.06	12.3
MW-474	04/06/2022 11:55	0.07	-67.5	6.41	1.99	3.757	9.07	7.1
MW-474	04/06/2022 12:00	0.07	-68.2	6.41	1.99	3.762	9.05	7.5
MW-474	04/06/2022 12:05	0.07	-68.4	6.4	1.99	3.76	9.04	7
MW-474	04/06/2022 12:10	0.05	-72.4	6.4	2	3.773	8.94	7.1
MW-474	04/06/2022 12:15	0.04	-75.6	6.4	2.01	3.797	8.95	7.5
MW-474	04/06/2022 12:20	0.04	-76.1	6.4	2.01	3.8	8.96	5.6
MW-474	04/06/2022 12:25	0.04	-76.2	6.4	2.01	3.801	9.02	2
MW-474	04/06/2022 12:30	0.04	-76.8	6.4	2.02	3.803	9.26	6.7
MW-474	04/06/2022 12:35	0.04	-78.7	6.41	2.03	3.822	9.08	7.7
MW-489	07/13/2016 11:17	0.47	-143.1	7.35	1.10	2.144	23.13	50.70
MW-489	07/13/2016 11:36	0.65	-147.9	7.45	1.08	2.119	24.04	52.40
MW-489	10/11/2016 09:07	3.65	-2.9	7.59	1.33	2.563	18.80	33.80
MW-489	10/11/2016 09:25	2.40	-105.1	7.43	1.22	2.361	19.27	67.50
MW-5	02/27/2012 13:59	-0.02	-11	6.87	0.02	0.377	10.73	7.15
MW-5	02/27/2012 14:56	0.30	-53	6.95	0.12	2.928	10.01	473.50
MW-5	02/28/2012 11:32	5.00	161	6.32	0.0000	0.512	7.40	21.80
MW-5	04/04/2013 10:22	0.98	-202	6.78	0.05	0.972	8.05	54.85
MW-5	04/04/2013 11:02	6.76	-43	7.1	0.1	2.041	7.84	348.3
MW-5	04/05/2013 09:48	0.91	-191	6.68	0.1	2.051	7.57	22.7
MW-5	05/29/2014 08:50	1.43	-367	6.18	0.05	9.402	16.47	14.03
MW-5	05/29/2014 09:40	3.02	-138	6.89	0.06	1.219	16.41	175.50
MW-5	05/30/2014 08:40	2.47	-273	6.25	0.06	1.146	17.64	4.80
MW-5	06/15/2016 10:18	0.33	0	6.04	0.02	0.410	18.98	10.40
MW-5	06/15/2016 12:22	1.20	-111	6.18	0.10	1.979	18.25	92.80
MW-5	05/03/2017 09:05	0.10	-13.00	6.36	0.06	1.228	17.27	190.60
MW-5	05/03/2017 09:11	6.07	105.00	5.85	0.02	0.503	16.38	10.70
MW-5	05/03/2017 09:58	1.31	-25.00	7.08	0.08	1.551	13.35	88.70
MW-5	05/23/2018 08:22	6.13	14	7.39	0.0096	0.2018	19.99	23.7
MW-5	05/23/2018 08:24	0.85	-50	7.07	0.0074	0.1571	17.49	13.6
MW-5	05/23/2018 08:26	0.23	-64	6.96	0.0074	0.1557	17.79	13.6
MW-5	05/23/2018 08:29	0.04	-71	6.89	0.0074	0.1559	17.88	15.7
MW-5	05/23/2018 08:31	-0.08	-76	6.84	0.0074	0.1559	17.88	15.7
MW-5	05/23/2018 08:34	-0.21	-80	6.82	0.0073	0.1552	17.93	13.7
MW-5	05/23/2018 08:36	-0.27	-83	6.81	0.0073	0.1549	17.9	13.5
MW-5	05/23/2018 08:38	-0.36	-85	6.79	0.0073	0.1544	17.91	14.9
MW-5	05/23/2018 08:41	-0.4	-88	6.78	0.0073	0.1537	17.8	17.5
MW-5	05/23/2018 08:43	-0.41	-90	6.78	0.0072	0.1524	17.89	14.5
MW-5	05/23/2018 08:45	-0.46	-92	6.78	0.0072	0.1518	17.82	17
MW-5	05/23/2018 08:48	-0.46	-93	6.79	0.0071	0.1505	17.92	14.8
MW-5	05/23/2018 08:50	-0.51	-95	6.79	0.0071	0.1496	17.67	14.9
MW-5	05/23/2018 08:52	-0.56	-96	6.79	0.0070	0.1475	17.58	15.7
MW-5	05/23/2018 08:55	-0.57	-98	6.8	0.0069	0.1463	17.55	15.6
MW-5	05/23/2018 08:57	-0.58	-99	6.8	0.0069	0.1451	17.57	13.1
MW-5	05/23/2018 08:59	-0.59	-100	6.81	0.0068	0.1445	17.63	13
MW-5	05/23/2018 09:02	-0.62	-101	6.81	0.0068	0.1442	17.65	14
MW-5	05/24/2018 09:02	-0.62	-101.00	6.81	0.01	0.144	17.83	13.95
MW-5	05/24/2018 09:49	2.54	-75.00	7.48	0.02	0.242	15.66	24.90
MW-5	05/24/2018 12:45	0.88	-71.00	6.88	0.01	0.236	18.14	7.70
MW-5	05/23/2019 13:15	1.26	-10.4	7.25	NM	0.126	13.48	17
MW-5	05/23/2019 14:27	1.18	11.4	7.02	0.05	0.101	13.81	6.4
MW-5	06/23/2020 08:50	0.44	-74	6.99	0.08	0.165	23.96	10.9
MW-5	06/23/2020 08:55	0.17	-45.3	5.61	0.07	0.152	22.17	4.7
MW-5	06/23/2020 09:00	0.15	-57.3	5.4	0.07	0.151	21.6	5
MW-5	06/23/2020 09:05	0.16	-65.9	5.4	0.07	0.151	21.6	6.6
MW-5	06/23/2020 09:10	0.09	-79.8	5.46	0.07	0.151	21.07	3.6
MW-5	06/23/2020 09:15	0.11	-93.2	5.61	0.07	0.151	21.66	4.4
MW-5	06/23/2020 09:20	0.13	-102.9	5.78	0.07	0.151	21.94	3.4
MW-5	06/23/2020 09:25	0.14	-102.3	5.73	0.07	0.151	22.07	2.6
MW-5	06/23/2020 09:30	0.11	-101.8	5.73	0.07	0.153	21.96	2.6
MW-5	06/23/2020 09:35	0.11	-101	5.72	0.07	0.153	22.22	3.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-5	06/23/2020 09:36	0.11	-101	5.72	0.07	0.153	22.22	3.1
MW-5	06/23/2020 10:50	0.1	-201.3	5.88	0.09	0.139	20.11	3.4
MW-5	06/23/2020 11:00	0.39	-199.2	5.91	0.07	0.182	20.33	3.9
MW-5	05/27/2021 12:45	2.92	6.6	6.09	0.08	0.161	22.78	18.1
MW-5	05/27/2021 12:50	2.98	-7.5	6.14	0.07	0.15	22.88	16.4
MW-5	05/27/2021 12:55	1.73	-17.3	6.15	0.07	0.144	22.28	7.5
MW-5	05/27/2021 13:00	1.37	16.5	6.12	0.07	0.144	22.1	6.8
MW-5	05/27/2021 13:05	1.27	-13.9	6.09	0.07	0.143	22.09	5.2
MW-5	05/27/2021 13:10	1.1	-12.4	6.07	0.07	0.142	21.78	5.9
MW-5	05/27/2021 13:15	0.94	-10.7	6.05	0.07	0.143	21.83	4.4
MW-5	05/27/2021 13:20	0.82	-9	6.03	0.07	0.143	22.1	4.4
MW-5	05/27/2021 13:25	0.81	-8	6.02	0.07	0.143	22.1	5.7
MW-5	05/27/2021 13:30	0.8	-2.9	5.99	0.07	0.143	22.1	4.4
MW-520	02/05/2018 10:25	3.12	196.90	6.64	3.66	6.726	4.9	86.90
MW-520	02/05/2018 11:10	4.32	106.70	7.81	2.46	6.125	3.17	72.80
MW-520	02/05/2018 11:30	3.59	123.00	2.92	3.47	6.417	3.69	45.00
MW-520	05/11/2018 10:42	3.76	-138.00	6.99	0.21	3.911	15.59	14.60
MW-520	05/11/2018 11:09	0.60	-184.00	7.20	0.18	3.498	14.89	14.50
MW-520	08/02/2018 10:57	0.92	-169.00	7.09	0.18	3.427	23.95	18.20
MW-520	08/02/2018 11:28	0.30	-192.00	7.24	0.19	3.484	22.82	21.70
MW-520	11/20/2018 14:35	2.84	-168.90	7.45	0.43	0.860	13.79	3.40
MW-520	11/20/2018 14:55	2.84	-150.10	7.43	0.57	1.143	14.5	5.90
MW-520	11/20/2018 15:15	1.73	-152.70	7.18	0.62	1.227	14.45	40.20
MW-520	02/27/2019 10:12	6.94	-91.2	7.92	0.69	1.374	4.99	37
MW-520	05/15/2019 10:17	3.12	-88.1	7.37	1.05	2.047	14.86	102
MW-520	08/29/2019 09:55	20.6	-150.1	7.12	NM	3.522	25.94	3.7
MW-520	08/29/2019 10:00	24.22	-136.2	7.05	1.88	3.581	27.16	16.1
MW-520	08/29/2019 10:05	4.12	-58.9	7.07	NM	2.527	25.96	3.6
MW-520	08/29/2019 10:10	8.36	-101.8	7.2	NM	2.534	26.38	0.3
MW-520	08/29/2019 10:15	10.44	-144.6	7.31	1.83	2.653	26.64	0.9
MW-520	08/29/2019 10:20	14.23	-158.6	7.35	NM	2.708	26.65	7.4
MW-520	08/29/2019 10:25	13.75	-165.2	7.36	NM	2.764	26.81	7.7
MW-520	08/29/2019 10:30	14.96	-167.2	7.35	NM	2.846	26.85	7.4
MW-520	08/29/2019 10:35	15.62	-166.8	7.32	NM	3	26.7	6.2
MW-520	08/29/2019 10:40	19.19	-148.5	7.2	NM	3.091	27.55	4.8
MW-520	08/29/2019 10:45	17.45	-135.3	7.16	NM	3.232	26.57	4.5
MW-520	08/29/2019 10:50	20.6	-150.1	7.12	NM	3.522	25.94	3.7
MW-520	08/29/2019 11:15	22.69	-133.9	7.07	NM	3.493	26.14	95.5
MW-520	11/05/2019 13:00	1.56	-128.1	7.67	NM	0.767	18.43	37.6
MW-520	11/05/2019 13:25	0.05	-210.8	7.46	0.52	1.042	19.58	29.8
MW-520	11/05/2019 13:40	0.06	-204.7	7.33	0.6	1.209	19.7	58.3
MW-520	05/13/2020 10:05	2.76	-136.3	7.54	0.94	1.836	13.92	25.7
MW-520	08/26/2020 09:25	0.27	-154.6	7.27	0.7	1.394	26.2	9.5
MW-520	08/26/2020 09:45	0.21	-166.5	7.11	0.96	1.899	25.02	20.2
MW-520	08/26/2020 09:55	0.58	-165.4	7.04	1.07	2.078	24.89	146.9
MW-520	11/05/2020 10:45	3.76	-163.4	7.66	0.74	1.476	19.02	13.6
MW-520	11/05/2020 10:55	1.88	-160.3	7.65	0.75	1.49	19.87	15.5
MW-520	02/12/2021 11:05	0.2	137.7	7.08	2.13	4.015	7.38	1.1
MW-520	02/12/2021 11:20	5.36	138.4	7.06	2.17	4.081	7.49	2.2
MW-521	02/05/2018 10:35	5.97	100.70	6.56	2.00	3.791	6.94	27.90
MW-521	02/05/2018 11:15	3.59	-123.00	2.92	3.47	6.417	3.69	45.00
MW-521	02/05/2018 11:25	3.24	-117.40	2.94	3.22	6.411	3.52	43.20
MW-521	05/10/2018 11:14	1.77	-99.00	6.44	0.32	5.824	16.58	259.70
MW-521	08/02/2018 11:40	1.18	-163.00	7.04	0.27	5.028	28.4	11.90
MW-521	08/02/2018 12:10	0.28	-150.00	6.47	0.27	4.960	28.26	21.60
MW-521	02/27/2019 11:23	7.67	-111.2	7.05	0.02	0.045	8.81	8.7
MW-521	05/15/2019 09:40	5	-64.3	6.6	0.03	0.077	15.13	5.6
MW-521	07/29/2019 10:05	10.11	-57.4	6.28	NM	5.27	25.12	8.6
MW-521	07/29/2019 10:25	7.75	-57.3	6.4	1.98	3.797	26.17	3
MW-521	07/29/2019 10:40	5.66	-56.4	6.33	2	3.816	27.39	6.4
MW-521	11/08/2019 09:25	6.16	-102	6.34	NM	1.384	16.77	8.8
MW-521	11/08/2019 09:50	1.03	-194.4	6.53	0.69	1.381	20.9	1.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-521	11/08/2019 10:00	1.08	-196.6	6.53	0.68	1.36	21.22	1.2
MW-521	05/13/2020 09:10	0.5	-113.6	6.74	2.55	4.735	15.48	5.8
MW-521	08/26/2020 08:25	0.29	-119	6.25	2.86	5.321	26.13	9.8
MW-521	08/26/2020 08:55	0.05	-128.7	6.36	2.47	4.648	26.53	0.4
MW-521	08/26/2020 09:05	0.24	-131.3	6.47	2.29	4.336	27.74	2.6
MW-521	11/05/2020 09:40	4.15	-85.1	6.67	2.34	4.386	21.01	10.4
MW-521	11/05/2020 09:50	1.96	-96.1	6.7	2.36	4.392	20.96	11.8
MW-521	02/12/2021 12:40	2.97	-152.8	6.73	2.35	4.382	7.44	79
MW-521	02/12/2021 13:10	0.2	-132.2	6.84	2.21	4.146	11.57	3.3
MW-521	02/12/2021 13:25	0.33	126.1	6.82	2.18	35.9	11.86	37.2
MW-521	03/14/2022 09:40	0.72	-193.2	7.19	0.46	0.915	11.37	197.5
MW-521	03/14/2022 09:45	1.34	-172.6	6.94	0.52	1.032	11.42	173.6
MW-521	03/14/2022 09:50	5.02	-97	6.68	1.92	3.624	12.05	21.5
MW-521	03/14/2022 09:55	5.06	-97.1	6.67	1.94	3.68	12.07	19.5
MW-521	03/14/2022 10:00	5.05	-101.4	6.67	1.97	3.703	12.09	18.1
MW-521	03/14/2022 10:05	4.25	-84.4	6.66	2.08	3.919	12.16	7.8
MW-521	03/14/2022 10:10	4.2	-88.9	6.67	2.09	3.917	12.1	7.6
MW-521	03/14/2022 10:15	3.73	-93.4	6.63	2.09	3.934	12.13	4.2
MW-521	03/14/2022 10:20	3.49	-47.8	6.68	2.08	3.917	12.12	2.7
MW-521	03/14/2022 10:25	1.72	-85.2	6.58	2.07	3.882	12.13	2.8
MW-538	02/13/2018 12:40	0.41	50.20	5.18	2.01	3.770	6.97	2.50
MW-538	02/13/2018 13:25	0.21	91.20	5.03	3.04	4.872	8.5	4.10
MW-538	02/13/2018 13:35	0.63	102.10	5.13	3.05	4.942	8.62	33.20
MW-538	05/17/2018 09:02	2.9	-48	5.43	0.297	5.460	14.81	10.4
MW-538	05/17/2018 09:04	1.55	-26	5.31	0.284	5.253	14.12	8.5
MW-538	05/17/2018 09:06	1.23	-24	5.34	0.274	5.078	14.05	8.6
MW-538	05/17/2018 09:08	1.08	-28	5.42	0.265	4.918	13.97	8.7
MW-538	05/17/2018 09:10	1.01	-37	5.52	0.252	4.694	13.91	8.9
MW-538	05/17/2018 09:13	1.01	-43	5.61	0.247	4.601	13.85	9.1
MW-538	05/17/2018 09:15	0.94	-48	5.68	0.243	4.535	13.8	11.9
MW-538	05/17/2018 09:17	0.95	-46	5.65	0.263	4.883	13.71	12.7
MW-538	05/17/2018 09:19	0.88	-55	5.8	0.247	4.605	13.92	12.5
MW-538	05/17/2018 09:21	0.91	-64	5.93	0.233	4.356	14.02	11
MW-538	05/17/2018 09:23	0.95	-68	5.98	0.230	4.308	14.04	10.6
MW-538	05/17/2018 09:26	0.86	-73	6.06	0.228	4.269	14.08	11
MW-538	05/17/2018 09:28	0.92	-78	6.15	0.222	4.161	14.24	11.1
MW-538	05/17/2018 09:30	0.85	-82	6.21	0.217	4.072	14.26	10.1
MW-538	05/17/2018 09:32	0.83	-84	6.24	0.214	4.021	14.17	10.3
MW-538	05/18/2018 09:08	1.03	-49.00	5.47	0.37	6.729	12.44	47.10
MW-538	05/18/2018 09:32	0.83	-84.00	6.24	0.21	4.004	14.35	10.26
MW-538	05/18/2018 10:35	3.02	-69.00	5.66	0.41	7.463	12.39	339.30
MW-538	08/30/2018 13:30	0.23	-17.20	5.73	3.92	6.954	27.34	5.00
MW-538	08/30/2018 14:05	1.93	26.70	5.39	3.42	6.282	24.25	7.40
MW-538	08/30/2018 14:10	2.51	11.50	5.56	3.58	6.538	21.5	29.40
MW-538	11/16/2018 11:20	0.04	178.00	4.67	2.69	4.976	12.87	17.80
MW-538	11/16/2018 12:00	0.06	186.10	4.16	3.03	5.563	14.54	5.50
MW-538	11/16/2018 12:10	0.11	203.50	3.94	3.28	6.011	15.15	27.10
MW-538	03/01/2019 13:05	0.05	-52.2	6.32	NM	3.64	6.77	11.7
MW-538	03/01/2019 14:00	0.48	-10	6.1	2	3.775	7.21	22.2
MW-538	09/05/2019 11:15	2.13	-81.2	6.45	1.28	1.499	19.92	26.8
MW-538	09/05/2019 12:45	3.26	72.9	6.58	NM	3.132	24.55	11.6
MW-538	09/05/2019 12:50	1.17	-5.9	6.01	NM	3.162	23.77	6.6
MW-538	09/05/2019 12:55	1.43	-29.9	6.06	NM	2.937	23.55	8.5
MW-538	09/05/2019 13:00	1.2	-37.8	6.1	NM	2.85	23.35	10.7
MW-538	09/05/2019 13:05	0.52	-52.8	6.26	NM	2.623	23.61	21.3
MW-538	09/05/2019 13:10	0.56	-61	6.38	NM	2.456	23.84	41.6
MW-538	09/05/2019 13:15	0.57	-67.3	6.5	NM	2.247	23.81	48.2
MW-538	09/05/2019 13:20	0.58	-68.5	6.51	NM	2.199	23.84	37.8
MW-538	09/05/2019 13:25	0.58	-68.5	6.47	NM	2.279	23.76	26.6
MW-538	09/05/2019 13:30	0.59	-69	6.43	NM	2.352	23.82	19.2
MW-538	09/05/2019 14:15	2.13	-81.2	6.45	1.28	1.499	19.92	26.8
MW-538	09/08/2020 10:25	2.38	-126.5	6.52	2.11	3.969	21.97	34.3

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-538	09/08/2020 11:05	19.55	-113.4	6.41	2.38	4.442	20.39	5.5
MW-538	09/08/2020 11:15	19.7	-81.5	6.37	2.4	4.491	20.18	20.53
MW-539	02/13/2018 09:40	4.04	-76.20	6.29	1.88	3.570	11.19	4.40
MW-539	02/13/2018 10:10	2.61	-41.20	6.14	1.80	3.420	9.11	7.20
MW-539	02/13/2018 10:20	2.60	-38.10	6.17	1.77	3.521	11.62	11.70
MW-539	05/17/2018 10:53	2.95	-140	6.2	0.232	4.336	14.88	16.1
MW-539	05/17/2018 10:55	1.34	-118	6.19	0.231	4.322	14.67	15.5
MW-539	05/17/2018 10:58	1.05	-108	6.18	0.232	4.326	14.62	14.7
MW-539	05/17/2018 11:00	0.98	-103	6.18	0.232	4.327	14.57	13.5
MW-539	05/17/2018 11:03	0.91	-100	6.18	0.231	4.323	14.47	12.3
MW-539	05/17/2018 11:05	0.82	-97	6.18	0.231	4.324	14.6	13.1
MW-539	05/17/2018 11:07	0.84	-95	6.18	0.231	4.325	14.6	12
MW-539	05/18/2018 09:53	0.45	-108.00	6.10	0.23	4.233	13.55	61.40
MW-539	05/18/2018 11:07	0.84	-95.00	6.18	0.23	4.307	14.78	12.02
MW-539	05/18/2018 11:36	3.13	-100.00	6.32	0.23	4.267	14.4	363.70
MW-539	08/27/2018 10:40	1.79	-97.90	6.38	2.99	5.211	22.15	17.70
MW-539	08/27/2018 11:10	3.16	-58.60	6.22	2.64	4.732	20.68	4.80
MW-539	08/27/2018 11:20	2.01	-52.30	6.19	2.59	4.845	24.13	68.80
MW-539	11/16/2018 09:15	0.32	171.10	5.64	1.14	2.212	8.91	176.60
MW-539	11/16/2018 09:45	0.33	179.00	5.51	1.03	2.177	13.72	131.90
MW-539	11/16/2018 09:55	0.11	234.50	5.42	0.99	1.936	14.59	271.40
MW-539	03/01/2019 09:15	3.57	-40	5.96	NM	2.71	7.87	46.2
MW-539	03/01/2019 10:10	1.16	-12.3	5.95	1.57	3.002	9.99	20.8
MW-539	09/03/2019 11:50	2.48	-66.8	6.07	NM	3.699	22.88	10.4
MW-539	09/03/2019 11:55	0.36	-85.9	6.24	NM	3.855	22.27	8.6
MW-539	09/03/2019 12:00	0.31	-94	6.28	NM	3.747	22.79	8.5
MW-539	09/03/2019 12:05	0.41	-94.3	6.29	NM	3.591	24.46	11.4
MW-539	09/03/2019 12:10	0.62	-72.4	6.29	NM	3.063	22.78	13.2
MW-539	09/03/2019 12:15	0.49	-70.8	6.29	NM	3.104	23.36	11.8
MW-539	09/03/2019 12:20	1.37	-71.5	6.29	NM	3.126	23.24	11.9
MW-539	09/03/2019 12:25	1.17	-72.6	6.29	NM	3.146	23.25	12.1
MW-539	09/03/2019 12:30	1.16	-72.7	6.29	NM	3.212	22.98	9.9
MW-539	09/03/2019 12:35	1.52	-75	6.29	NM	3.318	23.01	9.2
MW-539	09/03/2019 13:25	1.39	-118.5	6.25	2.01	3.806	24.66	54.2
MW-539	09/03/2019 13:55	1.23	-67.7	6.29	2.07	3.902	21.62	36.4
MW-539	04/10/2020 12:00	3.04	-103.4	6.16	NM	2.471	11.97	NM
MW-539	04/10/2020 12:45	3.45	-329	6.5	2.45	2.654	12.34	2.1
MW-539	10/05/2020 13:05	3.2	-131.9	7.19	1.9	3.612	21.35	20.2
MW-539	10/05/2020 13:10	5.8	-111.1	6.94	1.88	3.566	22.08	24.4
MW-539	10/05/2020 13:15	6.54	-104.5	6.86	1.85	3.521	22.62	24.2
MW-539	10/05/2020 13:20	5.71	-102.1	6.83	1.85	3.518	22.87	25
MW-539	10/05/2020 13:25	6.57	-101.9	6.78	1.84	3.499	22.81	26.7
MW-539	10/05/2020 13:30	5.8	-100.5	6.75	1.84	3.5	23.01	22.2
MW-539	10/05/2020 13:35	6.72	-98.6	6.74	1.84	3.499	22.81	25.1
MW-539	10/05/2020 13:40	6.87	-97.4	6.72	1.84	3.495	22.65	28.2
MW-539	10/05/2020 13:45	6.99	-96.1	6.69	1.84	3.502	21.8	24.4
MW-539	10/05/2020 13:50	6.24	-95.6	6.68	1.84	3.498	21.52	23.1
MW-539	10/05/2020 14:35	3.91	-84.4	6.66	1.91	3.611	20.07	24.6
MW-539	10/05/2020 14:55	0.43	-79.2	6.46	1.84	3.498	19.88	NM
MW-539	10/06/2020 14:55	NM	NM	NM	NM	NM	NM	498.8
MW-539	01/11/2022 09:00	0.65	-62.7	6.49	0.88	1.694	11.03	47.1
MW-539	01/11/2022 09:05	0.38	-78.5	6.47	0.87	1.707	10.39	21.1
MW-539	01/11/2022 09:10	0.37	-79	6.45	0.87	1.704	10.38	20.3
MW-539	01/11/2022 09:15	0.36	-80.6	6.44	0.87	1.71	9.78	16.7
MW-539	01/11/2022 09:20	0.36	-82.3	6.43	0.86	1.7	10.07	12.9
MW-539	01/11/2022 09:25	0.39	-84.5	6.44	0.88	1.724	9.32	9.2
MW-539	01/11/2022 09:30	0.39	-84.1	6.43	0.88	1.726	9.28	9
MW-539	01/11/2022 09:35	0.37	-84	6.46	0.88	1.727	9.25	8.8
MW-539	03/30/2022 12:10	1.38	-57.8	6.86	0.33	0.668	9.9	458.6
MW-539	03/30/2022 12:15	0.73	-60	6.54	0.32	0.659	9.86	357.8
MW-539	03/30/2022 12:20	0.64	-58.8	6.33	0.34	0.699	9.53	193.1
MW-539	03/30/2022 12:25	0.59	-49	6.09	0.36	0.739	9.53	88.3

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-539	03/30/2022 12:30	0.55	-35.2	6.09	0.38	0.765	9.56	15.8
MW-539	03/30/2022 12:35	0.56	-34.5	6.1	0.38	0.769	9.55	12.9
MW-539	03/30/2022 12:40	0.54	-33.8	6.15	0.39	0.793	9.53	6.8
MW-539	03/30/2022 12:45	0.52	-37.8	6.17	0.4	0.814	9.65	4.9
MW-539	03/30/2022 12:50	0.53	-39.7	6.2	0.41	0.827	9.79	10
MW-539	03/30/2022 12:55	0.53	-40.2	6.21	0.41	0.827	9.79	8.5
MW-540	02/12/2018 13:50	0.09	-152.80	6.96	7.32	12.510	12.86	19.90
MW-540	02/12/2018 14:30	0.53	-132.20	7.26	7.94	13.680	14.37	5.90
MW-540	02/12/2018 14:45	0.47	-168.10	6.91	6.87	11.810	15.08	14.30
MW-540	05/17/2018 14:06	4.42	-124	6.63	0.921	15.623	18.04	133.3
MW-540	05/17/2018 14:08	1.73	-129	6.63	0.924	15.737	15.37	148.7
MW-540	05/17/2018 14:10	1.29	-128	6.63	0.926	15.773	15.06	170.9
MW-540	05/17/2018 14:13	1.05	-127	6.64	0.928	15.805	15.04	134.8
MW-540	05/17/2018 14:15	0.96	-127	6.64	0.928	15.807	14.98	132.7
MW-540	05/17/2018 14:17	0.91	-127	6.64	0.930	15.832	15.13	122.9
MW-540	05/17/2018 14:19	0.89	-127	6.64	0.928	15.807	15.14	108.6
MW-540	05/17/2018 14:22	0.84	-127	6.65	0.930	15.835	15.04	108.4
MW-540	05/17/2018 14:24	0.88	-126	6.65	0.930	15.838	14.95	106
MW-540	05/18/2018 14:24	0.88	-126.00	6.65	0.93	15.770	15.14	106.00
MW-540	05/18/2018 14:52	1.94	-117.00	6.78	0.93	15.880	16.11	136.50
MW-540	08/27/2018 13:35	2.92	-99.10	7.23	11.04	18.610	21.69	215.60
MW-540	08/27/2018 14:25	3.59	-55.00	7.17	10.92	18.600	21.72	308.10
MW-540	08/27/2018 14:35	3.37	-78.80	7.06	10.86	18.340	22.49	347.60
MW-540	11/21/2018 09:05	0.34	-146.40	7.17	9.85	16.600	14.49	28.10
MW-540	11/21/2018 10:00	0.95	-176.00	7.14	9.63	16.360	14.17	0.0000
MW-540	11/21/2018 10:10	5.19	-147.90	7.57	9.24	15.710	15.7	88.70
MW-540	02/27/2019 09:10	0.05	-250.8	6.68	NM	17.13	11.84	669.9
MW-540	02/27/2019 10:05	0.31	-245.3	6.81	10.39	15.57	11.76	43
MW-540	09/06/2019 12:10	1.67	106.9	6.72	NM	9.948	20.7	135.3
MW-540	09/06/2019 12:15	1.13	70.1	6.62	NM	10.06	20.34	60.3
MW-540	09/06/2019 12:20	0.79	34.1	6.6	NM	10.09	20.24	47.4
MW-540	09/06/2019 12:25	0.59	0.1	6.59	NM	10.08	20.06	40.6
MW-540	09/06/2019 12:30	0.41	-22.9	6.59	NM	10.04	19.86	46.3
MW-540	09/06/2019 12:35	0.35	-29.8	6.59	NM	10.02	19.71	41.4
MW-540	09/06/2019 12:40	0.32	-35.9	6.59	NM	10.03	19.66	43
MW-540	09/06/2019 12:45	0.25	-46	6.59	NM	10.06	19.44	22.5
MW-540	09/06/2019 12:50	0.18	-51.7	6.59	NM	10.06	19.28	21.7
MW-540	09/06/2019 12:55	0.21	-56.1	6.6	NM	10.03	19.29	39.5
MW-540	09/06/2019 13:20	0.44	70.2	6.6	5.71	10.02	19.88	34.2
MW-540R	04/17/2020 10:00	0.03	-251.8	8.06	NM	15.26	12.35	0.8
MW-540R	04/17/2020 10:55	1.53	-202.6	8.54	9.68	16.61	15.06	4.1
MW-540R	10/06/2020 09:15	6.79	-257.3	7.85	9.56	16.27	19.94	2.7
MW-540R	10/06/2020 09:20	1.23	-293.9	7.7	9.56	16.27	19.81	1.4
MW-540R	10/06/2020 09:25	0.65	-329.5	7.75	9.52	16.21	19.96	0.4
MW-540R	10/06/2020 09:30	0.66	-333.7	7.77	9.55	16.25	19.96	0.4
MW-540R	10/06/2020 09:35	0.83	-340.3	7.82	9.58	16.29	19.95	0
MW-540R	10/06/2020 09:40	1.33	-343.9	7.84	9.57	16.31	20.22	0
MW-540R	10/06/2020 09:45	1.45	-348.1	7.86	9.63	16.38	20.23	0
MW-540R	10/06/2020 09:50	1.6	-349	7.87	9.62	16.42	20.19	0
MW-540R	10/06/2020 09:55	2.14	-351.1	7.89	9.61	16.35	20.48	0
MW-540R	10/06/2020 10:00	2.03	-350.1	7.9	9.63	16.38	20.47	0
MW-540R	10/06/2020 10:50	3.58	-323.5	8.13	9.74	16.55	20.69	5.5
MW-540R	10/06/2020 11:20	14.56	-334.7	8.3	9.77	16.59	20.01	16.4
MW-540R	02/16/2021 13:10	3.57	-173.2	7.19	4.72	8.446	12.69	6.6
MW-540R	02/16/2021 13:30	1.16	-224.2	7.18	4.51	8.08	12.56	28.3
MW-540R	05/24/2021 12:30	0.18	-312.1	6.71	10.09	17.07	14.3	1.7
MW-540R	05/24/2021 12:35	0.17	-311.3	6.69	10.06	17.04	14.38	1.7
MW-540R	09/02/2021 13:05	2.32	-253.4	7.26	8.17	14.11	22.51	22.1
MW-540R	09/02/2021 13:10	1.24	-292.6	7.17	8.21	14.14	22.42	8.2
MW-540R	09/02/2021 13:15	0.88	-322	7.13	8.15	14.11	22.4	5.8
MW-540R	09/02/2021 13:20	0.84	-343.9	7.15	8.06	13.95	21.99	7.3
MW-540R	09/02/2021 13:25	0.78	-347.8	7.15	8.11	13.95	21.31	3.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-540R	09/02/2021 13:30	0.77	-344.3	7.16	8.26	14.24	21.51	4.9
MW-540R	09/02/2021 13:35	0.69	-346.8	7.16	8.3	14.31	21.35	7.7
MW-540R	09/02/2021 13:40	0.69	-349.3	7.16	8.38	14.43	21.08	5.2
MW-540R	09/02/2021 13:45	0.61	-348.7	7.15	8.42	14.5	21.17	5.6
MW-540R	09/02/2021 13:50	0.63	-349.7	7.16	8.35	14.39	21.17	5
MW-540R	02/25/2022 13:50	4.12	-238	7.6	7.7	13.31	11.41	15.5
MW-540R	02/25/2022 13:55	3.91	-241.8	7.54	7.7	13.32	11.44	13.5
MW-540R	02/25/2022 14:00	3.21	-280	7.3	7.71	13.33	10.92	11.8
MW-540R	02/25/2022 14:05	2.08	-306.4	7.11	7.72	13.36	11.1	10.4
MW-540R	02/25/2022 14:10	1.94	-306	7.08	7.72	13.35	11.22	11.5
MW-540R	02/25/2022 14:15	1.75	-310.5	7.02	7.74	13.39	11.28	8.5
MW-540R	02/25/2022 14:20	1.75	-300.1	7.02	7.73	13.37	11.41	8.7
MW-540R	02/25/2022 14:25	2.01	-306.1	6.98	7.97	13.73	12.19	10.4
MW-540R	02/25/2022 14:30	2.1	328.4	6.97	8.15	14.03	12.29	9
MW-540R	02/25/2022 14:35	2.11	-329.7	6.97	8.17	14.06	12.31	8.8
MW-541	02/12/2018 13:40	0.21	-75.01	6.53	1.67	3.247	10.32	23.10
MW-541	02/12/2018 14:15	0.37	-103.40	6.91	2.99	3.561	11.73	9.00
MW-541	02/12/2018 14:25	0.54	-71.90	7.02	1.49	3.972	10.36	205.10
MW-541	05/17/2018 12:47	5.46	-100	6.4	0.184	3.486	15.42	20.2
MW-541	05/17/2018 12:50	1.85	-107	6.3	0.185	3.505	14.38	18.2
MW-541	05/17/2018 12:52	1.24	-104	6.28	0.186	3.516	14.23	18.4
MW-541	05/17/2018 12:54	1.03	-102	6.27	0.186	3.522	14.21	14.1
MW-541	05/17/2018 12:56	0.95	-100	6.26	0.186	3.528	14.24	15.9
MW-541	05/17/2018 12:58	0.93	-99	6.26	0.187	3.533	14.21	13.3
MW-541	05/17/2018 13:00	6.77	-96	6.44	0.000000	0.002	15.93	2.9
MW-541	05/17/2018 13:03	5.35	-89	6.37	0.186	3.529	14.02	71.2
MW-541	05/17/2018 13:05	1.8	-88	6.29	0.187	3.530	14.03	23.2
MW-541	05/17/2018 13:07	1.14	-87	6.28	0.187	3.532	14.05	15.9
MW-541	05/17/2018 13:09	0.95	-87	6.27	0.187	3.537	14.02	15.8
MW-541	05/17/2018 13:11	0.86	-87	6.27	0.187	3.530	14	15.8
MW-541	05/17/2018 13:13	0.85	-86	6.27	0.187	3.531	14.04	16.3
MW-541	05/17/2018 13:16	0.81	-86	6.27	0.190	3.585	14.15	57.1
MW-541	05/17/2018 13:18	0.88	-87	6.27	0.187	3.528	14.92	16.8
MW-541	05/17/2018 13:20	0.91	-87	6.28	0.187	3.528	15.44	12
MW-541	05/17/2018 13:22	0.94	-88	6.28	0.187	3.528	15.97	9.9
MW-541	05/17/2018 13:24	0.9	-88	6.28	0.187	3.529	16.47	8.4
MW-541	05/17/2018 13:26	0.92	-89	6.28	0.187	3.529	16.94	6.5
MW-541	05/17/2018 13:29	0.87	-89	6.28	0.187	3.527	17.43	6.4
MW-541	05/17/2018 13:31	0.86	-89	6.28	0.187	3.528	17.89	6.4
MW-541	05/18/2018 10:40	0.24	-109.00	6.49	0.18	3.347	13.72	38.80
MW-541	05/18/2018 13:31	0.86	-89.00	6.28	0.19	3.514	18.07	6.37
MW-541	05/18/2018 13:53	2.45	-56.00	6.38	0.21	3.868	14.56	1156.00
MW-541	08/28/2018 09:10	0.86	-88.40	6.05	3.24	5.960	22.48	208.90
MW-541	08/28/2018 09:40	1.22	-84.50	6.04	3.73	6.793	22.35	99.30
MW-541	08/28/2018 09:50	3.60	-49.20	6.12	2.07	3.929	22.92	514.10
MW-541	11/20/2018 12:50	3.35	-94.00	6.81	2.14	4.021	15.39	23.20
MW-541	11/20/2018 13:40	3.36	-121.20	6.94	4.34	7.795	16.69	5.70
MW-541	11/20/2018 13:50	4.03	-106.70	7.00	2.08	3.920	16.3	582.40
MW-541	02/28/2019 09:10	0.52	-71.2	6.52	NM	3.333	7.74	48.9
MW-541	02/28/2019 09:55	3.06	-75.6	6.81	3.46	6.329	9.97	9.9
MW-541	09/04/2019 10:05	2.68	-124.3	6.5	NM	2.41	24.23	7.1
MW-541	09/04/2019 10:10	4.5	-114.1	6.53	NM	2.395	23.12	3.9
MW-541	09/04/2019 10:15	5.91	-110.1	6.54	NM	2.393	22.52	1.8
MW-541	09/04/2019 10:20	5.27	-109	6.56	NM	2.474	22.22	2.2
MW-541	09/04/2019 10:25	5.34	-114.7	6.61	NM	3.217	22.06	2
MW-541	09/04/2019 10:30	4.77	-119.4	6.66	NM	3.809	22.1	1.5
MW-541	09/04/2019 10:35	4.18	-124.7	6.7	NM	4.458	21.99	1.9
MW-541	09/04/2019 10:40	3.55	-128.9	6.73	NM	5.035	22.02	1.7
MW-541	09/04/2019 10:45	3.05	-132.7	6.75	NM	5.503	21.94	1.7
MW-541	09/04/2019 10:50	2.17	-108.9	6.75	NM	5.606	22.08	2.5
MW-541	09/04/2019 14:05	2.17	-108.9	6.75	NM	5.606	22.08	2.5
MW-541	09/04/2019 14:17	3.01	-112.3	6.75	2.3	6.069	22.08	2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-541	09/04/2019 14:43	2.7	-132.1	6.76	2.14	6	22.03	133.2
MW-541R	04/10/2020 14:25	0.14	-356.2	7.34	NM	21.06	11.63	NM
MW-541R	04/10/2020 15:00	0.88	-318.9	7.73	5.96	10.49	13.24	2.4
MW-541R	10/06/2020 12:55	7.27	-302.5	8.73	11.49	19.26	21.48	2.3
MW-541R	10/06/2020 13:00	5.11	-322	8.5	11.71	19.57	21.45	0.9
MW-541R	10/06/2020 13:05	4.3	-332.4	8.37	11.96	19.94	21.48	0.6
MW-541R	10/06/2020 13:10	5.13	-363.8	8.28	12.76	21.22	21.49	0
MW-541R	10/06/2020 13:15	5.99	-358.2	8.3	12.86	21.39	21.86	0.4
MW-541R	10/06/2020 13:20	5.78	-368.6	8.35	12.89	21.46	22.46	0.2
MW-541R	10/06/2020 13:25	5.51	-370	8.36	12.88	21.45	22.56	0.3
MW-541R	10/06/2020 13:30	4.05	-370.6	8.35	12.7	21.17	21.95	0.3
MW-541R	10/06/2020 13:35	3.45	-367.3	8.37	12.64	21.07	21.98	0.2
MW-541R	10/06/2020 13:40	3.76	-357	8.36	12.62	21.04	22.31	0.3
MW-541R	10/06/2020 14:30	2.19	-310.2	8.89	11.61	19.54	22.34	3.8
MW-541R	10/06/2020 14:55	1.85	-362.9	8.59	11.14	18.73	20.9	NM
MW-541R	10/07/2020 14:55	NM	NM	NM	NM	NM	NM	44.3
MW-541R	04/01/2022 10:35	8.81	75.6	7.1	0.86	1.688	13.52	43.9
MW-541R	04/01/2022 10:40	8.72	79.4	7.09	0.86	1.69	13.29	34
MW-541R	04/01/2022 10:45	8.61	84.9	7.07	0.87	1.704	13.15	16.4
MW-541R	04/01/2022 10:50	8.56	90.7	7.05	0.89	1.747	12.85	10
MW-541R	04/01/2022 10:55	8.49	94.8	7.03	0.91	1.775	12.67	1.1
MW-541R	04/01/2022 11:00	8.3	93.5	6.98	0.94	1.836	12.98	3.2
MW-541R	04/01/2022 11:05	8.25	91.5	6.97	0.95	1.848	12.94	3.1
MW-541R	04/01/2022 11:10	8.16	88.6	6.96	0.95	1.859	13	3.2
MW-542	02/13/2018 09:40	0.67	-287.90	7.63	3.71	6.728	11.8	45.90
MW-542	02/13/2018 10:30	1.31	-368.80	7.86	3.27	7.013	12.62	5.10
MW-542	02/13/2018 10:45	2.86	-144.90	7.06	1.41	5.617	10.71	36.70
MW-542	05/22/2018 08:40	5.34	-129	6.9	0.246	4.561	17.08	19.6
MW-542	05/22/2018 08:42	1.66	-150	7.04	0.248	4.618	15.48	22.9
MW-542	05/22/2018 08:44	0.93	-155	7.12	0.249	4.630	14.95	23.1
MW-542	05/22/2018 08:47	0.89	-157	7.16	0.251	4.666	14.65	25.1
MW-542	05/22/2018 08:49	0.68	-158	7.18	0.253	4.704	14.7	24.3
MW-542	05/22/2018 08:52	0.49	-159	7.19	0.255	4.730	14.68	28.2
MW-542	05/22/2018 08:54	0.37	-160	7.2	0.257	4.768	14.67	31.4
MW-542	05/22/2018 08:56	0.29	-160	7.21	0.259	4.803	14.73	36.6
MW-542	05/22/2018 08:59	0.25	-161	7.22	0.260	4.829	14.68	35
MW-542	05/22/2018 09:01	0.18	-161	7.23	0.262	4.855	14.62	36.4
MW-542	05/22/2018 09:03	0.16	-161	7.23	0.263	4.879	14.71	43.4
MW-542	05/22/2018 09:06	0.13	-161	7.24	0.264	4.899	14.67	42.5
MW-542	05/22/2018 09:08	0.05	-162	7.24	0.264	4.903	14.61	44.7
MW-542	05/22/2018 09:10	0.08	-162	7.25	0.265	4.915	14.46	49.3
MW-542	05/22/2018 09:13	-0.01	-162	7.25	0.265	4.920	14.5	51.3
MW-542	05/22/2018 09:15	-0.03	-162	7.26	0.267	4.945	14.53	49.5
MW-542	05/23/2018 09:15	-0.03	-162.00	7.26	0.27	4.924	14.71	49.47
MW-542	05/23/2018 09:41	3.49	-121.00	6.96	0.27	4.969	14.96	616.20
MW-542	05/23/2018 12:30	0.32	-143.00	7.06	0.23	4.311	14.52	84.60
MW-542	08/28/2018 13:25	2.80	-83.20	7.75	2.69	5.008	23.76	52.20
MW-542	08/28/2018 13:55	2.91	-97.30	7.11	3.39	6.232	23.51	26.70
MW-542	08/28/2018 14:05	2.26	-94.70	7.37	2.38	4.466	25.17	19.50
MW-542	11/20/2018 09:00	0.40	-173.60	7.84	3.43	6.257	13.68	32.60
MW-542	11/20/2018 10:00	2.25	-136.90	7.46	3.63	6.593	15.02	10.50
MW-542	11/20/2018 10:10	3.06	-147.50	7.55	2.81	5.187	15.36	196.60
MW-542	02/28/2019 13:05	6.9	-136.7	7.28	NM	5.067	8.23	16.2
MW-542	02/28/2019 13:50	9.58	-55.6	7.41	3.38	6.18	9.96	5.1
MW-542	09/04/2019 13:10	1.73	115.7	7.12	NM	3.047	24.79	15.4
MW-542	09/04/2019 13:15	0.55	-27	7.06	NM	3.074	23.55	5.7
MW-542	09/04/2019 13:20	0.29	-112.6	7.1	NM	3.075	23.1	4.2
MW-542	09/04/2019 13:25	0.23	-127	7.12	NM	3.075	23.01	3.1
MW-542	09/04/2019 13:30	0.21	-133.3	7.13	NM	3.073	23.04	2.9
MW-542	09/04/2019 13:35	0.23	-137.1	7.13	NM	3.077	22.86	4.9
MW-542	09/04/2019 13:40	0.22	-139.4	7.12	NM	3.105	22.81	2.4
MW-542	09/04/2019 13:45	0.22	-140.5	7.11	NM	3.164	23.09	1.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-542	09/04/2019 13:50	0.22	-142.1	7.1	NM	3.209	23.25	1.3
MW-542	09/04/2019 13:55	0.22	-142.7	7.1	NM	3.235	23.21	1.2
MW-542	09/04/2019 14:10	1.63	-84.5	7.12	1.67	3.217	25.67	15.8
MW-542	09/04/2019 14:35	1.44	-99.4	7.14	1.6	3.079	24.47	252.3
MW-542	10/05/2020 10:00	NM	NM	NM	NM	NM	NM	137.2
MW-542	10/07/2020 08:30	4.62	-61	7.76	1.47	2.815	20.42	1.8
MW-542	10/07/2020 08:35	2.83	-107.4	7.74	1.47	2.825	20.36	1
MW-542	10/07/2020 08:40	2.05	-133.9	7.83	1.5	2.869	19.96	0.6
MW-542	10/07/2020 08:45	0.98	-146.8	7.91	1.49	2.87	19.95	0.3
MW-542	10/07/2020 08:50	0.62	-163.4	8	1.48	2.845	20.07	0
MW-542	10/07/2020 08:55	0.71	-164.5	8.01	1.48	2.841	20.1	0
MW-542	10/07/2020 09:00	0.88	-172	8.06	1.48	2.835	20.29	0
MW-542	10/07/2020 09:05	0.44	-174.6	8.07	1.48	2.835	20.42	0
MW-542	10/07/2020 09:10	0.57	-173.9	8.1	1.47	2.833	20.46	0
MW-542	10/07/2020 09:15	0.28	-179.4	8.12	1.47	2.826	20.59	0
MW-542	10/07/2020 09:47	2.26	-118.2	8.36	1.52	2.92	22.07	3.5
MW-542	10/07/2020 10:00	2.6	-123.7	8.45	1.52	2.911	21.31	NM
MW-542	03/31/2022 12:10	1	-95.3	6.17	0.72	1.42	13.23	47.8
MW-542	03/31/2022 12:15	0.95	-95.2	6.06	0.71	1.416	13.21	41.8
MW-542	03/31/2022 12:20	0.62	-107.3	5.73	0.72	1.42	12.2	19.8
MW-542	03/31/2022 12:25	0.61	-110.6	5.73	0.72	1.418	12.14	16.9
MW-542	03/31/2022 12:30	0.6	-113.1	5.72	0.72	1.42	12.13	19.9
MW-542	03/31/2022 12:35	0.57	-122.9	5.72	0.72	1.429	12.14	12.5
MW-542	03/31/2022 12:40	0.55	-151.8	5.74	0.74	1.468	12.07	12.2
MW-542	03/31/2022 12:45	0.55	-153	5.74	0.74	1.471	12.1	10.2
MW-542	03/31/2022 12:50	0.54	-165.9	5.76	0.76	1.501	12.17	7.2
MW-542	03/31/2022 12:55	0.54	-168.1	5.77	0.76	1.506	12.16	4.8
MW-543	02/14/2018 09:10	0.70	-122.60	6.70	0.43	0.866	5.02	14.90
MW-543	02/14/2018 10:00	0.81	-167.80	6.81	0.41	0.917	5.06	26.80
MW-543	02/14/2018 10:20	0.88	-172.90	7.12	0.50	0.964	5.26	40.70
MW-543	05/22/2018 13:27	5.5	-110	7.39	0.039	0.785	19.77	20
MW-543	05/22/2018 13:30	1.87	-136	7.55	0.039	0.779	19.3	15.5
MW-543	05/22/2018 13:33	0.83	-154	7.78	0.035	0.719	18.97	25
MW-543	05/22/2018 13:36	0.28	-169	7.95	0.033	0.678	18.88	22.2
MW-543	05/22/2018 13:39	0.17	-188	8.22	0.033	0.670	18.98	16.3
MW-543	05/22/2018 13:42	0.07	-205	8.51	0.033	0.669	19.09	12.5
MW-543	05/22/2018 13:45	0.06	-219	8.72	0.033	0.673	19.12	12.9
MW-543	05/22/2018 13:48	0.06	-224	8.75	0.035	0.704	19.19	9.9
MW-543	05/22/2018 13:51	0.02	-230	8.76	0.035	0.716	19.21	9.2
MW-543	05/22/2018 13:54	0.02	-234	8.71	0.037	0.745	19.18	7.8
MW-543	05/22/2018 13:57	-0.04	-238	8.62	0.039	0.788	19.14	8.4
MW-543	05/22/2018 14:00	-0.07	-241	8.53	0.040	0.818	19.07	8
MW-543	05/22/2018 14:03	-0.06	-245	8.44	0.042	0.839	18.92	7.2
MW-543	05/22/2018 14:06	-0.05	-250	8.37	0.043	0.868	18.88	5.9
MW-543	05/22/2018 14:09	-0.07	-256	8.33	0.044	0.887	18.84	6.6
MW-543	05/22/2018 14:11	-0.08	-262	8.29	0.045	0.906	18.7	5.9
MW-543	05/22/2018 14:14	-0.07	-268	8.27	0.046	0.923	18.64	4.8
MW-543	05/23/2018 12:47	0.14	-237.00	8.68	0.04	0.721	20.26	15.10
MW-543	05/23/2018 14:15	-0.07	-268.00	8.27	0.05	0.919	18.82	4.82
MW-543	05/23/2018 15:02	2.89	-261.00	8.31	0.04	0.962	15.21	9.72
MW-543	08/29/2018 09:00	1.49	-58.80	6.63	3.81	3.796	26	96.90
MW-543	08/29/2018 10:00	2.38	-54.10	6.17	2.10	3.981	24.96	132.00
MW-543	08/29/2018 10:10	3.56	-55.10	6.76	0.95	1.879	26.95	197.30
MW-543	11/15/2018 13:00	0.42	-68.00	8.31	0.67	1.335	9.44	11.40
MW-543	11/15/2018 13:35	0.04	-94.30	8.52	0.08	1.347	8.57	2.20
MW-543	11/15/2018 13:45	0.05	-73.10	8.39	0.65	1.311	7.46	7.90
MW-543	02/21/2019 13:05	0.85	-97.6	7.5	NM	1.22	8.13	22.3
MW-543	02/21/2019 13:55	3.37	-35.6	7.68	0.6	1.208	8.87	18
MW-543	09/06/2019 10:05	13.95	-98.7	6.25	NM	2.216	20.51	107.9
MW-543	09/06/2019 10:10	11.8	-105.7	6.32	NM	2.083	21.42	90.7
MW-543	09/06/2019 10:15	9.38	-114.5	6.36	NM	1.951	21.69	67.5
MW-543	09/06/2019 10:20	9.72	-121	6.4	NM	1.692	21.78	50.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-543	09/06/2019 10:25	9.53	-129.4	6.46	NM	1.493	21.81	26.2
MW-543	09/06/2019 10:30	8.23	-135.4	6.5	NM	1.34	21.88	18.7
MW-543	09/06/2019 10:35	8.08	-143	6.53	NM	1.207	21.99	12.9
MW-543	09/06/2019 10:40	9	-146.8	6.54	NM	1.246	21.98	43.7
MW-543	09/06/2019 10:45	6.87	-155.8	6.63	NM	1.051	22.12	8.1
MW-543	09/06/2019 10:50	5.4	-161.5	6.67	NM	0.999	22.16	5.3
MW-543	09/06/2019 11:20	8.3	-171.9	6.73	0.47	0.948	22.1	12.5
MW-543	09/06/2019 11:50	6.83	-155.5	6.71	0.47	0.962	21.88	44.3
MW-543R	10/05/2020 09:25	0.97	-285.4	6.58	7.2	12.5	18.84	19.2
MW-543R	10/05/2020 09:30	0.94	-286.5	6.6	7.2	12.51	18.93	21.1
MW-543R	10/05/2020 09:35	3.45	-318.4	6.52	7.14	12.41	19.21	9.3
MW-543R	10/05/2020 09:40	3.76	-316.8	6.52	7.1	12.42	19.24	9.1
MW-543R	10/05/2020 09:45	7.58	-317.6	6.53	4.28	12.37	19.35	24.4
MW-543R	10/05/2020 09:50	7.79	-317.6	6.47	7.14	12.41	19.37	24.3
MW-543R	10/05/2020 09:55	11.36	-320.8	6.53	7.14	12.42	19.51	31
MW-543R	10/05/2020 10:00	11.98	-321.1	6.52	4.17	7.528	19.51	26
MW-543R	10/05/2020 10:05	16.87	-332.3	6.57	4.22	7.615	19.69	25.3
MW-543R	10/05/2020 10:10	17.61	-331	6.57	4.21	7.594	19.7	23.3
MW-543R	02/17/2021 12:05	3.8	-336.7	7.61	7.35	12.96	11.98	41.4
MW-543R	02/17/2021 12:45	3.62	-335.3	7.43	5.1	9.067	13.71	24.7
MW-543R	02/25/2022 11:10	1.5	-356.2	7.01	9.39	16.17	5.74	13.3
MW-543R	02/25/2022 11:15	1.58	-358.2	7	9.4	16.18	5.74	13.1
MW-543R	02/25/2022 11:20	1.67	-360.9	7	9.41	16.2	5.73	13.5
MW-543R	02/25/2022 11:25	1.8	-363.8	7	9.43	16.22	5.72	12.9
MW-543R	02/25/2022 11:30	2.09	372.9	6.99	9.49	16.33	5.58	11.2
MW-543R	02/25/2022 11:35	2.1	-377.1	6.98	9.51	16.37	5.54	10.2
MW-543R	02/25/2022 11:40	1.42	-384	6.97	9.59	16.5	5.3	7.4
MW-543R	02/25/2022 11:45	1.42	-384.9	6.97	9.59	16.51	5.26	7.2
MW-543R	02/25/2022 11:50	1.4	-384.7	6.97	9.6	16.52	5.2	7.1
MW-544	02/14/2018 09:35	0.05	-96.20	7.57	0.11	0.230	8.48	0.0000
MW-544	02/14/2018 09:50	0.05	-97.10	7.56	0.11	0.227	8.45	0.0000
MW-544	02/14/2018 10:00	1.23	-30.30	7.54	0.17	0.360	7.85	35.40
MW-544	05/22/2018 12:09	3.16	-82	7.16	0.032	0.654	18.19	5.1
MW-544	05/22/2018 12:13	1.09	-113	7.1	0.032	0.645	17.01	4.4
MW-544	05/22/2018 12:16	0.43	-123	7.09	0.031	0.641	16.16	6.3
MW-544	05/22/2018 12:19	0.23	-128	7.09	0.031	0.641	16	5.4
MW-544	05/22/2018 12:22	0.23	-132	7.09	0.032	0.649	16.2	5.6
MW-544	05/22/2018 12:25	0.16	-134	7.09	0.032	0.651	16.11	5.1
MW-544	05/22/2018 12:28	0.05	-136	7.1	0.032	0.654	15.96	6.7
MW-544	05/22/2018 12:31	0	-138	7.11	0.032	0.658	15.73	7.9
MW-544	05/22/2018 12:35	-0.03	-140	7.12	0.032	0.661	15.56	7.8
MW-544	05/22/2018 12:38	0	-142	7.13	0.033	0.670	15.38	8.4
MW-544	05/23/2018 12:38	0.0000	-142.00	7.13	0.03	0.667	15.56	8.38
MW-544	05/23/2018 13:04	0.34	-99.00	6.87	0.03	0.640	14.51	9.00
MW-544	05/23/2018 13:17	3.64	-35.00	7.17	0.05	0.956	14.76	9.10
MW-544	08/29/2018 12:45	1.52	-56.80	6.14	7.29	12.680	22.81	26.20
MW-544	08/29/2018 12:50	2.92	-59.20	6.11	8.16	14.060	20.44	13.40
MW-544	08/29/2018 13:30	3.10	-55.40	6.71	2.68	5.001	21.58	135.70
MW-544	11/14/2018 13:10	0.59	-76.90	6.27	7.76	13.390	13.09	25.40
MW-544	11/14/2018 13:50	0.60	-74.00	6.27	6.53	12.890	14.32	10.20
MW-544	11/14/2018 14:00	0.95	-64.70	6.25	6.94	12.080	14.7	244.80
MW-544	02/20/2019 09:55	0.5	-73.7	6.49	NM	4.244	7.05	2.5
MW-544	02/20/2019 10:35	1.06	-53.7	6.21	0.02	0.041	3.63	0
MW-544	09/06/2019 08:35	4.76	119.5	6.88	NM	2.677	20.46	52.6
MW-544	09/06/2019 08:40	2.67	82.5	6.39	NM	3.565	20.32	30.2
MW-544	09/06/2019 08:45	1.34	21.7	6.25	NM	4.822	20.32	40.7
MW-544	09/06/2019 08:50	4.76	0.9	6.26	NM	5.191	20.38	54.4
MW-544	09/06/2019 08:55	3.15	-5.8	6.24	NM	5.405	20.25	49.5
MW-544	09/06/2019 09:00	1.26	-13.4	6.24	NM	5.595	20.26	36.7
MW-544	09/06/2019 09:05	4.45	-22.8	6.24	NM	6.158	20.11	23.3
MW-544	09/06/2019 09:10	2.16	-27	6.25	NM	6.557	20.02	25.8
MW-544	09/06/2019 09:15	2.37	-28.8	6.25	NM	6.693	19.95	25.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-544	09/06/2019 09:20	3.25	-30.5	6.27	NM	6.781	19.89	24.4
MW-544	09/06/2019 09:40	5.16	42	6.4	4.63	8.191	18.99	23.6
MW-544	09/06/2019 09:50	5.83	63.2	6.83	3.13	5.766	19.11	67.9
MW-544	10/05/2020 09:50	0.35	-159.5	6.28	4.4	7.892	17.85	7.4
MW-544	10/05/2020 09:55	2.59	-96.4	6.6	5.11	9.097	18.91	17.3
MW-544	10/05/2020 10:00	0.26	-141.7	6.38	5.22	9.273	20.04	16.9
MW-544	10/05/2020 10:05	0.86	-148	6.4	5.44	9.648	20.34	12.4
MW-544	10/05/2020 10:10	3.65	-169.2	6.39	5.55	9.822	20.33	9.6
MW-544	10/05/2020 10:15	5.63	-172.6	6.4	5.65	9.983	20.29	8
MW-544	10/05/2020 10:20	8.99	-172.7	6.41	5.81	10.26	20.5	9.2
MW-544	10/05/2020 10:25	9.94	-170	6.4	6.02	10.59	20.55	8.2
MW-544	10/05/2020 10:30	10.02	-179.2	6.35	6.13	10.79	20.3	8.4
MW-544	10/05/2020 10:35	10.23	-186.9	6.35	6.21	10.91	20.46	6.6
MW-544	10/05/2020 11:13	1.15	-107.1	6.67	8.76	15.01	20.43	14.1
MW-544	02/17/2021 10:10	4.53	-120.2	7.13	4.27	7.677	10.72	12.4
MW-544	02/17/2021 10:45	4.68	-96.2	7.01	8.92	15.26	10.44	34.7
MW-544	02/24/2022 13:40	0.39	-205.2	6.21	11.93	19.84	12.14	36.4
MW-544	02/24/2022 13:45	0.6	-206.3	6.22	11.9	19.85	11.96	21.9
MW-544	02/24/2022 13:50	-0.01	-205.1	6.22	11.79	19.71	11.95	-0.1
MW-544	02/24/2022 13:55	0.36	-203.5	6.22	11.77	19.71	12.03	150
MW-544	02/24/2022 14:00	0.29	-205.9	6.22	11.82	19.78	12.06	86.3
MW-544	02/24/2022 14:05	0.26	-214.4	6.23	11.94	19.94	11.89	56.8
MW-544	02/24/2022 14:10	0.27	-212.7	6.22	12	20.06	12.08	28.5
MW-544	02/24/2022 14:15	0.24	-212.7	6.22	12.05	20.07	12.12	4.4
MW-544	02/24/2022 14:20	0.31	-225.1	6.23	12.21	20.41	11.31	32.5
MW-544	02/24/2022 14:25	0.34	-225.2	6.24	12.2	20.39	11.31	26.8
MW-550	11/26/2018 10:40	7.60	-157.70	9.28	0.90	1.767	12.1	10.40
MW-550	11/26/2018 12:10	5.03	-129.40	9.21	0.53	1.063	13.62	0.90
MW-550	11/26/2018 12:20	7.58	-145.20	9.65	0.65	1.294	13.02	9.20
MW-550	02/04/2019 12:20	5.88	17.90	8.46	0.49	0.977	10.79	17.40
MW-550	02/04/2019 13:20	2.57	-77.00	8.40	0.71	1.423	13.62	2.70
MW-550	02/04/2019 13:45	2.39	-84.20	8.43	0.75	1.426	13.37	15.30
MW-550	05/03/2019 10:30	9.47	-82.5	8.08	0.45	0.9	12.81	3
MW-550	11/07/2019 09:55	0.79	-52.6	6.97	NM	0.357	15.08	9
MW-550	11/07/2019 11:50	0.34	-98.3	7.07	0.15	0.304	15.03	2.3
MW-550	11/07/2019 12:00	9.98	10.8	7.68	0.16	0.325	14.74	4.3
MW-550	02/19/2020 09:25	8.91	221.5	7.71	0.43	0.871	12.37	6.9
MW-550	01/06/2021 12:50	5.81	-91.6	8.27	0.68	1.363	10.78	11.7
MW-550	01/06/2021 13:50	6.26	-71.2	7.83	0.46	0.925	13.64	1.4
MW-550	01/06/2021 14:05	8.51	-18	7.87	0.45	0.911	12.33	9.8
MW-550	04/01/2021 15:10	1.81	-98.8	8.32	0.61	1.228	13.32	11.6
MW-550	04/01/2021 15:15	1.98	-88.6	8.09	0.57	1.159	13.39	9.9
MW-550	04/01/2021 15:20	1.43	-72.8	7.53	0.46	0.932	13.07	20.1
MW-550	04/01/2021 15:25	1.08	-70.7	7.42	0.44	0.898	13.17	11.9
MW-550	04/01/2021 15:30	1.04	-73.6	7.41	0.44	0.892	13.58	5.6
MW-550	04/01/2021 15:35	1.03	-71	7.38	0.45	0.903	14.66	2.5
MW-550	04/01/2021 15:40	1.03	-48.3	7.32	0.44	0.887	13.02	1
MW-550	04/01/2021 15:45	0.92	-39.8	7.22	0.44	0.883	13.17	2.2
MW-550	04/01/2021 15:50	0.89	-38.2	7.21	0.44	0.881	13.35	0
MW-550	04/01/2021 15:55	0.9	-37.4	7.23	0.43	0.877	13.41	0
MW-550	04/02/2021 10:15	7.73	-14.4	7.88	0.44	0.88	10.6	1.6
MW-550	04/02/2021 10:25	3.1	-33.9	7.59	0.41	0.824	9.69	1.3
MW-550	01/21/2022 10:20	5.16	-81.7	7.78	0.54	1.097	6.88	35.2
MW-550	01/21/2022 10:25	3.37	-78.3	7.39	0.47	0.945	7.38	17.6
MW-550	01/21/2022 10:30	3.5	-78.7	7.34	0.46	0.932	7.64	19.9
MW-550	01/21/2022 10:35	3.13	-80.9	7.29	0.46	0.933	7.52	22.1
MW-550	01/21/2022 10:40	2.99	-81.9	7.24	0.45	0.918	7.87	26
MW-550	01/21/2022 10:45	2.95	-82.2	7.2	0.46	0.921	7.74	23.9
MW-550	01/21/2022 10:50	2.9	-81.1	7.19	0.45	0.915	7.7	24.4
MW-550	01/21/2022 10:55	2.83	-79.6	7.16	0.44	0.912	7.68	24.5
MW-550	04/19/2022 08:35	1.25	6.9	7.28	0.42	0.859	11.19	110.3
MW-550	04/19/2022 08:40	0.64	-19.8	7.05	0.42	0.85	11.73	274.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-550	04/19/2022 08:45	0.55	-28.1	7.03	0.42	0.843	12	185.6
MW-550	04/19/2022 08:50	0.53	-31	7.03	0.41	0.838	12.1	122.2
MW-550	04/19/2022 08:55	0.5	-37.8	7.03	0.41	0.836	12.04	60.2
MW-550	04/19/2022 09:00	0.49	-41.2	7.05	0.41	0.832	12.04	57.3
MW-550	04/19/2022 09:05	0.49	-44.4	7.03	0.41	0.83	12.08	55
MW-551	11/26/2018 12:45	1.74	-137.10	7.67	7.23	12.520	10.58	23.90
MW-551	11/26/2018 13:40	2.08	-163.80	7.51	8.14	14.040	10.27	26.30
MW-551	11/26/2018 13:50	4.86	-154.80	7.53	9.44	16.080	11.37	229.30
MW-551	02/04/2019 12:20	5.85	-23.50	7.00	15.96	26.150	9.11	24.30
MW-551	02/04/2019 12:45	5.22	-85.40	7.24	16.23	26.480	11.15	18.90
MW-551	02/04/2019 13:30	5.81	-87.20	7.27	16.11	26.370	10.98	289.50
MW-551	05/03/2019 13:20	6.24	-133	7.28	12.62	21.03	12.85	13.9
MW-551	07/26/2019 12:30	1.39	-97.6	6.88	NM	27.09	25.41	22.5
MW-551	07/26/2019 13:30	2.42	-116.5	7.34	18.35	29.55	25.18	22.5
MW-551	07/26/2019 13:40	2.3	-120.6	8.25	18.74	30.37	20.97	35.8
MW-551	11/06/2019 13:30	0.78	-190.7	6.93	NM	8.36	16.98	18.9
MW-551	11/06/2019 14:30	0.37	-257.9	7.06	4.56	8.179	17.39	6.9
MW-551	11/06/2019 14:40	2.1	-207.5	7.14	4.85	8.65	17.23	50.4
MW-551	12/18/2019 13:15	6.71	-61.5	6.96	NM	13.96	8.21	14.1
MW-551	12/18/2019 13:20	5.44	-90.7	7	NM	14.11	8.5	13.3
MW-551	12/18/2019 13:25	4.97	-101.9	7.06	NM	14.27	7.75	13.7
MW-551	12/18/2019 13:30	4.75	-113.4	7.11	NM	14.12	7.75	12.5
MW-551	12/18/2019 13:35	4.6	-128.9	7.18	NM	13.58	7.44	15.5
MW-551	12/18/2019 13:40	4.48	-137.2	7.24	NM	13.15	7.1	24.4
MW-551	12/18/2019 13:45	4.27	-142.4	7.31	NM	12.47	6.41	26.9
MW-551	12/18/2019 13:50	4.04	-141.5	7.31	NM	12.35	6.5	22.3
MW-551	12/18/2019 13:55	3.89	-140.2	7.29	NM	12.42	6.89	16.6
MW-551	12/18/2019 14:00	3.76	-140.7	7.3	NM	12.6	7.26	12.4
MW-551	12/19/2019 09:45	9.5	241.7	6.85	2.12	3.997	6.4	7.7
MW-551	12/19/2019 10:05	6.56	38.4	6.85	2.33	4.385	6.52	346.7
MW-551	02/28/2020 09:05	0.23	-251.2	7.16	NM	6.983	5.06	10.8
MW-551	02/28/2020 09:25	0.15	-256.1	7.06	6.42	11.32	6.68	13.9
MW-551	05/18/2020 13:45	3.11	-172.5	7.19	17.41	28.22	15.44	3.3
MW-551	01/06/2021 12:30	3.43	21.1	7.44	14.3	22.64	10.42	21.3
MW-551	01/06/2021 12:45	3.47	-104.4	7.43	15.08	24.78	11.45	41.9
MW-551	04/01/2021 10:35	0.94	-80.4	6.95	13.01	21.69	8.45	8.4
MW-551	04/01/2021 10:40	1.4	-108.7	7.04	12.92	21.6	8.39	5.6
MW-551	04/01/2021 10:45	1.68	-123.9	7.08	12.58	21.1	8.38	4.8
MW-551	04/01/2021 10:50	0.96	143.6	7.13	11.45	19.35	8.52	8.4
MW-551	04/01/2021 10:55	0.46	7.6	7.22	10.12	17.21	8.5	7.8
MW-551	04/01/2021 11:00	0.47	-159	7.24	10.21	17.35	8.49	7.4
MW-551	04/01/2021 11:05	0.49	-155.4	7.2	10.32	17.5	8.47	6.4
MW-551	04/01/2021 11:10	0.46	-159	7.1	10.41	17.63	8.45	5.7
MW-551	04/01/2021 11:15	0.43	-160.9	7.22	10.74	18.18	8.33	4.1
MW-551	04/01/2021 11:20	0.39	-162.5	7.22	10.95	18.54	8.28	2.6
MW-551	04/01/2021 11:50	3.11	-134.7	7.2	16.54	27.09	8.54	10.6
MW-551	04/01/2021 12:15	0.89	-192.9	7.2	16.2	26.58	8.73	14.7
MW-551	07/14/2021 12:30	1.5	-204.7	7.07	9.66	16.52	25.07	21.2
MW-551	07/14/2021 12:35	1.59	-204.6	7.06	9.78	16.67	25.28	17.6
MW-551	07/14/2021 12:40	1.68	-205.8	7.04	9.9	16.89	25.16	15.5
MW-551	07/14/2021 12:45	1.73	-207.5	7.04	9.95	16.99	25.22	14.8
MW-551	01/21/2022 09:00	0.59	-234.8	7.06	12.46	21.29	3.55	26.3
MW-551	01/21/2022 09:05	1.51	-241.7	7.12	12.37	21.09	2.15	21.3
MW-551	01/21/2022 09:10	1.82	-239	7.15	11.82	20.44	1.1	18.8
MW-551	01/21/2022 09:15	1.91	-218.7	7.18	11.23	19.45	1.1	19.4
MW-551	01/21/2022 09:20	1.9	-220.8	7.19	11.02	19.07	1.63	19.4
MW-551	01/21/2022 09:25	2.03	-202.5	7.21	10.82	18.71	1.91	20.2
MW-551	01/21/2022 09:30	2.2	-217.2	7.23	10.4	18.02	1.77	22.8
MW-551	01/21/2022 09:35	2.16	-218.8	7.24	10.39	17.98	1.78	23.2
MW-551	01/21/2022 09:40	2.13	-219.9	7.26	10.39	17.97	1.8	23.6
MW-551	04/19/2022 09:35	0.93	-211.9	6.9	15.11	24.69	10.63	26
MW-551	04/19/2022 09:40	0.26	-236.3	7.06	14.79	24.4	10.61	18.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-551	04/19/2022 09:45	0.28	-239.7	7.08	13.49	22.41	10.59	20.1
MW-551	04/19/2022 09:50	0.3	-228.7	7.09	11.89	20.14	10.71	16.4
MW-551	04/19/2022 09:55	0.32	-236.4	7.13	10.48	17.81	10.72	11.3
MW-551	04/19/2022 10:00	0.3	-238.1	7.16	10.7	17.75	10.7	10.9
MW-551	04/19/2022 10:05	0.31	-236.5	7.19	10.69	17.72	10.66	10.7
MW-552	07/25/2019 10:05	0.7	-49.7	7.12	NM	31.72	19.51	4.2
MW-552	07/25/2019 10:55	1.37	-111.2	6.97	11.08	18.66	21.57	12.2
MW-552	07/25/2019 11:05	3.73	-112.7	7.18	12.84	21.32	19.77	44.1
MW-552	08/21/2019 10:45	2.73	-146.6	6.6	NM	18.96	22.84	0.8
MW-552	08/21/2019 10:50	0.74	-145.1	6.69	NM	18.02	21.09	60.4
MW-552	08/21/2019 10:55	0.63	-142.7	6.65	NM	15.85	21.1	182.9
MW-552	08/21/2019 11:00	0.63	-139	6.65	NM	14.15	21.44	15.5
MW-552	08/21/2019 11:05	0.65	-138.5	6.65	NM	13.65	21.98	38.7
MW-552	08/21/2019 11:10	0.75	-138.8	6.67	NM	13.21	21.95	43.5
MW-552	08/21/2019 11:15	0.77	-138.9	6.67	NM	13.8	22.02	36.4
MW-552	08/21/2019 11:20	0.77	-141.4	6.69	NM	13.38	21.97	28.4
MW-552	08/21/2019 11:25	0.78	-144.8	6.67	NM	12.77	21.81	17.8
MW-552	08/21/2019 11:30	0.79	-148.1	6.65	NM	12.35	22.01	14.5
MW-552	08/21/2019 14:00	0.23	-156.9	6.86	13.49	22.54	23.71	174.6
MW-552	08/21/2019 15:00	1.67	-116.7	6.54	7.02	11.98	23.41	301.1
MW-552	11/12/2019 08:25	0.82	-138	7.32	NM	40.16	14.37	14.6
MW-552	11/12/2019 08:30	0.78	-148.2	7.08	NM	38.26	13.8	8.4
MW-552	11/12/2019 08:35	0.7	-148.3	7.02	NM	36.44	13.75	6.9
MW-552	11/12/2019 08:40	0.66	-148.3	6.98	NM	35.2	13.66	5.9
MW-552	11/12/2019 08:45	0.64	-146.4	6.99	NM	33.56	13.55	5.8
MW-552	11/12/2019 08:50	0.62	-146.5	6.99	NM	32.72	13.47	8.4
MW-552	11/12/2019 08:55	0.6	-145.7	6.98	NM	31.57	13.31	11.7
MW-552	11/12/2019 09:00	0.59	-145	6.97	NM	29.94	13.38	20.5
MW-552	11/12/2019 09:05	0.59	-144.3	6.96	NM	28.8	13.49	26.2
MW-552	11/12/2019 09:10	0.59	-145.6	6.96	NM	28.1	13.52	31.1
MW-552	11/12/2019 10:15	2.28	18.4	7.4	25.01	39.21	13.87	18
MW-552	11/12/2019 10:30	5	-103.4	7.38	26.48	41.28	14.56	120.1
MW-552	02/14/2020 11:05	0.11	-154.1	6.97	NM	21.82	10.34	42.7
MW-552	02/14/2020 11:53	0.38	-118.4	6.94	14.47	23.83	12.62	15.7
MW-552	06/03/2020 13:05	2.81	-91.7	6.63	NM	9.479	17.63	10.01
MW-552	06/03/2020 13:35	1.98	-88.4	6.62	5.4	9.444	17.38	8.8
MW-552	11/04/2020 11:40	2.08	-108.5	6.97	8.69	14.89	20.79	3.3
MW-552	11/04/2020 11:45	1.38	-11	6.83	8.51	14.64	21.16	1.3
MW-552	11/04/2020 11:50	0.94	-110.4	6.78	8.24	14.2	22.26	4.3
MW-552	11/04/2020 11:55	0.89	-109.6	6.76	8.22	14.19	23.39	5.4
MW-552	11/04/2020 12:00	1.09	-108	6.75	7.9	13.66	21.68	10.3
MW-552	11/04/2020 12:05	0.86	-103.3	6.74	7.25	12.63	20.41	15.5
MW-552	11/04/2020 12:10	0.75	-98.9	6.74	6.51	11.44	19.91	23
MW-552	11/04/2020 12:15	0.74	-95	6.74	5.81	10.27	19.77	24.9
MW-552	11/04/2020 12:20	0.69	-88.9	6.76	4.94	8.83	19.58	23.3
MW-552	11/04/2020 12:25	0.7	-85.6	6.72	4.59	8.238	19.71	13.6
MW-552	11/04/2020 13:30	1.77	-138.8	6.98	17.57	28.44	20.1	13.7
MW-552	11/04/2020 13:45	2.69	-145.8	7.09	19.4	31.11	18.04	63.6
MW-552	02/25/2021 11:50	5.94	49.2	7.4	10.11	17.15	10.78	617
MW-552	02/25/2021 11:55	6.13	63.9	7.45	10.05	17.09	10.22	680.4
MW-552	02/25/2021 12:00	5.48	85.9	7.43	10.06	17.08	10.32	722.1
MW-552	02/25/2021 12:05	5.74	91.4	7.4	10.07	17.09	10.33	675.2
MW-552	02/25/2021 12:10	5.71	92	7.36	10.11	17.15	10.45	518.4
MW-552	02/25/2021 12:15	5.25	90.6	7.32	10.21	17.32	10.53	362.1
MW-552	02/25/2021 12:20	4.82	96.3	6.92	10.29	17.43	10.6	300.7
MW-552	02/25/2021 12:25	4.19	62.2	6.87	10.35	17.55	10.67	330.7
MW-552	02/25/2021 12:30	3.79	49.4	6.83	10.44	17.66	10.78	318.5
MW-552	02/25/2021 12:35	3.66	47	6.82	10.46	17.69	10.88	310.8
MW-552	03/02/2022 12:35	4.96	209.9	5.88	16.28	26.38	13.38	247.8
MW-552	03/02/2022 12:40	5.05	175.2	6.05	16.84	27.39	13.71	1773.8
MW-552	03/02/2022 12:45	137.7	137.4	6.24	17.59	28.47	15.12	2193.6
MW-552	03/02/2022 12:50	4.81	141.8	6.24	17.51	28.39	15.74	2135.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-552	03/02/2022 12:55	4.67	138.7	6.4	18.31	29.52	15.39	1341.6
MW-552	03/02/2022 13:00	4.56	137.5	6.44	18.21	29.38	15.69	1230.8
MW-552	03/02/2022 13:05	4	134.1	6.51	19.21	30.81	15.75	1316.7
MW-552	03/02/2022 13:10	3.51	122.5	6.59	19.87	31.79	15.93	1207.8
MW-552	03/02/2022 13:15	3.45	122.4	6.6	19.9	31.9	15.97	1438.9
MW-552	03/02/2022 13:20	3.35	122.5	6.6	19.88	31.8	16.27	1193.5
MW-562	07/25/2019 08:55	1.87	62.9	6.95	NM	30.5	21.71	3.6
MW-562	07/25/2019 09:45	4.93	-102.4	7.07	16.37	26.68	20.16	3.8
MW-562	07/25/2019 09:55	4.12	-100.9	7.09	15.6	24.77	20.51	6.5
MW-562	08/22/2019 13:25	0.88	-141.7	6.71	NM	33.16	21.38	24.8
MW-562	08/22/2019 13:30	0.24	-126	6.67	NM	32.37	21.67	2.8
MW-562	08/22/2019 13:35	0.22	-123.5	6.61	NM	32.14	22.05	34.7
MW-562	08/22/2019 13:40	0.21	-100.2	6.52	NM	25.85	22.57	76.1
MW-562	08/22/2019 13:45	0.21	-102.2	6.5	NM	25.64	22.79	65.9
MW-562	08/22/2019 13:50	0.22	-114.8	6.45	NM	25.94	23.09	46.3
MW-562	08/22/2019 13:55	0.23	-117.9	6.41	NM	26.08	23.02	43.8
MW-562	08/22/2019 14:00	0.22	-120.2	6.38	NM	26.35	22.89	45
MW-562	08/22/2019 14:05	0.23	-122.8	6.35	NM	26.88	23.04	81.7
MW-562	08/22/2019 14:10	0.25	-123.4	6.31	NM	27.27	22.62	31.1
MW-562	08/22/2019 14:42	1.66	-98.5	6.33	18.51	29.95	26.79	58.7
MW-562	08/22/2019 14:50	3.22	-100.2	6.17	19.5	31.41	22.2	36.4
MW-562	11/07/2019 13:40	7.11	-159.7	6.73	NM	16.57	16.58	28
MW-562	11/07/2019 13:45	0.61	-164.1	6.76	NM	19.09	16.8	13.9
MW-562	11/07/2019 13:50	0.94	-157.5	6.75	NM	19.17	17.01	15.7
MW-562	11/07/2019 13:55	1.93	-148	6.72	NM	18.64	17.02	26.4
MW-562	11/07/2019 14:00	1.96	-139	6.67	NM	17.75	16.99	37.9
MW-562	11/07/2019 14:05	1.94	-132.1	6.65	NM	17.18	16.9	73.7
MW-562	11/07/2019 14:10	1.88	-129	6.65	NM	17.1	16.85	83.6
MW-562	11/07/2019 14:15	1.83	-128.2	6.65	NM	17.06	16.81	87.4
MW-562	11/07/2019 14:20	1.8	-128.1	6.65	NM	17.03	16.85	87.5
MW-562	11/07/2019 14:50	6.1	-102.8	6.62	9.9	16.79	17.2	5
MW-562	11/07/2019 15:05	7.39	-114.9	6.73	10.41	17.58	16.93	34.3
MW-562	02/14/2020 09:15	0.12	-115.1	6.73	NM	22.15	8.27	41.1
MW-562	02/14/2020 09:56	0.32	-130.6	6.83	20.05	32.25	9.09	15.8
MW-562	03/02/2020 14:50	6.1	-102.8	6.62	9.9	16.79	17.2	5
MW-562	06/04/2020 13:10	0.46	-80.4	6.64	NM	20.85	18.34	25.3
MW-562	06/04/2020 13:35	0.44	-98.7	6.7	12.57	20.12	18.46	20.4
MW-562	11/04/2020 09:15	1.89	-66.7	6.37	12.45	20.7	16.63	62.2
MW-562	11/04/2020 09:20	1.11	-75	6.45	12.49	20.79	16.52	58.9
MW-562	11/04/2020 09:25	0.92	-78	6.56	12.48	20.76	16.25	62.3
MW-562	11/04/2020 09:30	0.81	-76.5	6.6	12.48	20.77	16.13	79.9
MW-562	11/04/2020 09:35	0.74	-75.9	6.64	12.48	20.78	16.26	98.4
MW-562	11/04/2020 09:40	0.72	-74.6	6.66	12.41	20.66	16.36	79.9
MW-562	11/04/2020 09:45	0.75	-73.1	6.66	12.4	20.64	16.56	86.3
MW-562	11/04/2020 09:50	0.76	-74	6.66	12.32	20.55	16.49	63.5
MW-562	11/04/2020 09:55	0.78	-80.7	6.65	12.23	20.38	16.57	46.4
MW-562	11/04/2020 10:00	0.78	-86.7	6.64	12.16	20.28	16.79	44.7
MW-562	11/04/2020 10:55	1.7	-151.1	7.01	19.57	31.34	17.31	17
MW-562	11/04/2020 11:10	1.99	-140.4	7.04	20.19	32.26	17.02	40.2
MW-562	02/25/2021 10:45	4	-87.9	6.58	17.84	28.91	10.9	105.3
MW-562	02/25/2021 10:50	0.59	-66.3	6.59	14.4	24.1	8.61	73.2
MW-562	02/25/2021 10:55	2.02	-37.8	6.64	14.19	23.53	8.05	61
MW-562	02/25/2021 11:00	2.06	-29.5	6.6	14.12	23.44	8.13	39.9
MW-562	02/25/2021 11:05	1.78	-29.4	6.65	13.96	23.21	8.06	35
MW-562	02/25/2021 11:10	1.48	-32.9	6.61	14.18	23.5	8.48	30.6
MW-562	02/25/2021 11:15	1.3	-44	6.61	14.62	24.13	8.67	29.8
MW-562	02/25/2021 11:20	1.12	-48.1	6.63	14.76	24.28	8.71	30
MW-562	02/25/2021 11:25	1.03	-44	6.61	14.58	24.14	8.79	28.8
MW-562	02/25/2021 11:30	1.02	-47.9	6.55	14.61	24.15	8.84	31.9
MW-562	03/02/2022 11:10	2.19	-45.1	6.73	8.19	14.09	11.32	127.7
MW-562	03/02/2022 11:15	3.06	4.7	6.86	3.64	6.622	11.46	32.6
MW-562	03/02/2022 11:20	3.28	9	6.89	3.27	5.662	11.16	47

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-562	03/02/2022 11:25	7.21	18.1	6.8	1.58	2.94	9.71	15.9
MW-562	03/02/2022 11:30	7.32	18.5	6.83	1.52	2.908	9.71	12.5
MW-562	03/02/2022 11:35	10.09	20.4	6.87	1.18	2.299	9.36	16.2
MW-562	03/02/2022 11:40	10.97	24.4	6.87	1.13	2.196	9.29	23.2
MW-562	03/02/2022 11:45	12.25	23.6	6.88	1.11	2.156	9.26	118.2
MW-562	03/02/2022 11:50	11.7	24.3	6.9	1.09	2.12	9.37	21.3
MW-562	03/02/2022 11:55	11.61	23.3	6.9	1.09	2.13	9.39	14.6
MW-563D	07/12/2019 09:00	1.46	-233.9	9.38	NM	0.749	27.07	350.5
MW-563D	07/12/2019 09:30	4.2	-212.7	8.78	0.42	0.794	21.08	410.6
MW-563D	07/12/2019 09:45	2.88	-212.5	9.37	0.78	1.56	24.03	408.2
MW-563S	07/12/2019 08:50	2.74	61.3	7.53	NM	0.332	25.15	23.4
MW-563S	07/12/2019 09:10	2.56	-124.2	8.53	0.12	0.248	24.34	20.1
MW-563S	07/12/2019 09:25	2.87	-92.9	8.07	0.21	0.435	24.76	39.5
MW-567S	07/12/2019 10:06	1.95	-124.3	8.08	NM	0.482	24.99	38.2
MW-567S	07/12/2019 10:20	3.27	-177.9	9.15	0.24	0.494	22.46	39.7
MW-567S	07/12/2019 10:30	2.35	-102.3	8.26	0.19	0.405	25.71	36.7
MW-569D	07/12/2019 10:50	0.58	-345.2	8.21	NM	1.882	25.14	254.1
MW-569D	07/12/2019 11:15	6.13	-387.8	8.36	0.91	1.632	20.48	249.2
MW-569D	07/12/2019 11:35	4.25	-352.7	8.08	0.91	1.846	26.37	251.5
MW-569S	07/12/2019 10:49	1.13	-218.9	7.64	NM	0.559	26.45	29.1
MW-569S	07/12/2019 11:13	1	-175.8	7.33	0.4	0.811	24.04	21.8
MW-569S	07/12/2019 11:30	3.57	-175.8	7.53	0.39	0.797	27.02	130.3
MW-570D	07/11/2019 09:35	3.74	-154.3	7.97	NM	3.214	22.67	16.2
MW-570D	07/11/2019 10:05	1.59	-200.3	8.08	2.01	3.794	20.63	0.2
MW-570D	07/11/2019 10:21	-118.4	-113.4	7.97	1.69	3.245	25.26	23.4
MW-570S	07/11/2019 09:31	2.37	-141.6	7.09	NM	1.746	24.67	120.7
MW-570S	07/11/2019 09:55	1.35	-157.8	7.93	0.79	1.559	24.58	32.2
MW-570S	07/11/2019 10:16	1.38	-152	7.62	0.81	1.613	25.11	75.3
MW-572D	07/11/2019 11:55	2.24	-112.6	7.04	1.27	2.457	22.1	1
MW-572S	07/11/2019 11:25	2.25	-95.4	7.26	NM	0.691	25.3	140.8
MW-572S	07/11/2019 11:50	0.91	-98.4	6.88	0.38	0.809	27.04	5.5
MW-572S	07/11/2019 12:10	1.83	-110.1	7.34	0.4	0.838	26.13	28.9
MW-574D	07/11/2019 12:45	0.86	14	8.17	NM	1.866	23.65	32.4
MW-574D	07/11/2019 13:10	1.51	35.4	7.65	1.03	1.899	21.77	5.7
MW-574D	07/11/2019 13:45	1.519	39.64	7.875	1.03	1.899	21.45	14.87
MW-574S	07/11/2019 12:50	2.67	-100.9	8	NM	1.228	26.01	31.3
MW-574S	07/11/2019 13:26	3.99	-56	7.94	0.73	1.433	24.62	9.8
MW-574S	07/11/2019 13:45	5.22	-89.3	7.74	0.96	1.894	23.49	117.5
MW-575	09/14/2020 12:10	5.06	-106.7	6.35	3.36	5.98	20.92	27.8
MW-575	09/14/2020 12:15	0.11	-81.1	6.34	3.51	6.448	21.63	11.1
MW-575	09/14/2020 12:20	0.05	-79.3	6.29	3.2	5.904	21.56	11.8
MW-575	09/14/2020 12:25	0.05	-77.3	6.25	3.09	5.722	21.68	9.8
MW-575	09/14/2020 12:30	0.05	-74.6	6.21	3.08	5.672	21.75	8.1
MW-575	09/14/2020 12:35	0.06	-72.7	6.19	3.19	5.908	21.99	8
MW-575	09/14/2020 12:40	0.05	-69.4	6.16	3.34	6.116	21.89	5.9
MW-575	09/14/2020 12:45	0.06	-67	6.14	3.49	6.387	22.06	6.4
MW-575	09/14/2020 12:50	0.06	-65.7	6.14	3.52	6.43	22.07	6
MW-575	09/14/2020 12:55	0.07	-63.1	6.11	3.56	6.501	21.98	5.8
MW-575	09/14/2020 12:56	0.07	-63.1	NM	3.56	6.501	21.98	5.8
MW-575	09/14/2020 13:40	0.14	-70.8	6.42	4.75	8.541	25.85	10.1
MW-575	09/14/2020 14:05	0.2	-63.1	6.31	2.42	4.639	21.97	103.2
MW-575	12/09/2020 10:30	1.56	-79.5	6.73	6.25	10.95	12.76	12.7
MW-575	12/09/2020 10:55	1.87	-73.4	6.76	7.45	12.89	15.79	55.4
MW-575	03/08/2021 13:40	2.61	-100.2	7.71	1.21	2.355	9.7	12.6
MW-575	03/08/2021 13:45	1.74	-75.1	7.05	1.06	2.072	9.33	11.3
MW-575	03/08/2021 13:50	1.2	-68.2	6.96	1.05	2.053	9.28	10.9
MW-575	03/08/2021 13:55	0.98	-63.4	6.86	1.04	2.034	9.51	9.9
MW-575	03/08/2021 14:00	0.98	-61.2	6.83	1.02	2.006	9.09	6
MW-575	03/08/2021 14:05	0.92	-59.5	6.82	1.01	1.979	9.13	4.4
MW-575	03/08/2021 14:10	0.7	-55.1	6.8	0.98	1.927	9.27	1.6
MW-575	03/08/2021 14:15	0.37	-51.9	6.78	1.06	2.006	9.4	0
MW-575	03/08/2021 14:20	0.32	-53.4	6.76	1.13	2.2	9.58	0

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-575	03/08/2021 14:25	0.36	-56.5	6.76	1.13	2.206	9.69	0
MW-575	03/08/2021 15:20	3.16	-44.8	7.01	2.67	4.949	10.37	6.6
MW-575	03/08/2021 15:30	3.62	-45.3	6.95	2.1	3.956	9.89	22.1
MW-575	06/01/2021 12:30	0.6	-71.2	6.37	1.77	3.354	18.22	17.8
MW-575	06/01/2021 12:35	0.68	-74	6.34	1.8	3.426	20.27	9.6
MW-575	06/01/2021 12:40	0.71	-58.3	6.33	1.8	3.419	20.74	11
MW-575	06/01/2021 12:45	0.74	-68.2	6.33	1.79	3.401	21.01	8
MW-575	06/01/2021 12:50	0.75	-63.5	6.31	1.79	3.398	21.02	7.3
MW-575	06/01/2021 12:55	0.74	-63.8	6.3	1.79	3.4	21.01	6
MW-575	06/01/2021 13:00	0.74	-60.3	6.29	1.8	3.411	20.85	4.9
MW-575	06/01/2021 13:05	0.74	-56.3	6.28	1.83	3.468	20.79	4.6
MW-575	06/01/2021 13:10	0.75	-59.6	6.29	1.85	3.506	20.81	4.8
MW-575	08/27/2021 12:30	0.59	-141.7	6.79	1.62	3.111	23.37	24.2
MW-575	08/27/2021 12:35	0.54	-145.5	6.8	1.66	3.183	23.41	30.8
MW-575	08/27/2021 12:40	0.52	-147.5	6.8	1.67	3.195	23.62	34.3
MW-575	08/27/2021 12:45	0.47	-148.7	6.82	1.7	3.258	23.58	36.2
MW-575	08/27/2021 12:50	0.44	-159.9	6.82	1.65	3.162	23.7	41.3
MW-575	08/27/2021 12:55	0.41	-152.1	6.83	1.73	3.313	23.55	36.9
MW-575	03/03/2022 09:35	0.34	5.5	7.22	0.57	1.152	10.54	528.5
MW-575	03/03/2022 09:40	0.77	25.7	6.6	0.37	0.76	10.24	412.8
MW-575	03/03/2022 09:45	0.74	18.6	6.55	0.38	0.77	10.33	325.7
MW-575	03/03/2022 09:50	1.07	18.1	6.5	0.37	0.755	10.31	206.6
MW-575	03/03/2022 09:55	1.58	3.2	6.42	0.34	0.689	10.39	74.9
MW-575	03/03/2022 10:00	1.46	-1	6.43	0.34	0.692	10.43	68.2
MW-575	03/03/2022 10:05	0.94	-28.4	6.43	0.44	0.891	10.8	38.7
MW-575	03/03/2022 10:10	0.7	-38.2	6.43	0.47	0.939	11.03	106.3
MW-575	03/03/2022 10:15	0.65	-52	6.45	0.51	1.034	11.36	29.8
MW-575	03/03/2022 10:20	0.56	-57.5	6.46	0.56	1.112	11.37	25
MW-576	07/12/2019 09:50	1.71	-231.7	9.54	NM	1.523	23.24	546.4
MW-576	07/12/2019 10:10	1.16	-311.6	9.52	1.1	2.045	22.6	689.7
MW-576	07/12/2019 10:35	0.85	-240.3	9.37	0.77	1.534	25.18	542.2
MW-576	09/14/2020 14:20	0.1	-120.9	6.48	10.46	17.84	23.72	43.1
MW-576	09/14/2020 14:25	0.1	-122.7	6.53	10.1	17.21	23.91	19.8
MW-576	09/14/2020 14:30	0.08	-127.1	6.58	8.36	14.49	24.16	6.9
MW-576	09/14/2020 14:35	0.07	-130.1	6.62	8.04	13.91	24.18	4.8
MW-576	09/14/2020 14:40	0.07	-132.6	6.66	8.12	14.03	24.17	4.7
MW-576	09/14/2020 14:45	0.06	-132.5	6.71	8.39	14.44	14.46	4.4
MW-576	09/14/2020 14:50	0.06	-137.1	6.77	8.34	14.37	24.17	4.3
MW-576	09/14/2020 14:55	0.06	-139.2	6.82	8.24	14.23	24.27	4.3
MW-576	09/14/2020 15:00	NM	NM	6.84	8.26	14.25	24.28	4.3
MW-576	09/14/2020 15:01	0.06	-142.6	6.84	8.26	14.25	24.28	4.3
MW-576	09/14/2020 15:40	0.04	-122.1	7.18	7.25	12.65	24.35	27.3
MW-576	09/14/2020 15:50	0.1	-122.8	7.21	6.95	12.19	23.85	50.5
MW-576	12/09/2020 13:05	0.91	-129.6	7.84	9.25	15.8	10.27	9.9
MW-576	12/09/2020 13:20	2.31	-112.4	7.89	9.12	15.6	9.95	10.9
MW-576	03/08/2021 10:40	2.82	-91.1	7.13	11.88	20.07	7.14	0
MW-576	03/08/2021 10:45	1.5	-99.2	7.2	11.15	18.93	6.98	0
MW-576	03/08/2021 10:50	0.74	-104.8	7.28	9.64	16.56	6.47	0
MW-576	03/08/2021 10:55	0.79	-121	7.33	9.21	15.86	6.68	0
MW-576	03/08/2021 11:00	0.67	-124	7.34	9.21	15.87	6.59	0.2
MW-576	03/08/2021 11:05	0.83	-140.7	7.38	9.2	15.8	6.78	0.1
MW-576	03/08/2021 11:10	0.81	-148.6	7.39	9.34	16.04	6.73	0
MW-576	03/08/2021 11:15	0.73	-154.3	7.4	9.5	16.25	6.8	0.2
MW-576	03/08/2021 11:20	0.95	-163.5	7.42	9.78	16.7	6.79	0.2
MW-576	03/08/2021 11:25	0.8	-167.3	7.43	9.97	17.02	6.75	0.2
MW-576	03/08/2021 12:05	4.02	-127.2	7.56	10.35	17.7	5.72	4.2
MW-576	03/08/2021 12:25	2.99	-119.3	7.58	10.72	18.26	6.04	57.7
MW-576	03/10/2021 15:25	1.29	-60	7.19	12.25	20.65	7.94	6.6
MW-576	03/10/2021 15:30	0.31	-107.2	7.35	11.01	18.68	7.22	6.7
MW-576	03/10/2021 15:35	0.07	-123.8	7.42	10.42	17.79	6.62	9.9
MW-576	03/10/2021 15:40	0.02	-126.1	7.44	9.97	17.07	6.39	6.5
MW-576	03/10/2021 15:45	0	-127.5	7.44	9.8	16.79	6.2	3.8

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-576	03/10/2021 15:50	0	-130.6	7.44	9.96	17.04	6.06	2.5
MW-576	03/10/2021 15:55	0.1	-136.4	7.45	10.18	17.38	6.06	1.5
MW-576	03/10/2021 16:00	0.2	-140.4	7.45	10.28	17.56	6.05	1.2
MW-576	03/10/2021 16:05	0.2	-143.7	7.47	10.36	17.69	6.06	0.9
MW-576	03/10/2021 16:10	0.3	-147.5	7.44	10.46	17.85	6.05	0.7
MW-576	08/26/2021 12:55	0.07	-160.8	6.78	15.83	26	26.22	24.7
MW-576	08/26/2021 13:00	0.01	-234.8	6.76	15.17	25.04	26.54	12.8
MW-576	08/26/2021 13:05	0	-271.8	6.81	14.4	23.81	26.44	6.7
MW-576	08/26/2021 13:10	-0.01	-290.5	6.88	14.04	23.28	26.26	3.5
MW-576	08/26/2021 13:15	-0.06	-302.1	6.93	13.76	22.86	26.35	2.8
MW-576	08/26/2021 13:20	-0.21	-312	6.99	13.41	22.33	25.99	2.9
MW-576	08/26/2021 13:25	-0.01	-318.4	7.02	13.23	22.03	26.12	3
MW-576	08/26/2021 13:30	-0.03	-323.7	7.06	13	21.69	26.03	2.8
MW-576	08/26/2021 13:35	-0.04	-326.7	7.09	12.8	21.44	26.17	2.7
MW-576	08/26/2021 13:40	47.1	-332.4	7.15	12.59	21.02	26.12	3.8
MW-576	03/03/2022 10:50	1.61	-111.7	7.1	11.54	19.17	8.06	40.8
MW-576	03/03/2022 10:55	0.1	-140.7	7.12	12.22	20.67	7.86	30.8
MW-576	03/03/2022 11:00	0.12	-149.8	7.22	9.68	16.69	7.31	63.9
MW-576	03/03/2022 11:05	0.14	-159.1	7.28	8.61	14.86	7.06	5.1
MW-576	03/03/2022 11:10	0.11	163.8	7.33	8.97	15.44	6.99	20.2
MW-576	03/03/2022 11:15	0.11	-169.3	7.41	9.69	16.58	6.97	-2.8
MW-576	03/03/2022 11:20	0.07	-170.6	7.45	10.21	17.39	6.97	43.6
MW-576	03/03/2022 11:25	0.08	-171.9	7.49	10.57	17.98	6.96	13.6
MW-576	03/03/2022 11:30	0.08	-171.3	7.51	10.83	18.38	7	85.9
MW-576	03/03/2022 11:35	0.07	-177.9	7.5	10.91	18.51	6.99	-10.3
MW-577	08/20/2019 13:45	1.3	-93.9	7.12	NM	1.18	24.88	39.5
MW-577	08/20/2019 14:30	0.93	-136.4	7.23	0.62	1.246	21.57	15.2
MW-577	08/20/2019 14:45	1.54	-110.7	7.32	0.47	0.963	23.39	14.1
MW-577	09/24/2019 11:10	1.63	-185.4	7.37	NM	0.945	21.47	13.1
MW-577	09/24/2019 12:15	1.62	-177.8	7.52	0.51	1.036	17.79	5.4
MW-577	09/24/2019 12:30	2.12	-173.7	7.5	0.52	1.044	18.23	7.7
MW-577	04/09/2021 09:50	2.28	-98.8	7.67	5.3	9.434	11.24	45.7
MW-577	04/09/2021 09:55	0.59	-108.5	7.29	4.84	8.609	11.62	14
MW-577	04/09/2021 10:00	0.53	-111.2	7.17	4.77	-111.2	11.72	24.6
MW-577	04/09/2021 10:05	0.52	-113.6	7.12	4.7	8.419	11.75	33.9
MW-577	04/09/2021 10:10	1.24	-115.8	7.08	4.68	8.369	11.85	48.1
MW-577	04/09/2021 10:15	0.51	-115.2	7.02	4.8	8.586	12.1	30.6
MW-577	04/09/2021 10:20	0.5	-115.6	6.99	4.89	8.729	12.14	25.1
MW-577	04/09/2021 10:25	0.93	-112.6	6.97	4.91	8.762	12.33	21.1
MW-577	04/09/2021 10:30	0.99	-117.1	6.95	4.93	8.794	12.5	17.2
MW-577	04/09/2021 10:35	1.15	-117.4	6.95	4.94	8.799	12.46	16.7
MW-577	04/11/2022 09:50	0.77	-138	7.5	2.53	4.694	12.36	14.7
MW-577	04/11/2022 09:55	0.48	-134.1	7.24	2.46	4.576	12.22	10.1
MW-577	04/11/2022 10:00	0.36	-134.4	7.14	2.39	4.47	12.11	9.2
MW-577	04/11/2022 10:05	0.27	-135.8	7.08	2.34	4.379	12.08	10.4
MW-577	04/11/2022 10:10	0.25	-136.3	7.06	2.32	4.339	12.04	13.2
MW-577	04/11/2022 10:15	0.26	-137.1	7.05	2.32	4.33	12.05	13.3
MW-577	04/11/2022 10:20	0.25	-136.8	7.04	2.32	4.327	12.09	13.9
MW-577R	10/19/2020 11:50	3.54	-189.5	7.32	3.51	6.407	19.76	12.7
MW-577R	10/19/2020 11:55	2.87	-176.9	7.13	3.51	6.415	20.35	7
MW-577R	10/19/2020 12:00	2.94	-175.9	7.12	3.53	6.453	20.1	8.8
MW-577R	10/19/2020 12:05	2.69	-176.9	7.11	3.54	6.45	19.55	8.7
MW-577R	10/19/2020 12:10	3.26	-178.5	7.11	3.55	6.471	19.43	16.6
MW-577R	10/19/2020 12:15	3.27	-177.8	7.12	3.54	6.455	19.52	20.4
MW-577R	10/19/2020 12:20	3.34	-178	7.11	3.52	6.421	19.29	26.8
MW-577R	10/19/2020 12:25	3.33	-180.2	7.12	3.51	6.399	19.13	25.9
MW-577R	10/19/2020 12:30	2.63	-180.3	7.11	3.49	6.373	19.01	22.8
MW-577R	10/19/2020 12:35	2.58	-180.5	7.11	3.48	6.358	19.23	22.4
MW-577R	10/19/2020 13:40	3.98	-154.4	7.11	3.42	6.256	19.07	14.9
MW-577R	10/19/2020 13:55	4.23	-135.6	7.19	3.43	6.264	19.7	NM
MW-577R	11/02/2020 13:55	NM	NM	NM	NM	NM	NM	31.9
MW-577R	01/14/2021 12:15	4.21	-136.1	7.27	4.95	8.872	12.35	17.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-577R	01/14/2021 12:20	1.32	-130.1	7.11	4.7	8.403	12.7	11.5
MW-577R	01/14/2021 12:25	0.74	-129.6	7.11	4.5	8.08	11.88	10.6
MW-577R	01/14/2021 12:30	0.61	-129.2	7.11	4.4	7.918	11.94	11.7
MW-577R	01/14/2021 12:35	0.49	-130.6	7.12	4.33	7.789	12	10.1
MW-577R	01/14/2021 12:40	0.51	-132	7.12	4.28	7.713	12.1	9.7
MW-577R	01/14/2021 12:45	0.42	-132	7.12	4.27	7.687	12.09	10
MW-577R	01/14/2021 12:50	0.39	-131.4	7.1	4.25	7.657	12.04	9.3
MW-577R	01/14/2021 12:55	0.31	-132	7.09	4.28	7.691	12.34	8.7
MW-577R	01/14/2021 13:00	0.32	-134.2	7.06	4.29	7.714	12.59	9.2
MW-577R	01/14/2021 14:20	1.61	-146.2	6.98	4.81	8.592	16.24	8.9
MW-577R	01/14/2021 14:35	3.09	-114.4	7.06	4.12	7.421	13.24	26.9
MW-577R	01/28/2022 10:35	3.19	-172.1	7.37	4.84	8.664	9.16	30.3
MW-577R	01/28/2022 10:40	1.97	-167.8	7.28	4.78	8.583	9.13	28.4
MW-577R	01/28/2022 10:45	1.43	-165.7	7.2	4.78	8.549	8.99	25.6
MW-577R	01/28/2022 10:50	0.74	-153.5	7.08	4.74	8.508	8.23	46.3
MW-577R	01/28/2022 10:55	0.74	-152.6	7.07	4.72	8.467	8.07	43.4
MW-577R	01/28/2022 11:00	0.6	-147.6	7.04	4.64	8.347	7.85	50.3
MW-577R	01/28/2022 11:05	0.59	-146.8	7.03	4.6	8.285	7.98	48.5
MW-577R	01/28/2022 11:10	0.61	-145.6	7.02	4.6	8.274	8.24	45.8
MW-577R	01/28/2022 11:15	0.59	-145.5	7.01	4.61	8.28	8.28	46.3
MW-577R	01/28/2022 11:20	0.61	-141.6	6.99	4.73	8.491	8.56	44.6
MW-578	11/21/2019 12:50	-0.21	-18.4	6.88	NM	14.59	15.92	45.9
MW-578	11/21/2019 14:30	1.66	-63.4	6.79	8.81	15.07	15.94	40.3
MW-578	11/21/2019 14:55	0.23	-82	6.92	8.57	14.69	15.53	26.9
MW-578	01/14/2020 13:00	7.49	203.3	6.79	NM	24.71	12.72	2.2
MW-578	01/14/2020 14:00	6.87	-14.8	7.23	16.16	26.36	12.96	3.3
MW-578	01/14/2020 14:10	5.78	2.8	7.19	15.77	25.79	12.56	15.5
MW-578	03/27/2020 10:05	0.86	-80.9	6.75	NM	25.67	13.86	3.9
MW-578	03/27/2020 11:30	1.83	-108.4	6.64	16.25	26.46	17.17	2.7
MW-578	12/14/2020 09:35	13.11	141	9.05	0.35	0.721	14.22	12.2
MW-578	12/14/2020 09:40	12.45	134.5	9.16	0.34	0.699	13.98	12.2
MW-578	12/14/2020 09:45	12.52	132.9	9.26	0.33	0.679	13.86	12.5
MW-578	12/14/2020 09:50	12.42	128.9	9.35	0.32	0.646	13.44	12.2
MW-578	12/14/2020 09:55	0.68	125.4	9.52	0.3	0.619	12.22	12
MW-578	12/14/2020 10:00	9.55	124.9	9.52	0.31	0.629	11.86	11.8
MW-578	12/14/2020 10:05	8.54	131.8	9.29	0.57	0.986	11.75	12.1
MW-578	12/14/2020 10:10	2.45	-76.2	6.74	12.8	21.22	12.1	6.1
MW-578	12/14/2020 10:15	2	-82.6	6.73	13.22	21.85	12.08	6
MW-578	12/14/2020 10:20	1.35	-91.5	6.73	13.74	22.69	12.16	5.5
MW-578	12/14/2020 11:30	1.31	-95.3	6.9	14.76	24.24	15.18	6.6
MW-578	12/14/2020 11:50	4.78	-87.5	7.03	6.24	10.93	14.04	22.5
MW-578	03/16/2021 10:35	1.96	-18.8	7.09	14.08	23.2	12.44	7.6
MW-578	03/16/2021 10:40	1.04	-14.8	7.08	14.36	23.67	11.72	4.8
MW-578	03/16/2021 10:45	0.94	-14.8	7.08	14.39	23.73	11.74	3.2
MW-578	03/16/2021 10:50	0.8	-16	7.06	14.56	23.96	12.04	2.1
MW-578	03/16/2021 10:55	0.68	-16.1	7.06	14.64	24.1	12.1	2
MW-578	03/16/2021 11:00	0.56	-17.5	7.04	14.7	24.18	12.21	2
MW-578	03/16/2021 11:05	0.52	-17.9	7.06	14.75	24.27	12.09	2.2
MW-578	03/16/2021 11:10	0.44	-18.5	7.06	14.77	24.29	12.29	2.8
MW-578	03/16/2021 11:15	0.4	-18.9	7.06	14.79	24.31	12.3	2.7
MW-578	03/16/2021 11:20	0.36	-19.3	7.07	14.81	24.36	12.4	2.7
MW-578	03/16/2021 12:40	2.25	-2	7.32	15.08	24.75	12.21	1.2
MW-578	03/16/2021 13:00	4.97	8.1	8.45	1.4	2.7	9.39	14.1
MW-578	03/11/2022 12:30	1.55	-125	6.49	13.07	21.68	14.38	9.7
MW-578	03/11/2022 12:35	1.39	-119.1	6.47	13.11	21.76	14.33	10.5
MW-578	03/11/2022 12:40	1.08	-136.4	6.53	13.62	22.48	14.77	22.4
MW-578	03/11/2022 12:45	1.04	-144.2	6.53	13.64	22.58	14.79	11.2
MW-578	03/11/2022 12:50	57.4	-143.1	6.52	13.77	22.72	14.89	11.2
MW-578	03/11/2022 12:55	0.96	-145.5	6.54	13.8	22.86	14.97	12.9
MW-578	03/11/2022 13:00	0.95	-145.9	6.54	13.92	22.97	15	27.7
MW-578	03/11/2022 13:05	0.94	-146.3	6.54	13.91	22.94	15.01	26.8
MW-578	03/11/2022 13:10	20.6	-147.1	6.55	13.93	22.96	15.03	20.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-578	03/11/2022 13:15	0.91	-173.9	6.64	13.98	23.06	15.06	10
MW-579	11/12/2019 12:30	1.14	-59.1	7.34	NM	18.72	14.61	6.8
MW-579	11/12/2019 12:35	0.87	-89	7.16	NM	17.52	14.76	7.8
MW-579	11/12/2019 12:40	0.78	-101.1	7.08	NM	16.39	14.29	9.9
MW-579	11/12/2019 12:45	0.75	-107.6	7.04	NM	15.32	14.13	12.3
MW-579	11/12/2019 12:50	0.73	-111.6	7.01	NM	14.18	14.4	16.3
MW-579	11/12/2019 12:55	0.66	-112.8	6.98	NM	12.45	14.64	21.6
MW-579	11/12/2019 13:00	0.62	-114.8	6.95	NM	10.95	14.52	19.5
MW-579	11/12/2019 13:05	0.6	-114.6	6.94	NM	9.571	14.39	16.6
MW-579	11/12/2019 13:10	0.6	-114.7	6.93	NM	9.39	14.36	14.9
MW-579	11/12/2019 13:15	0.57	-114.5	6.9	NM	9.141	14.39	10.6
MW-579	11/12/2019 14:00	4.39	-16.9	7.37	4.63	8.284	13.27	49.7
MW-579	11/12/2019 14:10	5.06	-84.6	7.15	17.81	28.79	14.2	14.5
MW-579	06/03/2020 09:30	2.58	-113.2	6.75	NM	8.528	15.43	10.5
MW-579	06/03/2020 10:15	3.93	-98.8	6.96	11.79	19.71	17.62	14.2
MW-579	11/05/2020 12:40	2.2	-84.6	6.79	5.9	10.41	20.03	5.9
MW-579	11/05/2020 12:45	1.92	-89	6.75	5.91	10.41	20.01	4.7
MW-579	11/05/2020 12:50	1.52	-89.8	6.71	5.84	10.32	20.07	5.4
MW-579	11/05/2020 12:55	1.09	-90.6	6.71	5.69	10.07	20.16	6
MW-579	11/05/2020 13:00	1.08	-88.8	6.68	5.62	9.962	21.48	7.5
MW-579	11/05/2020 13:05	1.09	-88.6	6.68	5.53	9.811	22.15	9.5
MW-579	11/05/2020 13:10	1.12	-89.7	6.67	5.27	9.389	22.13	9.1
MW-579	11/05/2020 13:15	1.14	-88.5	6.66	5.11	9.121	22.5	10.8
MW-579	11/05/2020 13:20	1.02	-87.7	6.68	4.43	7.988	19.73	12.3
MW-579	11/05/2020 13:25	0.92	-87.9	6.67	3.93	7.161	19.05	13.6
MW-579	11/05/2020 14:20	2.44	-90.2	6.99	11.01	18.54	19.62	8.3
MW-579	11/05/2020 14:35	2.73	-133.3	7.12	15.18	24.86	18.83	35.2
MW-579	02/25/2021 12:50	3.02	-70.2	6.87	5.1	9.097	10.17	91.7
MW-579	02/25/2021 12:55	0.78	-76.2	6.67	4.07	7.52	9.29	24.8
MW-579	02/25/2021 13:00	0.7	-66.2	6.54	2.03	3.944	7.46	30.5
MW-579	02/25/2021 13:05	1.44	-63.9	6.49	1.12	2.224	6.53	94.7
MW-579	02/25/2021 13:10	2.37	-53.8	6.41	0.99	1.956	5.8	61.8
MW-579	02/25/2021 13:15	2.01	-53.2	6.38	0.99	1.943	5.89	53
MW-579	02/25/2021 13:20	1.62	-58	6.38	1.01	1.984	5.91	48.7
MW-579	02/25/2021 13:25	1.33	-63.5	6.4	1.03	2.019	6.09	44.5
MW-579	02/25/2021 13:30	1.1	-68	6.41	1.03	2.028	6.03	42.8
MW-579	02/25/2021 13:35	0.94	-71.6	6.42	1.03	2.014	6.03	44.7
MW-579	06/17/2021 14:10	2.09	-133.3	7.25	9.63	16.38	18.43	38.6
MW-579	06/17/2021 14:15	1.04	-122.8	7.12	10.01	16.97	19.85	26.8
MW-579	06/17/2021 14:20	0.87	-130.5	7.11	10	16.95	20.38	22.5
MW-579	06/17/2021 14:25	0.7	-128	7.08	9.64	16.44	20.93	20.7
MW-579	06/17/2021 14:30	0.7	-126.9	7.06	9.32	15.86	21.45	19.7
MW-579	06/17/2021 14:35	0.66	-123.4	7.05	8.82	15.12	21.49	15.9
MW-579	06/17/2021 14:40	0.63	-120.7	7.03	8.46	14.58	21.45	19.8
MW-579	06/17/2021 14:45	0.59	-115.6	7	8.15	14.08	21.57	17.7
MW-579	06/17/2021 14:50	0.59	-108.4	6.98	7.81	13.52	21.71	14.9
MW-579	06/17/2021 14:55	0.54	-101.4	6.96	7.56	13.12	21.86	19.8
MW-579	03/02/2022 09:10	0.66	-23.4	6.96	5.59	9.892	9.55	30.7
MW-579	03/02/2022 09:15	0.11	189.7	5.31	5.01	9.081	9.29	32.8
MW-579	03/02/2022 09:20	0.1	262.1	5.16	2.63	4.946	8.67	35.4
MW-579	03/02/2022 09:25	0.32	210.5	5.5	1.9	3.59	8.35	73.4
MW-579	03/02/2022 09:30	0.81	197.4	5.61	1.73	3.358	8.3	90.1
MW-579	03/02/2022 09:35	0.93	162.1	5.8	1.42	2.729	7.74	86.7
MW-579	03/02/2022 09:40	0.9	151.7	5.85	1.29	2.504	7.93	76.4
MW-579	03/02/2022 09:45	0.86	147.3	5.84	1.29	2.497	7.98	62.8
MW-579	03/02/2022 09:50	0.83	142.3	5.87	1.3	2.515	8.1	50.7
MW-579	03/02/2022 09:55	0.83	141	5.83	1.31	2.536	8.05	38.8
MW-580	11/12/2019 08:35	0.44	-167.3	6.91	NM	17.35	14.93	1232.5
MW-580	11/12/2019 08:40	0.41	-166.5	6.93	NM	15.41	14.88	31.1
MW-580	11/12/2019 08:45	0.4	-167	6.92	NM	13.8	14.74	40.3
MW-580	11/12/2019 08:50	0.39	-167.4	6.93	NM	14.64	14.6	41.4
MW-580	11/12/2019 08:55	0.38	-167.2	6.93	NM	12.88	14.56	42.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-580	11/12/2019 09:00	0.35	-164.3	6.92	NM	11.35	14.44	36.1
MW-580	11/12/2019 09:05	0.74	-160.7	6.93	NM	10.84	14.58	23.9
MW-580	11/12/2019 09:10	0.7	-156.3	6.92	NM	10.71	14.59	19.8
MW-580	11/12/2019 09:15	0.51	-156.8	6.94	NM	11.16	14.2	18.9
MW-580	11/12/2019 09:20	0.47	-157.4	6.93	NM	10.43	14.44	14.1
MW-580	11/12/2019 10:40	0.46	-158.5	6.93	5.93	14.49	14.44	14.5
MW-580	06/02/2020 13:15	1.12	-106.8	6.91	NM	6.302	15.73	8.7
MW-580	06/02/2020 13:40	7.43	-91.2	7.44	3.26	6.018	16.48	26.8
MW-580	11/03/2020 08:55	2.75	-113.1	7.21	5.63	9.952	14.06	15.1
MW-580	11/03/2020 09:00	92	-127.3	6.86	5.39	9.55	14.54	12.2
MW-580	11/03/2020 09:05	0.56	-136.1	6.89	5.01	8.915	14.51	11.4
MW-580	11/03/2020 09:10	0.4	-140.6	6.93	4.77	8.533	14.87	20.4
MW-580	11/03/2020 09:15	0.38	-139.8	6.94	4.68	8.362	15.1	33.5
MW-580	11/03/2020 09:20	0.38	-139.8	6.94	4.66	8.339	19.53	29.4
MW-580	11/03/2020 09:25	0.41	-121	6.93	4.62	8.271	15.59	25.5
MW-580	11/03/2020 09:30	0.43	-118.7	6.92	4.64	8.312	14.95	26.9
MW-580	11/03/2020 09:35	0.4	-120.9	6.91	4.63	8.29	15.41	24.8
MW-580	11/03/2020 09:40	0.4	-115.6	6.9	4.57	8.197	15.41	21.9
MW-580	11/03/2020 10:30	2.19	-86.5	6.99	3.68	6.69	16.27	13.2
MW-580	11/03/2020 10:45	3.67	-95.3	6.9	6.04	10.61	15.8	12.8
MW-580	02/15/2021 09:35	3.4	-39.9	6.58	21.24	34.11	8.36	11.3
MW-580	02/15/2021 09:40	1.05	-81.7	8.66	16.56	26.87	8.95	8
MW-580	02/15/2021 09:45	0.79	-100.2	6.7	10.49	17.67	8.47	9.9
MW-580	02/15/2021 09:50	0.65	-111.2	6.83	8.15	14.01	7.78	10.5
MW-580	02/15/2021 09:55	0.57	-116.8	6.89	7.29	12.7	7.47	9.8
MW-580	02/15/2021 10:00	0.53	-119.4	6.91	7.01	12.26	7.37	9.9
MW-580	02/15/2021 10:05	0.5	-120	6.93	6.85	12.01	7.31	9.9
MW-580	02/15/2021 10:10	0.51	-121.4	6.93	6.72	11.8	7.19	10.4
MW-580	02/15/2021 10:15	0.47	-122.3	6.93	6.59	11.59	7.17	10.7
MW-580	02/15/2021 10:20	0.46	-122.6	6.93	6.51	11.47	7.19	10.5
MW-580	02/15/2021 10:40	0.4	-123.7	6.95	5.73	10.16	7.04	15.8
MW-580	02/15/2021 10:50	0.4	-123.4	6.92	5.68	10.08	7.4	13.3
MW-580	03/02/2022 10:30	1.16	-96.2	6.88	3.22	6.056	8.53	80
MW-580	03/02/2022 10:35	1.48	-109.5	7.04	2.24	4.301	8.34	49.9
MW-580	03/02/2022 10:40	1.15	-118.9	7.17	1.65	3.17	8.18	29.5
MW-580	03/02/2022 10:45	1.09	-121.8	7.16	1.52	2.921	8.07	15.5
MW-580	03/02/2022 10:50	0.88	-123.8	7.15	1.5	2.888	7.92	11.6
MW-580	03/02/2022 10:55	0.87	-130.5	7.14	1.47	2.835	7.96	7.8
MW-580	03/02/2022 11:00	0.94	-136	7.13	1.47	2.82	7.96	6.2
MW-580	03/02/2022 11:05	1	-141	7.13	1.45	2.787	7.79	5.7
MW-580	03/02/2022 11:10	0.96	-140.9	7.13	1.44	2.775	7.91	5.5
MW-580	03/02/2022 11:15	1.02	-139.9	7.13	1.44	2.777	7.96	5.5
MW-581	11/08/2019 12:45	-7.93	-354.9	6.31	NM	5.449	16.24	20.1
MW-581	11/08/2019 12:50	-5.05	-352.9	6.24	NM	5.082	16.11	19.8
MW-581	11/08/2019 12:55	-4.52	-358	6.15	NM	4.707	15.93	16
MW-581	11/08/2019 13:00	-2.49	-421.3	6.06	NM	3.896	15.99	23.2
MW-581	11/08/2019 13:05	-1.66	-453	6.12	NM	3.754	16.1	22.2
MW-581	11/08/2019 13:10	-1.15	-462.6	6.16	NM	3.613	15.81	18.4
MW-581	11/08/2019 13:15	-1.09	-460.9	6.18	NM	2.517	15.77	15.1
MW-581	11/08/2019 13:20	-0.76	-456.5	6.21	NM	3.337	15.84	10.4
MW-581	11/08/2019 13:25	-0.57	-449.7	6.23	NM	3.155	15.85	8.2
MW-581	11/08/2019 13:30	-0.51	-443.7	6.25	NM	2.95	16.18	6.3
MW-581	11/08/2019 14:34	3.85	-214.4	6.93	1.21	2.333	16.51	14.4
MW-581	11/08/2019 14:40	-172.5	8.83	6.75	0.93	1.814	16.34	140.5
MW-581	02/13/2020 11:40	0.22	-131	6.68	NM	5.601	6.68	16
MW-581	02/13/2020 12:30	0.245	-121.7	6.72	3.05	5.523	6.79	12.3
MW-581	06/01/2020 09:50	2.46	-106.1	6.42	NM	5.17	16.31	16.6
MW-581	06/01/2020 10:25	6.34	-72.9	7.09	2.07	3.907	17.28	5.8
MW-581	10/09/2020 11:35	NM	NM	NM	NM	NM	NM	11.6
MW-581	11/02/2020 09:50	1.14	-84.3	6.29	3.32	6.075	16.14	16.3
MW-581	11/02/2020 09:55	0.73	-94.8	6.35	3.34	6.104	16.02	17.9
MW-581	11/02/2020 10:00	0.54	-102.5	6.44	3.33	6.092	15.3	18

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-581	11/02/2020 10:05	0.39	-108.5	6.47	3.21	5.897	14.82	20.2
MW-581	11/02/2020 10:10	0.3	-109.2	6.5	3.08	5.658	14.93	22
MW-581	11/02/2020 10:15	0.26	-111	6.51	2.88	5.323	14.92	18.6
MW-581	11/02/2020 10:20	0.21	-111.7	6.53	2.72	5.044	14.76	18.7
MW-581	11/02/2020 10:25	0.19	-112	6.55	2.58	4.796	14.555	12.4
MW-581	11/02/2020 10:30	0.18	-114.4	6.55	2.48	4.62	14.41	13.9
MW-581	11/02/2020 10:35	0.14	-114.9	6.58	2.38	4.443	14.36	11.2
MW-581	11/02/2020 11:20	1.13	-96	6.89	1.63	3.112	16.18	3
MW-581	11/02/2020 11:35	1.58	-87	6.82	1.6	3.046	16.05	NM
MW-581	02/15/2021 11:00	3.31	-113.6	6.44	10.06	17.16	7.83	44.3
MW-581	02/15/2021 11:05	0.85	-126.9	6.43	8.68	14.92	7.9	36.4
MW-581	02/15/2021 11:10	0.66	-147.8	6.59	4.85	8.561	7.13	21.6
MW-581	02/15/2021 11:15	0.66	-155	6.67	3.6	6.501	6.51	28.6
MW-581	02/15/2021 11:20	0.63	-162.7	6.71	2.63	5.26	5.9	41.6
MW-581	02/15/2021 11:25	0.6	-169.2	6.73	2.6	4.84	5.78	39
MW-581	02/15/2021 11:30	0.59	-181.1	6.75	2.48	4.654	5.68	19.6
MW-581	02/15/2021 11:35	0.58	-187.9	6.75	2.42	4.542	5.61	12
MW-581	02/15/2021 11:40	0.6	-189.8	6.76	2.38	4.484	5.51	16.7
MW-581	02/15/2021 11:45	0.56	-193.1	6.75	2.39	4.493	5.8	7.5
MW-581	02/15/2021 12:05	0.5	-223.5	6.8	1.91	3.641	5.36	10.7
MW-581	02/15/2021 12:15	0.51	-226.3	6.85	1.99	3.705	5.6	39.9
MW-581	03/01/2022 13:40	0.7	-145.7	6.29	4.12	7.569	7.85	22.6
MW-581	03/01/2022 13:45	0.45	-172	6.45	3.35	6.191	7.52	19.9
MW-581	03/01/2022 13:50	0.64	-170.9	6.59	2.66	4.96	7.08	21.1
MW-581	03/01/2022 13:55	0.73	-164.8	6.67	2.24	4.22	6.81	59.3
MW-581	03/01/2022 14:00	0.77	-166.8	6.71	2.03	3.842	6.74	46.6
MW-581	03/01/2022 14:05	0.9	-166.4	6.7	2	3.791	6.75	43.8
MW-581	03/01/2022 14:10	1.07	-168	6.73	1.9	3.619	6.74	28.5
MW-581	03/01/2022 14:15	2.76	-166	6.75	1.78	3.396	6.76	22
MW-581	03/01/2022 14:20	1.26	-170.7	6.78	1.67	3.194	6.72	10.2
MW-581	03/01/2022 14:25	2.21	-170.8	6.79	1.61	3.069	6.72	8.5
MW-582	11/12/2019 12:35	-0.39	-348.1	6.7	NM	15.17	14.93	2.9
MW-582	11/12/2019 12:40	-0.75	-342.9	6.69	NM	14.13	15.29	1.6
MW-582	11/12/2019 12:45	-1.11	-341.8	6.68	NM	12.9	15.33	1
MW-582	11/12/2019 12:50	-1.2	-356	6.79	NM	4.388	14.94	1.1
MW-582	11/12/2019 12:55	-0.54	-355.5	6.91	NM	14.56	14.55	2.1
MW-582	11/12/2019 13:00	-0.17	-359.9	6.95	NM	2.326	14.46	1
MW-582	11/12/2019 13:05	-0.09	-360.5	6.96	NM	2.219	14.47	1
MW-582	11/12/2019 13:10	-0.03	-361.6	6.99	NM	2.066	14.49	1
MW-582	11/12/2019 13:15	0.02	-365.5	7.03	NM	1.876	14.41	1
MW-582	11/12/2019 13:20	0.05	-367.8	7.05	NM	1.863	14.44	1
MW-582	11/12/2019 14:40	4.59	-256.6	7.57	0.88	1.721	12.1	8.7
MW-582	11/12/2019 14:45	4.08	-212.6	7.55	0.28	0.57	10.92	7.2
MW-582	06/01/2020 13:10	11.92	-125.4	6.73	NM	0.591	16.48	1.7
MW-582	06/01/2020 13:40	5.19	-70.3	7.27	0.29	0.601	7.17	1.7
MW-582	11/02/2020 12:35	0.76	-150	6.98	0.98	1.921	16.57	9.8
MW-582	11/02/2020 12:40	0.5	-150.8	6.92	0.8	1.595	16.42	4.8
MW-582	11/02/2020 12:45	0.29	-146.4	6.9	0.57	1.146	16.31	1.2
MW-582	11/02/2020 12:50	0.22	-145	6.92	0.48	0.975	16.36	1.2
MW-582	11/02/2020 12:55	0.16	-136	6.92	0.44	0.884	16.39	0.2
MW-582	11/02/2020 13:00	0.13	-125.1	6.93	0.41	0.831	16.35	0.2
MW-582	11/02/2020 13:05	0.11	-118.9	6.94	0.41	0.826	16.44	0.3
MW-582	11/02/2020 13:10	0.13	-128.9	6.93	0.42	0.844	16.4	0.3
MW-582	11/02/2020 13:15	0.12	-117.4	6.93	0.42	0.844	17.49	0.2
MW-582	11/02/2020 13:20	0.11	-120	6.93	0.42	0.846	18.1	0.2
MW-582	11/02/2020 14:10	0.74	-123.5	7.05	0.37	0.752	16.2	0.7
MW-582	11/02/2020 14:25	1.17	-114.3	7.03	0.37	0.752	14.89	1.4
MW-582	02/15/2021 12:30	2.72	-239.9	6.68	5.09	8.115	8.23	70
MW-582	02/15/2021 12:35	1.99	-246	7.24	1.21	2.319	6.63	40
MW-582	02/15/2021 12:40	2.03	-238.8	7.29	0.73	1.445	6.06	18.6
MW-582	02/15/2021 12:45	1.82	-231.5	7.24	0.61	1.222	5.81	15.4
MW-582	02/15/2021 12:50	1.78	-223.2	7.19	0.57	1.154	5.59	7.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-582	02/15/2021 12:55	1.5	-221.9	7.16	0.56	1.127	5.55	3.8
MW-582	02/15/2021 13:00	1.47	-219.2	7.12	0.55	1.108	5.48	2.6
MW-582	02/15/2021 13:05	1.36	-219.7	7.1	0.54	1.095	5.54	3
MW-582	02/15/2021 13:10	1.3	-219.3	7.08	0.53	1.078	5.45	1.7
MW-582	02/15/2021 13:15	1.19	-215.6	7.1	0.53	1.076	5.61	3.7
MW-582	02/15/2021 13:35	1.35	-209.4	7.15	0.42	0.851	5.22	2.3
MW-582	02/15/2021 13:45	0.57	-222.3	7.15	0.4	0.813	5.31	23.8
MW-582	06/16/2021 15:05	3.8	-152.3	7.02	1.53	2.034	24.38	19.3
MW-582	06/16/2021 15:10	1.54	-241.5	6.64	3.15	5.875	19.02	16.9
MW-582	06/16/2021 15:15	0.85	-231.6	7	0.62	1.25	19.46	8.3
MW-582	06/16/2021 15:20	0.75	-226.2	7.02	0.47	0.952	19.7	3.2
MW-582	06/16/2021 15:25	0.73	-228.8	7.01	0.47	0.946	19.84	2.1
MW-582	06/16/2021 15:30	0.7	-232.8	7.01	0.46	0.939	19.71	0.8
MW-582	06/16/2021 15:35	0.69	-231	7.02	0.45	0.911	19.91	0.2
MW-582	06/16/2021 15:40	0.69	-229.2	7.03	0.45	0.906	19.73	0.3
MW-582	06/16/2021 15:45	0.68	-228.8	7.03	0.45	0.906	19.96	0
MW-582	03/02/2022 13:25	2.17	-122.8	7.25	0.61	1.207	10.81	22.2
MW-582	03/02/2022 13:30	0.94	-94.3	6.77	0.44	0.906	9.25	12.6
MW-582	03/02/2022 13:35	0.81	-75.7	6.6	0.36	0.744	8.62	9.3
MW-582	03/02/2022 13:40	0.73	-71	6.55	0.35	0.711	8.38	8.3
MW-582	03/02/2022 13:45	0.71	-67.9	6.5	0.32	0.662	8.16	7
MW-582	03/02/2022 13:50	0.6	-64.5	6.45	0.31	0.626	7.97	5.9
MW-582	03/02/2022 13:55	0.62	-64.7	6.45	0.3	0.609	7.89	5.7
MW-582	03/02/2022 14:00	0.6	-64.6	6.44	0.29	0.592	7.89	4.4
MW-582	03/02/2022 14:05	0.58	-64.5	6.43	0.28	0.576	7.74	4.6
MW-582	03/02/2022 14:10	0.56	-64.4	6.4	0.27	0.561	7.7	2.9
MW-583	04/10/2020 09:53	3.85	-324	7.8	30.63	47.31	11.21	8.4
MW-583	10/05/2020 15:05	NM	NM	NM	NM	NM	NM	34.6
MW-583	10/09/2020 13:05	1.23	-378.7	7.83	49.08	71.36	22.23	6.7
MW-583	10/09/2020 13:10	1.21	-378.9	7.78	49.13	71.52	22.41	6.4
MW-583	10/09/2020 13:15	1.2	-422.7	7.78	49.17	71.53	22.48	5.8
MW-583	10/09/2020 13:20	0.14	-442.1	7.58	51.14	73.98	23.38	4
MW-583	10/09/2020 13:25	1.6	-453.6	7.55	52	74.97	23.51	3.5
MW-583	10/09/2020 13:30	0.5	-472.6	7.58	53.02	76.38	23.39	2.7
MW-583	10/09/2020 13:35	0.39	-454.4	7.62	53.21	76.83	23.64	3.3
MW-583	10/09/2020 13:40	0.28	-443.9	7.62	53.09	76.46	23.57	3.5
MW-583	10/09/2020 13:45	0.26	-442.9	7.62	53.26	76.67	23.43	4.6
MW-583	10/09/2020 13:50	0.24	-442.9	7.63	53.31	76.64	23.42	3.8
MW-583	10/09/2020 14:40	0.98	-412.1	7.38	57.54	82.03	26.38	36
MW-583	10/09/2020 15:05	0.23	-395.4	7.32	53.02	76.45	21.44	NM
MW-583	02/17/2021 14:40	2.07	-413.9	7.15	50.98	74.26	13.15	13.8
MW-583	02/17/2021 15:05	5.51	-431.6	7.93	53.61	77.33	14.86	9.8
MW-583	02/17/2021 15:20	3.06	-429	7.71	48.7	69.64	13.04	17.9
MW-583	05/24/2021 13:35	0.46	-340	7.64	32.4	49.73	14.81	20.7
MW-583	05/24/2021 13:40	0.02	-332.1	7.36	30.59	47.45	14.6	21
MW-583	05/24/2021 13:45	0.51	-322.9	7.05	27.86	43.44	14.31	21.2
MW-583	05/24/2021 13:50	1.1	-326	6.95	28.77	44.53	14.53	16.7
MW-583	05/24/2021 13:55	1.11	-327.7	6.97	29.84	45.46	14.94	15.3
MW-583	05/24/2021 14:00	0.11	-396.5	8.72	50.47	73.32	14.74	7
MW-583	05/24/2021 14:05	0.05	-405.1	8.7	51.06	74.15	14.51	6.7
MW-583	05/24/2021 14:10	0.08	-409	8.73	50.27	73.11	14.67	5.4
MW-583	05/24/2021 14:15	0.1	-415.2	8.74	49.5	72.13	14.62	4.5
MW-583	05/24/2021 14:20	0.1	-420.6	8.71	49.17	71.87	14.61	4.9
MW-583	02/24/2022 14:40	2.77	-313.9	9.11	22.76	35.68	8.69	18.1
MW-583	02/24/2022 14:45	1.75	-334.5	9.2	26.89	41.67	8.62	19.4
MW-583	02/24/2022 14:50	1.32	-342.7	9.24	29.77	45.79	8.52	20.3
MW-583	02/24/2022 14:55	3.2	-355.8	9.03	37.61	57.02	8.7	16.1
MW-583	02/24/2022 15:00	2.49	-362.3	8.79	38.47	58.24	8.62	20.3
MW-583	02/24/2022 15:05	1.56	-407	8.77	39.17	59.24	8.7	11.9
MW-583	02/24/2022 15:10	1.52	-407.6	8.7	39.21	59.25	8.71	10.1
MW-583	02/24/2022 15:15	1.86	-334.7	8.41	39.9	60.18	8.91	9.3
MW-583	02/24/2022 15:20	1.71	-399	8.34	40.88	61.47	8.86	7.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-583	02/24/2022 15:25	1.69	-399.5	8.32	40.77	61.32	8.91	6.7
MW-584	10/05/2020 12:35	3.35	-388.4	7.52	7.23	12.6	21.95	16.8
MW-584	10/05/2020 12:40	6.04	-390.6	7.5	7.23	12.57	22.06	7.5
MW-584	10/05/2020 12:45	9.19	-396.5	7.21	7.19	12.46	21.41	16.5
MW-584	10/05/2020 12:50	9.26	-396.4	7.32	7.15	12.32	21.4	16.1
MW-584	10/05/2020 12:55	14.06	-398.4	7.21	7.18	12.5	21.63	8.8
MW-584	10/05/2020 13:00	14.39	-397.7	7.24	7.12	12.4	21.64	8.8
MW-584	10/05/2020 13:05	22.35	-397.4	7.44	7.22	12.28	21.6	8.9
MW-584	10/05/2020 13:10	22.97	-397.7	7.4	7.17	12.25	21.65	8.8
MW-584	10/05/2020 13:15	31.92	-400.1	7.44	7.21	12.62	22.12	8.8
MW-584	10/05/2020 13:20	32.21	-400.1	7.1	7.18	12.53	22.14	NM
MW-584	10/06/2020 13:20	NM	NM	NM	NM	NM	NM	8.8
MW-584	02/17/2021 11:45	3.87	-338.8	7.99	8.34	14.34	11.83	16.6
MW-584	02/17/2021 12:15	1.32	-347.4	8.13	4.24	7.662	9.29	106.9
MW-584	09/01/2021 14:10	0.32	-354.8	7.33	7.84	13.55	21.82	14.8
MW-584	09/01/2021 14:15	0.36	-365.8	7.3	7.89	13.62	21.42	13.9
MW-584	09/01/2021 14:20	0.4	-360.2	7.27	7.86	13.59	20.97	14.1
MW-584	09/01/2021 14:25	0.37	-369.3	7.26	7.86	13.57	20.88	15.4
MW-584	09/01/2021 14:30	0.34	-375.4	7.26	7.82	13.52	20.91	15.3
MW-584	09/01/2021 14:35	0.32	-375.6	7.25	7.76	13.42	20.9	15.5
MW-584	09/01/2021 14:40	0.53	-378.3	7.25	7.71	13.35	20.93	15.8
MW-584	09/01/2021 14:45	0.55	-377.8	7.25	7.74	13.39	20.9	14.9
MW-584	09/01/2021 14:50	0.34	-377.2	7.24	7.74	13.38	20.79	15.5
MW-584	09/01/2021 14:55	0.27	-378.9	7.24	7.73	13.37	20.79	14.7
MW-584	02/24/2022 11:55	-0.07	-367.5	6.75	10.38	17.6	10.32	42.7
MW-584	02/24/2022 12:00	-0.75	-368.7	6.73	10.36	17.56	10.32	25.3
MW-584	02/24/2022 12:05	-3	-360.1	6.66	10.28	17.44	9.57	25
MW-584	02/24/2022 12:10	-2.56	-366.2	6.71	10.18	17.28	9.82	35.2
MW-584	02/24/2022 12:15	0.85	-372.6	6.68	10.22	17.33	9.43	37.2
MW-584	02/24/2022 12:20	1.03	-372.8	6.67	10.4	17.63	8.69	32.6
MW-584	02/24/2022 12:25	3.09	3.09	6.71	10.11	17.18	9.36	27.4
MW-584	02/24/2022 12:30	1.77	-374.4	6.71	10.16	17.25	9.28	27.6
MW-584	02/24/2022 12:35	1.36	-365.3	6.7	10.24	17.38	9.39	26.3
MW-584	02/24/2022 12:40	1.34	-364.3	6.7	10.23	17.36	9.48	26.1
MW-585	10/14/2020 12:40	NM	NM	NM	NM	NM	NM	56.6
MW-585	10/16/2020 10:40	7.29	-265.4	12.65	8.77	14.95	16.91	3.9
MW-585	10/16/2020 10:45	5.02	-321.3	12.62	6.47	11.74	16.85	52
MW-585	10/16/2020 10:50	4.2	-299.5	12.35	4.84	8.53	16.98	77.2
MW-585	10/16/2020 10:55	3.35	-332.6	12.56	6.49	11.32	17.27	31
MW-585	10/16/2020 11:00	2.28	-359.1	12.65	7.86	13.51	16.97	19.6
MW-585	10/16/2020 11:05	2.12	-371.4	12.67	8.49	14.51	17.04	13.8
MW-585	10/16/2020 11:10	1.32	-371.6	12.7	9.27	15.78	16.81	10.8
MW-585	10/16/2020 11:15	1.13	-376.9	12.67	8.65	14.83	16.75	11.7
MW-585	10/16/2020 11:20	1.07	-377.7	12.66	8.45	14.51	16.84	11.1
MW-585	10/16/2020 11:25	1.06	-377.3	12.66	8.42	14.441	16.77	10.7
MW-585	10/16/2020 12:25	1.26	-204	12.71	12.2	20.35	19.68	9.4
MW-585	10/16/2020 12:40	4.32	-48.8	9.74	1.43	2.749	16.79	NM
MW-585	01/13/2021 08:45	2.34	1.5	10.22	1.87	3.527	10.15	71.8
MW-585	01/13/2021 08:50	1.56	-47.4	10.28	1.9	3.602	8.97	67.1
MW-585	01/13/2021 08:55	1.31	-79.5	10.3	1.87	3.553	7.86	63.1
MW-585	01/13/2021 09:00	0.91	-101.3	10.31	1.84	3.502	7.6	59.8
MW-585	01/13/2021 09:05	0.76	-117	10.35	1.85	3.508	7.57	59.6
MW-585	01/13/2021 09:10	0.66	-128.5	10.37	1.85	3.518	7.6	60.2
MW-585	01/13/2021 09:15	0.59	-139.4	10.39	1.86	3.526	7.65	60.1
MW-585	01/13/2021 09:20	0.42	-151.3	10.43	1.87	3.549	7.79	58.5
MW-585	01/13/2021 09:25	0.4	-161	10.47	1.89	3.573	7.99	56.6
MW-585	01/13/2021 09:30	0.32	-159.2	10.49	1.9	3.596	8.07	58.6
MW-585	01/13/2021 10:40	2.69	-146.1	12	3.55	6.45	12.78	52.5
MW-585	01/13/2021 11:00	3.16	-67	9.69	1.44	2.755	9.98	70
MW-585	04/08/2021 10:45	1.36	-45.4	8.44	0.94	1.847	14.97	30
MW-585	04/08/2021 10:50	0.46	-54.6	8.6	0.97	1.902	14.56	69.6
MW-585	04/08/2021 10:55	0.23	-63.4	8.78	1.04	2.029	14.07	166.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-585	04/08/2021 11:00	0.16	-78	9.15	1.24	2.399	13.94	442.7
MW-585	04/08/2021 11:05	0.14	-114.6	9.06	1.11	2.131	14.19	371.1
MW-585	04/08/2021 11:10	0.12	-90.6	9.07	1.08	2.097	14.22	406.7
MW-585	04/08/2021 11:15	0.1	-109.3	9.15	1.14	2.212	14.29	490.3
MW-585	04/08/2021 11:20	0.08	-134.8	9.24	1.21	2.33	14.3	500.3
MW-585	04/08/2021 11:25	0.05	-160.2	9.33	1.26	2.443	14.31	496
MW-585	04/08/2021 11:30	0.06	-173.2	9.37	1.28	2.472	14.33	496.7
MW-585	01/31/2022 10:15	1.89	-123.8	7.36	0.64	1.274	9.72	0.8
MW-585	01/31/2022 10:20	0.63	-108.2	7.36	0.65	1.31	10.64	1.3
MW-585	01/31/2022 10:25	0.45	-107.1	7.43	0.7	1.39	10.66	9.8
MW-585	01/31/2022 10:30	0.36	-107.4	7.52	0.74	1.459	10.32	18.7
MW-585	01/31/2022 10:35	0.33	-108.8	7.52	0.74	1.473	10.5	16.4
MW-585	01/31/2022 10:40	0.29	-113.5	7.61	0.76	1.498	10.59	7.7
MW-585	01/31/2022 10:45	0.28	-121.9	7.68	0.77	1.526	11.09	6.6
MW-585	01/31/2022 10:50	0.26	-126.6	7.7	0.78	1.543	10.49	19.3
MW-585	01/31/2022 10:55	0.22	-129	7.75	0.78	1.55	10.51	17.2
MW-585	01/31/2022 11:00	0.2	-136.7	7.62	0.79	1.569	10.29	17.3
MW-585	04/12/2022 11:25	3.53	-122.2	7.73	0.22	0.455	14.6	13.1
MW-585	04/12/2022 11:30	2.84	-138.6	7.63	0.21	0.43	14.41	12.8
MW-585	04/12/2022 11:35	3.09	-154.7	7.64	0.2	0.423	14.22	2.2
MW-585	04/12/2022 11:40	3.14	-160.3	7.65	0.2	0.422	14.46	0
MW-585	04/12/2022 11:45	2.94	-166.2	7.66	0.21	0.428	14.97	0
MW-585	04/12/2022 11:50	2.31	-170.4	7.67	0.21	0.436	15.25	0
MW-585	04/12/2022 11:55	2.38	-175.9	7.68	0.22	0.446	15.38	0
MW-585	04/12/2022 12:00	2.04	-182	7.69	0.22	0.459	15.48	0
MW-585	04/12/2022 12:05	2.1	-184.4	7.7	0.23	0.465	15.79	0
MW-585	04/12/2022 12:10	1.91	-188	7.71	0.23	0.475	15.71	0
MW-586	10/14/2020 12:35	3.73	-43.7	8.93	3.9	7.074	20.54	53.7
MW-586	10/14/2020 12:40	2.19	-59	8.97	3.98	7.206	20.27	59.4
MW-586	10/14/2020 12:45	1.72	-52	8.96	4.04	7.303	20.43	61.1
MW-586	10/14/2020 12:50	1.12	-34.4	8.9	4.16	7.501	20.19	59.6
MW-586	10/14/2020 12:55	0.97	-9.5	8.78	4.25	7.668	20.17	57
MW-586	10/14/2020 13:00	1.42	12.7	8.49	4.49	8.053	20.18	54.5
MW-586	10/14/2020 13:05	0.67	14.4	8.16	4.68	8.366	20.2	53.3
MW-586	10/14/2020 13:10	1.34	-16.5	7.91	4.91	8.759	20.21	57.4
MW-586	10/14/2020 13:15	0.67	-42.6	7.89	4.96	8.844	20.3	58.9
MW-586	10/14/2020 13:20	1.09	-50.2	7.92	4.97	8.873	20.28	58.5
MW-586	10/14/2020 14:30	2.86	20	12.59	17.95	29	20.31	47.3
MW-586	10/14/2020 14:55	3.17	130.9	8.44	3.64	6.625	19.62	NM
MW-586	10/15/2020 14:55	NM	NM	NM	NM	NM	NM	86.9
MW-586	01/15/2021 12:15	3.31	-45.6	7.14	1.82	3.448	11.64	57.8
MW-586	01/15/2021 12:20	2.22	-52.6	7.12	1.82	3.454	11.68	46.8
MW-586	01/15/2021 12:25	1.18	-63.7	7.14	1.79	3.395	10.55	150.9
MW-586	01/15/2021 12:30	1.16	-68.9	7.14	1.8	3.4	10.48	126.8
MW-586	01/15/2021 12:35	0.73	-95.5	7.29	2.61	4.808	10.59	92.7
MW-586	01/15/2021 12:40	0.53	-147.3	7.57	3.35	6.117	10.73	83.2
MW-586	01/15/2021 12:45	0.42	-164.9	7.67	3.78	6.842	10.96	38.4
MW-586	01/15/2021 12:50	0.36	-182.5	7.83	4.14	7.466	10.89	40.3
MW-586	01/15/2021 12:55	0.3	-191.3	7.89	4.28	7.703	11.11	43.9
MW-586	01/15/2021 13:00	0.33	-195.7	7.9	4.33	7.781	11.16	54.4
MW-586	01/15/2021 14:15	8.2	47.1	12.99	28.22	43.68	10.49	20.8
MW-586	01/15/2021 14:40	2.03	145	7.87	2.59	4.808	11.45	90.1
MW-586	04/08/2021 10:40	11.1	-164	7.22	2.7	4.956	12.59	57.7
MW-586	04/08/2021 10:45	13.43	-74.7	7.18	2.7	5.012	11.47	42.8
MW-586	04/08/2021 10:50	12.16	-177.5	7.17	2.71	5.014	11.01	40.3
MW-586	04/08/2021 10:55	11.33	-177.1	7.15	2.7	5.014	10.83	35.5
MW-586	04/08/2021 11:00	10.53	-177.1	7.15	2.7	5.001	10.84	30.6
MW-586	04/08/2021 11:05	5.59	-177.7	7.15	2.69	4.99	10.96	26.8
MW-586	04/08/2021 11:10	9.17	-176.9	7.15	2.7	5.002	10.93	27.1
MW-586	04/08/2021 11:15	8.68	-181.9	7.19	3.04	5.553	10.92	28.9
MW-586	04/08/2021 11:20	7.77	-202.3	7.32	3.7	6.728	11.44	26.4
MW-586	04/08/2021 11:25	7.53	-207.5	7.33	3.76	6.819	12.36	19.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-586	01/31/2022 11:55	2.86	-168.8	6.88	2.69	5.003	8.52	297.6
MW-586	01/31/2022 12:00	0.58	-143.8	6.87	2.63	4.888	9.11	466.5
MW-586	01/31/2022 12:05	0.46	-139.9	6.92	2.76	5.104	9.43	330.9
MW-586	01/31/2022 12:10	0.43	-138.3	6.96	2.81	5.19	9.56	255.7
MW-586	01/31/2022 12:15	0.4	-137	7	2.83	5.244	9.63	174.6
MW-586	01/31/2022 12:20	0.4	-136.5	7.02	2.86	5.291	9.58	140.9
MW-586	01/31/2022 12:25	0.39	-135.8	7.02	2.88	5.314	9.7	127
MW-586	01/31/2022 12:30	0.37	-135.8	7.03	2.89	5.346	9.58	103.2
MW-586	01/31/2022 12:35	0.36	-136.4	7.05	2.9	5.36	9.81	97.8
MW-586	01/31/2022 12:40	0.36	-139.5	7.07	2.91	5.38	9.69	79.9
MW-586	04/12/2022 09:45	1.46	-139.1	7.34	1.11	2.158	11.56	64.1
MW-586	04/12/2022 09:50	0.62	-153.8	7.24	1.14	2.21	11.41	32.6
MW-586	04/12/2022 09:55	0.55	-159.4	7.24	1.15	2.233	11.31	37.1
MW-586	04/12/2022 10:00	0.58	-162.1	7.23	1.16	2.241	11.36	34.5
MW-586	04/12/2022 10:05	0.47	-164	7.23	1.16	2.247	11.41	39.6
MW-586	04/12/2022 10:10	0.46	-165.1	7.23	1.17	2.261	11.5	39
MW-586	04/12/2022 10:15	0.5	-167.9	7.23	1.25	2.411	11.72	41
MW-586	04/12/2022 10:20	0.46	-171.7	7.24	1.33	2.558	11.87	38.1
MW-586	04/12/2022 10:25	0.48	-173.8	7.26	1.36	2.62	12.03	32.4
MW-586	04/12/2022 10:30	0.44	-175.4	7.27	1.38	2.652	11.99	28.4
MW-587	10/15/2020 09:05	1.95	193.2	6.44	2.13	3.992	17.34	34.9
MW-587	10/15/2020 09:10	1.46	177.6	6.46	2.13	3.995	17.38	26.8
MW-587	10/15/2020 09:15	1.23	162.7	6.47	2.15	4.031	16.99	42.2
MW-587	10/15/2020 09:20	1.27	160.6	6.48	2.15	4.035	16.89	71.6
MW-587	10/15/2020 09:25	0.84	137.3	6.47	2.14	4.025	17.71	79.8
MW-587	10/15/2020 09:30	0.79	126.4	6.48	2.15	4.039	17.75	68.7
MW-587	10/15/2020 09:35	0.89	123.7	6.45	2.15	4.032	17.63	54.9
MW-587	10/15/2020 09:40	0.9	114.5	6.45	2.14	4.015	17.87	38.2
MW-587	10/15/2020 09:45	0.55	106.7	6.46	2.14	4.014	17.96	28.3
MW-587	10/15/2020 09:50	0.5	102.9	6.45	2.13	4.011	17.99	24.3
MW-587	10/15/2020 10:40	1.57	174	6.43	2.06	3.887	18.99	8.3
MW-587	10/15/2020 10:50	3.7	123.5	6.5	2.07	3.891	18.73	NM
MW-587	10/20/2020 10:50	NM	NM	NM	NM	NM	NM	800.8
MW-587	01/08/2021 10:35	1.19	65.3	8.03	1.63	3.11	11.1	3.5
MW-587	01/08/2021 10:40	0.81	65.1	7.56	1.64	3.123	11.42	3.8
MW-587	01/08/2021 10:45	0.59	64.4	7.13	1.65	3.142	11.38	6.2
MW-587	01/08/2021 10:50	0.46	63.8	6.71	1.66	3.167	11.44	6.8
MW-587	01/08/2021 10:55	0.41	63.6	6.69	1.66	3.168	11.38	7.6
MW-587	01/08/2021 11:00	0.38	63.4	6.67	1.66	3.165	11.4	7.4
MW-587	01/08/2021 11:05	0.33	63.4	6.64	1.67	3.167	11.45	7.4
MW-587	01/08/2021 11:10	0.16	62.6	6.56	1.71	3.24	12.02	7
MW-587	01/08/2021 11:15	0.09	68.6	6.47	1.84	3.477	12.3	6
MW-587	01/08/2021 11:20	0.09	69.3	6.47	1.84	3.478	12.27	4.9
MW-587	01/08/2021 12:19	1.11	65.4	6.78	1.65	3.136	11.41	0.7
MW-587	01/08/2021 12:26	1.81	81.2	6.81	1.64	3.127	9.51	10
MW-587	04/12/2021 12:45	7.34	5.5	6.51	0.34	0.7	11.13	158.8
MW-587	04/12/2021 12:50	2.49	25.2	6.42	1.01	2.02	11.04	99.4
MW-587	04/12/2021 12:55	1.31	23.4	6.42	1.3	2.512	11.1	43.3
MW-587	04/12/2021 13:00	1.13	23	6.41	1.38	2.645	11.17	29.9
MW-587	04/12/2021 13:05	1.05	24.7	6.39	1.43	2.76	11.22	25
MW-587	04/12/2021 13:10	1	24.2	6.37	1.55	2.977	11.3	13.9
MW-587	04/12/2021 13:15	0.98	19.8	6.35	1.65	3.148	11.28	10.3
MW-587	04/12/2021 13:20	0.97	17.1	6.34	1.69	3.219	11.29	8.2
MW-587	04/12/2021 13:25	0.97	17.5	6.34	1.71	3.251	11.31	7.4
MW-587	04/12/2021 13:30	0.96	19.3	6.34	1.72	3.261	11.33	6.4
MW-588	10/01/2020 13:30	NM	NM	NM	NM	NM	NM	12.3
MW-588	10/20/2020 11:30	8.14	-60.2	6.77	0.86	1.698	17.49	13.2
MW-588	10/20/2020 11:35	9.63	-97.6	6.75	0.87	1.704	17.8	9.2
MW-588	10/20/2020 11:40	10.72	-122.2	6.82	0.87	1.705	17.82	10.5
MW-588	10/20/2020 11:45	10.78	-134.5	6.86	0.87	1.704	17.83	29.4
MW-588	10/20/2020 11:50	10.82	-137.4	6.87	0.87	1.703	17.82	41.8
MW-588	10/20/2020 11:55	10.89	-141.8	6.93	0.87	1.704	18.79	40.5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-588	10/20/2020 12:00	10.87	-146.2	6.92	0.87	1.709	18.48	46.5
MW-588	10/20/2020 12:05	10.4	-148.3	6.94	0.87	1.704	18.47	47.4
MW-588	10/20/2020 12:10	10.14	-148.5	6.94	0.87	1.708	18.48	45.3
MW-588	10/20/2020 13:15	6.48	-72.9	6.92	0.87	1.704	17.5	18.4
MW-588	10/20/2020 13:30	6.83	-71.2	6.97	0.73	1.452	17.8	NM
MW-588	01/15/2021 09:00	2.32	-100.8	6.84	1.11	2.152	11.5	10.8
MW-588	01/15/2021 09:05	5.75	-110.8	6.92	1.09	2.119	9.72	8.7
MW-588	01/15/2021 09:10	3.75	-113.6	6.94	1.08	2.102	10.1	9
MW-588	01/15/2021 09:15	2.72	-126.6	6.99	1.06	2.074	9.74	6.4
MW-588	01/15/2021 09:20	2.42	-133.5	7.02	1.05	2.05	9.83	6.7
MW-588	01/15/2021 09:25	1.81	-136.5	7.03	1.05	2.044	10.11	6.8
MW-588	01/15/2021 09:30	1.58	-138.7	7.03	1.04	2.034	10.17	7.5
MW-588	01/15/2021 09:35	2.64	-139.8	7.03	1.04	2.031	10.39	8.2
MW-588	01/15/2021 09:40	2.3	-140.8	7.03	1.04	2.032	10.52	9.5
MW-588	01/15/2021 09:45	3.29	-141.1	7.03	1.04	2.023	10.55	9.9
MW-588	01/15/2021 10:55	3.21	-96.6	7.03	1.06	2.073	11.19	8.3
MW-588	01/15/2021 11:10	4.64	-99.6	7.06	1.01	1.965	10.58	21.8
MW-588	04/09/2021 11:15	3.75	-78.1	7.42	1.33	2.55	11.62	115.9
MW-588	04/09/2021 11:20	0.91	-97	7.1	1.22	2.363	12.01	103.3
MW-588	04/09/2021 11:25	0.77	-103.3	7.05	1.21	2.327	12.48	75
MW-588	04/09/2021 11:30	0.72	-108	7.03	1.2	2.319	12.53	79.6
MW-588	04/09/2021 11:35	0.71	-110.3	7.02	1.2	2.318	12.58	54.3
MW-588	04/09/2021 11:40	0.68	-112.8	7	1.2	2.321	12.44	61.4
MW-588	04/09/2021 11:45	0.69	-113.6	7	1.2	2.317	12.65	58
MW-588	04/09/2021 11:50	0.7	-115.6	6.99	1.2	2.315	12.75	59.7
MW-603	11/23/2020 10:55	4.45	35	7.65	16.04	26.19	12.71	14
MW-603	11/23/2020 11:45	4.52	47	7.77	16.05	26.2	13.11	38.1
MW-603	02/23/2021 11:05	0.95	-80.2	6.99	14.73	24.42	7.63	4.8
MW-603	02/23/2021 11:10	0.16	-108.6	7.04	14.85	24.6	7.22	4.6
MW-603	02/23/2021 11:15	0.13	-122.2	7.08	14.87	24.65	6.68	5.2
MW-603	02/23/2021 11:20	0.09	-126.9	7.08	14.84	24.62	6.54	6.4
MW-603	02/23/2021 11:25	0.07	-132.6	7.09	14.81	24.58	6.41	7.8
MW-603	02/23/2021 11:30	0.07	-130	7.09	14.69	24.4	6.35	7.5
MW-603	02/23/2021 11:35	0.07	-134.4	7.08	14.17	23.59	6.3	7.6
MW-603	02/23/2021 11:40	0.07	-136.6	7.07	13.37	22.31	6.27	6.2
MW-603	02/23/2021 11:45	0.06	-136.4	7.06	12.69	21.35	6.09	5.4
MW-603	02/23/2021 11:50	0.05	-138.3	7.05	12.62	21.25	6.23	5.9
MW-603	02/23/2021 12:25	0.07	-156	7.16	15.41	25.39	8.5	4.8
MW-603	02/23/2021 12:35	0.34	-145.2	7.18	15.57	25.89	6.98	20.6
MW-603	05/04/2021 13:05	3.96	-91.6	6.99	13.84	23.25	17.57	33.7
MW-603	05/04/2021 13:10	0.66	-95.5	7.05	13.93	22.83	15.42	31.8
MW-603	05/04/2021 13:15	0.62	95.4	7.03	12.4	20.64	17.11	26.7
MW-603	05/04/2021 13:20	0.47	95.3	7.03	11.87	19.85	17.74	27.4
MW-603	05/04/2021 13:25	0.37	-96.5	7.03	11.59	19.4	18.71	36.9
MW-603	05/04/2021 13:30	0.4	-95.8	7.04	11.3	18.95	18.92	40.9
MW-603	05/04/2021 13:35	0.36	-96.4	7.03	11.08	18.57	19.01	43.5
MW-603	05/04/2021 13:40	0.28	-49.2	7.02	10.95	18.41	18.92	33.3
MW-603	05/04/2021 13:45	0.11	-102.6	7	10.56	17.79	19.29	23.6
MW-603	05/04/2021 13:50	0.1	-104.7	6.99	10.39	17.55	19.4	17
MW-603	08/04/2021 13:50	2	-210.3	7.09	16.12	26.3	23.63	20.4
MW-603	08/04/2021 13:55	0.54	-253.8	7.1	16.03	26.23	23.77	20.1
MW-603	08/04/2021 14:00	0.93	-263.3	7.09	15.65	25.66	23.78	18.4
MW-603	08/04/2021 14:05	0.03	-271.1	7.05	14.75	24.3	23.77	17.2
MW-603	08/04/2021 14:10	0.03	-274.3	7.03	14.07	23.27	23.82	13.5
MW-603	08/04/2021 14:15	0.03	-275.9	7.01	13.76	22.83	23.7	12.6
MW-603	08/04/2021 14:20	0.03	-276.3	7	13.4	22.26	23.59	14
MW-603	08/04/2021 14:25	0.02	-277.6	6.99	13.34	22.17	23.61	15.5
MW-603	08/04/2021 14:30	0	-277.7	6.98	12.89	21.48	23.74	21.2
MW-603	08/04/2021 14:35	0.03	-272.8	6.96	12.41	20.78	23.7	24.8
MW-603	02/10/2022 13:55	2.39	24.9	6.93	15.54	25.49	10.38	28.9
MW-603	02/10/2022 14:00	0.35	-65.5	7.02	15.64	25.65	10.62	28.1
MW-603	02/10/2022 14:05	0.26	-72.7	7.02	15.68	25.71	10.63	27.7

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
MW-603	02/10/2022 14:10	0.15	-85.6	7.01	15.7	25.72	10.4	27.5
MW-603	02/10/2022 14:15	0.09	-102.6	7.03	15.59	25.55	9.97	28
MW-603	02/10/2022 14:20	0.09	-110.2	7.01	15.45	25.39	9.6	29.3
MW-603	02/10/2022 14:25	0.1	-116.9	7.02	15.03	24.78	9.27	29.5
MW-603	02/10/2022 14:30	0.1	-118.4	7.01	14.84	24.5	9.21	27.5
MW-603	02/10/2022 14:35	0.1	-119.3	7.01	14.54	24.03	9.18	26.3
MW-603	02/10/2022 14:40	0.12	-120.9	7.01	13.92	23.1	9.34	23.8
MW-604	11/19/2020 11:30	1.94	-76.5	7.22	4.49	8.046	17.2	12.3
MW-604	11/19/2020 11:45	2.77	-89.3	7.28	4.82	8.6	17.73	118.8
MW-604	02/22/2021 09:45	3.5	-129.6	7.63	4.24	7.6	9.03	21.3
MW-604	02/22/2021 09:50	0.29	-149.7	8.4	6.241	6.228	8.13	24.3
MW-604	02/22/2021 09:55	0.24	-156.9	8.67	3.3	6.065	7.57	28.6
MW-604	02/22/2021 10:00	0.18	-168.8	8.84	3.22	5.94	7.16	23.5
MW-604	02/22/2021 10:05	0.18	-168.9	8.88	3.2	5.894	6.97	22.8
MW-604	02/22/2021 10:10	0.19	-157.9	8.71	3.22	5.928	7.12	22.3
MW-604	02/22/2021 10:15	0.19	-143.9	8.5	3.3	6.071	7.31	22.5
MW-604	02/22/2021 10:20	0.18	-134.1	8.32	6.192	6.207	7.48	22.7
MW-604	02/22/2021 10:25	0.13	-127.4	8.15	3.57	6.515	7.91	24.7
MW-604	02/22/2021 10:30	0.13	-124.4	8.09	3.5	6.403	8.09	24.6
MW-604	02/22/2021 10:50	0.26	-131	7.74	4.45	7.987	10.92	30.9
MW-604	02/22/2021 11:00	0.26	-116.4	7.73	4.46	8.025	9.97	27.5
MW-604	05/11/2021 09:05	10.26	28	7.06	2.6	2.525	14	17
MW-604	05/11/2021 09:10	6.77	-33.9	6.81	2.81	5.022	13.91	18.5
MW-604	05/11/2021 09:15	4.94	-66	6.93	2.97	5.444	13.7	23
MW-604	05/11/2021 09:20	3.89	-143.1	7.85	1.27	2.465	12.22	9.4
MW-604	05/11/2021 09:25	4.51	-67.8	8.12	1.23	2.305	12.83	9.9
MW-604	05/11/2021 09:30	4.36	-111.9	7.97	1.85	3.495	12.93	7.6
MW-604	05/11/2021 09:35	4.08	-123.1	7.86	2.06	3.814	13.02	8.5
MW-604	05/11/2021 09:40	3.73	-126.3	7.85	2.15	4.025	13.1	8.4
MW-604	05/11/2021 09:45	1.53	-151.3	7.85	2.88	5.303	13.58	6.3
MW-604	05/11/2021 09:50	1.4	-151.2	7.82	2.94	5.403	13.57	5.9
MW-604	05/11/2021 09:55	0.85	-139.5	7.45	3.26	5.96	13.5	8.6
MW-604	05/11/2021 10:00	0.8	-101.7	7.32	3.36	6.132	13.57	8.8
MW-604	08/06/2021 12:31	0.45	-57.8	6.62	4.08	7.009	22.22	18.2
MW-604	02/09/2022 13:00	5.06	126.6	8.19	2.66	4.939	9.59	27.3
MW-604	02/09/2022 13:05	3.97	20.1	7.79	2.52	4.698	10.04	26.4
MW-604	02/09/2022 13:10	3.98	-62.6	7.71	2.49	4.644	10.42	22.9
MW-604	02/09/2022 13:15	4.5	-87.3	7.6	2.48	4.616	10.48	21.5
MW-604	02/09/2022 13:20	4.7	-106.2	7.52	2.48	4.62	10.12	19.8
MW-604	02/09/2022 13:25	4.65	-113.8	7.51	2.47	4.611	10.03	18.6
MW-604	02/09/2022 13:30	4.9	-123.6	7.5	2.47	4.599	9.88	15
MW-604	02/09/2022 13:35	4.95	-138.8	7.51	2.46	4.589	9.68	14.8
MW-604	02/09/2022 13:40	4.74	-151	7.52	2.46	4.583	9.33	15.4
MW-604	02/09/2022 13:45	4.9	-158	7.52	2.45	4.583	9.3	16.1
NF-10	02/01/2012 15:21	2.22	-20	7.57	0.03	0.56744	14.77	167.3
NF-10	02/01/2012 15:23	1.45	-31	7.63	0.03	0.57746	11.96	65
NF-10	02/01/2012 15:25	1.16	-37	7.65	0.03	0.56633	11.71	63.8
NF-10	02/01/2012 15:28	1.06	-42	7.66	0.03	0.56599	11.58	49.6
NF-10	02/01/2012 15:30	1	-46	7.66	0.03	0.56661	11.32	46.5
NF-10	02/01/2012 15:32	0.95	-52	7.67	0.03	0.57665	11.38	36.6
NF-10	02/01/2012 15:34	0.92	-56	7.67	0.03	0.57992	11.16	34.7
NF-10	02/01/2012 15:36	0.88	-59	7.67	0.03	0.5694	11.39	38.6
NF-10	02/01/2012 15:38	0.87	-63	7.68	0.03	0.57091	11.17	35.8
NF-10	02/01/2012 15:41	0.83	-67	7.67	0.03	0.57078	11.57	28.6
NF-10	02/01/2012 15:43	0.82	-72	7.69	0.03	0.57996	11.57	31
NF-10	02/01/2012 15:45	0.83	-74	7.68	0.03	0.57489	11.24	24.8
NF-10	02/01/2012 15:47	0.82	-76	7.69	0.03	0.57372	11.31	30
NF-10	02/01/2012 15:49	0.81	-79	7.69	0.03	0.58013	11.26	26.2
NF-10	02/01/2012 15:51	0.81	-81	7.69	0.03	0.5833	11.07	30.2
NF-10	02/01/2012 15:54	0.8	-83	7.69	0.03	0.57164	11.05	26.8
NF-10	02/01/2012 15:56	0.78	-86	7.69	0.03	0.58108	11.14	22.7
NF-10	02/01/2012 15:58	0.79	-87	7.69	0.03	0.58164	10.77	28.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-10	02/01/2012 16:00	0.78	-89	7.7	0.03	0.58237	10.73	24.8
NF-10	02/01/2012 16:02	0.78	-90	7.7	0.03	0.57392	10.97	18.2
NF-10	02/01/2012 16:04	0.76	-92	7.7	0.03	0.57666	11.11	23.3
NF-10	02/01/2012 16:07	0.75	-94	7.7	0.03	0.58326	11.06	17.6
NF-10	02/01/2012 16:09	0.75	-96	7.7	0.03	0.58256	11.06	22
NF-10	02/01/2012 16:10	0.73	-97	7.70	0.03	0.574	11.15	19.78
NF-10	02/01/2012 16:11	0.73	-97	7.7	0.03	0.57411	11.15	19.8
NF-10	02/01/2012 17:05	0.27	-106	7.72	0.03	0.614	9.17	40.50
NF-10	02/02/2012 11:30	0.12	-72	7.55	0.03	0.604	8.83	65.00
NF-10	04/02/2012 08:16	4.91	-77	7.47	0.03	0.57379	13.29	83.4
NF-10	04/02/2012 08:19	2.55	-95	7.54	0.03	0.5965	10.35	12.6
NF-10	04/02/2012 08:21	1.05	-107	7.58	0.03	0.59711	10.52	12.5
NF-10	04/02/2012 08:24	0.62	-113	7.62	0.03	0.59786	10.49	12.1
NF-10	04/02/2012 08:26	0.39	-118	7.64	0.03	0.59863	10.55	13
NF-10	04/02/2012 08:29	0.27	-121	7.66	0.03	0.60425	10.31	13.1
NF-10	04/02/2012 08:31	0.24	-124	7.66	0.03	0.59588	10.48	12.1
NF-10	04/02/2012 08:34	0.03	-126	7.67	0.03	0.59683	10.53	11.8
NF-10	04/02/2012 08:36	-0.03	-128	7.68	0.03	0.59941	10.48	12.3
NF-10	04/02/2012 08:38	-0.09	-129	7.68	0.03	0.59606	10.37	12.6
NF-10	04/02/2012 08:41	-0.14	-131	7.69	0.03	0.59585	10.46	11.7
NF-10	04/02/2012 08:43	-0.17	-132	7.7	0.03	0.59702	10.48	12.5
NF-10	04/02/2012 08:46	-0.2	-133	7.72	0.03	0.59624	10.57	11.7
NF-10	04/02/2012 08:48	-0.22	-135	7.73	0.03	0.59672	10.69	13.1
NF-10	04/02/2012 08:51	-0.23	-135	7.74	0.03	0.59625	10.68	11.5
NF-10	04/02/2012 08:53	-0.27	-136	7.75	0.03	0.59786	10.59	11.7
NF-10	04/02/2012 08:56	-0.3	-137	7.76	0.03	0.59562	10.59	11.5
NF-10	04/02/2012 08:58	-0.34	-137	7.77	0.03	0.59629	10.49	12.2
NF-10	04/02/2012 09:01	-0.35	-138	7.76	0.03	0.59605	10.59	12.2
NF-10	04/02/2012 10:01	14.39	-100	7.62	0.03	0.6281	11.53	45.5
NF-10	04/03/2012 09:27	2.14	8	6.86	0	0.387	11.12	24.5
NF-10	07/16/2012 13:29	0.87	-146	7.07	0.03	0.65365	34.62	32.9
NF-10	07/16/2012 13:31	0.76	-155	7.06	0.03	0.6593	31.84	6
NF-10	07/16/2012 13:33	0.56	-167	7.1	0.03	0.6557	29.64	6.1
NF-10	07/16/2012 13:35	0.45	-176	7.12	0.03	0.65247	29.43	6
NF-10	07/16/2012 13:37	0.41	-181	7.12	0.03	0.65246	29.17	6.4
NF-10	07/16/2012 13:40	0.39	-185	7.14	0.03	0.6501	28.79	7.3
NF-10	07/16/2012 13:42	0.36	-189	7.14	0.03	0.64983	28.8	7.1
NF-10	07/16/2012 13:44	0.34	-192	7.14	0.03	0.65025	28.59	7.4
NF-10	07/16/2012 13:46	0.33	-194	7.15	0.03	0.65111	28.17	8.1
NF-10	07/16/2012 13:48	0.3	-197	7.14	0.03	0.65105	28.62	7.2
NF-10	07/16/2012 13:50	0.32	-198	7.15	0.03	0.65227	28.14	8.7
NF-10	07/16/2012 13:52	0.28	-200	7.15	0.03	0.65284	27.89	7.4
NF-10	07/16/2012 13:54	0.27	-201	7.16	0.03	0.6487	27.81	7.9
NF-10	07/16/2012 13:56	0.26	-202	7.16	0.03	0.64911	27.71	10.1
NF-10	07/16/2012 13:58	0.24	-203	7.14	0.03	0.65379	28.08	7.8
NF-10	07/16/2012 14:00	0.23	-204	7.14	0.03	0.65214	28.64	7.7
NF-10	07/16/2012 14:02	0.23	-204	7.14	0.03	0.65392	28.32	9
NF-10	07/16/2012 14:04	0.23	-204	7.13	0.03	0.65406	28.42	9.1
NF-10	07/16/2012 14:06	0.22	-205	7.13	0.03	0.65537	28.58	8.6
NF-10	07/16/2012 14:07	0.22	-205	7.13	0.03	0.655	28.58	8.60
NF-10	07/16/2012 15:05	4.14	-106	7.13	0.03	0.699	23.43	69.40
NF-10	07/17/2012 09:58	2.75	-132	6.75	0.43	0.666	22.53	131.00
NF-10	10/11/2012 10:34	4.77	-264	7.64	0.03	0.64801	18.09	85.5
NF-10	10/11/2012 10:36	1.39	-292	7.76	0.03	0.65245	17.86	75.4
NF-10	10/11/2012 10:38	0.93	-303	7.76	0.03	0.6535	17.96	72.8
NF-10	10/11/2012 10:41	0.72	-311	7.97	0.03	0.65435	18.25	73.4
NF-10	10/11/2012 10:43	0.66	-314	7.91	0.03	0.65474	18.31	73.3
NF-10	10/11/2012 10:45	0.64	-315	7.95	0.03	0.65357	18.57	72
NF-10	10/11/2012 10:48	0.64	-317	7.90	0.03	0.652	18.48	73.34
NF-10	10/11/2012 11:42	6.63	-207	7.37	0.03	0.694	19.71	152.40
NF-10	10/12/2012 14:33	2.35	-259	6.89	0.03	0.687	19.45	50.70
NF-10	02/04/2013 14:32	3.43	-209	6.93	0.05	1.03154	5.52	69.2

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-10	02/04/2013 14:34	1.15	-248	7	0.05	0.95243	5.93	56.8
NF-10	02/04/2013 14:36	0.84	-265	7.05	0.05	0.93782	5.72	53
NF-10	02/04/2013 14:39	0.71	-272	7.07	0.05	0.93276	5.71	53.1
NF-10	02/04/2013 14:41	0.66	-277	7.1	0.05	0.93241	5.94	53.8
NF-10	02/04/2013 14:43	0.65	-280	7.12	0.05	932.700	6.05	52.71
NF-10	02/04/2013 15:31	8.80	-184	7.51	0.05	1.020	7.49	26.50
NF-10	02/05/2013 10:29	0.94	-68	4.14	0.09	1.797	14.59	23.60
NF-10	04/17/2013 15:09	0.72	-258	7.28	0.05	0.942	16.78	11.29
NF-10	04/17/2013 15:54	8.92	-113	7.33	0.06	1.113	10.86	39.2
NF-10	04/18/2013 11:55	0.28	-257	7.21	0.03	0.685	10.65	78.5
NF-10	07/24/2013 14:27	0.16	-178	7.14	0.06	1.263	26.11	2.96
NF-10	07/24/2013 15:06	3.28	-124	7.02	0.08	1.558	23.20	113.70
NF-10	07/25/2013 11:13	0.15	-166.00	7.03	0.06	1.110	23.90	86.80
NF-10	08/18/2013 10:52	4.32	-81.9	7.38	0.36	783.000	22.32	24.30
NF-10	08/18/2013 11:16	0.81	-107.6	6.91	0.28	0.586	22.65	13.20
NF-10	08/19/2013 10:52	4.32	-81.9	7.38	0.36	783.000	22.32	24.30
NF-10	08/19/2013 11:16	0.81	-107.6	6.91	0.28	0.586	22.65	13.20
NF-10	08/19/2013 11:47	1.11	-86.9	6.80	0.28	0.586	22.55	9.70
NF-10	03/26/2014 10:24	0.98	-406	7.21	0.11	2.170	6.55	26.86
NF-10	03/26/2014 11:18	4.79	-240	6.80	0.08	1.625	9.22	64.20
NF-10	03/27/2014 13:22	1.47	-404	7.18	0.10	2.046	7.16	75.00
NF-10	04/24/2014 14:42	1.48	-403	7.25	0.05	0.959	14.62	14.17
NF-10	04/24/2014 15:45	5.61	-249	7.29	0.04	0.829	15.06	697.20
NF-10	04/25/2014 10:55	1.11	-486	7.21	0.08	1.590	10.95	39.90
NF-10	07/24/2014 09:22	0.60	-56	6.80	0.03	0.649	24.98	8.42
NF-10	07/24/2014 10:08	5.04	155	6.90	0.03	0.674	21.15	1124.50
NF-10	07/25/2014 09:06	0.96	205	6.15	0.03	0.680	21.15	95.30
NF-10	08/18/2014 10:00	0.35	-114.2	6.80	0.28	0.584	22.69	9.60
NF-10	08/18/2014 11:30	0.32	-112.4	6.67	0.29	0.599	23.22	0.0000
NF-10	08/18/2014 11:50	0.33	-110.1	6.67	0.29	0.591	23.99	0.0000
NF-10	10/08/2014 12:39	1.15	-129	6.97	0.03	0.675	21.20	87.90
NF-10	10/08/2014 13:40	5.92	-120	6.85	0.03	0.665	20.53	936.30
NF-10	12/05/2014 14:05	5.93	-74.8	7.08	0.30	0.608	8.12	27.40
NF-10	01/14/2015 14:47	-0.51	-187	7.36	0.07	1.485	5.43	17.97
NF-10	01/14/2015 15:31	6.05	-128	7.40	0.06	1.296	8.20	1933.60
NF-10	01/15/2015 12:55	4.30	-167	7.25	0.07	1.399	0.39	77.53
NF-10	05/05/2015 10:30	9.07	-159	7.02	NM	0.877	11.93	79.2
NF-10	05/05/2015 11:00	8.43	-125	7.03	NM	0.601	12.64	1476.9
NF-10	07/16/2015 13:43	1.2	-369	NM	0.03	0.708	21.46	101.2
NF-10	07/16/2015 14:31	7.4	-96	7.47	0.12	2.23	20.63	1503.8
NF-10	10/08/2015 10:45	0.76	194	6.71	0.07	1.455	20.44	91.50
NF-10	10/08/2015 12:02	7.49	77	7.02	0.08	1.478	20.92	864.30
NF-10	12/05/2015 12:05	0.15	129.8	7.28	0.31	0.636	10.76	13.20
NF-10	12/05/2015 13:30	0.13	-160.2	7.30	0.31	0.631	11.04	5.40
NF-10	04/06/2016 15:10	2.69	-92	7.00	0.40	0.505	10.07	49.90
NF-10R	08/09/2018 10:00	1.96	-87.80	7.58	1.01	1.972	21.99	31.70
NF-10R	08/09/2018 10:45	1.48	-126.60	7.32	1.00	1.963	20.09	4.70
NF-10R	08/09/2018 10:55	1.08	-83.70	7.20	0.99	1.960	25.7	34.40
NF-10R	11/05/2018 09:15	6.00	13.40	6.60	0.94	1.839	14.1	72.80
NF-10R	11/05/2018 09:50	1.95	-159.50	7.52	0.94	1.891	14.22	14.20
NF-10R	11/05/2018 10:05	6.27	-133.20	7.56	0.94	1.844	15.38	74.80
NF-10R	02/04/2019 09:40	4.07	-106.20	7.81	0.76	1.503	10.09	5.90
NF-10R	02/04/2019 10:15	5.06	-122.40	7.93	0.75	1.482	10.39	2.40
NF-10R	02/04/2019 10:35	4.92	114.30	7.87	0.76	1.473	10.34	11.50
NF-10R	05/01/2019 09:40	3.52	-163.7	7.69	0.71	1.412	12.28	1.7
NF-10R	07/08/2019 10:05	1.61	-145.4	7.05	NM	1.634	17.77	9.3
NF-10R	07/08/2019 10:10	0.83	-171.3	7.16	NM	1.617	17.77	4.2
NF-10R	07/08/2019 10:15	0.7	-170.8	7.26	NM	1.601	16.75	3.5
NF-10R	07/08/2019 10:20	0.53	-174.4	7.32	NM	1.599	16.73	3.4
NF-10R	07/08/2019 10:25	0.46	-175	7.37	NM	1.599	16.7	4
NF-10R	07/08/2019 10:30	0.37	-166.8	7.4	NM	1.594	16.56	5.7
NF-10R	07/08/2019 10:35	0.39	-169.1	7.44	NM	1.591	18.1	2.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-10R	07/08/2019 10:40	0.39	-169.8	7.46	NM	1.589	18.18	2.8
NF-10R	07/08/2019 10:45	0.41	-163.5	7.45	NM	1.589	18.16	2.9
NF-10R	07/08/2019 11:15	0.41	-163.5	7.45	NM	1.589	18.16	2.9
NF-10R	07/09/2019 10:50	3.8	-143.3	7.44	0.81	1.591	17.3	1.9
NF-10R	07/09/2019 12:05	3.8	-143.3	7.44	0.81	1.591	17.3	1.9
NF-10R	07/09/2019 12:25	NM	-149.4	7.48	0.8	1.583	20.71	38.8
NF-10R	01/15/2020 09:40	8.54	137.1	8.79	1	1.937	10.25	47.5
NF-10R	05/21/2020 14:25	0.21	-73.6	10.34	3.68	6.677	15.78	42.6
NF-10R	09/17/2020 11:48	NM	NM	NM	NM	NM	NM	437.7
NF-10R	10/19/2020 09:20	20.13	181.6	7.17	1.07	2.086	17.99	165.1
NF-10R	10/19/2020 09:25	20.43	177.7	7.2	1.07	2.087	18.07	161.5
NF-10R	10/19/2020 09:30	18.76	168.4	7.24	1.11	2.141	18.17	126.9
NF-10R	10/19/2020 09:35	15.87	151	7.38	1.43	2.73	18.43	58.2
NF-10R	10/19/2020 09:40	13.6	78.4	7.54	1.75	3.319	18.25	34.2
NF-10R	10/19/2020 09:45	13.21	31.8	7.63	1.89	3.569	18.34	26.7
NF-10R	10/19/2020 09:50	11.56	-3.6	7.77	2	3.764	18.37	21.7
NF-10R	10/19/2020 09:55	10.76	-22.6	7.88	2.05	3.857	18.38	18.2
NF-10R	10/19/2020 10:00	10.43	-28.7	7.89	2.06	3.872	18.34	18
NF-10R	10/19/2020 10:45	4.7	-79.9	8.87	2.27	4.259	19.78	11.4
NF-10R	10/19/2020 11:48	13.45	59.8	7.47	1.09	2.132	20.02	NM
NF-10R	01/12/2021 12:40	2.03	-118.1	9.81	2.19	4.102	10.41	90
NF-10R	01/12/2021 12:45	0.92	-139.3	9.78	2.19	4.109	10.36	76.6
NF-10R	01/12/2021 12:50	0.4	-159.2	9.77	2.19	4.116	10.21	74.5
NF-10R	01/12/2021 12:55	0.17	-182.4	9.78	2.2	4.119	9.84	60.2
NF-10R	01/12/2021 13:00	0.12	-243.2	10.16	2.44	4.529	9.85	28
NF-10R	01/12/2021 13:05	0.11	-312.8	10.37	2.64	4.902	10.18	19.1
NF-10R	01/12/2021 13:10	0.11	-362.1	10.42	2.74	5.074	10.45	16.8
NF-10R	01/12/2021 13:15	0.1	-384.2	10.42	2.78	5.144	10.61	16.2
NF-10R	01/12/2021 13:20	0.1	-394.7	10.39	2.83	5.225	10.66	16.9
NF-10R	01/12/2021 13:25	0.1	-398.9	10.35	2.85	5.282	10.89	17.8
NF-10R	01/12/2021 14:35	1.43	-235.6	10.05	2.78	5.143	12.75	41.2
NF-10R	01/12/2021 14:45	4	-148.6	9.62	2.24	4.207	9.38	146.5
NF-10R	04/08/2021 12:05	2.36	-27.9	9.95	1.82	3.479	16.99	134.2
NF-10R	04/08/2021 12:10	0.15	-79	10.2	2.13	4.02	14.84	135.9
NF-10R	04/08/2021 12:15	0.05	-121.5	10.37	2.31	4.312	13.95	119
NF-10R	04/08/2021 12:20	0.05	-142.8	10.4	2.34	4.372	13.81	109.3
NF-10R	04/08/2021 12:25	0.05	-157.4	10.39	2.37	4.423	13.84	94.4
NF-10R	04/08/2021 12:30	0.05	-175.1	10.36	2.38	4.433	13.75	90.3
NF-10R	04/08/2021 12:35	0.05	-188.9	10.34	2.38	4.447	13.79	73.5
NF-10R	04/08/2021 12:40	0.05	-196.8	10.32	2.37	4.415	13.93	84.1
NF-10R	04/08/2021 12:45	0.05	-197	10.27	2.34	4.368	13.84	82.2
NF-10R	04/08/2021 12:50	0.05	206.8	10.26	2.33	4.345	13.84	80.4
NF-10R	01/26/2022 12:25	2.4	-154.2	9.28	1.31	2.504	8.73	79.9
NF-10R	01/26/2022 12:30	3.06	-160.9	9.32	1.33	2.552	8.93	76
NF-10R	01/26/2022 12:35	5.77	-210.4	9.51	1.45	2.783	9.82	50.6
NF-10R	01/26/2022 12:40	5.96	-212.1	9.47	1.46	2.797	9.86	47.9
NF-10R	01/26/2022 12:45	4.39	-230.8	9.88	1.48	2.844	9.95	40.3
NF-10R	01/26/2022 12:50	4.41	-231.7	9.43	1.48	2.837	9.89	41
NF-10R	01/26/2022 12:55	4.58	-221.4	9.42	1.48	2.828	9.77	42.2
NF-10R	01/26/2022 13:00	6.11	-223.1	9.41	1.48	2.832	9.65	40.6
NF-10R	01/26/2022 13:05	5.04	-221	9.37	1.48	2.844	9.6	35.7
NF-10R	01/26/2022 13:10	4.75	-220.8	9.41	1.48	2.844	9.7	36.4
NF-10R	04/13/2022 11:15	0.52	4.4	9.19	0.49	0.986	13.93	26.6
NF-10R	04/13/2022 11:20	0.15	-43.8	9.43	0.5	1.006	13.09	18.4
NF-10R	04/13/2022 11:25	0.1	-56.4	9.49	0.54	1.041	13	17.5
NF-10R	04/13/2022 11:30	0.06	-88.2	9.71	0.6	1.195	13.12	12
NF-10R	04/13/2022 11:35	0.07	-109.1	9.84	0.64	1.273	13.08	13.8
NF-10R	04/13/2022 11:40	0.05	129.9	9.9	0.67	1.327	13.08	10.1
NF-10R	04/13/2022 11:45	0.04	-150.5	9.93	0.69	1.372	13.15	9.1
NF-10R	04/13/2022 11:50	0.05	-162.3	9.94	0.71	1.396	13.29	9.6
NF-10R	04/13/2022 11:55	0.03	-174.2	9.97	0.71	1.414	13.28	14.1
NF-10R	04/13/2022 12:00	0.07	-181.6	9.98	0.71	1.412	13.39	10.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-11	02/01/2012 13:44	1.82	-55	7.02	0.11	2.05342	14.29	71.7
NF-11	02/01/2012 13:46	1.41	-55	7.02	0.09	1.82913	11.05	139.1
NF-11	02/01/2012 13:48	1.33	-54	7.03	0.09	1.80875	10.59	45.9
NF-11	02/01/2012 13:50	1.12	-53	7.02	0.09	1.80689	10.65	45
NF-11	02/01/2012 13:52	0.28	-54	7.02	0.09	1.81379	10.41	31.5
NF-11	02/01/2012 13:54	0.23	-54	7.03	0.09	1.82584	10.26	67.9
NF-11	02/01/2012 13:56	0.25	-54	7.02	0.09	1.81789	10.59	20.9
NF-11	02/01/2012 13:58	1.31	-55	7.02	0.09	1.82071	10.59	28.3
NF-11	02/01/2012 14:00	1.04	-55	7.02	0.09	1.81434	10.35	25.3
NF-11	02/01/2012 14:01	0.94	-55	7.02	0.09	1.80662	10.5	20.8
NF-11	02/01/2012 14:03	0.88	-56	7.02	0.09	1.82283	10.73	18.4
NF-11	02/01/2012 14:05	0.86	-56	7.03	0.09	1.8113	10.73	15.4
NF-11	02/01/2012 14:07	0.85	-56	7.02	0.09	1.80494	11.15	17.7
NF-11	02/01/2012 14:09	0.86	-57	7.02	0.09	1.82495	10.99	13.7
NF-11	02/01/2012 14:11	0.86	-57	7.02	0.09	1.8212	10.98	18.8
NF-11	02/01/2012 14:13	0.85	-57	7.02	0.09	1.8074	11.28	11.3
NF-11	02/01/2012 14:15	0.86	-57	7.02	0.09	1.82326	11.16	14.3
NF-11	02/01/2012 14:17	0.85	-58	7.02	0.09	1.80784	11.32	11.4
NF-11	02/01/2012 14:19	0.84	-58	7.02	0.09	1.8216	11.37	11.3
NF-11	02/01/2012 14:21	0.85	-58	7.02	0.09	1.81448	11.21	10.3
NF-11	02/01/2012 14:23	0.84	-58	7.02	0.09	1.81712	11.02	9.2
NF-11	02/01/2012 14:25	0.83	-58	7.02	0.09	1.81424	11.16	9.8
NF-11	02/01/2012 14:27	0.82	-59	7.02	0.09	1.80079	11.02	9.2
NF-11	02/01/2012 14:54	2.83	-40	7.27	0.03	0.656	7.41	89.20
NF-11	02/02/2012 10:40	0.14	-72	7.25	0.04	0.817	6.57	110.10
NF-11	04/02/2012 10:20	2.47	-47	6.89	0.09	1.77289	11.17	27.6
NF-11	04/02/2012 10:22	0.69	-53	6.91	0.09	1.80916	11.23	23.9
NF-11	04/02/2012 10:25	0.24	-56	6.93	0.09	1.81022	11.28	10
NF-11	04/02/2012 10:27	-0.02	-59	6.94	0.09	1.81034	11.3	9.9
NF-11	04/02/2012 10:29	-0.19	-60	6.95	0.09	1.80672	11	6
NF-11	04/02/2012 10:32	-0.31	-62	6.95	0.09	1.81089	11.18	22.7
NF-11	04/02/2012 10:34	-0.42	-63	6.95	0.09	1.80595	10.93	4
NF-11	04/02/2012 10:36	-0.51	-64	6.96	0.09	1.80986	10.92	4.3
NF-11	04/02/2012 10:39	-0.57	-65	6.96	0.09	1.80567	10.88	6.5
NF-11	04/02/2012 10:41	-0.64	-66	6.96	0.09	1.80711	10.79	3.6
NF-11	04/02/2012 10:43	-0.68	-67	6.95	0.09	1.80968	10.98	8.6
NF-11	04/02/2012 10:46	0.56	-67	6.96	0.09	1.8061	10.86	5.3
NF-11	04/02/2012 10:48	0.01	-68	6.95	0.09	1.8065	11.14	5.5
NF-11	04/02/2012 10:50	-0.13	-69	6.96	0.09	1.80739	11.14	3.8
NF-11	04/02/2012 10:53	-0.21	-70	6.96	0.09	1.80775	11.24	3.9
NF-11	04/02/2012 10:55	-0.27	-70	6.96	0.09	1.80873	11.12	5.7
NF-11	04/02/2012 10:57	-0.3	-71	6.96	0.09	1.80989	11.12	4
NF-11	04/02/2012 11:00	-0.35	-71	6.96	0.09	1.80781	11.12	4.7
NF-11	04/02/2012 11:02	-0.36	-72	6.96	0.09	1.80595	11.14	4.6
NF-11	04/02/2012 11:04	-0.37	-72	6.96	0.09	1.80524	11.24	3.7
NF-11	04/02/2012 11:07	-0.38	-73	6.96	0.09	1.81	11.09	4.4
NF-11	04/02/2012 11:09	-0.43	-73	6.96	0.09	1.80291	11.04	5
NF-11	04/02/2012 11:10	-0.43	-73	6.96	0.09	1.803	11.04	4.982
NF-11	04/02/2012 11:42	3.5	-64	7.44	0.02	0.4011	11.14	63.4
NF-11	04/03/2012 10:22	1.55	23	6.39	0	0.308	10.64	17
NF-13	01/23/2012 08:26	4.98	97	6.19	0.08	1.12946	8.11	270.2
NF-13	01/23/2012 08:29	0.21	77	6.24	0.08	1.08132	7.82	115.3
NF-13	01/23/2012 08:31	0.19	60	6.25	0.08	1.07866	7.95	19.2
NF-13	01/23/2012 08:34	0.17	49	6.25	0.08	1.08135	8.01	7.3
NF-13	01/23/2012 08:36	0.15	40	6.24	0.08	1.09688	8.13	12.7
NF-13	01/23/2012 08:39	0.14	31	6.24	0.08	1.10734	8.14	13.4
NF-13	01/23/2012 08:41	0.13	25	6.24	0.08	1.1185	8.15	5.3
NF-13	01/23/2012 08:44	0.13	20	6.24	0.08	1.13955	8.1	6
NF-13	01/23/2012 08:46	0.13	17	6.24	0.08	1.14025	8.11	76.5
NF-13	01/23/2012 08:49	0.12	14	6.24	0.08	1.14893	8.21	5.4
NF-13	01/23/2012 08:52	0.12	11	6.24	0.09	1.15966	8.22	5.8
NF-13	01/23/2012 08:54	0.11	8	6.25	0.09	1.16387	8.14	6.9

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-13	01/23/2012 08:56	0.11	8	6.25	0.09	1.164	8.14	6.87
NF-13	01/24/2012 08:50	1.73	-137	6.49	1.41	18.760	14.95	16.60
NF-13	04/02/2012 14:41	1.4	98	5.44	0.5	9.00827	12.47	7.2
NF-13	04/02/2012 14:44	0.67	94	5.4	0.48	8.68887	11.92	5.8
NF-13	04/02/2012 14:47	0.38	100	5.3	0.46	8.34673	11.87	5.2
NF-13	04/02/2012 14:50	0.28	108	5.2	0.45	8.16571	11.94	5.6
NF-13	04/02/2012 14:53	0.1	131	4.91	0.43	7.69567	11.96	5.6
NF-13	04/02/2012 14:56	0.05	168	4.55	0.4	7.32382	12.02	5.5
NF-13	04/02/2012 14:59	-0.09	205	4.26	0.39	7.05668	12.01	5.7
NF-13	04/02/2012 15:02	-0.17	267	3.98	0.37	6.78598	12.06	5.8
NF-13	04/02/2012 15:05	-0.16	355	3.82	0.36	6.62639	12.1	6.5
NF-13	04/02/2012 15:08	-0.19	367	3.9	0.37	6.745	11.97	6.6
NF-13	04/02/2012 15:11	-0.16	420	3.63	0.35	6.38402	12	6.7
NF-13	04/02/2012 15:14	-0.06	427	3.61	0.34	6.25787	11.98	6.7
NF-13	04/02/2012 15:17	0.18	447	3.5	0.32	5.92098	12.03	6.7
NF-13	04/02/2012 15:20	0.4	457	3.47	0.31	5.71412	12.04	6.9
NF-13	04/02/2012 15:23	0.78	443	3.5	0.31	5.63269	11.96	7
NF-13	04/02/2012 15:26	1.39	430	3.54	0.29	5.33253	11.94	7.6
NF-13	04/02/2012 15:28	1.39	430	3.54	0.29	5.333	11.94	7.65
NF-13	04/03/2012 12:21	1.37	-26	5.84	0.50	9.520	12.46	6.80
NF-13	07/10/2012 08:18	2.11	-70	6.14	0.49	8.68985	23.58	22.3
NF-13	07/10/2012 08:20	1.52	-205	6.61	1.47	23.98176	20.48	9.6
NF-13	07/10/2012 08:22	0.87	-236	6.7	1.5	24.35187	20.06	6.4
NF-13	07/10/2012 08:24	0.58	-246	6.83	1.49	24.21701	19.52	4.1
NF-13	07/10/2012 08:26	0.41	-252	7.95	1.47	23.94384	19.38	3.4
NF-13	07/10/2012 08:29	0.3	-256	7.88	1.45	23.68814	19.27	3.8
NF-13	07/10/2012 08:31	0.22	-259	8	1.43	23.36494	19.31	3.8
NF-13	07/10/2012 08:33	0.17	-262	8.13	1.42	23.25681	19.5	5.3
NF-13	07/10/2012 08:35	0.16	-265	7.32	1.41	23.02294	19.58	8.2
NF-13	07/10/2012 08:37	0.14	-266	7.54	1.39	22.72326	19.64	7.5
NF-13	07/10/2012 08:39	0.13	-269	7.03	1.38	22.62156	19.38	10.6
NF-13	07/10/2012 08:42	0.12	-269	6.9	1.36	22.31727	19.34	6.7
NF-13	07/10/2012 08:44	0.11	-270	6.82	1.34	21.98129	19.55	10.6
NF-13	07/10/2012 08:46	0.12	-270	6.78	1.33	21.86351	19.13	6.5
NF-13	07/10/2012 08:48	0.11	-271	6.75	1.31	21.54308	18.9	6.2
NF-13	07/10/2012 08:50	0.11	-272	6.69	1.31	21.55276	19.28	7.2
NF-13	07/10/2012 08:52	0.1	-272	6.68	1.28	21.12941	19.13	4.8
NF-13	07/10/2012 08:55	0.09	-272	6.67	1.28	21.07125	19.36	10.1
NF-13	07/10/2012 08:57	0.08	-272	6.63	1.26	20.75328	19.61	10.9
NF-13	07/10/2012 08:59	0.08	-273	6.59	1.25	20.67227	20.02	11.1
NF-13	10/10/2012 08:35	0.82	-291	9.64	1.77	28.49121	16.22	5.5
NF-13	10/10/2012 08:39	0.81	-289	9.62	1.78	28.67975	15.94	3.3
NF-13	10/10/2012 08:42	0.85	-290	10.36	1.77	28.576	16.11	5.6
NF-13	10/10/2012 08:46	0.91	-290	10.71	1.77	28.61464	16.06	5.8
NF-13	10/10/2012 08:49	0.99	-289	11.27	1.78	28.66751	15.98	4
NF-13	10/10/2012 08:53	1.05	-289	11.24	1.78	28.64924	16.01	2.6
NF-13	10/10/2012 08:56	1.08	-288	11.4	1.77	28.51277	16.22	3.7
NF-13	10/10/2012 09:00	1.1	-287	10.77	1.76	28.33248	16.5	3
NF-13	10/10/2012 09:03	1.14	-287	10.58	1.76	28.34292	16.48	1.8
NF-13	10/10/2012 09:07	1.18	-288	10.86	1.75	28.18389	16.73	3.4
NF-13	10/10/2012 09:10	1.21	-287	11.08	1.74	28.16354	16.76	4.2
NF-13	10/10/2012 09:14	1.22	-287	10.28	1.74	28.02614	16.97	4
NF-13	10/10/2012 09:17	1.25	-288	9.89	1.73	27.98071	17.04	4.6
NF-13	10/10/2012 09:21	1.26	-287	9.89	1.73	27.96895	17.06	6.2
NF-13	10/10/2012 09:24	1.3	-287	9.79	1.74	28.08346	16.88	9
NF-13	10/10/2012 09:25	1.30	-287	9.79	1.73	28.080	16.88	8.96
NF-13	10/11/2012 09:19	0.95	-366	7.93	1.83	29.560	14.65	2.00
NF-13	01/28/2013 13:27	4.14	-320	5.88	1.7	28.15775	7.15	7.2
NF-13	01/28/2013 13:30	2.62	-337	5.86	1.93	31.57626	8.35	7
NF-13	01/28/2013 13:32	1.07	-353	5.86	1.98	32.21755	8.92	6.1
NF-13	01/28/2013 13:35	0.76	-362	5.86	1.98	32.24172	9.05	7.8
NF-13	01/28/2013 13:38	0.61	-367	5.86	1.98	32.18598	9.19	5

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-13	01/28/2013 13:41	0.56	-368	5.87	1.98	32.21091	9.19	5.4
NF-13	01/28/2013 13:44	0.52	-369	5.87	1.99	32.27171	9.13	8.8
NF-13	01/28/2013 13:47	0.47	-369	5.87	1.98	32.25147	9.14	6.5
NF-13	01/28/2013 13:50	0.47	-370	5.87	1.98	32.16222	9.18	6.2
NF-13	01/28/2013 13:53	0.43	-371	5.87	1.98	32.23817	9.03	5.4
NF-13	01/28/2013 13:56	0.42	-371	5.87	1.98	32.26682	9.1	5.5
NF-13	01/28/2013 13:59	0.44	-371	5.87	1.98	32.24542	9	6.9
NF-13	01/28/2013 14:02	0.43	-370	5.88	1.98	32.21053	8.88	7.4
NF-13	01/28/2013 14:05	0.42	-370	5.88	1.98	32.18986	8.89	5.3
NF-13	01/28/2013 14:08	0.42	-370	5.88	1.98	32.19341	8.77	4.5
NF-13	01/28/2013 14:11	0.41	-370	5.88	1.97	32.05414	8.84	6.4
NF-13	01/28/2013 14:14	0.40	-369	5.88	3.54	32.150	8.91	4.85
NF-13	01/28/2013 15:39	3.92	-410	6.15	3.58	33.580	13.91	58.80
NF-13	01/29/2013 11:12	0.27	-299	6.02	3.54	34050.000	14.93	32.90
NF-13	04/17/2013 12:54	1.12	-170	5.4	0.3	5.526	14.31	17.96
NF-13	04/17/2013 14:22	2.8	-325	6.71	3.95	59	15.95	24.4
NF-13	04/18/2013 11:05	0.09	-352	6.58	2.03	32.54	14.1	27.6
NF-13	07/17/2013 09:53	1.60	-160	5.23	0.28	5.147	24.16	7.18
NF-13	07/17/2013 11:23	3.82	-200	6.57	3.24	49.550	14.58	100.80
NF-13	07/18/2013 10:05	0.38	-310.00	6.34	2.36	37.270	13.58	4.30
NF-13	02/26/2014 14:34	0.68	-71	4.88	0.31	5.874	5.91	10.91
NF-13	02/26/2014 16:03	4.76	-69	6.12	0.85	14.710	11.12	11.40
NF-13	02/27/2014 11:25	0.75	-204	5.90	1.03	17.490	12.81	29.60
NF-13	05/01/2014 14:45	3.97	-159	5.38	0.81	13.810	15.19	23.95
NF-13	05/01/2014 16:18	5.06	-299	6.51	1.91	30.350	21.46	118.50
NF-13	05/02/2014 11:29	1.27	-320	6.34	0.90	15.330	15.18	121.90
NF-13	07/24/2014 13:09	3.10	105	4.93	0.17	3.203	21.61	11.62
NF-13	07/24/2014 14:48	3.46	155	5.68	0.42	7.522	15.58	22.20
NF-13	07/25/2014 10:55	3.54	7	5.81	0.46	8.201	13.48	17.60
NF-13	10/14/2014 12:59	0.91	-3	5.03	1.06	17.760	21.41	25.65
NF-13	10/14/2014 14:34	1.96	-280	6.20	3.29	50.070	15.57	65.40
NF-13	10/15/2014 11:12	0.47	-403	6.41	3.65	55.140	14.58	8.80
NF-13	01/22/2015 13:43	-0.61	-270	5.61	0.18	3.537	8.36	7.29
NF-13	01/22/2015 15:12	0.39	-261	6.69	1.87	30.190	13.21	50.30
NF-13	01/23/2015 10:56	0.59	-320	6.52	1.71	27.730	14.31	19.30
NF-13	05/05/2015 11:17	0.02	-378	6.52	NM	24.81	13.76	38.6
NF-13	05/05/2015 14:09	0.24	-282	6.32	NM	33.89	13.06	88.1
NF-13	08/11/2015 11:31	0.17	-320	6.49	4.76	69.95	13.65	0.2
NF-13	08/11/2015 15:39	1.34	-86	6.37	0.99	16.7	20.68	145.6
NF-13	10/08/2015 11:45	5.58	-253	6.2	3.79	56.99	14.78	21.1
NF-13	10/08/2015 15:12	4.96	75	6.35	3.62	54.44	16.73	65.8
NF-13	03/16/2016 09:30	0.13	-318	6.11	1.28	21.240	14.11	8.80
NF-13	03/16/2016 15:03	1.57	-265	6.21	3.33	50.900	13.14	59.70
NF-13	03/28/2017 11:52	3.45	-8	5.35	0.44	7.991	11.08	17.80
NF-13	03/28/2017 13:45	3.82	-50	6.16	0.52	9.735	10.74	17.30
NF-13	05/01/2018 12:54	2.04	26	6.41	0.5502	0.0097	20.28	7.5
NF-13	05/01/2018 12:57	1.88	30	6.06	0.6935	0.0120	16.1	15.9
NF-13	05/01/2018 13:00	1.11	35	6.03	0.6502	0.0114	15.37	6.5
NF-13	05/01/2018 13:04	0.91	39	5.9	0.6263	0.0110	15.68	6.2
NF-13	05/01/2018 13:07	0.92	41	5.82	0.6174	0.0108	15.53	7.2
NF-13	05/01/2018 13:10	0.86	44	5.76	0.6030	0.0106	15.46	7.6
NF-13	05/01/2018 13:13	0.87	47	5.69	0.5909	0.0104	15.38	6.8
NF-13	05/01/2018 13:16	0.83	50	5.61	0.5763	0.0102	15.29	7.8
NF-13	05/01/2018 13:20	0.75	53	5.54	0.5670	0.0100	15.69	7.6
NF-13	05/01/2018 13:23	0.73	58	5.47	0.5439	0.0096	15.86	7.3
NF-13	05/01/2018 13:26	0.72	62	5.41	0.5405	0.0096	16.18	8.8
NF-13	05/01/2018 13:29	0.75	66	5.36	0.5351	0.0095	15.95	7.7
NF-13	05/01/2018 13:33	0.73	68	5.34	0.5269	0.0093	15.71	8.9
NF-13	05/01/2018 13:36	0.68	72	5.3	0.5214	0.0092	15.75	13
NF-13	05/01/2018 13:39	0.67	75	5.25	0.5076	0.0090	16.31	9.6
NF-13	05/01/2018 13:42	0.71	80	5.2	0.5071	0.0090	16.15	8.1
NF-13	05/02/2018 11:04	2.68	-368.00	6.44	1.72	27.840	14.67	8.00

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
NF-13	05/02/2018 13:42	0.71	80.00	5.20	0.51	9.028	16.03	8.12
NF-13	05/02/2018 15:09	5.10	8.00	6.93	1.26	20.920	13.91	43.20
NF-13	05/27/2021 13:05	2.39	-51.8	5.86	11.58	16.5	19.53	36.1
NF-13	05/27/2021 13:10	0.87	-112.1	5.78	15.35	23.25	15.85	7.1
NF-13	05/27/2021 13:15	0.49	-67.4	5.57	11.27	19.02	14.85	9.6
NF-13	05/27/2021 13:20	0.47	-63.2	5.52	9.79	16.69	15.61	9.7
NF-13	05/27/2021 13:25	0.57	-62	5.51	9.26	15.72	15.64	8.7
NF-13	05/27/2021 13:30	0.51	-65.4	5.52	8.78	14.99	16.71	8.2
NF-13	05/27/2021 13:35	0.21	-83.1	5.6	8.91	15.17	17.45	8.2
NF-13	05/27/2021 13:40	0.2	-83	5.62	8.61	14.66	18.02	7.5
NF-13	05/27/2021 13:45	0.19	-86	5.62	8.59	14.6	17.93	7.2
NF-13	05/27/2021 13:50	0.16	-103.2	5.66	8.41	14.49	17.71	29.2
NF-13	04/01/2022 12:40	1.46	-31.1	5.63	7.44	12.88	12.37	2.6
NF-13	04/01/2022 12:45	1.42	-31.6	5.6	7.46	12.93	12.4	0.5
NF-13	04/01/2022 12:50	1.41	-31.8	5.59	7.49	12.98	12.38	0.9
NF-13	04/01/2022 12:55	1.33	-33.2	5.57	7.58	13.1	12.45	-0.9
NF-13	04/01/2022 13:00	1.29	-35.3	5.55	7.66	13.23	12.47	-1
NF-13	04/01/2022 13:05	1.33	-33.5	5.54	7.52	13.01	12.8	-1.5
NF-13	04/01/2022 13:10	1.34	-35	5.51	7.47	12.92	12.82	-3
P-1	03/08/2012 08:38	0.44	-132	6.95	0.0000	0.810	12.20	8.80
P-1	03/08/2012 09:24	3.14	-23	6.24	0.0000	0.840	13.20	16.20
P-1	03/09/2012 08:39	0.23	-109	6.92	0.0000	0.788	10.80	14.60
P-1	08/08/2012 09:42	1.44	-97	13.97	0.04	0.76212	27.31	76.8
P-1	08/08/2012 09:44	1.2	-91	13.99	0.04	0.78746	25.43	33
P-1	08/08/2012 09:46	0.99	-94	14.01	0.04	0.7826	24.28	29.6
P-1	08/08/2012 09:48	0.92	-96	14.01	0.04	0.77932	24.04	16
P-1	08/08/2012 09:50	0.85	-96	14.02	0.04	0.77809	24.02	10.7
P-1	08/08/2012 09:52	0.8	-97	14.02	0.04	0.77589	24.1	9
P-1	08/08/2012 09:54	0.77	-100	14.02	0.04	0.77214	24.22	8.8
P-1	08/08/2012 09:56	0.72	-103	14.01	0.04	0.77016	24.47	8.6
P-1	08/08/2012 09:58	0.70	-106	14.00	0.04	0.770	24.97	8.50
P-1	08/08/2012 10:43	5.32	-108	13.46	0.04	0.869	21.45	9.00
P-1	08/09/2012 10:07	5.50	-188	7.49	0.04	0.777	21.23	23.60
P-1	04/04/2013 14:04	0.74	-259	7.32	0.42	7.615	11.36	13.77
P-1	04/04/2013 15:00	4.92	-155	7.23	0.45	8.153	10.87	271.3
P-1	04/05/2013 10:38	0.08	-257	7.33	0.48	8.646	9.71	10.9
P-1	09/24/2013 13:54	0.59	-379	7.21	0.22	4.043	22.03	11.80
P-1	09/24/2013 14:43	1.15	-404	7.19	0.25	4.614	20.21	265.10
P-1	09/25/2013 12:30	0.03	-243	7.29	0.85	14.430	20.75	4.30
P-1	06/23/2014 08:31	0.38	138	7.41	0.08	1.472	22.01	9.78
P-1	06/23/2014 09:29	0.93	-80	6.89	0.11	2.170	15.07	396.00
P-1	06/24/2014 12:06	0.18	-88	1.31	0.20	3.800	21.51	25.50
P-1	11/13/2014 14:49	2.04	-304	7.02	0.13	2.447	13.95	3.82
P-1	11/13/2014 15:39	4.21	-188	7.20	0.14	2.649	16.23	21.60
P-1	11/14/2014 11:45	1.72	-331	6.99	0.12	2.373	15.76	23.20
P-1	06/30/2015 12:02	1.54	-25	7.12	0.19	3.606	19.03	7.6
P-1	06/30/2015 14:45	10.81	4	6.87	0.28	5.122	15.93	551.3
P-1	02/17/2016 10:03	0.43	-79	7.23	0.03	0.651	9.97	22.30
P-1	02/17/2016 10:35	2.02	-70	6.81	0.06	1.159	11.75	14.00
P-1	08/17/2016 11:08	0.09	-145	7.30	0.22	4.062	22.98	4.40
P-1	08/17/2016 14:06	1.73	-98	7.30	0.59	10.310	20.57	407.60
P-1	02/08/2017 09:13	0.12	1154	7.31	0.03	0.676	10.97	11.70
P-1	02/08/2017 10:08	1.90	1198	7.11	0.05	0.920	11.08	19.90
P-1	03/19/2018 12:33	7.17	110	7.54	0.056	1.139	9.45	11.2
P-1	03/19/2018 12:36	3.41	111	7.22	0.057	1.147	9.33	8
P-1	03/19/2018 12:39	2.99	106	7.15	0.057	1.145	9.16	8.5
P-1	03/19/2018 12:41	2.79	102	7.09	0.056	1.137	9.16	10.2
P-1	03/19/2018 12:44	2.74	97	7.07	0.057	1.147	9.09	9.6
P-1	03/19/2018 12:46	2.77	93	7.06	0.056	1.139	8.83	10.2
P-1	03/20/2018 11:28	5.85	25.00	6.40	0.05	1.089	8.98	18.20
P-1	03/20/2018 12:47	2.77	93.00	7.06	0.06	1.143	8.71	10.24
P-1	03/20/2018 13:13	10.35	92.00	7.13	0.06	1.155	10.7	133.70

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-1	06/06/2018 10:37	3.55	-79.00	6.54	0.20	3.715	15.27	39.20
P-1	06/06/2018 12:08	1.00	-109.00	6.73	0.20	3.700	20.36	43.50
P-1	08/23/2018 11:27	0.39	-63.00	6.48	0.76	12.990	22.43	34.50
P-1	08/23/2018 13:23	0.53	-135.00	6.79	1.10	18.260	26.09	3.84
P-1	08/23/2018 14:12	0.93	-90.00	6.99	1.16	19.310	20.2	111.30
P-1	10/01/2018 12:40	2.91	-117.10	6.92	5.39	9.599	23.57	28.50
P-1	10/01/2018 13:15	5.59	-101.80	6.69	5.99	10.590	23.12	11.60
P-1	10/01/2018 13:30	4.91	-106.30	6.73	6.00	10.320	23.14	48.60
P-1	12/07/2018 11:30	1.37	-137.20	7.00	3.98	7.207	12.59	2.10
P-1	12/07/2018 11:40	1.99	-144.60	7.00	4.39	7.487	13.79	0.50
P-1	12/07/2018 11:50	1.73	-147.20	7.00	4.72	7.592	14.01	0.0000
P-1	03/19/2019 11:15	0.43	-121.1	6.95	NM	7.231	10.21	NM
P-1	03/19/2019 11:45	2.17	-104.2	6.93	4.46	7.981	11.1	244.5
P-1	06/12/2019 13:10	8.59	-42.3	5.73	NM	7.127	20.76	52.4
P-1	06/12/2019 13:34	5.61	-117.6	6.11	7.75	13.42	22.08	83
P-1	06/12/2019 13:45	3.79	-79	6	7.75	13.5	22.94	102.4
P-1	09/06/2019 10:25	3.14	-84.8	8.42	NM	7.877	21.78	7.6
P-1	09/06/2019 10:30	1.1	-97	8.21	NM	8.104	22.32	9.2
P-1	09/06/2019 10:35	2.58	-88.9	8.05	NM	8.339	22.18	21.7
P-1	09/06/2019 10:40	1.4	-77.8	7.9	NM	8.477	22.26	58.8
P-1	09/06/2019 10:45	2.06	-75.1	7.84	NM	8.86	21.89	61.6
P-1	09/06/2019 10:50	2.37	-71.2	7.84	NM	9.362	21.1	12.2
P-1	09/06/2019 10:55	0.98	-81.9	7.98	NM	9.446	20.97	15.8
P-1	09/06/2019 11:00	0.88	-82.4	7.99	NM	9.396	20.93	11.8
P-1	09/06/2019 11:05	0.86	-82.2	7.93	NM	9.314	20.84	12.1
P-1	09/06/2019 11:10	5.49	-80	7.99	NM	9.449	20.92	14.1
P-1	09/06/2019 11:30	8.99	-58.9	8.01	5.25	9.327	20.01	0.6
P-1	09/06/2019 11:42	8.74	-90.7	7.93	5.43	9.635	19.24	233.7
P-1	12/06/2019 13:00	1.27	-38.9	7.22	NM	6.654	9.93	11.2
P-1	12/06/2019 13:05	1.03	-49.1	7.23	NM	6.669	9.85	11.9
P-1	12/06/2019 13:10	0.68	-74	7.3	NM	6.678	9.85	12.4
P-1	12/06/2019 13:15	0.59	-90.8	7.33	NM	6.672	9.76	13
P-1	12/06/2019 13:20	0.99	-90.6	7.33	NM	6.705	9.41	10.8
P-1	12/06/2019 13:25	2.38	-79	7.3	NM	7.193	10.76	24.1
P-1	12/06/2019 13:30	1.56	-81	7.28	NM	7.207	10.91	20.3
P-1	12/06/2019 13:35	1.11	-84.5	7.28	NM	7.155	11.15	17.1
P-1	12/06/2019 13:40	0.52	-94.3	7.32	NM	6.837	11.1	11.5
P-1	12/06/2019 13:45	0.5	-97.4	7.34	NM	6.736	11.09	11.4
P-1	12/06/2019 14:40	3.16	-66.5	7.39	3.57	6.507	10.38	7.6
P-1	12/06/2019 14:55	5.53	-78	7.48	3.69	6.694	11.08	173.5
P-1	03/12/2020 13:05	0.39	-66	6.8	NM	6.608	9.59	36.5
P-1	03/13/2020 10:00	4.32	-110.3	6.77	3.02	6.328	10.66	12.9
P-1	09/03/2020 09:30	2.58	-137.4	6.71	4.22	7.642	24.45	5.5
P-1	09/03/2020 09:35	0.52	-127.6	6.62	3.87	7.026	23.89	3.4
P-1	09/03/2020 09:40	0.54	-124.4	6.6	3.68	7.08	24.43	3.3
P-1	09/03/2020 09:45	0.66	-121.8	6.59	3.96	7.202	24.64	18.9
P-1	09/03/2020 09:50	0.52	-113.8	6.59	3.97	7.215	24.17	29.2
P-1	09/03/2020 09:55	0.53	-110.4	6.6	4.01	7.3	24.14	13.8
P-1	09/03/2020 10:00	0.55	-107.6	6.6	4.15	7.531	24.16	2.4
P-1	09/03/2020 10:05	0.6	-112.2	6.59	4.32	7.824	24.33	13
P-1	09/03/2020 10:10	2.07	-106.6	6.57	4.57	8.41	24.31	8.3
P-1	09/03/2020 10:15	1.77	-120.3	6.56	5.58	9.894	22.87	4.6
P-1	09/03/2020 10:16	1.77	-120.3	6.56	5.58	9.894	22.87	4.6
P-1	09/03/2020 10:50	5.45	-103.5	6.52	5.46	9.828	21.05	79.5
P-1	09/03/2020 11:10	1.63	-109.5	6.51	4.73	9.212	20.79	21.2
P-1	12/08/2020 12:50	7.61	-81.9	7.59	4.06	7.341	9.6	46.1
P-1	12/08/2020 13:00	3.6	-80.3	7.28	4.07	7.362	9.59	39.6
P-1	03/24/2021 10:20	1.54	-89.2	6.96	4.57	8.191	10.41	15.1
P-1	03/24/2021 10:25	0.64	-85.8	6.87	4.55	8.164	9.92	14.7
P-1	03/24/2021 10:30	0.63	-89.6	6.89	4.55	8.158	10.46	76.5
P-1	03/24/2021 10:35	0.57	-91.8	6.92	4.59	8.236	10.72	32.1
P-1	03/24/2021 10:40	0.54	-93.7	6.93	4.69	8.396	10.71	19.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-1	03/24/2021 10:45	0.42	-95.9	6.95	4.69	8.395	10.35	11.1
P-1	03/24/2021 10:50	0.38	-99.2	6.96	4.56	8.187	10.25	4
P-1	03/24/2021 10:55	0.39	-100.8	6.98	4.64	8.323	10.46	4.9
P-1	03/24/2021 11:00	0.39	-101.8	6.97	4.78	8.551	10.59	2.3
P-1	03/24/2021 11:05	0.38	-102.7	6.97	4.85	8.672	10.67	2.1
P-1	03/25/2021 09:20	3.47	-32.6	6.78	3.55	6.461	11.29	57.2
P-1	03/25/2021 09:30	5.17	-63.8	6.74	4.58	8.218	10.35	38.4
P-1	06/24/2021 12:50	1.06	-100.7	6.74	5.19	9.192	17.86	96.2
P-1	06/24/2021 12:55	0.65	-107.2	6.7	5.21	9.241	17.56	59.3
P-1	06/24/2021 13:00	0.61	-108.7	6.81	5.61	9.902	20.97	30
P-1	06/24/2021 13:05	0.61	-105.5	6.79	5.65	10	21.32	24.7
P-1	06/24/2021 13:10	0.58	-104.3	6.78	5.73	10.13	20.83	26.2
P-1	06/24/2021 13:15	0.53	-102.3	6.75	5.76	10.17	21.18	26.9
P-1	06/24/2021 13:20	0.55	-97.9	6.73	5.67	10.05	20.91	26.8
P-1	04/01/2022 12:05	5.27	13.8	7.15	4.15	7.446	12.36	379.1
P-1	04/01/2022 12:10	1.2	-27.6	7.17	4.28	7.711	11.34	265.9
P-1	04/01/2022 12:15	1.22	-17.9	7.18	4.28	7.714	11.64	167.6
P-1	04/01/2022 12:20	1.4	-21.7	7.18	4.27	7.688	12.22	128.6
P-1	04/01/2022 12:25	1.45	-62.2	7.16	4.29	7.709	12.74	105.5
P-1	04/01/2022 12:30	1.44	-66.6	7.15	4.29	7.744	12.81	101.4
P-1	04/01/2022 12:35	1.42	-69.3	7.13	4.3	7.768	12.85	98.7
P-10	02/27/2012 14:18	4.31	-21	7.63	0.49	5.676	12.40	65.40
P-10	02/28/2012 11:18	0.02	-64	6.98	0.50	8.830	8.50	41.50
P-10	08/15/2012 13:57	8.68	-157	7.30	0.50	8.420	23.40	35.10
P-10	08/16/2012 11:30	4.23	-54	7.58	0.50	8.600	25.37	49.10
P-10	03/18/2013 10:41	3.04	-141	7.19	1.33	22.35	9.91	151.9
P-10	03/19/2013 09:40	0.63	-247	7.24	0.51	9.251	7.05	71.4
P-10	09/24/2013 15:22	1.78	-381	7.44	1.27	20.980	20.64	23.70
P-10	09/25/2013 13:10	0.37	-254	7.54	1.16	19.270	20.78	29.80
P-10	05/29/2014 10:19	2.58	-193	7.14	0.80	13.760	16.24	43.50
P-10	05/30/2014 09:10	1.40	-450	7.21	1.01	17.030	16.22	27.40
P-10	12/11/2014 14:45	1.18	-110	7.22	0.43	7.774	11.80	52.10
P-10	12/12/2014 11:52	-0.16	-183	7.36	0.41	7.512	9.50	39.30
P-10	06/26/2015 13:49	2.3	-118	7.34	1.54	25.03	21.85	52.4
P-10	06/26/2015 14:18	2.25	-65	7.78	1.19	19.78	21.74	73.8
P-10	03/03/2016 11:27	1.02	-128	6.77	0.39	7.100	7.21	20.10
P-10	03/03/2016 13:58	2.80	-105	7.54	1.29	21.610	10.78	41.60
P-10	09/09/2016 09:22	0.15	-85	7.11	0.69	11.960	25.36	33.00
P-10	09/09/2016 11:55	1.54	-13	7.06	0.46	8.205	25.11	55.50
P-10	02/15/2017 10:43	4.69	276	7.65	0.15	2.872	6.95	31.10
P-10	02/15/2017 11:36	6.07	29	6.65	0.41	7.445	9.25	32.70
P-10	03/01/2018 09:28	12.21	22.00	6.95	0.60	10.602	11.62	69.90
P-10	03/01/2018 13:07	11.83	-38.00	7.27	0.86	14.880	9.28	40.10
P-10	08/23/2018 10:34	0.47	-99.00	7.37	0.66	11.490	23.91	18.30
P-10	08/23/2018 11:36	1.05	-60.00	7.18	0.67	11.630	23.21	26.60
P-10	03/18/2019 13:42	2.47	-102.6	7.42	4.04	7.301	13.81	0
P-10	08/26/2019 12:55	2.8	123.2	7.76	NM	6.474	24.49	53.3
P-10	08/26/2019 14:15	1.43	-146.8	7.42	5.49	9.744	20.71	7.1
P-10	08/26/2019 14:25	2.86	-135.7	7.67	3.12	5.753	22.11	18.6
P-10	02/10/2020 11:40	0.2	-186.7	7.3	5.39	9.36	14.55	0.3
P-2	04/27/2017 09:14	0.39	-80.00	6.26	0.84	14.480	13.58	18.06
P-2	02/01/2018 13:14	7.48	89	6.65	2.606	41.722	6.86	712
P-2	02/01/2018 13:17	1.4	89	6.59	2.693	42.917	7.23	467.3
P-2	02/01/2018 13:19	0.78	88	6.53	2.740	43.598	7.2	344.5
P-2	02/01/2018 13:22	0.67	86	6.49	2.752	43.757	7.26	384.3
P-2	02/01/2018 13:25	0.5	85	6.46	2.753	43.791	7.22	408.3
P-2	02/01/2018 13:27	0.4	83	6.44	2.780	44.169	7.22	410.6
P-2	02/01/2018 13:30	0.34	82	6.42	2.824	44.804	7.27	444.3
P-2	02/01/2018 13:33	0.28	81	6.4	2.798	44.428	7.27	403.9
P-2	02/01/2018 13:35	0.25	80	6.39	2.786	44.259	7.27	493.1
P-2	02/01/2018 13:38	0.24	80	6.38	2.801	44.476	7.25	365.8
P-2	02/01/2018 13:41	0.24	79	6.36	2.791	44.316	7.35	382.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-2	02/01/2018 13:43	0.2	78	6.35	2.794	44.318	7.51	423.2
P-2	02/01/2018 13:46	0.18	78	6.34	2.788	44.218	7.6	343
P-2	02/01/2018 13:49	0.18	77	6.33	2.805	44.479	7.54	607.8
P-2	02/01/2018 13:51	0.19	77	6.33	2.815	44.610	7.56	1085.1
P-2	02/01/2018 13:54	0.19	77	6.32	2.787	44.217	7.56	941.1
P-2	02/01/2018 13:56	0.18	77	6.31	2.816	44.618	7.6	359.4
P-2	02/01/2018 13:59	0.15	76	6.31	2.797	44.336	7.66	415
P-2	02/01/2018 14:02	0.16	76	6.3	2.839	44.943	7.68	3174
P-2	02/01/2018 14:04	0.13	76.00	6.30	2.82	44.790	7.63	1032.00
P-2	05/03/2018 11:03	4.56	7	6.91	1.508	24.433	28.29	26.4
P-2	05/03/2018 11:06	1.5	5	6.72	1.454	23.723	20.97	10
P-2	05/03/2018 11:10	1.16	5	6.63	1.461	23.819	21.47	11.4
P-2	05/03/2018 11:13	1.06	6	6.55	1.465	23.858	22.03	12.6
P-2	05/03/2018 11:16	1.02	7	6.45	1.459	23.754	23.53	11.8
P-2	05/03/2018 11:19	0.88	6	6.39	1.465	23.838	24.32	9.9
P-2	05/03/2018 11:22	1.25	8	6.38	1.499	24.381	21.54	9.4
P-2	05/03/2018 11:26	0.83	6	6.4	1.466	23.899	21.05	10.3
P-2	05/03/2018 11:29	0.8	7	6.42	1.485	24.183	20.93	10.2
P-2	05/03/2018 11:32	0.71	8	6.39	1.454	23.703	22.03	13.8
P-2	05/03/2018 11:35	0.78	9	6.36	1.463	23.830	21.95	17
P-2	05/03/2018 11:38	0.88	11	6.35	1.449	23.634	21.73	16.5
P-2	05/03/2018 11:42	1.01	12	6.34	1.430	23.353	21.5	19.8
P-2	05/03/2018 11:45	1.21	13	6.33	1.433	23.387	21.6	19.2
P-2	05/03/2018 11:48	1.4	15	6.31	1.466	23.874	22.14	86.7
P-2	05/03/2018 11:51	4.03	11.00	6.29	1.45	23.630	25.87	50.36
P-2	07/25/2018 11:23	0.56	-127.00	6.25	0.91	15.370	22.02	16.04
P-2	10/31/2018 14:45	6.25	-70.00	6.61	14.55	23.940	19.85	47.50
P-2	10/31/2018 14:55	6.96	-88.10	6.74	14.58	23.950	20	46.60
P-2	10/31/2018 15:05	6.94	-90.90	6.76	14.45	23.820	20.04	46.50
P-5	05/01/2017 11:01	0.55	61.00	6.25	0.11	2.089	15.92	22.43
P-5	02/05/2018 13:21	3.39	151.00	5.97	0.07	1.475	8.68	5.50
P-5	05/07/2018 10:50	1.10	-187.00	6.22	0.07	1.445	15.43	25.31
P-5	07/11/2018 09:18	1.62	-97.00	6.18	0.07	1.415	20.43	46.83
P-5	10/30/2018 14:05	0.03	12.70	6.24	0.72	1.419	17.96	12.60
P-5	10/30/2018 14:40	0.02	2.20	6.20	0.71	1.411	17.96	5.20
P-5	10/30/2018 14:50	0.01	2.70	6.22	0.71	1.405	17.92	2.00
P-6	03/27/2012 08:32	2.33	-83	6.9	0.18	3.51077	8.31	39.9
P-6	03/27/2012 08:35	0.53	-81	6.88	0.2	3.77534	7.64	23
P-6	03/27/2012 08:38	0.03	-81	6.89	0.19	3.69193	7.89	12.6
P-6	03/27/2012 08:41	-0.14	-80	6.89	0.19	3.66802	8.09	11.9
P-6	03/27/2012 08:44	-0.12	-79	6.88	0.19	3.64949	8.54	10.7
P-6	03/27/2012 08:46	-0.26	-77	6.87	0.19	3.6049	7.89	7.5
P-6	03/27/2012 08:49	-0.25	-75	6.88	0.18	3.51683	8.07	6.7
P-6	03/27/2012 08:52	-0.13	-72	6.87	0.18	3.38351	7.94	6.6
P-6	03/27/2012 08:55	-0.03	-70	6.88	0.16	3.16552	8.21	6.6
P-6	03/27/2012 08:58	0.26	-67	6.89	0.15	2.9164	8.53	5.8
P-6	03/27/2012 09:01	0.46	-64	6.88	0.14	2.76097	8.29	5.5
P-6	03/27/2012 09:04	0.44	-61	6.86	0.14	2.77773	8.07	4.5
P-6	03/27/2012 09:07	0.45	-60	6.87	0.14	2.73536	8.52	4.8
P-6	03/27/2012 09:10	0.36	-60	6.87	0.14	2.75414	8.69	3.9
P-6	03/27/2012 09:13	0.41	-58	6.87	0.14	2.77503	8.42	3.8
P-6	03/27/2012 09:16	0.3	-57	6.86	0.14	2.78115	8.21	3.6
P-6	03/27/2012 09:19	0.22	-57	6.86	0.14	2.80944	8.45	3.7
P-6	03/27/2012 09:22	0.14	-57	6.87	0.15	2.82639	8.46	3.4
P-6	03/27/2012 09:53	6.38	-62	6.94	0.16	2.986	10.19	6.60
P-6	03/28/2012 08:50	1.75	52	6.54	0.20	3.770	10.91	3.60
P-6	08/15/2012 10:12	4.83	-150	6.80	0.30	4.940	25.00	12.40
P-6	08/15/2012 10:49	5.94	-146	6.73	0.20	4.170	24.76	30.70
P-6	08/16/2012 09:48	5.16	-99	6.57	0.20	4.420	22.20	23.80
P-6	02/26/2013 10:13	2.16	-169	6.71	0.08	6.48852	10.67	34.4
P-6	02/26/2013 10:16	1.23	-177	6.74	0.08	6.84234	8.6	18.3
P-6	02/26/2013 10:18	0.77	-191	6.75	0.08	7.01148	8.92	26.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-6	02/26/2013 10:21	0.63	-207	6.77	0.08	6.85687	8.99	31.1
P-6	02/26/2013 10:24	0.61	-220	6.77	0.08	6.58769	9	49.6
P-6	02/26/2013 10:27	0.53	-226	6.77	0.08	6.35978	8.97	32.8
P-6	02/26/2013 10:30	0.47	-233	6.77	0.08	6.32012	8.9	32.1
P-6	02/26/2013 10:33	0.45	-235	6.77	0.08	6.17832	8.98	46.7
P-6	02/26/2013 10:35	0.45	-237	6.78	0.08	6.19704	8.88	39.1
P-6	02/26/2013 10:38	0.48	-238	6.78	0.08	6.11576	8.73	47.5
P-6	02/26/2013 10:41	0.54	-235	6.78	0.08	6.01547	8.79	48.3
P-6	02/26/2013 10:44	0.67	-230	6.78	0.08	5.89338	8.68	39.6
P-6	02/26/2013 10:47	0.79	-222	6.79	0.08	5.78702	8.75	48.4
P-6	02/26/2013 10:50	0.94	-214	6.79	0.08	5.67733	8.72	44.4
P-6	02/26/2013 10:52	1.1	-206	6.79	0.08	5.57825	8.78	39.7
P-6	02/26/2013 10:55	1.37	-197	6.8	0.08	5.41993	8.7	38.7
P-6	02/26/2013 10:58	1.63	-188	6.81	0.08	5.28842	8.73	34.8
P-6	02/26/2013 11:01	1.82	-182	6.81	0.08	5.199	8.75	28.90
P-6	02/26/2013 11:38	6.20	-117	7.10	0.08	4.659	9.66	28.40
P-6	02/27/2013 10:04	1.89	-185	6.67	0.08	5614.000	9.81	17.00
P-6	09/25/2013 08:48	3.54	-309	6.66	0.1	1.85763	18.31	41.4
P-6	09/25/2013 08:51	1.53	-342	6.68	0.1	1.98809	18.1	22.7
P-6	09/25/2013 08:54	0.98	-346	6.7	0.11	2.12208	18.32	16.7
P-6	09/25/2013 08:56	0.79	-347	6.71	0.11	2.12693	18.35	17.7
P-6	09/25/2013 08:59	0.72	-348	6.72	0.11	2.20079	18.4	16.3
P-6	09/25/2013 09:02	0.71	-348	6.72	0.11	2.14854	18.46	11.9
P-6	09/25/2013 09:05	0.69	-349	6.73	0.12	2.23382	18.41	13
P-6	09/25/2013 09:07	0.69	-349	6.73	0.11	2.13539	18.51	14.9
P-6	09/25/2013 09:10	0.68	-350	6.73	0.11	2.14205	18.39	10.2
P-6	09/25/2013 09:13	0.7	-349	6.73	0.11	2.12987	18.44	13.4
P-6	09/25/2013 09:15	0.69	-349	6.74	0.11	2.1688	18.48	20.1
P-6	09/25/2013 09:18	0.66	-350	6.73	0.11	2.09346	18.45	12.6
P-6	09/25/2013 09:21	0.67	-350	6.74	0.11	2.14992	18.51	14.7
P-6	09/25/2013 09:24	0.65	-350	6.74	0.11	2.06061	18.51	12
P-6	09/25/2013 09:26	0.64	-350	6.74	0.1	2.03335	18.58	18.6
P-6	09/25/2013 09:29	0.64	-350	6.74	0.11	2.0419	18.63	8.2
P-6	09/25/2013 09:32	0.64	-351	6.74	0.1	2.01701	18.72	7.9
P-6	09/25/2013 09:35	0.66	-352	6.74	0.1	2.00076	18.68	6.3
P-6	09/25/2013 09:37	0.63	-351	6.74	0.1	2.02208	18.63	5.4
P-6	03/27/2014 10:30	8.40	-167	6.62	NM	2.63882	4.59	24.4
P-6	03/27/2014 10:33	2.80	-186	6.61	NM	3.06572	4.5	25.6
P-6	03/27/2014 10:36	2.07	-192	6.63	NM	11.32962	4.2	26.2
P-6	03/27/2014 10:39	1.36	-199	6.64	NM	11.78273	4.47	23.2
P-6	03/27/2014 10:42	1.20	-210	6.65	NM	12.19113	4.11	23.7
P-6	03/27/2014 10:45	1.16	-227	6.66	NM	12.72847	3.88	194
P-6	03/27/2014 10:48	1.16	-253	6.67	NM	13.79036	4.18	25.5
P-6	03/27/2014 10:51	1.18	-285	6.67	NM	13.42294	4.79	26.9
P-6	03/27/2014 10:54	1.23	-304	6.67	NM	12.86704	5.19	12.8
P-6	03/27/2014 10:57	1.31	-310	6.68	NM	12.26615	5.03	16.2
P-6	03/27/2014 11:00	1.39	-311	6.68	NM	12.6755	5.11	16.2
P-6	03/27/2014 11:03	1.49	-307	6.68	NM	12.66827	5.63	11.4
P-6	03/27/2014 11:06	1.61	-296	6.69	NM	12.21733	6.15	18.2
P-6	03/27/2014 11:09	1.62	-286	6.68	NM	11.98651	6.53	10.2
P-6	03/27/2014 11:12	1.73	-284	6.69	NM	11.38938	6.23	8.8
P-6	03/27/2014 11:14	1.83	-281	6.7	NM	11.34113	6.34	8.4
P-6	03/27/2014 11:17	1.87	-279	6.7	NM	11.50461	6.28	8.8
P-6	03/27/2014 11:18	1.87	-279	6.70	1.04	17.910	6.28	8.82
P-6	03/27/2014 11:57	6.28	-148	6.62	0.18	3.478	7.90	712.30
P-6	03/28/2014 10:06	2.13	-269	6.57	1.06	18.210	8.70	29.10
P-6	11/11/2014 01:07	5.40	-127	6.61	NM	2.79321	19.04	37.5
P-6	11/11/2014 01:10	2.82	-147	6.68	NM	2.75543	18.89	25.3
P-6	11/11/2014 01:13	2.37	-155	6.7	NM	2.68363	18.75	25.9
P-6	11/11/2014 01:16	2.21	-164	6.72	NM	2.63673	18.68	20.2
P-6	11/11/2014 01:19	2.09	-172	6.72	NM	2.56639	18.56	27.8
P-6	11/11/2014 01:22	2.12	-189	6.72	NM	2.38879	18.29	15.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-6	11/11/2014 01:25	2.08	-202	6.73	NM	2.35239	18.54	10.9
P-6	11/11/2014 01:28	2.14	-211	6.73	NM	2.45774	18.79	10.8
P-6	11/11/2014 01:31	2.11	-225	6.73	NM	2.29529	18.54	6.2
P-6	11/11/2014 01:34	2.10	-235	6.73	NM	2.44451	18.53	7.2
P-6	11/11/2014 01:37	2.10	245	6.72	NM	2.40794	18.28	6.5
P-6	11/11/2014 01:40	2.09	-244	6.77	NM	2.23097	18.05	4.8
P-6	11/11/2014 01:43	2.15	-239	6.75	NM	2.11529	18.10	5.7
P-6	11/11/2014 01:46	2.16	-236	6.74	NM	2.04095	18.40	4.2
P-6	11/11/2014 01:49	2.2	-235	6.74	NM	2.09053	18.26	5.5
P-6	11/11/2014 01:52	2.25	-232	6.73	NM	1.97776	18.29	3.1
P-6	11/11/2014 01:55	2.27	-230	6.73	NM	2.0212	18.34	2.4
P-6	11/11/2014 11:18	2.27	-230	6.73	0.12	2.317	18.34	2.42
P-6	11/11/2014 11:57	2.54	-171	6.64	0.16	3.065	17.80	83.60
P-6	11/12/2014 10:06	18.35	-71	6.37	0.17	3.216	17.39	39.50
P-6	06/26/2015 08:48	2.22	-103	6.34	0.1754	0.0033	24.39	26.8
P-6	06/26/2015 08:50	1.21	-108	6.44	0.1902	0.0036	21.01	15.3
P-6	06/26/2015 08:53	0.71	-107	6.5	0.1956	0.0037	20.78	8.1
P-6	06/26/2015 08:56	0.75	-107	6.52	0.2066	0.0039	22.03	14.1
P-6	06/26/2015 08:58	0.68	-104	6.56	0.2089	0.0039	21.35	312.1
P-6	06/26/2015 09:01	0.51	-103	6.58	0.1972	0.0037	20.4	11.6
P-6	06/26/2015 09:04	0.44	-102	6.58	0.1970	0.0037	20.95	17.1
P-6	06/26/2015 09:06	0.36	-103	6.6	0.2092	0.0039	20.26	9.2
P-6	06/26/2015 09:09	0.27	-103	6.61	0.1989	0.0037	19.85	7.8
P-6	06/26/2015 09:12	0.25	-102	6.61	0.2076	0.0039	20.12	6.3
P-6	06/26/2015 09:14	0.23	-103	6.62	0.1981	0.0037	19.94	5.8
P-6	06/26/2015 09:17	0.26	-103	6.62	0.2030	0.0038	21.27	5
P-6	06/26/2015 09:20	0.31	-105	6.62	0.2013	0.0038	22.29	6.1
P-6	06/26/2015 09:22	0.33	-106	6.62	0.1998	0.0037	23.21	6.2
P-6	06/26/2015 09:25	0.35	-107	6.62	0.1986	0.0037	23.96	7.2
P-6	06/26/2015 09:28	0.37	-108	6.62	0.1971	0.0037	24.63	6.3
P-6	06/26/2015 09:30	0.38	-109	6.62	0.1961	0.0037	25.38	5.9
P-6	06/26/2015 09:33	0.4	-110	6.62	0.1953	0.0037	26.11	7.6
P-6	06/26/2015 09:36	0.46	-111	6.62	0.1945	0.0036	26.8	6.4
P-6	06/26/2015 09:38	0.53	-111	6.62	0.1938	0.0036	27.47	6.7
P-6	06/26/2015 10:01	1.25	-75	6.48	0.28	5.174	16.03	588.4
P-6	06/26/2015 10:35	-0.58	-78	6.67	1.26	21.02	15.05	98.5
P-6	03/14/2016 13:22	4.570	-60.000	6.650	0.569	10.200	8.230	142.000
P-6	03/14/2016 13:25	1.070	-75.000	6.610	0.642	11.404	8.430	69.200
P-6	03/14/2016 13:28	0.560	-80.000	6.590	0.674	11.925	8.590	35.200
P-6	03/14/2016 13:31	0.500	-83.000	6.600	0.698	12.330	8.410	31.500
P-6	03/14/2016 13:34	0.470	-86.000	6.600	0.710	12.530	8.300	26.900
P-6	03/14/2016 13:37	0.470	-89.000	6.600	0.718	12.662	8.340	21.800
P-6	03/14/2016 13:40	0.520	-91.000	6.610	0.725	12.772	8.350	17.200
P-6	03/14/2016 13:44	0.560	-91.000	6.610	0.727	12.805	8.370	18.300
P-6	03/14/2016 13:47	0.570	-91.000	6.610	0.729	12.842	8.360	18.600
P-6	03/15/2016 11:02	4.63	24	6.29	0.12	2.345	9.77	18.00
P-6	03/15/2016 14:14	2.66	-108	6.63	0.74	12.990	10.55	628.20
P-6	08/31/2016 13:09	1.450	-89.000	6.770	NM	8619.450	30.790	21.600
P-6	08/31/2016 13:11	0.990	-90.000	6.700	NM	10420.210	25.320	13.500
P-6	08/31/2016 13:14	0.740	-93.000	6.690	NM	10871.890	25.160	10.700
P-6	08/31/2016 13:17	0.650	-95.000	6.680	NM	10906.820	25.020	11.800
P-6	08/31/2016 13:19	0.620	-97.000	6.680	NM	10692.110	24.820	12.300
P-6	08/31/2016 13:22	0.590	-99.000	6.680	NM	10575.450	24.850	11.000
P-6	08/31/2016 13:25	0.570	-101.000	6.680	NM	10623.020	24.760	14.200
P-6	08/31/2016 13:27	0.570	-102.000	6.680	NM	10664.660	24.870	14.200
P-6	08/31/2016 13:30	0.580	-104.000	6.680	NM	10395.580	24.740	11.600
P-6	08/31/2016 13:32	0.550	-105.000	6.670	NM	10485.740	24.790	11.500
P-6	08/31/2016 13:35	0.530	-107.000	6.680	NM	10467.890	24.630	10.800
P-6	09/01/2016 11:20	0.16	-80	6.50	0.53	9.414	21.47	21.20
P-6	09/01/2016 13:58	1.87	-131	7.15	0.65	11.270	21.51	593.90
P-6	03/27/2017 08:26	3.08	318	6.87	0.0719	0.0144	10.37	40.9
P-6	03/27/2017 08:29	1.23	286	6.81	0.0704	0.0141	8.92	45.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-6	03/27/2017 08:32	0.52	251	6.77	0.0699	0.0140	8.69	62.4
P-6	03/27/2017 08:36	0.79	221	6.81	0.0636	0.0128	8.71	50.6
P-6	03/27/2017 08:39	2.68	206	6.9	0.0518	0.0105	8.67	48
P-6	03/27/2017 08:42	5.09	201	6.96	0.0385	0.0079	8.6	36.9
P-6	03/27/2017 08:45	5.89	198	6.95	0.0330	0.0068	8.51	24.7
P-6	03/27/2017 08:48	6.04	194	6.93	0.0325	0.0067	8.27	23.2
P-6	03/27/2017 08:51	5.97	189	6.91	0.0329	0.0068	8.33	18.4
P-6	03/27/2017 08:54	5.88	181	6.9	0.0332	0.0069	8.33	15.1
P-6	03/27/2017 08:58	5.87	175	6.89	0.0337	0.0069	8.29	15.5
P-6	03/27/2017 09:01	5.77	169	6.88	0.0338	0.0070	8.45	13.6
P-6	03/27/2017 09:04	5.68	162	6.89	0.0336	0.0069	8.41	13.6
P-6	03/27/2017 09:07	5.5	156	6.88	0.0338	0.0070	8.53	13.7
P-6	03/27/2017 09:10	5.3	151	6.87	0.0344	0.0071	8.55	12.5
P-6	03/27/2017 09:13	5.2	146	6.86	0.0351	0.0072	8.56	13.3
P-6	03/28/2017 09:38	4.88	185	6.57	0.07	1.393	9.62	14.20
P-6	03/28/2017 10:07	8.03	196	7.09	0.06	1.294	9.50	109.30
P-6	03/27/2018 13:27	6.62	73.00	7.08	0.15	2.893	10.64	328.80
P-6	03/27/2018 13:31	8.10	43.00	6.71	0.07	1.414	9.16	40.10
P-6	03/27/2018 14:56	6.17	69.00	6.51	0.09	1.702	13.67	3.68
P-6	10/16/2018 13:10	0.25	88.30	6.99	0.34	0.704	19.72	2.40
P-6	10/16/2018 13:25	0.19	80.50	6.95	0.48	0.963	20.11	2.50
P-6	10/16/2018 13:35	0.17	82.10	6.91	0.50	1.010	19.7	3.10
P-6	04/29/2019 14:15	7.35	42.6	7.33	NM	0.519	12.2	2.3
P-6	04/29/2019 14:35	3.5	53.4	7.18	0.5	0.997	11.51	3.1
P-6	09/26/2019 11:05	8.88	-106	6.57	NM	1.97	20.7	10.4
P-6	09/26/2019 11:10	8.42	-132.6	6.6	NM	1.884	20.58	11.9
P-6	09/26/2019 11:15	8.46	-137.3	6.62	NM	1.794	20.78	9.5
P-6	09/26/2019 11:20	8.14	-142.6	6.64	NM	1.664	20.53	8.1
P-6	09/26/2019 11:25	7.89	-142.8	6.64	NM	1.596	20.59	3.9
P-6	09/26/2019 11:30	7.21	-146.1	6.64	NM	1.574	20.46	2.6
P-6	09/26/2019 11:35	6.28	-145.4	6.65	NM	1.542	20.74	2
P-6	09/26/2019 11:40	5.63	-146.7	6.66	NM	1.501	20.76	2.5
P-6	09/26/2019 11:45	5	-145.2	6.66	NM	1.486	20.86	1.8
P-6	09/26/2019 11:50	4.3	-136.6	6.67	NM	1.52	20.78	1.7
P-6	09/26/2019 12:15	0.58	-143.8	6.6	0.86	1.698	19.95	4.5
P-6	09/26/2019 12:35	6.07	-97.2	6.68	0.92	1.824	23.33	26.9
P-6	04/28/2020 09:50	7.87	94.2	6.86	NM	0.291	11.88	4.5
P-6	04/28/2020 10:05	4.67	98	6.64	0.25	0.508	11.52	4.6
P-6	09/17/2020 12:40	2.79	11.3	6.19	0.97	1.919	22.36	0.4
P-6	09/17/2020 12:45	1.34	22.7	6.51	0.95	1.865	23.09	0.5
P-6	09/17/2020 12:50	1.2	29.1	6.54	0.93	1.847	23.45	0.5
P-6	09/17/2020 12:55	1.13	56.8	6.57	0.87	1.73	23.33	0.4
P-6	09/17/2020 13:00	0.99	67.6	6.57	0.8	1.601	23.28	0.4
P-6	09/17/2020 13:05	1.06	78.8	6.56	12.5	1.474	23.35	0.6
P-6	09/17/2020 13:10	1	84.9	6.55	0.74	1.449	23.31	0.5
P-6	09/17/2020 13:15	0.99	92	6.54	0.74	1.464	22.97	0.6
P-6	09/17/2020 13:20	0.95	96.6	6.53	0.74	1.474	22.94	0.6
P-6	09/17/2020 13:25	0.92	100	6.52	0.74	1.467	22.84	0.6
P-6	09/17/2020 14:05	2.18	-10.9	6.56	0.89	1.767	23.41	2.2
P-6	09/17/2020 14:15	3.05	34.2	6.64	0.92	1.806	22.32	NM
P-6	09/23/2020 14:15	NM	NM	NM	NM	NM	NM	21
P-6	03/19/2021 09:00	2.85	158.2	6.99	0.7	1.392	9.39	31.3
P-6	03/19/2021 09:05	1.29	139	6.91	0.69	1.367	8.22	14.1
P-6	03/19/2021 09:10	1.09	124.8	6.92	0.66	1.317	8.49	7.1
P-6	03/19/2021 09:15	4.08	114.8	7.04	0.58	1.154	8.64	21.9
P-6	03/19/2021 09:20	5.42	108.5	7.06	0.51	1.027	8.25	21
P-6	03/19/2021 09:25	6.08	110.6	6.93	0.46	0.904	7.69	14.8
P-6	03/19/2021 09:30	6.04	110.2	6.99	0.39	0.805	7.34	10.7
P-6	03/19/2021 09:35	5.92	107.3	7.05	0.37	0.76	7.32	6.6
P-6	03/19/2021 09:40	5.73	107.6	7.02	0.36	0.735	7.43	1.7
P-6	03/19/2021 09:45	5.49	107.2	7.07	0.35	0.715	7.53	0.8
P-6	03/19/2021 10:05	2.36	104.3	7.02	0.56	1.133	8.67	5.6

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
P-6	03/19/2021 10:20	3.71	100	7	0.61	1.245	8.61	37.8
P-6	10/05/2021 13:35	2.4	-31.1	6.69	0.56	1.59	20.89	42.1
P-6	10/05/2021 13:40	4.42	-24.5	6.7	0.39	0.788	20.64	16.4
P-6	10/05/2021 13:45	6.2	-20.8	6.68	0.34	0.708	20.58	9.2
P-6	10/05/2021 13:50	5.51	-18.1	6.7	0.33	0.672	20.52	5.3
P-6	10/05/2021 13:55	5.92	-16.2	6.72	0.32	0.665	20.52	0.7
P-6	10/05/2021 14:00	6.81	-14.5	6.73	0.33	0.669	20.59	0.6
P-6	10/05/2021 14:05	6.74	-12.5	6.72	0.33	0.676	20.59	0.4
P-6	10/05/2021 14:10	3.5	-9.4	6.73	0.33	0.683	20.52	0.2
P-6	10/05/2021 14:15	6.32	-6.3	6.72	0.34	0.697	20.42	-0.2
P-6	10/05/2021 14:20	6.09	-4.2	6.73	0.35	0.71	20.36	0
P-6	04/13/2022 09:00	8.6	120.6	7.05	0.19	0.399	13.19	0
P-6	04/13/2022 09:05	8.59	118.1	7.08	0.19	0.4	13.22	0
P-6	04/13/2022 09:10	8.58	116.8	7.09	0.19	0.399	13.3	0
P-6	04/13/2022 09:15	8.53	116.1	7.09	0.19	0.4	13.42	0
P-6	04/13/2022 09:20	8.07	119.6	7.11	0.19	0.396	13.5	0
P-6	04/13/2022 09:25	8.06	120.1	7.11	0.19	0.394	13.53	0
P-6	04/13/2022 09:30	8.06	120.4	7.12	0.19	0.395	13.43	0
RW-02	03/14/2012 12:46	1.94	-60	6.77	0.06	1.11262	19.93	4.6
RW-02	03/14/2012 12:48	1.93	-69	6.81	0.06	1.18951	15.49	2.3
RW-02	03/14/2012 12:51	2.23	-73	6.85	0.06	1.1904	14.68	2.4
RW-02	03/14/2012 12:53	1.91	-77	6.86	0.06	1.18562	14.42	2.4
RW-02	03/14/2012 12:55	1.98	-80	6.87	0.06	1.19201	14.52	2.1
RW-02	03/14/2012 12:58	1.92	-82	6.86	0.06	1.19128	14.88	2.6
RW-02	03/14/2012 13:00	1.83	-84	6.86	0.06	1.19199	14.85	2.7
RW-02	03/14/2012 13:02	1.75	-86	6.86	0.06	1.19392	14.76	2.7
RW-02	03/14/2012 13:05	1.63	-87	6.86	0.06	1.19461	14.68	2.6
RW-02	03/14/2012 13:07	1.56	-89	6.86	0.06	1.19567	14.59	2.7
RW-02	03/14/2012 13:09	1.48	-90	6.86	0.06	1.19529	14.82	2.5
RW-02	03/14/2012 13:12	1.41	-91	6.86	0.06	1.19636	14.83	3
RW-02	03/14/2012 13:14	1.33	-92	6.86	0.06	1.19742	14.8	3
RW-02	03/14/2012 13:17	1.24	-93	6.86	0.06	1.19742	14.78	3.2
RW-02	03/14/2012 13:19	1.16	-94	6.86	0.06	1.1963	15.13	3.3
RW-02	03/14/2012 13:21	1.1	-95	6.86	0.06	1.20057	14.87	3.5
RW-02	03/14/2012 13:24	1.02	-96	6.85	0.06	1.2007	14.8	3.3
RW-02	03/14/2012 13:26	0.95	-97	6.85	0.06	1.20274	14.88	3.6
RW-02	03/14/2012 13:28	0.87	-97	6.85	0.06	1.20602	14.68	4.1
RW-02	03/14/2012 13:31	0.81	-98	6.85	0.06	1.20518	14.85	4
RW-02	03/14/2012 13:33	0.73	-99	6.86	0.06	1.20503	14.62	4.8
RW-02	03/14/2012 13:35	0.67	-99	6.86	0.06	1.20435	14.49	4.8
RW-02	03/14/2012 13:36	0.67	-99	6.86	0.06	1.204	14.49	4.81
RW-02	03/14/2012 14:15	6.09	-60	6.68	0.03	0.641	11.29	11.10
RW-02	03/15/2012 10:35	0.80	-75	6.25	0.0000	0.676	10.60	24.70
RW-02	02/25/2013 10:46	4.98	-238	6.43	0.19	3.59682	9.64	8.9
RW-02	02/25/2013 10:49	1.77	-249	6.49	0.21	3.97514	8.86	2.5
RW-02	02/25/2013 10:51	1.09	-248	6.52	0.21	4.0149	8.82	2.2
RW-02	02/25/2013 10:53	0.83	-244	6.54	0.21	4.06557	9.01	2.3
RW-02	02/25/2013 10:56	0.75	-237	6.55	0.22	4.13192	8.99	3.6
RW-02	02/25/2013 10:58	0.68	-231	6.56	0.22	4.15541	8.88	1.9
RW-02	02/25/2013 11:00	0.58	-225	6.56	0.22	4.11411	9	1.7
RW-02	02/25/2013 11:03	0.56	-221	6.56	0.22	4.16699	9.03	1.7
RW-02	02/25/2013 11:05	0.47	-217	6.57	0.22	4.17099	8.97	1.7
RW-02	02/25/2013 11:07	0.47	-214	6.57	0.22	4.16531	9.02	1.9
RW-02	02/25/2013 11:10	0.47	-212	6.57	0.22	4.19293	9.02	1.8
RW-02	02/25/2013 11:11	0.47	-212	6.57	0.22	4193.000	9.13	1.78
RW-02	02/25/2013 12:04	3.55	-209	6.57	0.15	2874.000	8.98	24.20
RW-02	02/26/2013 10:49	0.73	-8	6.60	0.08	1513.000	7.55	16.80
RW-02	04/30/2013 13:27	12.02	-42.6	5.64	0.5	0.72	13.7	27.7
RW-02	04/30/2013 13:29	12.56	-38.1	5.47	0.5	0.72	13.5	24.2
RW-02	04/30/2013 13:31	12.07	-37	5.43	0.5	0.72	13.6	26.6
RW-02	04/30/2013 13:33	11.77	-36	5.43	0.5	0.72	13.5	23.4
RW-02	04/30/2013 13:35	11.53	-36.4	5.41	0.5	0.73	13.6	22.1

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
RW-02	04/30/2013 13:37	11.27	-35.3	5.38	0.46	0.727	13.6	20.9
RW-02	04/30/2013 15:30	4.82	-32.2	5.71	0.57	0.914	14.83	45
RW-02	05/01/2013 15:49	5.66	-32.3	5.74	0.6	0.924	13.18	63.4
RW-02	06/18/2013 13:25	0.0000	-64	6.30	0.80	1.410	19.00	29.00
RW-02	06/18/2013 15:20	2.73	-112	6.16	1.16	2.027	19.82	3.20
RW-02	06/19/2013 13:25	6.72	-88	6.65	0.02	0.039	26.74	9.70
RW-02	06/30/2014 11:40	0.32	-10.9	6.45	0.21	0.447	24.29	210.70
RW-02	06/30/2014 13:25	0.09	-286.7	10.92	23.96	37.670	18.16	182.20
RW-02	06/30/2014 13:50	0.04	-260	10.86	24.15	37.970	23.40	278.70
RW-02	07/31/2014 08:50	0.46	-97.4	6.57	0.29	0.597	23.59	102.00
RW-02	07/31/2014 09:20	0.39	-105.1	6.55	0.28	0.569	74.43	61.10
RW-02	07/31/2014 09:25	0.33	-104.2	6.55	0.28	0.569	24.51	60.60
RW-02	09/09/2014 13:01	0.04	146	8.46	1.36	22.320	23.07	45.85
RW-02	09/09/2014 13:56	0.14	118	8.76	1.67	26.850	20.76	420.00
RW-02	09/10/2014 11:03	0.15	-431	9.19	1.85	29.440	23.51	21.60
RW-02	01/19/2015 10:05	0.91	-63.6	6.80	0.83	1.322	8.06	121.80
RW-02	01/19/2015 13:30	0.66	-183.6	6.84	0.36	0.730	8.04	139.40
RW-02	01/19/2015 13:45	0.47	-190	6.73	0.60	1.168	8.27	74.00
RW-02	07/07/2015 13:00	1.85	-294	8.99	18.00	29.300	18.03	5.50
RW-02	07/07/2015 13:15	4.23	-104	6.80	6.20	10.100	19.67	70.20
RW-02	12/14/2015 13:07	1.81	-170	9.03	21.60	46.400	17.62	0.0000
RW-02	12/14/2015 13:35	0.0000	-94	7.36	3.10	10.500	18.46	211.00
RW-02	12/29/2015 11:10	0.96	687	7.02	0.31	5.778	13.76	27.3
RW-02	12/29/2015 15:17	1.66	-82	6.61	0.46	8.334	13.12	61.7
RW-02	06/15/2016 09:29	9.75	-92	6.53	0.95	16.100	18.88	16.00
RW-02	06/15/2016 10:42	0.29	-263	7.79	1.44	23.620	17.89	37.80
RW-02	12/06/2016 09:30	0.04	-115	6.78	0.11	2.137	14.83	22.7
RW-02	12/06/2016 11:09	4.4	-103	6.9	0.13	2.416	14.63	40.8
RW-02	10/09/2019 08:15	6.43	-198.7	7.31	NM	10.51	20.4	235.1
RW-02	10/09/2019 08:20	6.13	-203.3	7.25	NM	10.74	20.61	488.3
RW-02	10/09/2019 08:25	6.07	-204.6	7.23	NM	10.69	20.72	404.3
RW-02	10/09/2019 08:30	5.41	-205.9	7.21	NM	10.49	20.76	369.2
RW-02	10/09/2019 08:35	4.37	-216.7	7.2	NM	10.48	20.85	510.4
RW-02	10/09/2019 08:40	3.41	-211.6	7.18	NM	10.33	21	435.4
RW-02	10/09/2019 08:45	2.94	-237.6	7.19	NM	10.58	21.08	357.3
RW-02	10/09/2019 08:50	3.23	-250.1	7.21	NM	10.95	21	273.8
RW-02	10/09/2019 08:55	2.77	-236.6	7.22	NM	11.39	21.08	200
RW-02	10/09/2019 09:00	1.98	-240.4	7.24	NM	11.74	21.02	176.4
RW-02	10/09/2019 11:45	7.66	-187.3	7.57	9.52	16.21	19.96	0
RW-02	10/09/2019 12:00	10.25	-120.2	6.39	0.5	1.017	21.19	304.9
RW-02	09/23/2020 09:15	1.05	-137.4	6.46	0.97	1.921	21.31	88.3
RW-02	09/23/2020 09:20	0.6	-139.6	6.63	0.99	1.941	21.19	29.5
RW-02	09/23/2020 09:25	0.89	-143.6	6.67	1.02	2.004	21.4	28
RW-02	09/23/2020 09:30	0.64	-145.5	6.67	1.05	2.046	21.44	28.4
RW-02	09/23/2020 09:35	0.49	-150.6	6.72	1.14	2.218	21.6	27.7
RW-02	09/23/2020 09:40	0.73	-154.8	6.74	1.22	2.366	21.82	24.6
RW-02	09/23/2020 09:45	0.44	-156.6	6.76	1.26	2.443	21.83	21.6
RW-02	09/23/2020 09:50	0.37	-158.7	6.77	1.3	2.514	21.86	21.3
RW-02	09/23/2020 09:55	0.4	-159.9	6.78	1.35	2.611	21.91	20.6
RW-02	09/23/2020 10:00	0.58	-163.7	6.82	1.52	2.905	22.1	19.7
RW-02	09/23/2020 12:30	2.02	-142.9	7.43	6.51	11.47	26.57	19.9
RW-02	09/23/2020 13:47	5.29	-96.5	6.86	1.61	3.083	23.38	35.9
RW-02	12/04/2020 10:35	0.19	-128.1	7	2.55	4.727	14.67	453
RW-02	12/04/2020 10:40	0.19	-142.6	6.92	1.86	3.515	14.88	467.2
RW-02	12/04/2020 10:45	0.2	-149.3	6.9	1.92	3.607	14.95	318.4
RW-02	12/04/2020 10:50	0.2	-168.3	6.96	2.31	4.287	15.03	100.8
RW-02	12/04/2020 10:55	0.2	-185.7	7.03	2.64	4.902	15.33	102.9
RW-02	12/04/2020 11:00	0.23	-192.8	7.07	2.7	4.976	15.65	68.6
RW-02	12/04/2020 11:05	0.22	-206.9	7.12	2.95	5.405	15.79	59.5
RW-02	12/04/2020 11:10	0.18	-226.2	7.2	3.29	5.997	15.89	39
RW-02	12/04/2020 11:15	0.22	-235.4	7.27	3.58	6.482	15.91	35.3
RW-02	12/04/2020 11:20	0.25	-248.4	7.31	3.82	6.91	15.87	30

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
RW-02	12/04/2020 13:30	0.24	-173	7.47	4.63	8.282	12.9	390.7
RW-02	12/04/2020 13:45	0.39	-174.5	7.42	4.94	8.807	12.69	190.2
RW-02	03/30/2021 13:45	2.71	-161.7	8.14	0.38	0.774	12.85	56.6
RW-02	03/30/2021 13:50	0.67	-129.2	7.21	0.33	0.684	13.28	43.7
RW-02	03/30/2021 13:55	0.45	-132	7.01	0.31	0.642	15.14	28.7
RW-02	03/30/2021 14:00	0.4	-144.3	6.99	0.3	0.609	13.53	32.7
RW-02	03/30/2021 14:05	0.35	-139.8	6.71	0.3	0.605	12.65	34.2
RW-02	03/30/2021 14:10	0.3	-144.5	6.68	0.3	0.604	12.44	35
RW-02	03/30/2021 14:15	0.28	-150.3	6.7	0.3	0.607	12.22	37.7
RW-02	03/30/2021 14:20	0.27	-155.2	6.75	0.3	0.605	12.09	36.7
RW-02	03/30/2021 14:25	0.27	-156	6.75	0.29	0.603	12.24	37.2
RW-02	03/30/2021 16:56	2.7	-124.9	7.66	3.26	5.981	12.37	13.3
RW-02	03/30/2021 17:05	1.38	-124.6	7.9	3.33	6.093	12.41	2.7
RW-02	06/11/2021 12:30	0.48	-99.8	6.64	0.33	0.666	18.98	6.5
RW-02	06/11/2021 12:35	0.47	-101.9	6.65	0.33	0.68	18.94	6.5
RW-02	06/11/2021 12:40	0.43	-105.3	6.66	0.34	0.698	18.91	6
RW-02	06/11/2021 12:45	0.42	-107.1	6.68	0.36	0.733	18.73	5.6
RW-02	06/11/2021 12:50	0.44	-102.4	6.71	0.39	0.785	18.68	5.1
RW-02	06/11/2021 12:55	0.51	-104.5	6.79	0.48	0.971	18.62	4.6
RW-02	06/11/2021 13:00	0.6	-116	7.04	0.97	1.851	18.52	4.1
RW-02	06/11/2021 13:05	0.69	-131.4	7.32	1.55	2.941	18.44	4
RW-02	06/11/2021 13:10	0.64	-139.3	7.51	1.88	3.542	18.32	3.3
RW-02	06/11/2021 13:15	0.65	-147.2	7.58	1.99	3.756	18.28	3.1
RW-02	06/11/2021 13:20	0.68	-147.4	7.61	2.07	3.894	18.21	2.9
RW-02	06/11/2021 13:25	0.64	-155.5	7.63	2.13	4	18.24	2.7
RW-02	06/11/2021 13:30	0.6	-150.3	7.65	2.15	4.045	18.19	2.8
RW-02	06/11/2021 13:35	0.64	-158.6	7.67	2.17	4.074	18.16	2.8
RW-02	03/10/2022 13:10	4.04	-113.3	7.14	1.25	2.414	9.38	437.2
RW-02	03/10/2022 13:15	1.51	-117	6.69	1.25	2.422	9.45	154.3
RW-02	03/10/2022 13:20	1.2	-115.9	6.62	1.26	2.433	9.14	38.7
RW-02	03/10/2022 13:25	0.96	-116.5	6.58	1.26	2.436	8.84	5.7
RW-02	03/10/2022 13:30	0.92	-116.1	6.57	1.26	2.436	8.81	4
RW-02	03/10/2022 13:35	0.88	-117	6.59	1.26	2.442	8.89	3.9
RW-02	03/10/2022 13:40	0.9	-124.9	6.59	1.26	2.455	8.8	3.8
RW-11	06/02/2014 09:43	1.87	-346	6.58	2.23	35.300	15.52	727.30
RW-11	06/02/2016 09:38	NM	1225	6.74	0.04	0.730	20.22	357.70
RW-11	06/02/2016 13:08	1.61	-208	6.85	0.08	1.619	18.47	13.80
RW-11	05/10/2017 09:51	2.00	75.00	6.53	0.04	0.745	14.7	16.40
RW-11	05/10/2017 11:30	2.32	11.00	7.17	0.09	1.799	13.14	1258.00
RW-21	03/27/2012 14:03	5.29	-57	6.91	0.02	0.491	10.91	7.30
RW-21	03/28/2012 10:40	1.39	-13	6.57	0.0000	0.274	10.59	5.20
RW-21	04/11/2013 11:12	3.23	-138	6.54	0.25	4.757	10.42	161.5
RW-21	04/12/2013 14:44	0.01	-258	6.53	0.24	4.582	10.64	7.7
RW-21	08/27/2014 11:38	0.58	191	6.51	0.05	0.932	22.90	7.30
RW-21	08/28/2014 11:21	0.51	-413	6.56	0.05	0.971	22.25	4.10
RW-21	12/10/2015 11:17	0.51	154	7.12	0.04	0.77	12.36	5.3
RW-21	12/10/2015 14:21	6.96	260	7.64	0.04	0.754	10.28	66.6
RW-21	06/02/2016 08:52	NM	1111	6.59	0.05	1.070	22.57	82.70
RW-21	06/02/2016 12:38	-0.13	-308	6.78	0.05	1.008	21.54	5.30
RW-21	06/09/2017 10:25	0.05	-56.00	6.79	0.12	2.375	16.04	13.90
RW-21	06/09/2017 12:17	2.17	-81.00	7.95	0.09	1.731	16.39	56.00
RW-21	08/27/2020 08:25	3.07	-17.2	7.01	0.16	0.319	21.09	21.1
RW-21	08/27/2020 09:30	0.33	-148.7	6.77	0.12	0.244	22.86	0.2
RW-21	08/27/2020 09:40	0.36	-156.7	6.78	0.11	0.242	23.11	1.9
RW-21	04/23/2021 10:30	4.29	-151.7	6.94	0.13	0.267	11.87	82.3
RW-21	04/23/2021 10:35	2.52	-173.8	6.8	0.13	0.275	10.74	89
RW-21	04/23/2021 10:40	1.44	-199	6.81	0.13	0.275	10.75	50.1
RW-21	04/23/2021 10:45	10.86	-215.1	6.99	0.13	0.275	10.85	56.6
RW-21	04/23/2021 10:50	0.73	-226.7	6.98	0.13	0.275	10.88	26
RW-21	04/23/2021 10:55	0.54	-230.5	6.97	0.13	0.273	10.88	40.2
RW-21	04/23/2021 11:00	0.49	-238.2	6.99	0.13	0.269	11	7.8
RW-21	04/23/2021 11:05	0.44	-241.3	6.99	0.13	0.265	11.1	7.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
RW-21	04/23/2021 11:10	0.42	-243.3	7.02	0.13	0.263	11.08	7.9
RW-21	04/23/2021 11:15	0.39	-244	6.91	0.12	0.261	11.09	7.7
RW-31	12/30/2015 10:08	5.23	10	6.79	0.98	16.73	10.7	2004.7
RW-31	05/05/2017 11:48	2.98	-43.00	6.88	0.21	3.984	13.71	20.20
RW-31	06/11/2018 14:54	3.37	-89.00	7.00	0.10	2.034	17.79	11.40
RW-31	05/29/2019 14:20	0.79	-62.8	6.99	0.96	1.882	17.9	1.9
RW-31	05/12/2020 09:10	15.02	-132.3	7	1.03	2.009	12.93	53
RW-31	11/20/2020 11:00	2.41	-60.1	7.15	2	3.773	16.72	6.6
RW-31	11/20/2020 11:20	2.49	-93.5	7.2	1	1.952	15.73	9.6
RW-31	02/26/2021 08:30	1.85	-49.6	6.71	4.59	8.254	9.15	22.9
RW-31	02/26/2021 08:35	1.22	-79.7	6.77	4.49	8.064	9.4	6.4
RW-31	02/26/2021 08:40	1.04	-91.2	6.81	4.46	8.032	9.5	6.2
RW-31	02/26/2021 08:45	1.01	-97.8	6.83	4.56	8.195	9.53	6.7
RW-31	02/26/2021 08:50	0.97	-103.5	6.84	5.05	9.011	9.88	6.6
RW-31	02/26/2021 08:55	0.96	-105.6	6.84	5.1	9.129	9.89	6.3
RW-31	02/26/2021 09:00	0.97	-109.8	6.86	5.2	9.267	9.95	6.7
RW-31	02/26/2021 10:05	3.02	-121.4	7.03	5.08	9.065	9.11	1.6
RW-31	02/26/2021 10:25	0.67	-121.8	7.08	5.14	9.155	9.33	7.5
RW-31	05/11/2021 11:45	5.07	-93.9	7.13	5.08	8.366	16.39	18.7
RW-31	05/11/2021 11:50	2.7	-106.5	6.84	6.12	10.52	15.43	12.4
RW-31	05/11/2021 11:55	1.45	-114.2	6.79	6.74	11.72	14.75	9.2
RW-31	05/11/2021 12:00	0.57	-125.7	6.76	7.23	12.52	14.06	2.1
RW-31	05/11/2021 12:05	0.49	-129.5	6.76	7.25	12.58	13.88	0.3
RW-31	05/11/2021 12:10	0.46	-132.9	6.77	7.28	12.63	13.95	1.8
RW-31	05/11/2021 12:15	0.46	-134.9	6.77	7.31	12.68	13.92	2.4
RW-31	05/11/2021 12:20	0.5	-136.5	6.77	7.34	12.71	13.91	2.7
RW-31	05/11/2021 12:25	0.46	-138.2	6.78	7.38	12.79	13.99	2.8
RW-31	05/11/2021 12:30	0.47	-140.5	6.78	7.51	12.99	13.97	2.2
RW-31	02/14/2022 11:55	5.04	-80.3	7.28	1.9	3.611	7.01	15.4
RW-31	02/14/2022 12:00	4.89	-83.4	7.26	2.02	3.826	6.72	13.9
RW-31	02/14/2022 12:05	4.22	-84.8	7.23	2.08	3.855	6.06	11.8
RW-31	02/14/2022 12:10	5.65	-86.4	7.22	2.15	4.073	5.74	11
RW-31	02/14/2022 12:15	5.8	-88.6	7.15	2.5	4.685	5.54	10
RW-31	02/14/2022 12:20	5.73	-91.8	7.12	2.91	5.4	5.41	8.2
RW-31	02/14/2022 12:25	6.08	-97.6	7.13	3.43	6.332	5.36	7.4
RW-31	02/14/2022 12:30	4.63	-104.4	7.12	4.32	7.847	5.53	6.6
RW-31	02/14/2022 12:35	3.8	-109.2	7.11	4.9	8.829	6.16	6.2
RW-31	02/14/2022 12:40	2.93	-111.4	7.11	5.58	9.662	5.85	5.8
RW-33	03/18/2013 11:38	3.98	-195	6.9	1.26	21.25	9.27	63.4
RW-33	03/19/2013 10:29	1.2	-261	6.52	0.35	6.488	8.39	24
RW-33	12/30/2015 09:26	0.11	-58	6.72	0.03	0.587	13.83	587
RW-33	12/30/2015 12:15	6.72	-60	7.23	0.82	14.28	9.78	246.5
RW-33	06/02/2016 14:00	5.05	1175	6.56	0.18	3.452	19.96	65.00
RW-33	05/05/2017 09:39	-0.03	-150.00	7.24	0.13	2.597	15.36	41.66
RW-33	05/05/2017 10:14	5.40	18.00	7.04	0.16	3.016	14.03	45.40
RW-33	06/01/2018 12:58	1.57	-253.00	7.33	0.11	2.123	17.86	32.42
RW-33	06/01/2018 13:25	3.43	-152.00	7.30	0.11	2.152	16.96	35.70
RW-33	07/26/2019 13:15	0.35	-45.7	6.89	NM	3.807	25.11	13.1
RW-33	07/30/2019 10:05	1.5	70.5	7.46	NM	7.188	22.65	115.1
RW-33	07/30/2019 10:10	0.58	-26.9	6.91	NM	6.256	24.62	112.5
RW-33	07/30/2019 10:15	0.44	-40	6.86	NM	5.928	24.22	91.3
RW-33	07/30/2019 10:20	0.39	-42.4	6.83	NM	5.629	24.73	54.4
RW-33	07/30/2019 10:25	0.37	-43.6	6.83	NM	5.29	24.69	42.7
RW-33	07/30/2019 10:30	0.35	-44.8	6.85	NM	4.86	24.78	30.8
RW-33	07/30/2019 10:35	0.34	-45.6	6.84	NM	4.574	24.91	27.6
RW-33	07/30/2019 10:40	0.35	-46.3	6.86	NM	4.28	25.2	20.7
RW-33	07/30/2019 10:45	0.35	-46.4	6.88	NM	3.995	25.07	18.5
RW-33	07/30/2019 10:50	0.35	-45.7	6.89	NM	3.807	25.11	13.1
RW-33	07/30/2019 14:25	0.2	-26.5	7.08	1.09	2.132	22.61	0.3
RW-33	07/30/2019 14:40	0.19	-29.4	7.09	1.08	2.109	22.91	0.3
RW-33	05/11/2020 12:15	9.37	-269.2	7.24	NM	1.714	13.86	107.6
RW-33	05/11/2020 13:40	9.76	-304.4	7.32	0.83	1.637	13.45	9.4

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
RW-33	01/28/2021 13:55	2.04	-98.7	7.29	1.34	2.581	9.74	27.4
RW-33	01/28/2021 14:00	1.63	-98.9	7.26	1.34	2.583	9.83	27
RW-33	01/28/2021 14:05	1.41	-99.5	7.23	1.35	2.589	9.99	24.9
RW-33	01/28/2021 14:10	0.95	-101.8	7.14	1.35	2.598	10.29	33.6
RW-33	01/28/2021 14:15	0.53	-107.4	7.03	1.35	2.593	10.67	27.5
RW-33	01/28/2021 14:20	0.46	-108.8	7.04	1.34	2.582	10.85	22.9
RW-33	01/28/2021 14:25	0.41	-110.8	7.02	1.34	2.583	10.56	20.2
RW-33	01/28/2021 14:30	0.46	-113	7.02	1.32	2.552	10.63	16.3
RW-33	01/28/2021 14:35	0.42	-114.1	7.03	1.32	2.546	10.71	15.3
RW-33	01/28/2021 14:40	0.39	-114.2	7.02	1.32	2.551	10.63	15.6
RW-33	01/29/2021 09:40	0.66	-74	7.15	1.35	2.693	9.05	13.6
RW-33	01/29/2021 09:50	4.04	-85.3	7.3	1.4	2.448	9.1	32.5
RW-34	02/20/2012 08:37	-0.13	-10	7.24	0.05	0.767	11.19	10.60
RW-34	02/21/2012 09:02	0.34	38	6.39	0.07	1.070	12.10	6.30
RW-34	09/02/2014 12:49	1.44	265	6.69	0.11	2.110	23.93	120.70
RW-34	12/30/2015 09:58	8.34	-76	6.97	0.03	0.567	15.41	9.4
RW-34	12/30/2015 12:39	1.35	-92	7.72	0.03	0.598	13.95	10.2
RW-34	06/01/2016 09:47	NM	413	6.70	0.02	0.378	18.04	6.80
RW-34	06/01/2016 14:31	0.61	1207	6.70	0.03	0.688	15.31	11.80
RW-34	05/05/2017 09:35	0.27	182.00	6.82	0.06	1.238	11.74	197.70
RW-34	05/05/2017 10:45	8.86	73.00	7.66	0.06	1.132	12.04	1428.10
RW-34	06/06/2019 09:15	6.67	-110.4	8.03	NM	1.812	16.44	406.2
RW-34	06/06/2019 10:15	3.91	-71.7	7.24	0.23	0.48	17.56	18.7
RW-34	06/06/2019 10:30	5.2	-36.2	6.99	0.1	0.22	17.63	8
RW-34	06/08/2020 13:05	1.89	-34	6.62	0.44	0.889	14.14	27.2
RW-34	06/23/2021 13:05	3.78	43.9	6.49	0.08	0.168	21.12	81.8
RW-34	06/23/2021 13:10	1.93	22.1	6.36	0.07	0.16	20.57	34.3
RW-34	06/23/2021 13:15	0.54	19.4	6.06	0.08	0.144	20.32	14.5
RW-34	06/23/2021 13:20	0.47	20.2	6.06	0.07	0.155	20.23	8.9
RW-34	06/23/2021 13:25	0.38	19.1	6.06	0.07	0.155	20.53	4.7
RW-34	06/23/2021 13:30	0.36	18.9	6.02	0.07	0.156	20.24	5.6
RW-34	06/23/2021 13:35	0.33	17.4	6.06	0.07	0.155	20.36	3.8
RW-34	06/23/2021 13:40	0.31	18	6.05	0.07	0.156	20.46	6.5
RW-34	06/23/2021 13:45	0.29	17.3	6.06	0.07	0.156	20.72	5.7
RW-34	06/23/2021 13:50	0.27	15.6	6.11	0.07	0.156	20.58	2.8
RW-35	02/20/2012 13:33	0.10	-23	7.02	0.09	1.181	5.52	105.20
RW-35	02/21/2012 11:29	0.48	-69	6.75	0.19	2.210	4.10	83.30
RW-35	06/05/2013 12:13	5.24	-75	7.03	0.03	0.541	23.63	214.30
RW-35	06/16/2016 09:00	4.33	-135	6.79	0.06	1.212	19.86	23.70
RW-35	05/16/2017 08:57	1.18	-33.00	6.60	0.21	3.987	12.73	65.30
RW-35	05/03/2018 10:37	2.38	42.00	7.47	0.57	9.989	14.7	138.20
RW-35	05/24/2019 10:19	3.35	-130.4	7.56	1.97	3.72	14.28	0.8
RW-35	02/23/2021 08:55	1.59	-171.4	6.74	16.45	27.08	6.66	156.2
RW-35	02/23/2021 09:00	1.27	-152.4	6.74	16.75	27.51	7.14	1.22
RW-35	02/23/2021 09:05	1.19	-133.2	6.62	17.31	28.27	7.61	31
RW-35	02/23/2021 09:10	1.41	-138	6.66	16.78	27.45	7.42	21.7
RW-35	02/23/2021 09:15	1.72	-134.8	6.71	15.9	26.22	6.46	28.1
RW-35	02/23/2021 09:20	1.95	-138	6.69	14.96	24.36	6.48	29.1
RW-35	02/23/2021 09:25	2.13	-125.7	6.69	14.08	23.48	6.48	25.5
RW-35	02/23/2021 09:30	2.2	-122.3	6.7	13.31	22.19	6.56	20.4
RW-35	02/23/2021 09:35	2.43	-119.1	6.69	12.7	21.29	6.58	16.8
RW-35	02/23/2021 09:40	2.36	-122.7	6.7	12.23	20.58	6.64	15.3
RW-35	02/23/2021 10:20	0.07	-120.9	6.68	7.73	13.4	8.51	1.7
RW-35	02/23/2021 10:40	0.08	-111.6	6.69	7.61	13.2	8.47	20.1
RW-35	05/04/2021 11:25	4.06	-98.2	6.84	16.36	26.7	16.78	23.1
RW-35	05/04/2021 11:30	2.89	-94.4	6.9	16.56	26.94	14.91	29.6
RW-35	05/04/2021 11:35	1.41	-92.7	6.92	16.83	27.35	14.47	72.3
RW-35	05/04/2021 11:40	1	-94.4	6.91	17.58	28.49	14.2	110.6
RW-35	05/04/2021 11:45	0.48	-95.3	6.89	18.16	29.3	14.49	151.3
RW-35	05/04/2021 11:50	0.21	-95.9	6.89	18.56	29.94	14.53	155.6
RW-35	05/04/2021 11:55	0.4	-87.7	6.72	18.9	30.41	14.35	99.7
RW-35	05/04/2021 12:00	0.08	-84.5	6.58	18.22	29.34	13.99	87.8

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
RW-35	05/04/2021 12:05	0.08	-84.8	6.53	17.24	27.92	13.93	77
RW-35	05/04/2021 12:10	0.08	-85.7	6.53	16.6	26.82	13.78	62.2
RW-35	02/10/2022 10:50	4	-45.8	6.46	22.54	35.86	7.33	45.3
RW-35	02/10/2022 10:55	4.92	-146	6.68	19.81	31.91	9.85	29.2
RW-35	02/10/2022 11:00	4.9	-148.5	6.7	19.44	31.34	9.65	25.1
RW-35	02/10/2022 11:05	4.98	-155.4	6.7	18.78	30.32	9.85	23.5
RW-35	02/10/2022 11:10	4.94	-158.5	6.71	18.52	29.92	9.53	24.6
RW-35	02/10/2022 11:15	4.95	-161.3	6.71	18.33	29.71	9.64	21.8
RW-35	02/10/2022 11:20	4.85	-163.2	6.72	18.01	29.14	9.82	20.5
RW-35	02/10/2022 11:25	5.02	-165.5	6.73	17.56	17.54	9.93	21.1
RW-35	02/10/2022 11:30	4.89	-167.6	6.74	17.2	28	10.01	22.2
RW-35	02/10/2022 11:35	5	-168.8	6.75	16.91	27.58	9.81	19.6
RW-41	08/16/2013 08:30	2.42	-88	6.86	1.34	2.599	21.72	178.80
RW-41	08/16/2013 09:03	0.30	-101.9	6.99	1.50	2.857	21.76	27.30
RW-41	08/16/2013 09:19	0.29	-99.6	7.01	1.58	2.973	21.99	21.10
RW-41	08/17/2013 09:19	0.29	-99.6	7.01	1.58	2.973	21.99	21.10
RW-41	09/10/2014 14:33	0.55	207	7.14	0.08	1.569	25.42	31.70
RW-41	09/11/2014 10:45	0.49	-365	7.15	0.08	1.655	26.57	10.70
RW-41	12/10/2015 13:55	0.0000	-118	7.37	1.00	1.900	21.65	165.00
RW-41	12/10/2015 14:30	0.0000	-116	7.34	1.00	1.900	21.83	164.00
RW-41	12/30/2015 10:42	1.27	-90	7.07	0.08	1.55	13.24	66.8
RW-41	12/30/2015 10:59	10.02	-72	8.09	0.04	0.813	9.89	197.1
RW-41	07/21/2016 14:55	0.13	-113.4	6.95	0.55	1.109	21.70	0.70
RW-41	07/21/2016 15:14	0.21	-107.9	6.95	0.54	1.084	21.48	10.40
RW-41	05/05/2017 13:00	5.62	5.00	7.15	0.09	1.751	17.31	53.50
RW-41	06/01/2018 10:24	3.17	-81.00	7.18	0.05	1.035	16.59	8.30
RW-41	10/19/2018 10:10	5.73	-66.90	7.19	0.49	0.987	19.06	51.00
RW-41	10/19/2018 12:00	3.03	-71.50	7.13	0.45	0.915	19.41	3.90
RW-41	10/19/2018 12:10	6.74	-44.50	7.29	0.45	0.903	19.54	47.10
RW-41	01/14/2019 11:20	9.65	-48.9	7.38	0.52	1.038	6.61	9.7
RW-41	06/03/2019 14:06	4.68	-123.1	7.38	0.21	0.438	16.34	15.9
RW-41	11/20/2020 13:30	5.47	-17.8	7.41	0.42	0.849	18.29	7.5
RW-41	11/20/2020 13:45	5.34	-79.2	7.4	0.41	0.841	18.73	49.3
RW-41	02/25/2021 09:50	3.28	-21.4	7.45	0.53	1.054	8.67	101.4
RW-41	02/25/2021 09:55	0.55	-49.5	7.29	0.5	1.014	8.89	48.1
RW-41	02/25/2021 10:00	0.46	-65.5	7.31	0.5	1.007	8.9	33.9
RW-41	02/25/2021 10:05	0.44	-74.1	7.33	0.5	0.998	8.96	29.2
RW-41	02/25/2021 10:10	0.41	-78.8	7.34	0.49	0.988	8.99	23.5
RW-41	02/25/2021 10:15	0.4	-86.9	7.35	0.49	0.985	9.12	23.9
RW-41	02/25/2021 10:20	0.39	-88.1	7.37	0.48	0.962	9.19	22.8
RW-41	02/25/2021 11:25	0.28	7.47	7.46	0.39	0.8	10.47	3.9
RW-41	02/25/2021 11:35	0.28	-137.8	7.45	0.4	0.803	10.46	10.2
RW-41	05/07/2021 12:15	4.49	-75.8	7.46	0.56	1.117	18.55	21.7
RW-41	05/07/2021 12:20	0.77	-100.9	7.17	0.58	1.162	15.96	7.4
RW-41	05/07/2021 12:25	0.75	-100.7	6.95	0.58	1.157	15.8	6
RW-41	05/07/2021 12:30	0.77	-112.7	7.03	0.57	1.135	15.51	1.5
RW-41	05/07/2021 12:35	0.8	-116.3	7.08	0.55	1.112	15.38	0.2
RW-41	05/07/2021 12:40	0.8	-119.9	7.11	0.55	1.101	15.29	0.2
RW-41	05/07/2021 12:45	0.8	-122.6	7.13	0.54	1.09	15.26	0.4
RW-41	08/05/2021 12:38	1.49	-98.8	6.89	0.66	1.402	26.13	0
RW-41	08/05/2021 12:43	0.48	-94.3	6.7	0.63	1.282	25.28	0
RW-41	08/05/2021 12:48	0.32	-103.1	6.79	0.62	1.247	25.01	0
RW-41	08/05/2021 12:53	0.27	-108.6	6.86	0.62	1.237	24.67	4
RW-41	08/05/2021 12:58	0.21	0	6.89	0.62	1.239	24.67	8
RW-41	08/05/2021 13:03	0.19	-118.5	6.99	0.62	1.241	24.48	13
RW-41	08/05/2021 13:08	0.17	-120.9	7.02	0.63	1.251	24.46	5.1
RW-41	08/05/2021 13:13	0.17	-122.2	7.02	0.63	1.26	24.52	3.8

Appendix B6 Main Yard
Historical Groundwater Parameter Data
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

Field Parameter		DO	ORP	pH	Salinity	Specific Conductivity	Temperature	Turbidity
Units		mg/L	millivolts		ppt	mS/cm	Deg C	NTU
Location ID	Date							
RW-41	08/05/2021 13:18	0.15	-123.8	7.05	0.64	1.265	24.26	40.1
RW-41	08/05/2021 13:23	0.15	-125.7	7.07	0.64	1.268	24.14	54.2
RW-41	02/11/2022 10:25	13.05	-181.1	7.34	1.1	2.13	10.56	23.2
RW-41	02/11/2022 10:30	14.59	-183	7.19	1.08	2.104	10.7	13.7
RW-41	02/11/2022 10:35	9.58	-184.7	7.2	1.08	2.106	10.71	13.4
RW-41	02/11/2022 10:40	22.96	-189.2	7.16	1.06	2.061	10.73	7.8
RW-41	02/11/2022 10:45	22.24	-189.4	7.16	1.06	2.057	10.71	6.5
RW-41	02/11/2022 10:50	13.03	-191.8	7.14	1.02	1.994	10.76	4
RW-41	02/11/2022 10:55	11.02	-193.2	7.11	1	1.948	10.76	4.1
RW-41	02/11/2022 11:00	11.51	-193.2	7.13	0.99	1.942	10.83	4.1
RW-41	02/11/2022 11:05	9.2	-198.2	7.14	0.94	1.841	11.11	0.7
RW-41	02/11/2022 11:10	8.83	-198.2	7.14	0.94	1.839	11.13	0.6
RW-42	02/27/2012 10:42	1.43	-35	6.84	0.01	0.25651	14.33	38.8
RW-42	02/27/2012 10:45	1.13	-31	6.71	0.01	0.15048	11.61	145
RW-42	02/27/2012 10:47	0.02	-30	6.68	0.01	0.15381	10.33	90.15
RW-42	02/27/2012 10:49	0.01	-30	6.63	0.01	0.1533	10.35	22.44
RW-42	02/27/2012 10:52	0	-28	6.61	0.01	0.15317	10.52	20.45
RW-42	02/27/2012 10:54	0	-26	6.58	0.01	0.1533	10.57	28.05
RW-42	02/27/2012 10:57	-0.01	-24	6.56	0.01	0.1531	10.69	25.32
RW-42	02/27/2012 10:59	-0.02	-22	6.55	0.01	0.15336	10.57	22.43
RW-42	02/27/2012 11:01	-0.02	-20	6.54	0.01	0.15475	10.53	26.88
RW-42	02/27/2012 11:04	-0.02	-18	6.54	0.01	0.15389	10.38	24.87
RW-42	02/27/2012 11:06	-0.03	-16	6.53	0.01	0.15369	10.65	23.53
RW-42	02/27/2012 11:08	-0.03	-14	6.53	0.01	0.15364	10.4	29.07
RW-42	02/27/2012 11:11	-0.03	-13	6.52	0.01	0.15316	10.62	23.31
RW-42	02/27/2012 11:13	-0.04	-12	6.52	0.01	0.15349	10.71	23.56
RW-42	02/27/2012 11:15	-0.04	-12	6.52	0.01	0.15326	10.61	25.24
RW-42	02/27/2012 11:38	-0.15	-78	6.88	0.01	0.193	8.77	2498.10
RW-42	02/28/2012 09:55	0.40	-18	6.20	0.0000	0.232	8.50	856.00
RW-42	03/20/2013 09:53	1.03	-209	5.77	0.01	0.217	7.32	134.8
RW-42	03/20/2013 11:16	2.89	-241	6.91	0.04	0.737	7.9	871.2
RW-42	03/21/2013 09:40	0.06	-291	6.43	0.05	1.009	7.64	1494.4
RW-42	08/12/2013 13:58	2.66	-62.1	6.30	0.17	0.355	23.65	140.00
RW-42	08/12/2013 15:18	3.54	-52.3	6.42	0.26	0.419	23.83	200.90
RW-42	08/12/2013 15:55	3.60	-53.7	6.43	0.27	0.423	23.88	201.60
RW-42	09/03/2014 09:16	0.93	21	5.65	0.01	0.250	25.94	14.53
RW-42	09/03/2014 09:51	1.07	43	6.47	0.01	0.276	24.79	160.20
RW-42	12/04/2015 12:30	1.82	-115	7.06	0.16	0.334	14.64	152.80
RW-42	12/04/2015 15:00	3.14	-24.8	6.59	0.18	0.366	11.11	1551.00
RW-42	06/10/2016 10:37	0.12	-35	5.81	0.02	0.381	19.68	161.00
RW-42	06/10/2016 11:29	3.13	-110	6.41	0.03	0.574	18.72	1792.10
RW-42	05/11/2017 10:24	1.49	42.00	5.84	0.0000	0.090	14.73	122.10
RW-42	05/11/2017 11:02	0.22	65.00	6.43	0.0000	0.732	16.32	37.11
RW-42	05/11/2017 11:36	1.37	-10.00	7.84	0.06	1.265	14.53	855.60
RW-42	06/07/2018 10:59	1.08	0.0000	6.03	0.01	0.107	20.73	16.99
RW-42	06/07/2018 11:27	1.71	-55.00	6.35	0.01	0.132	19.05	492.80
RW-42	06/07/2018 12:46	1.01	-58.00	6.24	0.01	0.113	18.86	88.50
RW-42	10/24/2018 08:15	4.50	-41.60	9.15	0.18	0.370	17.78	28.90
RW-42	10/24/2018 09:35	6.91	-71.40	7.03	0.08	0.178	16.9	1486.00
RW-42	10/24/2018 09:45	1.77	-59.20	7.53	0.09	0.184	18.74	142.80
RW-42	01/14/2019 11:25	8.47	-24.4	6.31	0.04	0.096	6.24	427.9
RW-42	06/03/2019 10:30	0.34	43.1	5.81	NM	0.084	18.43	12.1
RW-42	06/03/2019 11:02	1.15	73.9	5.92	0.04	0.082	20.19	18.1
RW-42	06/01/2020 10:05	0.54	20.9	6.02	NM	0.15	18.94	NM
RW-42	06/01/2020 10:50	4.72	49.9	6.18	0.11	0.23	18.2	44.5

Notes:
1. mg/L - milligrams per liter
2. ppt - parts per trillion
3. mS/cm - milliSiemens per centimeter
4.NTU - nephelometric turbidity unit
5. NM - No Measured

APPENDIX C

Well Construction Summary

Appendix C
Scope of Work for MNA
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

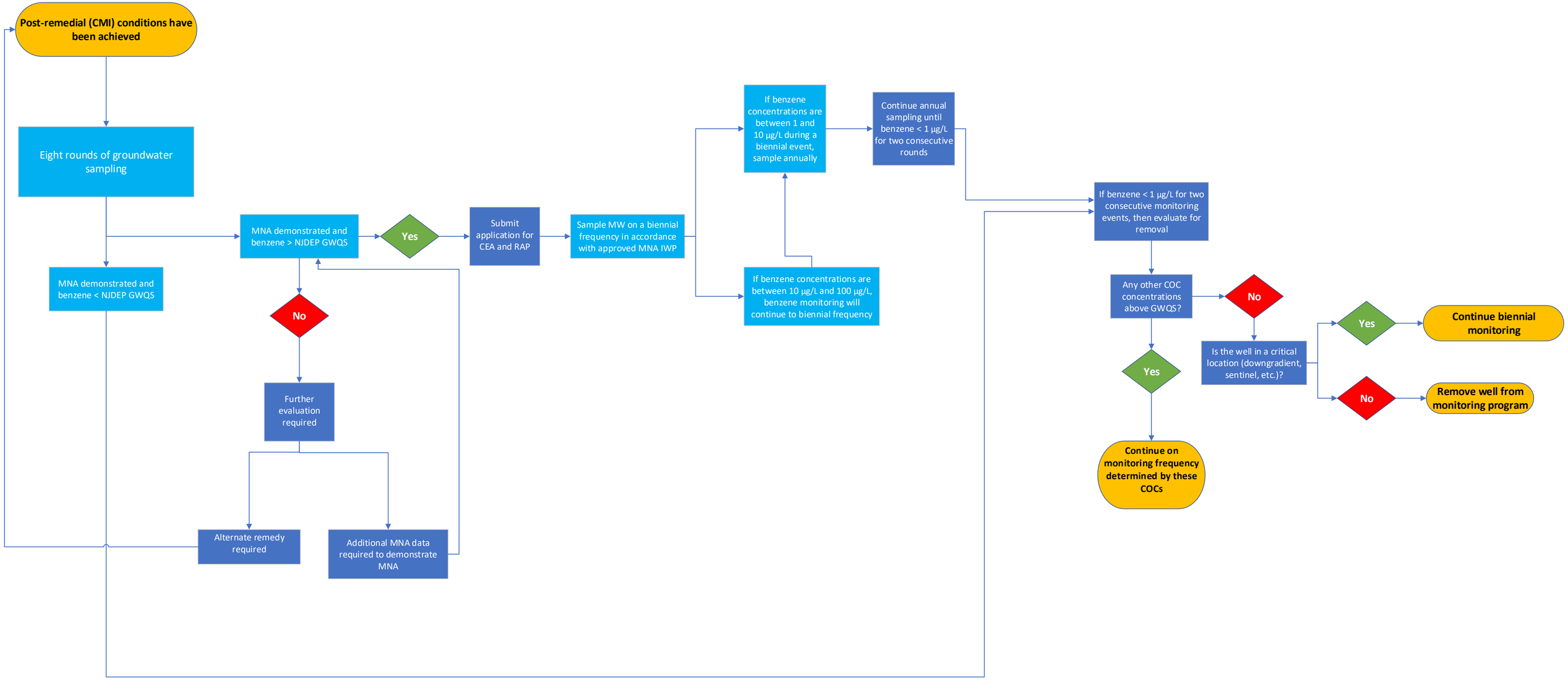
Central Yard		
Well ID	**Zone**	**Aquifer**
MW-0054R	Downgradient	Shallow
MW-0055R	MNA	Shallow
MW-0056R	MNA	Shallow
MW-103	Background	Shallow
MW-147	Background	Shallow
MW-185	Background	Deep
MW-188	Downgradient	Shallow
MW-190	Downgradient	Shallow
MW-216	MNA	Shallow
MW-217	MNA	Shallow
MW-219R	Background	Shallow
MW-221	Downgradient	Shallow
MW-222	MNA	Shallow
MW-230	Crossgradient	Shallow
MW-362	Background	Shallow
MW-368	MNA	Shallow
MW-369	MNA	Shallow
MW-372R	Downgradient	Shallow
MW-418	MNA	Shallow
MW-434R	MNA	Shallow
MW-435R	Downgradient	Shallow
MW-436R	MNA	Shallow
MW-438	Downgradient	Shallow
MW-439	Crossgradient	Shallow
MW-440	Background	Shallow
MW-441R	MNA	Shallow
MW-509	MNA	Shallow
MW-519	Downgradient	Shallow
MW-532	MNA	Deep
MW-533	MNA	Deep
TP2-018R	MNA	Shallow

Notes:
- MNA - Well being sampled for monitored natural attenuation
- Groundwater samples will be collected in accordance with Section 5.1 of the Monitored Natural Attenuation Annual Report for VOCs+TICs, SVOCs+TICs, MNA Parameters, and Groundwater Stabilization

Main Yard		
Well ID	**Zone**	**Aquifer**
MW-0034	Downgradient	Shallow
MW-0059	MNA	Shallow
MW-0067	MNA	Shallow
MW-13	Crossgradient	Shallow
MW-21	Background	Shallow
MW-114	Background	Shallow
MW-121R	MNA	Shallow
MW-122	MNA	Shallow
MW-128	Background	Shallow
MW-133	Background	Shallow
MW-135	Downgradient	Shallow
MW-136	Downgradient	Shallow
MW-164	Downgradient	Shallow
MW-199	Downgradient	Shallow
MW-201	Downgradient	Shallow
MW-203	Downgradient	Shallow
MW-205	MNA	Shallow
MW-207	MNA	Shallow
MW-234RR	Downgradient	Shallow
MW-281	Background	Shallow
MW-314	Background	Shallow
MW-354	Background	Shallow
MW-358	Background	Shallow
MW-374	MNA	Shallow
MW-376	MNA	Shallow
MW-378	MNA	Shallow
MW-380	MNA	Shallow
MW-395	MNA	Shallow
MW-402	Downgradient	Shallow
MW-404R	MNA	Shallow
MW-405	Downgradient	Shallow
MW-406	MNA	Shallow
MW-407	MNA	Shallow
MW-419	MNA	Shallow
MW-421	MNA	Shallow
MW-422	MNA	Shallow
MW-423	MNA	Shallow
MW-424	MNA	Shallow
MW-433R	MNA	Shallow
MW-466	MNA	Shallow
MW-474	MNA	Shallow
MW-489	MNA	Shallow
MW-5	Downgradient	Shallow
MW-521	MNA	Shallow

East Yard		
Well ID	**Zone**	**Aquifer**
MW-0043	Crossgradient	Shallow
MW-14	Background	Shallow
MW-131R	Background	Shallow
MW-144	Downgradient	Shallow
MW-148	Downgradient	Shallow
MW-149	MNA	Shallow
MW-153	Background	Shallow
MW-172	Downgradient	Shallow
MW-178	MNA	Shallow
MW-227R	MNA	Shallow
MW-229R	MNA	Shallow
MW-253	Downgradient	Shallow
MW-256	Crossgradient	Shallow
MW-257	Downgradient	Shallow
MW-282	Downgradient	Shallow
MW-288	MNA	Shallow
MW-289	MNA	Shallow
MW-292R	MNA	Shallow
MW-347	MNA	Shallow
MW-348	Background	Shallow
MW-386R	MNA	Shallow
MW-400	Background	Shallow
MW-401R	Background	Shallow
MW-443	MNA	Shallow
MW-446R	MNA	Shallow
MW-464	MNA	Shallow
MW-495	MNA	Shallow
MW-496	MNA	Shallow
MW-506	Background	Shallow
MW-512	Background	Shallow
MW-6	MNA	Shallow
RW-81	Background	Shallow
RW-83R	MNA	Shallow
P14TP1R	MNA	Shallow
P15TP1	MNA	Shallow
P15TP3	MNA	Shallow
P15TP4	MNA	Shallow
P15TP5	MNA	Shallow

MNA MONITORING SCHEDULE



Appendix C Central Yard
Monitoring Well Construction Summary Table
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

LOCATION ID	WELL COMPLETION DATE	NORTHING	EASTING	YARD	LNAPL AREA	GW ZONE	TOTAL DEPTH OF WELL	CASING DIAMETER	CASING MATERIAL	SCREEN START DEPTH (ft. bgs.)	SCREEN END DEPTH (ft. bgs.)	SCREEN LENGTH (ft.)	TOP OF INNER CASING ELEV. (ft. amsl.)	GROUND ELEVATION (ft amsl)	NJDEP WELL PERMIT NO.	Well Status
MW-0054R	10/20/2016	620292.4	556643.3	Central Yard	AOC 25	Shallow	14	2	Sch 40 PVC	4.4	16.4	12	30.4	28	E201611220	Current
MW-0055R	10/20/2016	620249.4	556655.4	Central Yard	AOC 25	Shallow	14	2	SCh 40 PVC	5.03	17.03	12	30.73	27.7	E201611221	Current
MW-0056R	11/1/2016	620197.1	556669.1	Central Yard	AOC 25	Shallow	14	2	Sch 40 PVC	4.98	16.98	12	30.98	28	E201612671	Current
MW-102R	8/6/2019	618888.5	557276.9	Central Yard	AOC 22	Shallow	13	2	Sch 40 PVC	2.63	12.63	10	32.83	33.2	E201908023	Current
MW-103	7/9/2002	620113.2	557476.5	Central Yard	SWMU 14	Shallow	11.5	4	Sch 40 PVC	3.72	13.72	10	29.12	26.9	2600065056	Current
MW-147	8/21/2002	620033.3	556564.3	Central Yard	PAOC 74	Shallow	14	4	Sch 40 PVC	6.37	16.37	10	30.87	28.5	2600065052	Current
MW-185	1/7/2004	618591.7	557361.2	Central Yard	AOC 36	Deep	39	4	Sch 40 PVC	33.66	38.66	5	33.66	34	2600069916	Current
MW-188	6/4/2004	618673.1	557521.5	Off Site	AOC 36	Shallow	26	2	Sch 40 PVC	20.25	25.25	5	33.49	34.24	2600070076	Current
MW-190	6/8/2004	620504.42	556564.46	Central Yard	PAOC 74	Shallow	14	4	Sch 40 PVC	6.55	16.55	10	21.35	18.8	2600070299	Current
MW-216	2/24/2005	618780.7	557451.9	Central Yard	AOC 36	Deep	25.5	2	Sch 40 PVC	14.96	24.96	10	32.76	33.3	2600073829	Current
MW-217	3/14/2005	618684	557425.9	Central Yard	AOC 36	Shallow	23	2	Sch 40 PVC	12.63	22.63	10	33.38	33.75	2600073830	Current
MW-219R	9/22/2014	618728.7	557191.5	Central Yard	AOC 36	Shallow	21	2	Sch 40 PVC	18.36	23.36	5	30.46	28.1	E201412226	Current
MW-221	1/7/2006	618662.3	557588.4	Off Site	AOC 36	Shallow	15	2	Sch 40 PVC	9.77	14.77	5	23.73	23.96	2600077400	Current
MW-222	1/7/2006	618604.3	557679.1	Off Site	AOC 36	Shallow	15	2	Sch 40 PVC	9.57	14.57	5	22.67	23.1	2600077401	Current
MW-230	5/2/2006	618920.6	557205	Central Yard	AOC 36	Shallow	10	2	Sch 40 PVC	7.33	12.33	5	36.43	34.1	2600078721	Current
MW-362	4/18/2013	619567.5	556653.8	Central Yard	PAOC 27	Shallow	22	2	Sch 40 PVC	11.66	21.66	10	35.16	35.5	E201304761	Current
MW-368	5/6/2013	618799.2	557459.3	Central Yard	AOC 36	Shallow	24	2	Sch 40 PVC	13.76	23.76	10	33.06	33.3	E201305815	Current
MW-369	5/10/2013	618815.6	557434	Central Yard	AOC 36	Shallow	19	2	Sch 40 PVC	13.58	18.58	5	32.86	34.2	E201305816	Current
MW-371	5/16/2013	618557.5	557396.7	Central Yard	AOC 36	Deep	50	2	Sch 40 PVC	44.58	49.58	5	33.28	33.7	E201305818	Current
MW-372R	10/9/2014	618555	557412.1	Central Yard	AOC 36	Shallow	27	2	Sch 40 PVC	21.59	26.59	5	31.19	31.6	E201412228	Current
MW-418	4/24/2015	619839.5	556705	Central Yard	PAOC 82	Shallow	14	2	Sch 40 PVC	10.63	15.63	5	33.33	30.7	E201503057	Current
MW-434R	3/30/2017	620061.3	558059.1	Central Yard	SWMU 11B	Shallow	12	2	Sch 40 PVC	1.53	11.53	10	17.43	17.9	E201702422	Current
MW-435R	4/14/2017	620037.6	558080.6	Central Yard	SWMU 11B	Shallow	12	2	Sch 40 PVC	1.53	11.53	10	17.13	17.6	E201702423	Current
MW-436R	4/13/2017	620001.2	558019.3	Central Yard	SWMU 11B	Shallow	10	2	Sch 40 PVC	0.56	9.56	9	18.46	18.9	E201702424	Current
MW-438	9/3/2015	620083.1	558097.1	Central Yard	SWMU 11B	Shallow	9	2	Sch 40 PVC	0.76	8.76	8	16.76	17	E201510011	Current
MW-439	9/4/2015	620043.6	558001.2	Central Yard	SWMU 11B	Shallow	9	2	Sch 40 PVC	0.74	8.74	8	18.84	19.1	E201510012	Current
MW-440	9/3/2015	619959	557981.7	Central Yard	SWMU 11B	Shallow	10	2	Sch 40 PVC	0.61	9.61	9	19.91	20.3	E201510013	Current
MW-441R	4/13/2017	619991.2	558049.9	Central Yard	SWMU 11B	Shallow	9	2	Sch 40 PVC	0.59	8.59	8	18.09	18.5	E201702425	Current
MW-509	9/23/2016	619989.3	557992.5	SSPL	SWMU 11B	Shallow	10	2	Sch 40 PVC	1.21	9.71	8.5	19.41	19.7	E201610829	Current
MW-519	7/25/2017	618968	557456.1	Central Yard	AOC 36	Deep	25	2	Sch 40 PVC	19.74	24.74	5	33.84	34.1	E201708004	Current
MW-532	12/6/2017	618803.2	557394.9	Central Yard	AOC 36	Deep	30	2	Sch 40 PVC	19.72	29.72	10	32.22	32.5	E201713042	Current
MW-533	12/11/2017	618816	557224.6	Central Yard	AOC 36	Deep	25	2	Sch 40 PVC	14.68	24.68	10	31.18	31.5	E201713039	Current
TP2-018R	4/14/2017	620024.5	558058	SSPL	SSPL	Shallow	16	2	Sch 40 PVC	5.56	15.56	10	17.76	18.2	E201702426	Current

Notes:
LNAPL = light non-aqueous phase liquid
GW = groundwater
Sch 40 PVC = schedule 40 polyvinyl chloride
ft. bgs. = feet below ground surface
ft. amsl. = feet above mean sea level
NJDEP = New Jersey Department of Environmental Protections

Appendix C Main Yard
Monitoring Well Construction Summary Table
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

LOCATION ID	WELL COMPLETION DATE	NORTHING	EASTING	YARD	LNAPL AREA	GW ZONE	TOTAL DEPTH OF WELL	CASING DIAMETER	CASING MATERIAL	SCREEN START DEPTH (ft. bgs.)	SCREEN END DEPTH (ft. bgs.)	SCREEN LENGTH (ft.)	TOP OF INNER CASING ELEV. (ft. amsl.)	GROUND ELEVATION (ft. amsl.)	NJDEP WELL PERMIT NO.	Well Status
MW-0034	3/18/1997	621554.4	557994	Main Yard	SWMU 7, SWMU 40, PAOC 21	Shallow	8	4	Sch 40 PVC	5.4	10.4	5	10.3	7.9	2600046957	Current
MW-0059	2/23/2000	622613.92	556996.15	Main Yard	SWMU 43	Shallow	14	4	Sch 40 PVC	3.8	16.8	13	15	12.2	26-56504	Current
MW-0067	3/1/2000	622400.77	557056.18	Main Yard	SWMU 43	Shallow	11	4	Sch 40 PVC	3.38	13.38	10	13.28	10.9	26-56718	Current
MW-13	10/15/1991	622794.89	555818.96	Main Yard	AOC 7, SWMU 39	Shallow	12	4	Sch 40 PVC	4.33	14.33	10	14.53	12.2	2600027061	Current
MW-21	2/20/1992	622633.18	555896.57	Main Yard	SWMU 39	Shallow	16	4	Sch 40 PVC	11.31	1.31	10	17.31	15	2600028417	Current
MW-114	7/17/2002	622313.4	555978.1	Main Yard	SWMU 28, SWMU 30	Shallow	12	-	Sch 40 PVC	1.73	11.73	10	13.89	-	2600065071	Current
MW-121R	3/27/2017	622765.6	556082.5	Main Yard	SWMU39/AOC5	Shallow	11	2	SCh 40 PVC	0.73	10.73	10	15.23	15.5	E201702926	Current
MW-128	7/30/2002	621054.1	557555	Main Yard	AOC 8-NF 6	Shallow	12	4	Sch 40 PVC	4.53	14.53	10	15.33	12.8	26-65044	Current
MW-133	8/28/2002	620809.2	557413.2	Main Yard	AOC 19	Shallow	14	4	Sch 40 PVC	3.7	13.7	10	12.42	12.72	2600065047	Current
MW-134	8/16/2002	620775.4	558140.5	East Yard	AOC 21	Shallow	11.5	4	Sch 40 PVC	4.55	14.55	10	14.55	11.5	26-65087	Current
MW-135	8/16/2002	620780.2	558288.9	Main Yard	AOC 21	Shallow	13	4	Sch 40 PVC	5.24	15.24	10	10.94	8.7	2600065088	Current
MW-136	8/19/2002	622177.5	557604.7	Main Yard	SWMU 41	Shallow	11	4	Sch 40 PVC	3.31	13.31	10	8.11	5.8	26-65073	Current
MW-164	1/29/2003	622899.8	555973.7	Main Yard	SWMU 39	Shallow	12	4	Sch 40 PVC	4.64	14.64	10	12.44	9.8	2600066686	Current
MW-199	10/7/2004	622697.352	557026.816	Main Yard	SMWU 2	Shallow	14.5	4	Stainless Steel	7	17	10	14.23	11.73	2600072393	Current
MW-201	10/6/2004	622723.445	557260.292	Main Yard	SWMU 2	Shallow	10.5	4	Stainless Steel	5	13.5	8.5	13.83	10.83	2600072394	Current
MW-203	11/4/2004	622636.523	557358.193	Main Yard	SWMU 2	Shallow	11.5	4	Stainless Steel	4	14	10	13.68	11.18	2600072395	Current
MW-205	10/11/2004	622340.473	557180.904	Main Yard	SWMU 2	Shallow	9	4	Stainless Steel	5.5	11	5.5	13.8	11.8	2600072396	Current
MW-207	11/9/2004	622440.6	557046.2	Main Yard	SWMU 2, SWMU 43	Shallow	12	4	Stainless Steel	7.04	14.04	7.5	15.24	12.7	2600072397	Current
MW-234RR	8/10/2017	622341.1	556339.8	North Field	AOC 44	Shallow	8	2	Sch 40 PVC	4.23	10.73	6.5	12.63	9.9	E201708801	Current
MW-281	12/18/2007	620718.7	557930.2	Main Yard	AOC 8-NF 6	Shallow	12	4	Sch 40 PVC	1.67	11.67	12	12.48	12.81	2600085806	Current
MW-314	6/23/2010	621446.2	556407.6	Main Yard	PAOC 86	Shallow	12	2	Sch 40 PVC	13.04	18.04	5	13.74	14	E201006106	Current
MW-354	4/1/2013	621907.4	556040	Main Yard	PAOC 37	Shallow	15	2	Sch 40 PVC	7.7	17.7	10	18.8	16.1	E201303728	Current
MW-358	3/28/2013	620613.2	556410.7	Main Yard	PAOC 77	Shallow	10	2	Sch 40 PVC	5.85	12.85	7	16.85	14	E201303732	Current
MW-374	8/20/2013	622219.6	557038.7	Main Yard	PAOC 46	Shallow	10	2	Sch 40 PVC	5.53	12.53	7	8.53	6	E201311797	Current
MW-376	8/23/2013	621989.8	556717.2	Main Yard	PAOC 33	Shallow	13	2	Sch 40 PVC	5.15	15.15	10	11.05	8.9	E201311819	Current
MW-378	9/24/2013	622122	556196.7	Main Yard	PAOC 41	Shallow	10	2	Sch 40 PVC	5.79	15.79	10	17.49	15.2	E201311821	Current
MW-380	8/28/2013	621651.1	556835	Main Yard	PAOC 44	Shallow	13	2	Sch 40 PVC	2.59	12.59	10	12.49	12.9	E201311823	Current
MW-395	9/27/2013	622193.3	557188.4	Main Yard	PAOC 46	Shallow	13	2	Sch 40 PVC	5.48	15.48	10	8.18	5.7	E201313921	Current
MW-402	3/11/2014	622643.4	556361.3	Main Yard	CAMU	Shallow	20	2	Sch 40 PVC	5.02	20.02	15	15.92	15.9	E201402494	Current
MW-404R	3/31/2017	622783.4	556019.5	Main Yard	SWMU 39	Shallow	12	2	Sch 40 PVC	1.58	11.58	10	15.08	15.5	E201703191	Current
MW-405	5/8/2014	622319.8	557028.3	Main Yard	SWMU 20	Shallow	13	2	Sch 40 PVC	2.61	12.61	10	9.51	9.9	E201404234	Current
MW-406	5/9/2014	622668.6	555952.3	Main Yard	SWMU 39	Shallow	14	2	Sch 40 PVC	3.46	13.46	10	15.06	15.6	E201405638	Current
MW-407	5/16/2014	622606.5	555975.6	Main Yard	SWMU 39	Shallow	12.5	2	Sch 40 PVC	2.12	12.12	10	15.52	15.9	E201405804	Current
MW-419	9/9/2015	621128.4	557839.1	Main Yard	AOC 8	Shallow	13.5	2	Sch 40 PVC	3.14	13.14	10	9.24	9.6	E201508637	Current
MW-421	8/21/2015	621116.7	557617.6	Main Yard	AOC 8	Shallow	14	2	Sch 40 PVC	3.74	13.74	10	12.04	12.3	E201507033	Current
MW-422	8/19/2015	621192.1	557587.7	Main Yard	AOC 8	Shallow	13	2	Sch 40 PVC	2.7	12.7	10	12.5	12.8	E201507034	Current
MW-423	8/20/2015	621258.9	557695.6	Main Yard	AOC 8	Shallow	13	2	Sch 40 PVC	2.64	12.64	10	8.84	9.2	E201508639	Current
MW-424	7/28/2015	622102.6	557013.7	Main Yard	SWMU 20	Shallow	5.5	2	Sch 40 PVC	3.59	8.09	4.5	8.99	6.4	E201503442	Current
MW-433R	10/28/2016	622185.6	556760.5	Main Yard	SWMU 20	Shallow	9.5	2	Sch 40 PVC	3.79	11.79	8	9.79	7.5	E201610292	Current
MW-466	10/28/2015	621053.1	557634.1	Main Yard	AOC 8	Shallow	15	2	Sch 40 PVC	4.63	14.63	10	12.23	12.6	E201512279	Current
MW-474	11/10/2015	622580.9	556549.5	Main Yard	CAMU	Shallow	10	2	Sch 40 PVC	5.27	13.27	8	13.77	10.5	E201513186	Current
MW-489	3/24/2016	622035.2	556904.2	Main Yard	AOC 9a	Shallow	7	2	Sch 40 PVC	4.73	9.73	5	10.23	7.5	E201602408	Current
MW-5	9/23/1991	621262.4	557945.96	Main Yard	PAOC 94	Shallow	10	4	Sch 40 PVC	2	10	8	29.53	28.4	2600026765	Current
MW-521	9/18/2017	620779.4	558203.4	Main Yard	AOC 50	Shallow	10	2	Sch 40 PVC	1.67	9.67	8	10.17	10.5	E201709399	Current
P-1	9/20/1991	621796.7	557180.3	Main Yard	PAOC 6	Shallow	13	2	Sch 40 PVC	4.7	14.7	5	10.56	7.86	2600072721	Current

Notes:
LNAPL = light non-aqueous phase liquid
GW = groundwater
Sch 40 PVC = schedule 40 polyvinyl chloride
ft. bgs. = feet below ground surface
ft. amsl. = feet above mean sea level
NJDEP = New Jersey Department of Environmental Protections

Appendix C East Yard
Monitoring Well Construction Summary Table
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

LOCATION ID	WELL COMPLETION DATE	NORTHING	EASTING	YARD	LNAPL AREA	GW ZONE	TOTAL DEPTH OF WELL	CASING DIAMETER	CASING MATERIAL	SCREEN START DEPTH (ft. bgs.)	SCREEN END DEPTH (ft. bgs.)	SCREEN LENGTH (ft.)	TOP OF INNER CASING ELEV. (ft. amsl.)	GROUND ELEVATION (ft amsl)	NJDEP WELL PERMIT NO.	Well Status
MW-0043	2/6/1998	620750	558467.8	East Yard	PAOC 72	Shallow	12	4	Sch 40 PVC	4.54	14.54	10	11.04	8.5	26-49829	Current
MW-14	10/9/1991	619532.64	558166.79	East Yard	PAOC 47	Shallow	13	4	Sch 40 PVC	2.06	12.06	10	20.92	21.36	26-27062	Current
MW-131R	5/10/2016	620148.6	558823.5	East Yard	SWMU 10	Shallow	12	2	Sch 40 PVC	4.99	14.99	10	15.89	12.9	E201604895	Current
MW-144	8/20/2002	619947.5	560284.7	East Yard	AOC 14	Shallow	14	4	Sch 40 PVC	3.61	13.61	10	9.81	10.2	26-65070	Current
MW-148	8/21/2002	620450.4	559046.4	East Yard	AOC 35	Shallow	14	4	Sch 40 PVC	6.89	16.89	10	14.59	11.7	26-65061	Current
MW-149	8/20/2002	619744.5	560327.4	East Yard	EY4b	Shallow	13	4	Sch 40 PVC	2.57	12.57	10	10.31	10.74	26-65063	Current
MW-153	8/26/2002	619535.8	558892.1	East Yard	PAOC 55	Shallow	18	4	Sch 40 PVC	5.75	20.75	15	18.65	15.9	26-65082	Current
MW-172	1/30/2003	620501.7	559478.3	East Yard	PAOC 64	Shallow	14.5	4	Sch 40 PVC	4.2	14.2	10	12.39	12.69	26-66694	Current
MW-178	3/17/2003	619889	559595.6	East Yard	PAOC 58, SWMU 9	Deep	25.25	4	Sch 40 PVC	17.63	27.63	10	17.38	15	26-67145	Current
MW-227R	12/15/2014	619868.6	558760.2	East Yard	EY1	Shallow	12	2	Sch 40 PVC	1.18	11.18	10	12.88	13.7	E201416039	Current
MW-229R	12/16/2014	619889.3	558865.7	East Yard	PAOC 65	Shallow	12	2	Sch 40 PVC	1.61	11.61	10	13.01	13.4	E201416040	Current
MW-253	12/8/2006	620017.7	560326.3	East Yard	SWMU 3	Shallow	9.5	2	Sch 40 PVC	4.11	9.11	5	9.75	10.14	2600081495	Current
MW-256	12/11/2006	619210	560481.3	East Yard	PAOC 1	Shallow	10	2	Sch 40 PVC	7.39	12.39	5	11.09	8.7	2600081498	Current
MW-257	12/11/2006	619002	560509.2	East Yard	AOC 45	Shallow	10	2	Sch 40 PVC	7.54	12.54	5	11.74	9.2	2600081499	Current
MW-282	3/20/2008	620311.7	559734	East Yard	AOC 31	Shallow	12	4	Sch 40 PVC	4.61	14.61	10	13.61	11	2600086799	Current
MW-289	7/15/2008	620325.1	559867.9	East Yard	AOC 31	Shallow	12	4	Sch 40 PVC	4.38	14.38	12	12.28	9.9	2600087570	Current
MW-292R	11/21/2012	620175.2	559735.1	East Yard	AOC 31	Shallow	15.5	2	Stainless Steel	5.15	15.15	10	11.65	12	E201217339	Current
MW-347	3/22/2013	619239.7	560256.3	East Yard	AOC 46	Shallow	13	2	Sch 40 PVC	2.75	12.75	10	10.85	11.1	E201302331	Current
MW-348	7/31/2013	619237.5	560315.4	East Yard	AOC 46	Shallow	13.5	2	Sch 40 PVC	6.17	16.17	10	12.97	10.3	E201308958	Current
MW-381	9/25/2013	620074.9	558977.4	East Yard	PAOC 65	Shallow	13.5	2	Sch 40 PVC	3.01	13.01	10	12.31	12.8	E201311824	Current
MW-386R	5/12/2016	620179.5	558817.3	East Yard	SWMU 10	Shallow	13	2	Sch 40 PVC	2.68	12.68	10	14.18	14.5	E201604892	Current
MW-400	9/30/2016	619629.2	559577.1	East Yard	AOC 38/39	Shallow	7.5	2	Sch 40 PVC	1.19	7.19	6	17.39	17.7	E201610560	Current
MW-401R	10/16/2017	619766.5	559570.6	East Yard	AOC 38/39	Shallow	11	2	Sch 40 PVC	4.41	13.41	9	17.41	15	E201711538	Current
MW-443	9/11/2015	620361	558391	East Yard	AOC 37	Shallow	12.5	2	Sch 40 PVC	2.21	12.21	10	11.41	11.7	E201510129	Current
MW-446R	8/18/2016	620432	558351.2	East Yard	AOC 37	Shallow	9	2	Sch 40 PVC	1.66	8.66	7	9.96	10.3	E201609692	Current
MW-464	9/29/2015	620367.1	558362.6	East Yard	AOC 37	Shallow	10	2	Sch 40 PVC	4.93	12.93	8	13.93	11	E201511203	Current
MW-495	8/17/2016	619912.6	560204.8	East Yard	AOC 14/26	Shallow	14.5	2	Sch 40 PVC	4.2	14.2	10	11.1	11.4	E201608862	Current
MW-496	8/4/2016	619832.1	560128.1	East Yard	AOC 14/26	Shallow	10	2	Sch 40 PVC	1.68	9.68	8	11.88	12.2	E201608863	Current
MW-506	8/26/2016	620210.5	559953	East Yard	AOC 31	Shallow	11	2	Sch 40 PVC	3.51	10.51	7	11.71	12.2	E201609794	Current
MW-512	2/15/2017	619584.1	559488.4	East Yard	AOC 39	Shallow	9	2	Sch 40 PVC	2.19	8.69	6.5	17.19	17.5	E201613440	Current
MW-6	9/26/1991	619241.49	559016.85	East Yard	PAOC 50	Shallow	20	4	Sch 40 PVC	4.77	19.77	15	23.07	23.3	26-26766	Current
RW-61R	12/15/2014	619885.4	558813.5	East Yard	PAOC 65	Shallow	9	2	Sch 40 PVC	0.33	8.33	8	12.93	13.6	E201416038	Current
RW-81	6/1/2001	619650.7	560196.9	East Yard	EY4b	Shallow	12	4	Sch 40 PVC	4.65	14.65	12	15.95	13.3	26-61367	Current
RW-83R	3/1/2018	619801.5	560225	East Yard	AOC 14	Shallow	15	4	Sch 40 PVC	4.27	14.27	10	14.37	11.1	E201801359	Current
P14TP1R	11/5/2015	619606.4	560467.7	East Yard	PAOC 14	Shallow	12	2	Sch 40 PVC	5.24	15.24	10	14.94	11.7	E201512757	Current
P15TP1	11/10/2009	619665.7	560481.5	East Yard	PAOC 15	Shallow	15	1.5	Stainless Steel	4.63	14.63	15	10.4	NA	P200912574	Current
P15TP3	11/17/2009	619670.2	560438.8	East Yard	PAOC 15	Shallow	20	1.5	Stainless Steel	5.6	15.6	16	10.22	NA	P200912576	Current
P15TP4	11/10/2009	619641.9	560418.2	East Yard	PAOC 15	Shallow	15	1.5	Stainless Steel	4.59	14.59	15	9.96	NA	P200912577	Current
P15TP5	11/17/2009	619626.8	560448.9	East Yard	PAOC 15	Shallow	15	1.5	Stainless Steel	4.53	14.53	15	10.86	NA	P200912578	Current

Notes:
LNAPL = light non-aqueous phase liquid
GW = groundwater
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NJDEP = New Jersey Department of Environmental Protections

APPENDIX D

Molecular Biological Data

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SITE LOGIC Report

QuantArray®-Petro Study

Contact: Megan Moeller
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MI Identifier: 116TC

Report Date: 04/18/2022

Project:
Comments:

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The QuantArray®-Petro Approach

Comprehensive evaluation of biodegradation potential at petroleum impacted sites is inherently problematic due to two factors:

(1) Petroleum products are complex mixtures of hundreds of aliphatic, aromatic, cyclic, and heterocyclic compounds.

(2) Even for common classes of contaminants like benzene, toluene, ethylbenzene, and xylenes (BTEX), biodegradation can proceed by a multitude of pathways.

The QuantArray®-Petro has been designed to address both of these issues by providing the simultaneous quantification of the specific functional genes responsible for both aerobic and anaerobic biodegradation of BTEX, PAHs, and a variety of short and long chain alkanes.

Thus, when combined with chemical and geochemical groundwater monitoring programs, the QuantArray®-Petro allows site managers to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of petroleum hydrocarbons through a multitude of aerobic and anaerobic pathways to give a much clearer and comprehensive view of contaminant biodegradation.

The QuantArray®-Petro is used to quantify specific microorganisms and functional genes to evaluate aerobic and anaerobic biodegradation of the following classes of compounds present in petroleum products:

BTEX and MTBE

- Toluene dioxygenase (TOD) and monooxygenase (RMO, RDEG, PHE, TOL) genes for aerobic BTEX biodegradation
- Includes MTBE utilizing strain *Methylibium petroleiphilum* PM1 and TBA monooxygenase
- Benzylsuccinate synthase (BSS) for anaerobic biodegradation of toluene, ethylbenzene, and xylenes
- Benzene carboxylase (ABC) for anaerobic benzene biodegradation]

Naphthalene and PAHs

- Includes two groups of naphthalene dioxygenase genes (NAH, PHN) for aerobic biodegradation
- Naphthylmethylsuccinate synthase (MNSSA) for anaerobic biodegradation of methyl-naphthalenes
- Naphthalene carboxylase (ANC) initiates the only known pathway for anaerobic naphthalene biodegradation

Alkanes/TPH

- The *n*-alkanes are a substantial portion of petroleum products
- The QuantArray®-Petro includes quantification of alkane monooxygenase genes (ALK and ALMA)
- Also includes quantification of alkylsuccinate synthase (assA) genes to evaluate anaerobic biodegradation of alkanes

How do QuantArrays® work?

The QuantArray®-Petro in many respects is a hybrid technology combining the highly parallel detection of microarrays with the accurate and precise quantification provided by qPCR into a single platform. The key to highly parallel qPCR reactions is the nanoliter fluidics platform for low volume, solution phase qPCR reactions.

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How are QuantArray® results reported?

One of the primary advantages of the QuantArray®-Petro is the simultaneous quantification of a broad spectrum of different microorganisms and key functional genes involved in a variety of pathways for hydrocarbon biodegradation. However, highly parallel quantification combined with various metabolic and cometabolic capabilities of different target organisms can complicate data presentation. Therefore, in addition to Summary Tables, QuantArray®-Petro results will be presented as Microbial Population Summary and Comparison Figures to aid in the data interpretation and subsequent evaluation of site management activities.

Types of Tables and Figures:

Microbial Population Summary	Figure presenting the concentrations of QuantArray®-Petro target gene concentrations (e.g. toluene dioxygenase) relative to typically observed values.
Summary Tables	Tables of target population concentrations grouped by biodegradation pathway and contaminant type.
Comparison Figures	Depending on the project, sample results can be presented to compare changes over time or examine differences in microbial populations along a transect of the dissolved plume.

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Results

Table 1: Summary of the QuantArray®-Petro results obtained for samples M230C5, M368D5, M102RB2, and M217E8.

Sample Name Sample Date	M230C5 03/28/2022	M368D5 03/28/2022	M102RB2 03/28/2022	M217E8 03/28/2022
Aerobic BTEX and MTBE	cells/mL	cells/mL	cells/mL	cells/mL
Toluene/Benzene Dioxygenase (TOD)	<4.80E+00	<4.90E+00	<5.00E+00	**1.69E+02**
Phenol Hydroxylase (PHE)	<4.80E+00	**3.17E+02**	**4.83E+02**	**1.64E+02**
Toluene 2 Monooxygenase/Phenol Hydroxylase (RDEG)	<4.80E+00	**1.30E+02**	**2.20E+03**	**7.20E+02**
Toluene Ring Hydroxylating Monooxygenases (RMO)	<4.80E+00	**8.32E+03**	**6.49E+02**	<4.80E+00
Xylene/Toluene Monooxygenase (TOL)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Ethylbenzene/Isopropylbenzene Dioxygenase (EDO)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Biphenyl/Isopropylbenzene Dioxygenase (BPH4)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Methylibium petroleiphilum PM1 (PM1)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
TBA Monooxygenase (TBA)	<4.80E+00	<4.90E+00	<5.00E+00	**3.54E+02**
Aerobic PAHs and Alkanes				
Naphthalene Dioxygenase (NAH)	**8.00E-01 (J)**	<4.90E+00	<5.00E+00	**1.50E+00 (J)**
Naphthalene-inducible Dioxygenase (NidA)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Phenanthrene Dioxygenase (PHN)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Alkane Monooxygenase (ALK)	<4.80E+00	<4.90E+00	<5.00E+00	**1.40E+00 (J)**
Alkane Monooxygenase (ALMA)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Anaerobic BTEX				
Benzoyl Coenzyme A Reductase (BCR)	**1.40E+03**	**1.72E+03**	**2.64E+03**	**1.41E+04**
Benzylsuccinate Synthase (BSS)	<4.80E+00	**7.85E+01**	**6.66E+02**	<4.80E+00
Benzene Carboxylase (ABC)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Anaerobic PAHs and Alkanes				
Naphthylmethylsuccinate Synthase (MNSSA)	<4.80E+00	**7.16E+02**	**7.40E+02**	**9.19E+02**
Naphthalene Carboxylase (ANC)	<4.80E+00	<4.90E+00	**7.03E+01**	<4.80E+00
Alkylsuccinate Synthase (ASSA)	**6.98E+01**	<4.90E+00	**7.70E+00**	**2.35E+01**
Other				
Total Eubacteria (EBAC)	**8.44E+05**	**6.42E+05**	**5.12E+05**	**1.91E+06**
Sulfate Reducing Bacteria (APS)	**2.50E+04**	**1.59E+05**	**4.72E+04**	**2.57E+05**

Legend:

NA = Not Analyzed
NS = Not Sampled
J = Estimated Gene Copies Below PQL but Above LQL
I = Inhibited
< = Result Not Detected

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Table 2: Summary of the QuantArray®-Petro results obtained for samples M533B1, M216G2, M530B1, and M222C3.

Sample Name Sample Date	M533B1 03/29/2022	M216G2 03/29/2022	M530B1 03/29/2022	M222C3 04/04/2022
Aerobic BTEX and MTBE	cells/mL	cells/mL	cells/mL	cells/mL
Toluene/Benzene Dioxygenase (TOD)	**1.92E+01**	<4.80E+00	<2.50E+02	<5.00E+00
Phenol Hydroxylase (PHE)	**2.97E+01**	**4.30E+04**	<2.50E+02	<5.00E+00
Toluene 2 Monooxygenase/Phenol Hydroxylase (RDEG)	**3.10E+02**	**7.46E+03**	<2.50E+02	<5.00E+00
Toluene Ring Hydroxylating Monooxygenases (RMO)	**3.01E+03**	**7.11E+04**	<2.50E+02	<5.00E+00
Xylene/Toluene Monooxygenase (TOL)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Ethylbenzene/Isopropylbenzene Dioxygenase (EDO)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Biphenyl/Isopropylbenzene Dioxygenase (BPH4)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Methylibium petroleiphilum PM1 (PM1)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
TBA Monooxygenase (TBA)	<4.80E+00	**9.10E+01**	<2.50E+02	<5.00E+00
Aerobic PAHs and Alkanes				
Naphthalene Dioxygenase (NAH)	<4.80E+00	**1.40E+00 (J)**	<2.50E+02	<5.00E+00
Naphthalene-inducible Dioxygenase (NidA)	**2.43E+02**	**1.11E+03**	<2.50E+02	<5.00E+00
Phenanthrene Dioxygenase (PHN)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Alkane Monooxygenase (ALK)	**1.80E+01**	<4.80E+00	<2.50E+02	<5.00E+00
Alkane Monooxygenase (ALMA)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Anaerobic BTEX				
Benzoyl Coenzyme A Reductase (BCR)	**7.72E+03**	**9.12E+03**	<2.50E+02	**7.27E+02**
Benzylsuccinate Synthase (BSS)	**2.35E+02**	**1.44E+03**	<2.50E+02	**1.74E+02**
Benzene Carboxylase (ABC)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Anaerobic PAHs and Alkanes				
Naphthylmethylsuccinate Synthase (MNSSA)	<4.80E+00	**3.65E+03**	<2.50E+02	<5.00E+00
Naphthalene Carboxylase (ANC)	<4.80E+00	**1.26E+02**	<2.50E+02	<5.00E+00
Alkylsuccinate Synthase (ASSA)	**3.25E+01**	**1.50E+00 (J)**	<2.50E+02	<5.00E+00
Other				
Total Eubacteria (EBAC)	**3.46E+06**	**7.36E+06**	**2.63E+04**	**5.47E+04**
Sulfate Reducing Bacteria (APS)	**2.07E+05**	**1.14E+06**	<2.50E+02	**6.99E+03**

Legend:

NA = Not Analyzed
NS = Not Sampled
J = Estimated Gene Copies Below PQL but Above LQL
I = Inhibited
< = Result Not Detected

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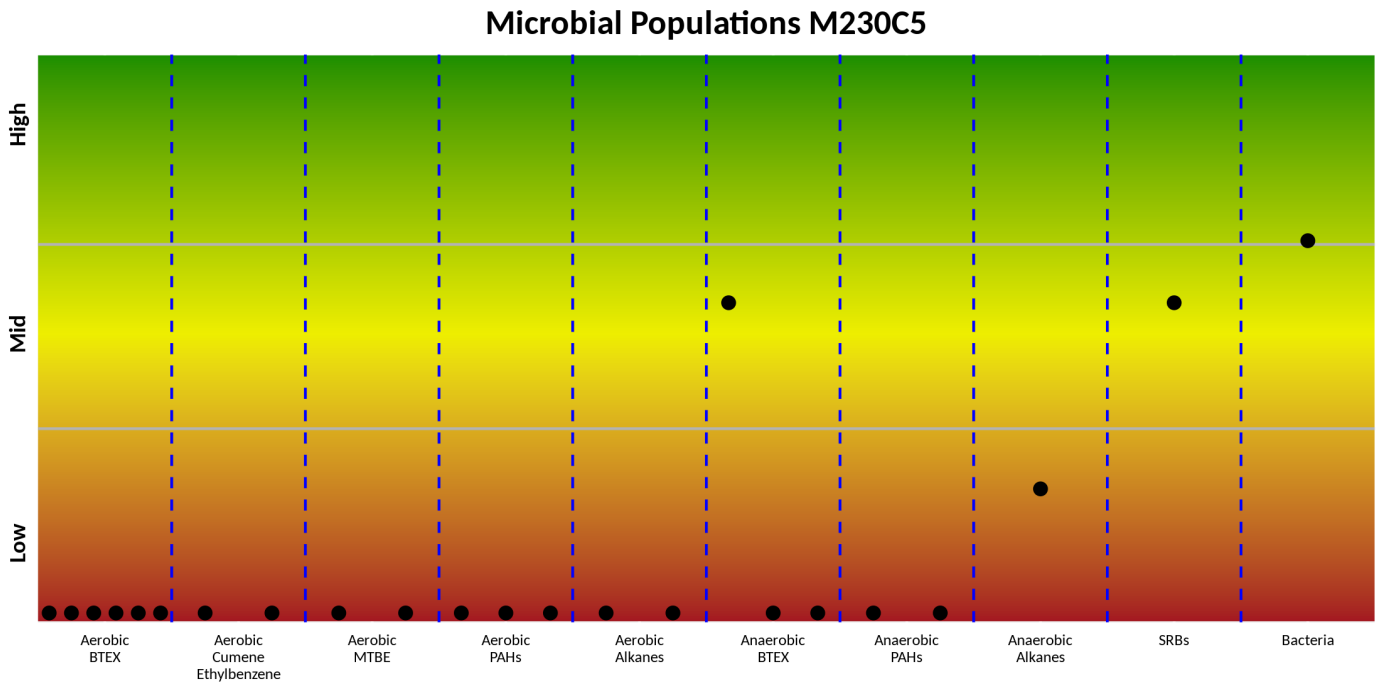

Figure 1: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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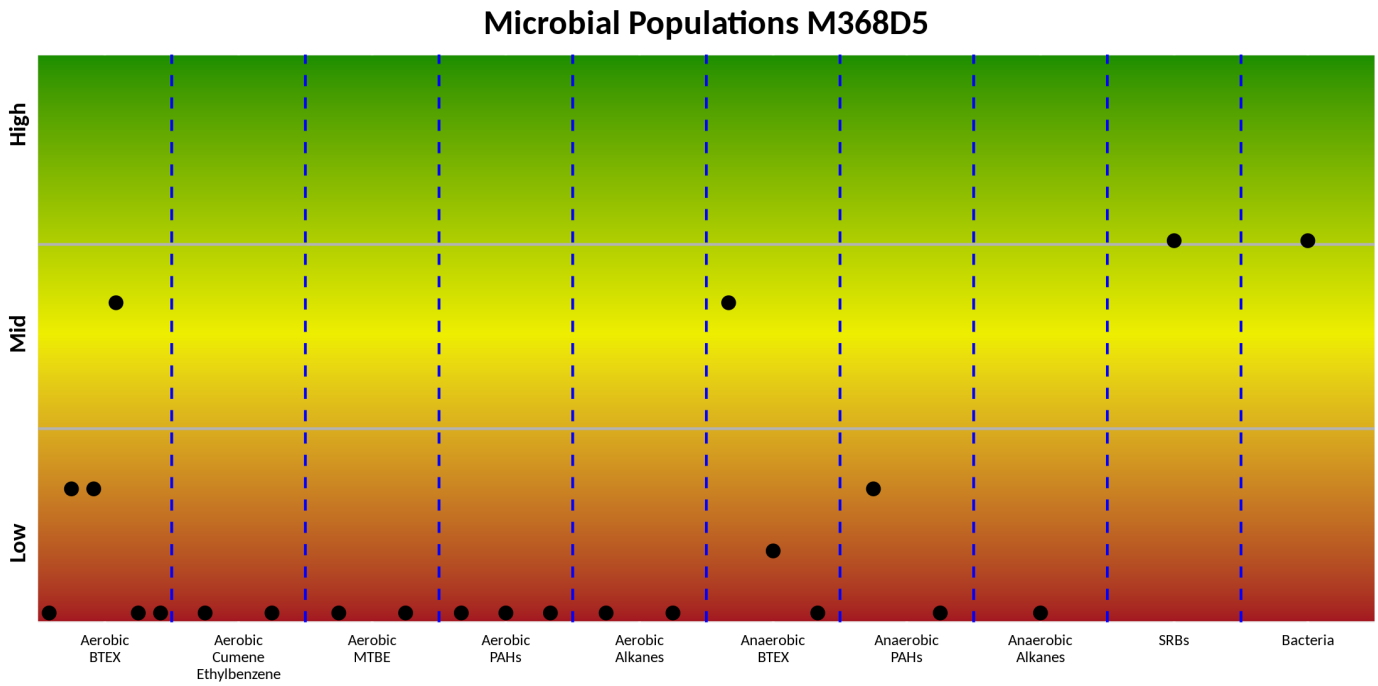

Figure 2: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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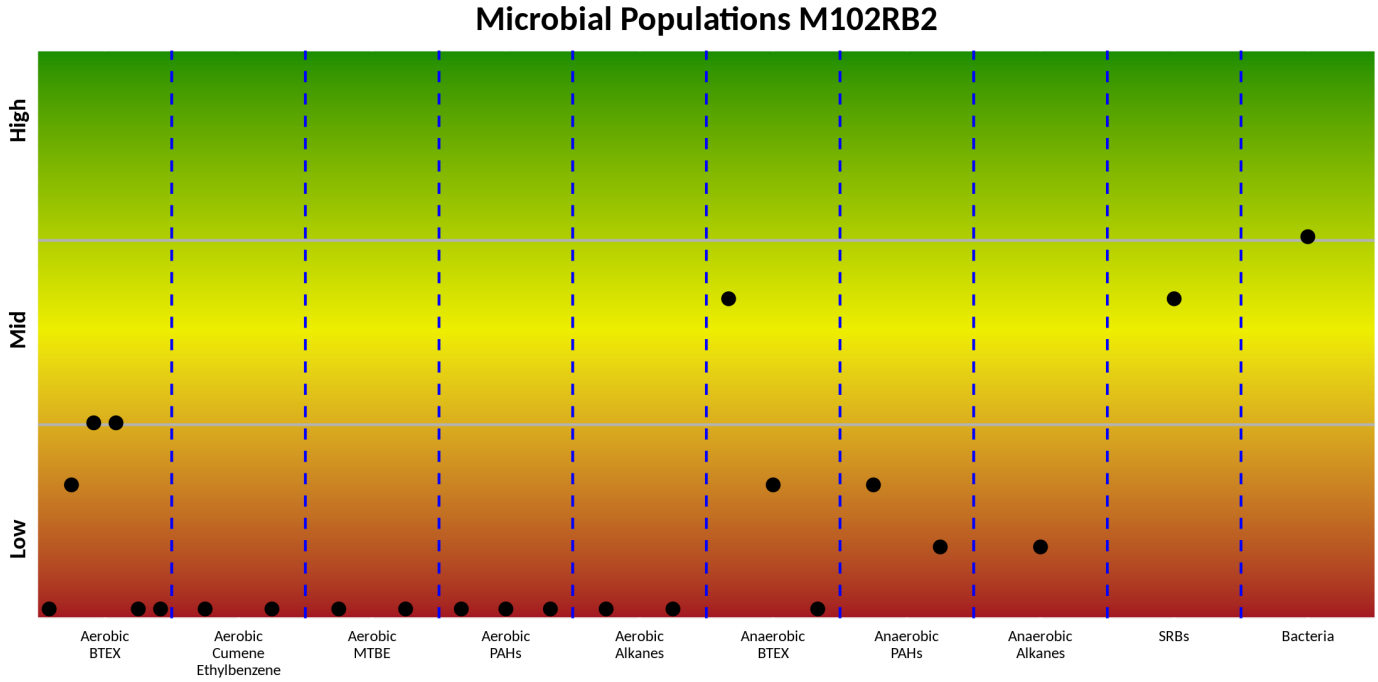

Figure 3: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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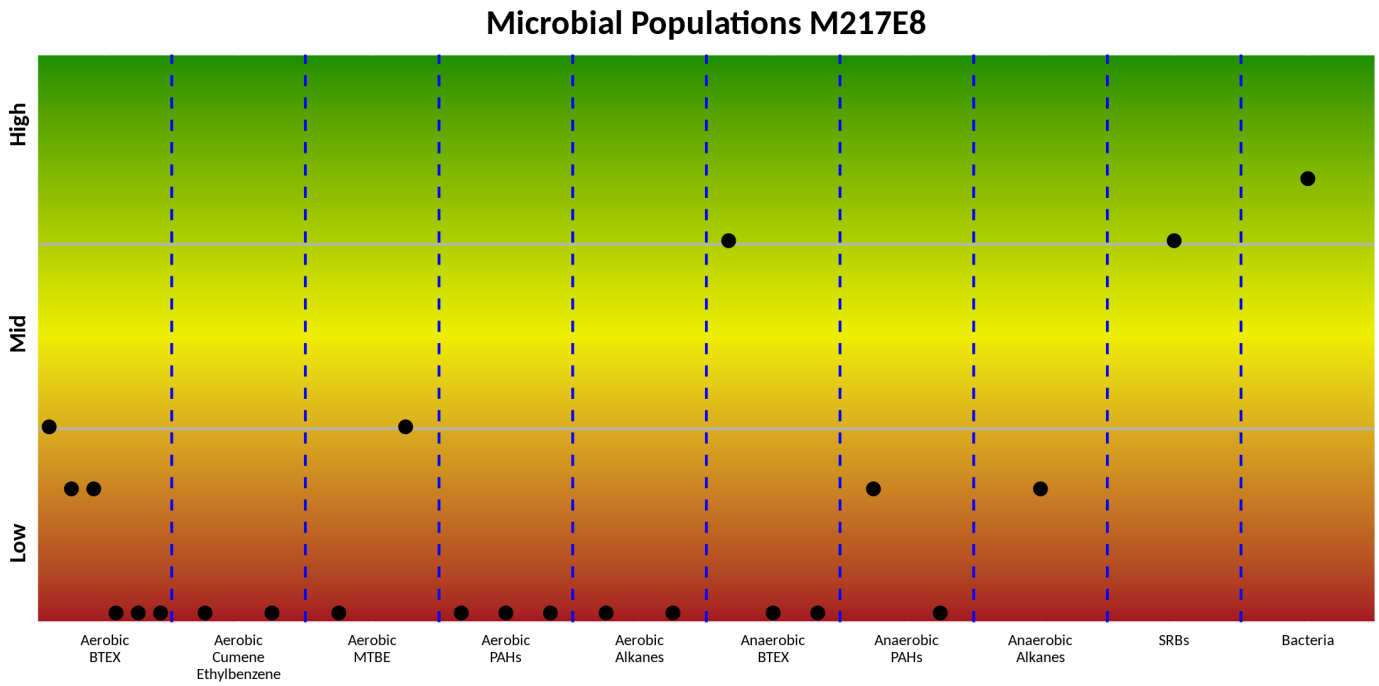

Figure 4: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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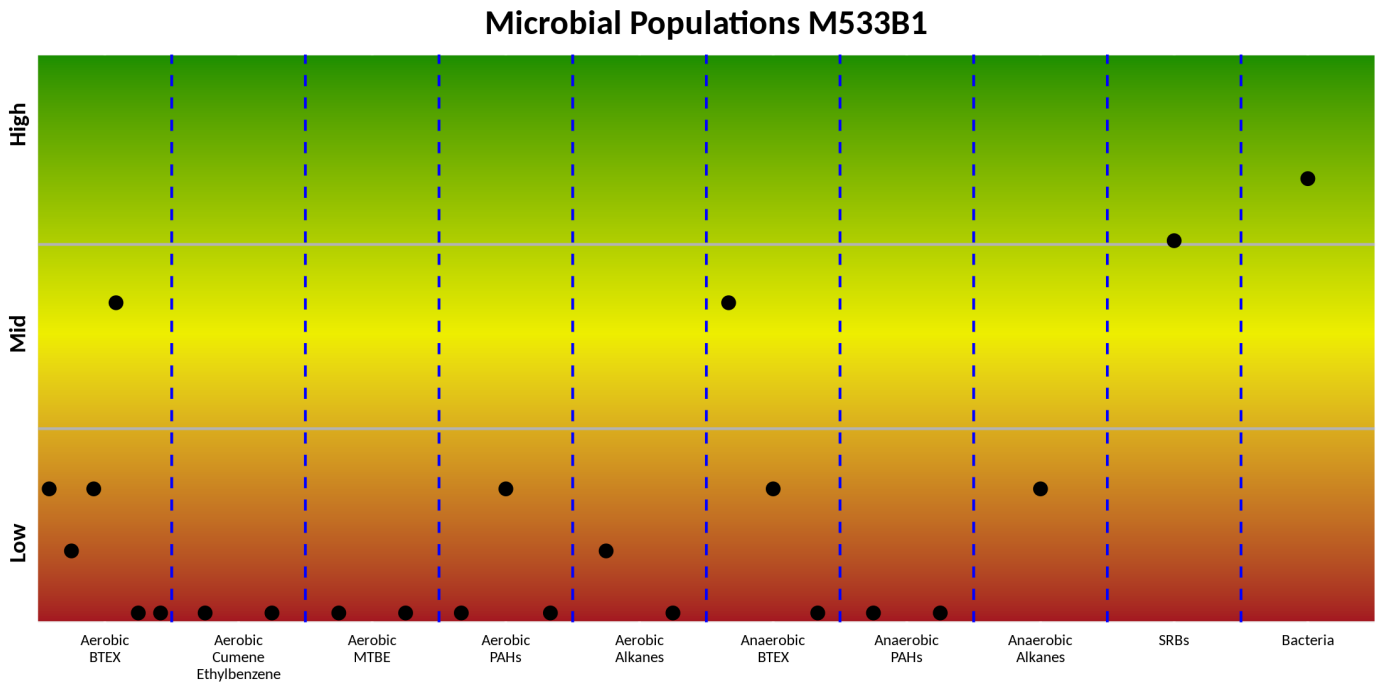

Figure 5: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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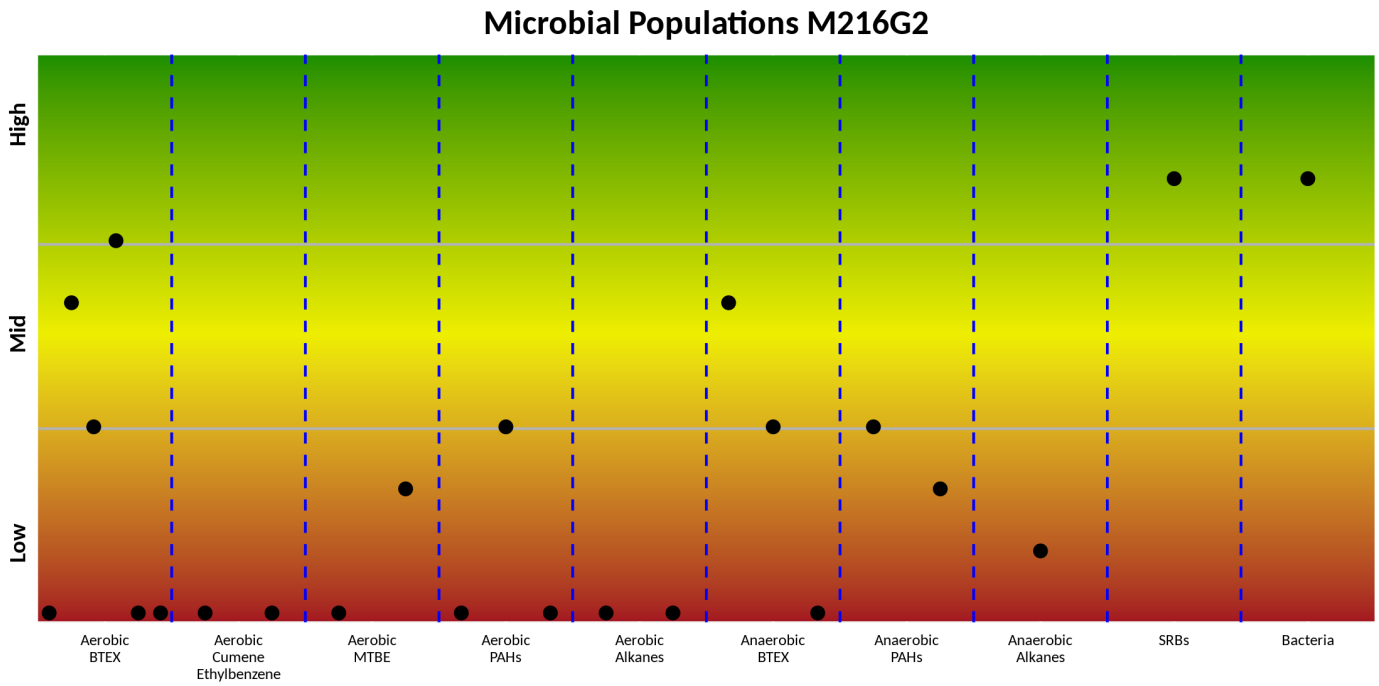

Figure 6: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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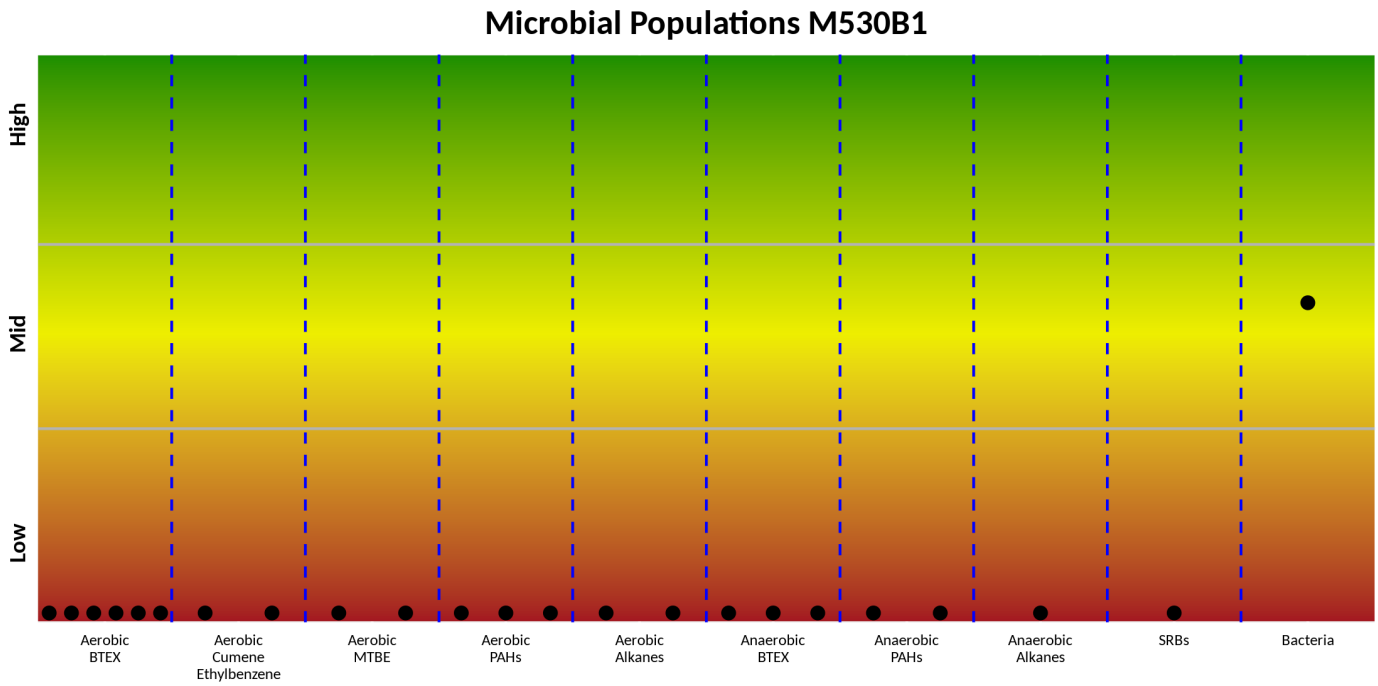

Figure 7: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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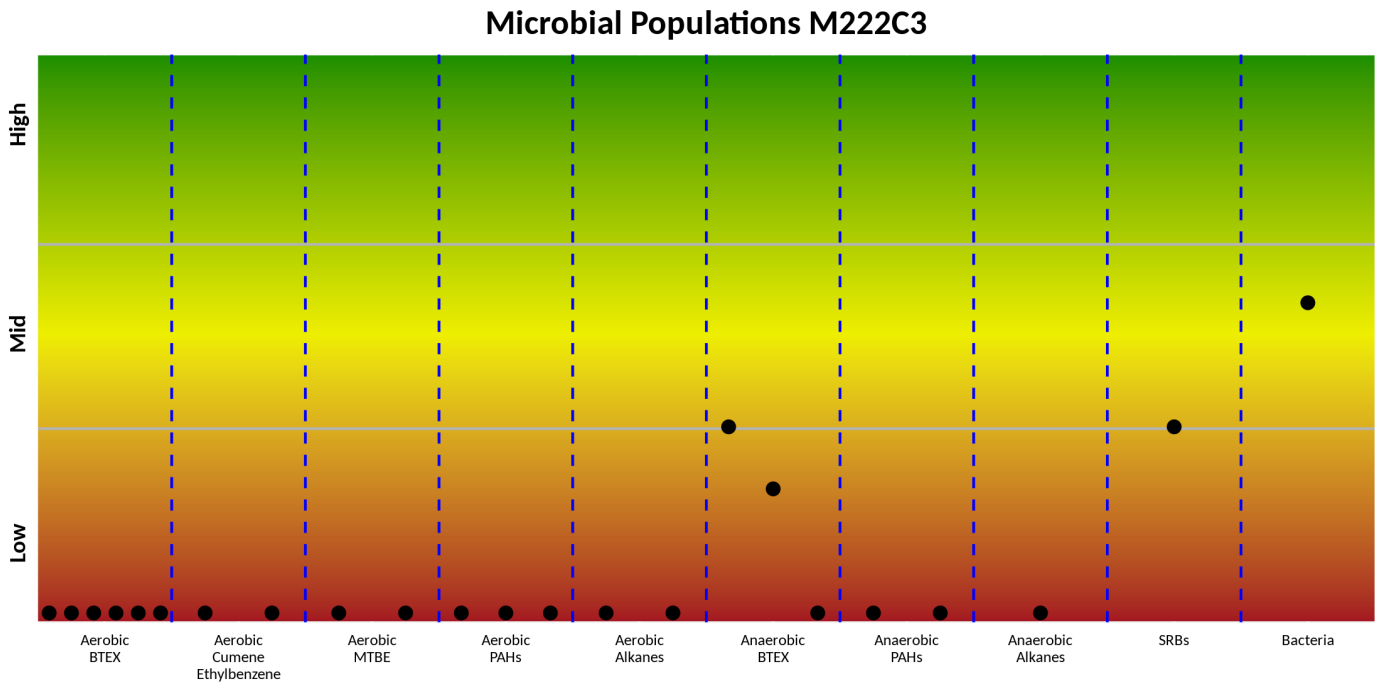

Figure 8: Microbial population summary to aid in evaluating potential pathways and biodegradation of specific contaminants.

Aerobic		Anaerobic	
BTEX	TOD, PHE, RDEG, RMO, TOL, EDO	BTEX	BCR, BSS, ABC
Cumene, Ethylbenzene	EDO, BPH4	Naphthalene/Methylnaphthalene	MNSSA, ANC
MTBE/TBA	PM1, TBA	Alkanes	assA
Naphthalene	NAH, NidA		
Phenanthrene	PHN		
Alkanes	ALK, ALMA		

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Table 3: Summary of the QuantArray®-Petro results for microorganisms responsible for aerobic biodegradation of BTEX and MTBE for samples M230C5, M368D5, M102RB2, and M217E8.

Sample Name Sample Date	M230C5 03/28/2022	M368D5 03/28/2022	M102RB2 03/28/2022	M217E8 03/28/2022
Aerobic BTEX and MTBE	cells/mL	cells/mL	cells/mL	cells/mL
Toluene/Benzene Dioxygenase (TOD)	<4.80E+00	<4.90E+00	<5.00E+00	**1.69E+02**
Phenol Hydroxylase (PHE)	<4.80E+00	**3.17E+02**	**4.83E+02**	**1.64E+02**
Toluene 2 Monooxygenase/Phenol Hydroxylase (RDEG)	<4.80E+00	**1.30E+02**	**2.20E+03**	**7.20E+02**
Toluene Ring Hydroxylating Monooxygenases (RMO)	<4.80E+00	**8.32E+03**	**6.49E+02**	<4.80E+00
Xylene/Toluene Monooxygenase (TOL)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Ethylbenzene/Isopropylbenzene Dioxygenase (EDO)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Biphenyl/Isopropylbenzene Dioxygenase (BPH4)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Methylibium petroleiphilum PM1 (PM1)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
TBA Monooxygenase (TBA)	<4.80E+00	<4.90E+00	<5.00E+00	**3.54E+02**

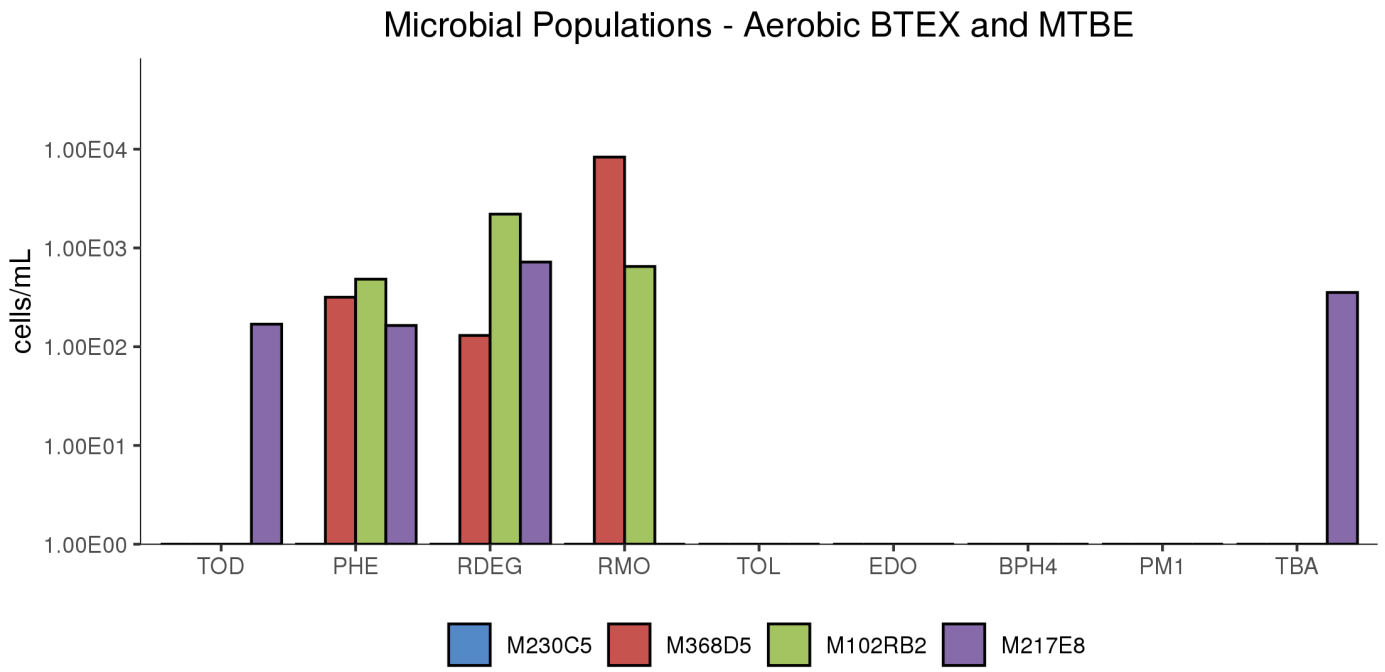

Figure 9: Comparison - microbial populations involved in aerobic biodegradation of BTEX and MTBE.

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Table 4: Summary of the QuantArray®-Petro results for microorganisms responsible for aerobic biodegradation of BTEX and MTBE for samples M533B1, M216G2, M530B1, and M222C3.

Sample Name Sample Date	M533B1 03/29/2022	M216G2 03/29/2022	M530B1 03/29/2022	M222C3 04/04/2022
Aerobic BTEX and MTBE	cells/mL	cells/mL	cells/mL	cells/mL
Toluene/Benzene Dioxygenase (TOD)	**1.92E+01**	<4.80E+00	<2.50E+02	<5.00E+00
Phenol Hydroxylase (PHE)	**2.97E+01**	**4.30E+04**	<2.50E+02	<5.00E+00
Toluene 2 Monooxygenase/Phenol Hydroxylase (RDEG)	**3.10E+02**	**7.46E+03**	<2.50E+02	<5.00E+00
Toluene Ring Hydroxylating Monooxygenases (RMO)	**3.01E+03**	**7.11E+04**	<2.50E+02	<5.00E+00
Xylene/Toluene Monooxygenase (TOL)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Ethylbenzene/Isopropylbenzene Dioxygenase (EDO)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Biphenyl/Isopropylbenzene Dioxygenase (BPH4)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Methylibium petroleiphilum PM1 (PM1)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
TBA Monooxygenase (TBA)	<4.80E+00	**9.10E+01**	<2.50E+02	<5.00E+00

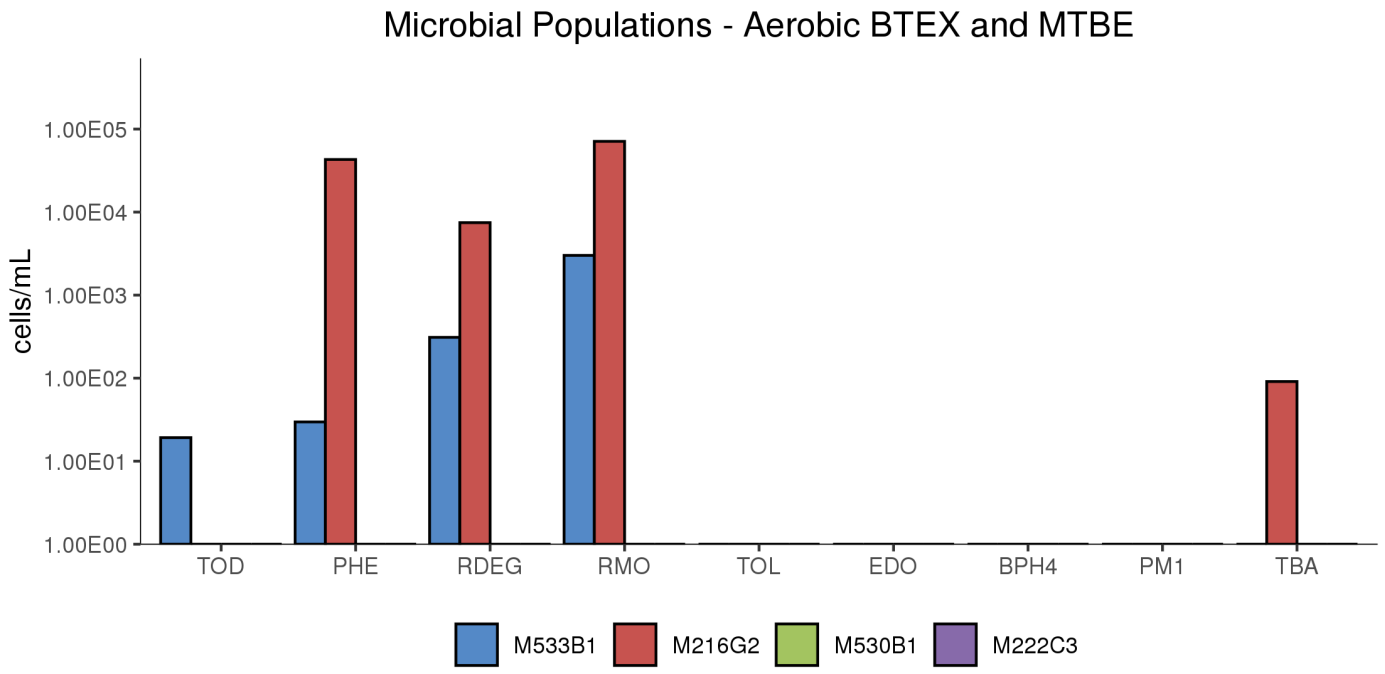

Figure 10: Comparison - microbial populations involved in aerobic biodegradation of BTEX and MTBE.

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Table 5: Summary of the QuantArray®-Petro results for microorganisms responsible for aerobic biodegradation of PAHs and alkanes for samples M230C5, M368D5, M102RB2, and M217E8.

Sample Name Sample Date	M230C5 03/28/2022	M368D5 03/28/2022	M102RB2 03/28/2022	M217E8 03/28/2022
Aerobic PAHs and Alkanes	cells/mL	cells/mL	cells/mL	cells/mL
Naphthalene Dioxygenase (NAH)	**8.00E-01 (J)**	<4.90E+00	<5.00E+00	**1.50E+00 (J)**
Naphthalene-inducible Dioxygenase (NidA)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Phenanthrene Dioxygenase (PHN)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Alkane Monooxygenase (ALK)	<4.80E+00	<4.90E+00	<5.00E+00	**1.40E+00 (J)**
Alkane Monooxygenase (ALMA)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00

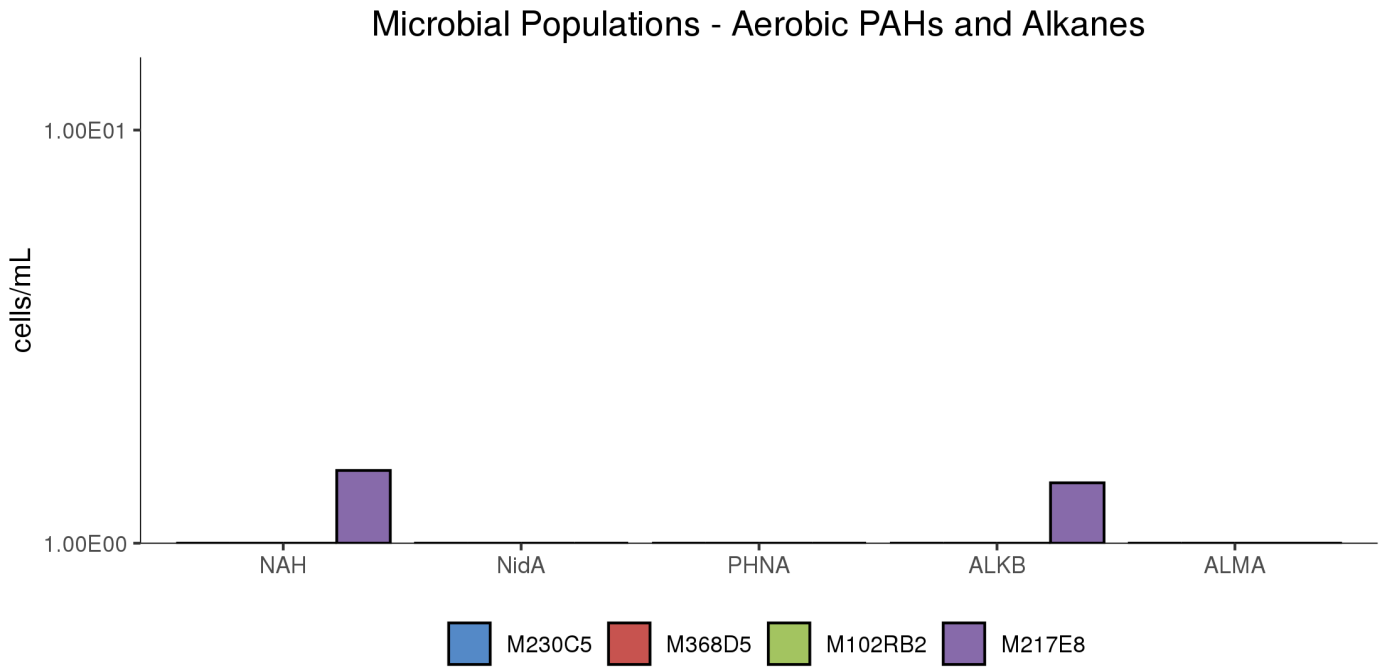

Figure 11: Comparison - microbial populations involved in aerobic biodegradation of PAHs and alkanes.

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Table 6: Summary of the QuantArray®-Petro results for microorganisms responsible for aerobic biodegradation of PAHs and alkanes for samples M533B1, M216G2, M530B1, and M222C3.

Sample Name Sample Date	M533B1 03/29/2022	M216G2 03/29/2022	M530B1 03/29/2022	M222C3 04/04/2022
Aerobic PAHs and Alkanes	cells/mL	cells/mL	cells/mL	cells/mL
Naphthalene Dioxygenase (NAH)	<4.80E+00	**1.40E+00 (J)**	<2.50E+02	<5.00E+00
Naphthalene-inducible Dioxygenase (NidA)	**2.43E+02**	**1.11E+03**	<2.50E+02	<5.00E+00
Phenanthrene Dioxygenase (PHN)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Alkane Monooxygenase (ALK)	**1.80E+01**	<4.80E+00	<2.50E+02	<5.00E+00
Alkane Monooxygenase (ALMA)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00

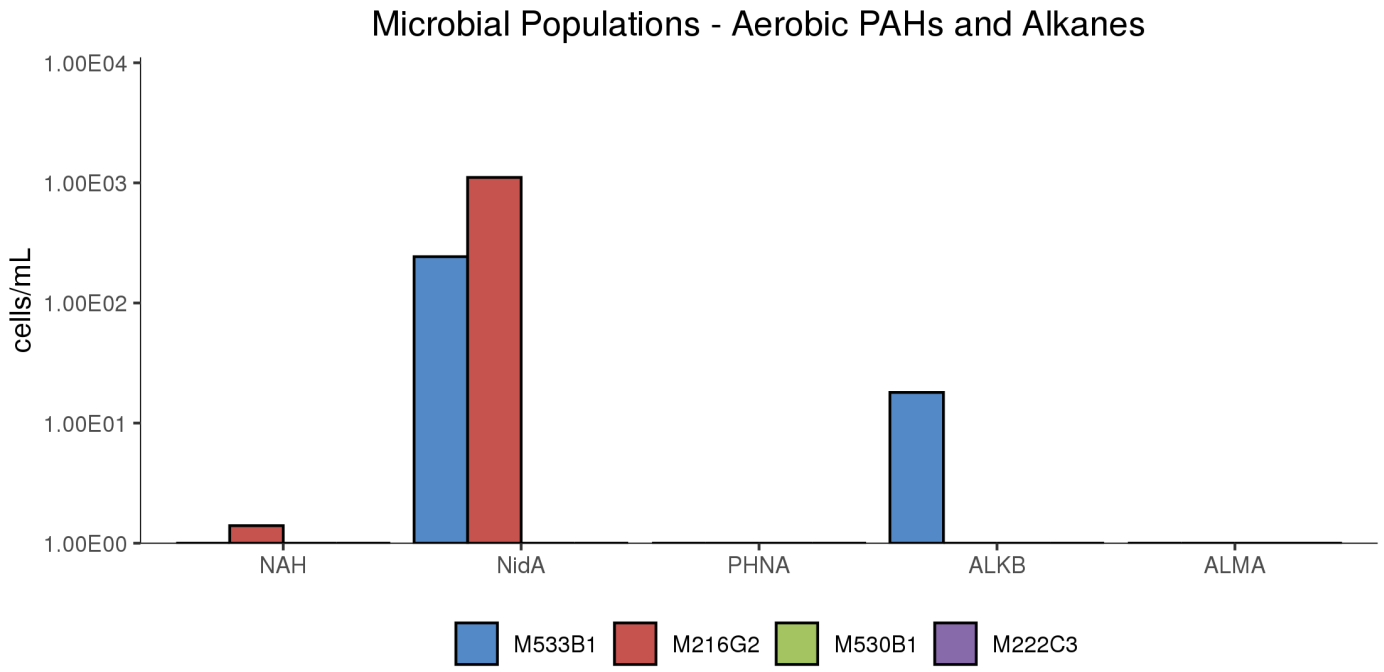

Figure 12: Comparison - microbial populations involved in aerobic biodegradation of PAHs and alkanes.

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Table 7: Summary of the QuantArray®-Petro results for microorganisms responsible for anaerobic biodegradation of BTEX, PAHs and alkanes for samples M230C5, M368D5, M102RB2, and M217E8.

Sample Name Sample Date	M230C5 03/28/2022	M368D5 03/28/2022	M102RB2 03/28/2022	M217E8 03/28/2022
Anaerobic BTEX	cells/mL	cells/mL	cells/mL	cells/mL
Benzoyl Coenzyme A Reductase (BCR)	**1.40E+03**	**1.72E+03**	**2.64E+03**	**1.41E+04**
Benzylsuccinate Synthase (BSS)	<4.80E+00	**7.85E+01**	**6.66E+02**	<4.80E+00
Benzene Carboxylase (ABC)	<4.80E+00	<4.90E+00	<5.00E+00	<4.80E+00
Anaerobic PAHs and Alkanes				
Naphthylmethylsuccinate Synthase (MNSSA)	<4.80E+00	**7.16E+02**	**7.40E+02**	**9.19E+02**
Naphthalene Carboxylase (ANC)	<4.80E+00	<4.90E+00	**7.03E+01**	<4.80E+00
Alkylsuccinate Synthase (ASS)	**6.98E+01**	<4.90E+00	**7.70E+00**	**2.35E+01**

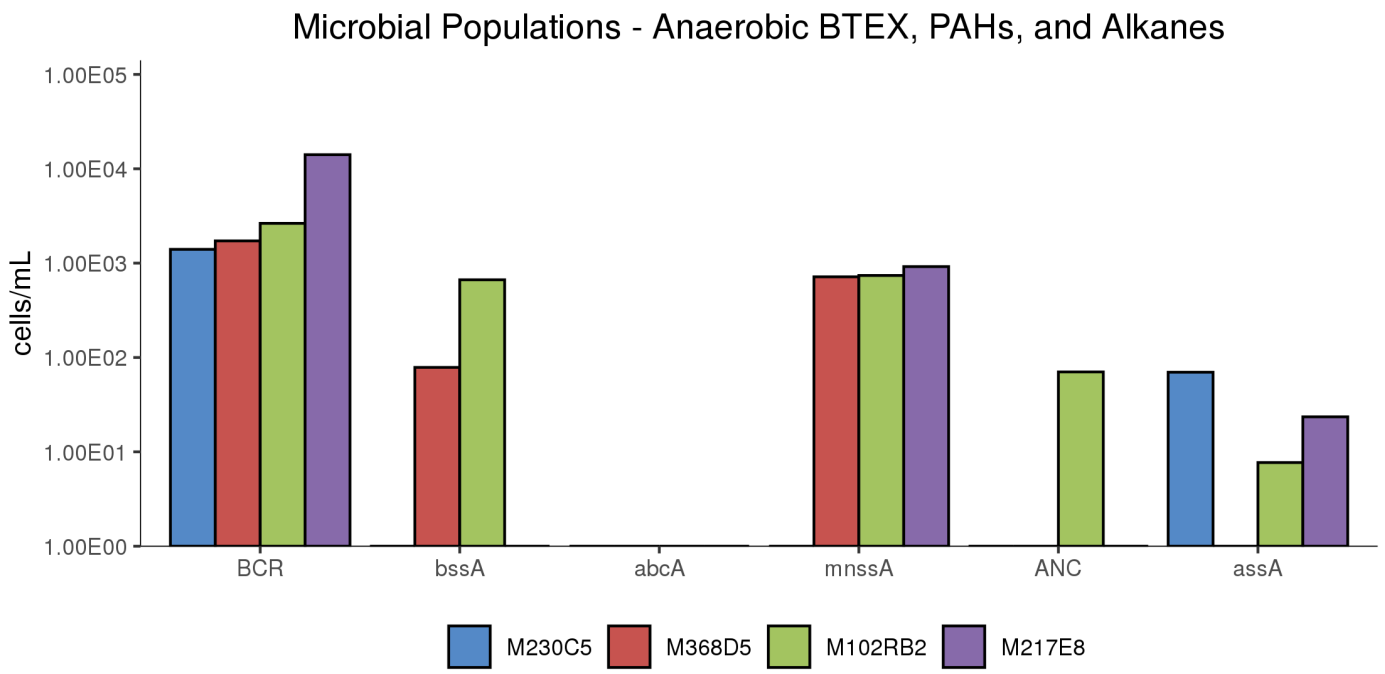

Figure 13: Comparison - microbial populations involved in anaerobic biodegradation of BTEX, PAHs and alkanes.

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Table 8: Summary of the QuantArray®-Petro results for microorganisms responsible for anaerobic biodegradation of BTEX, PAHs and alkanes for samples M533B1, M216G2, M530B1, and M222C3.

Sample Name Sample Date	M533B1 03/29/2022	M216G2 03/29/2022	M530B1 03/29/2022	M222C3 04/04/2022
Anaerobic BTEX	cells/mL	cells/mL	cells/mL	cells/mL
Benzoyl Coenzyme A Reductase (BCR)	**7.72E+03**	**9.12E+03**	<2.50E+02	**7.27E+02**
Benzylsuccinate Synthase (BSS)	**2.35E+02**	**1.44E+03**	<2.50E+02	**1.74E+02**
Benzene Carboxylase (ABC)	<4.80E+00	<4.80E+00	<2.50E+02	<5.00E+00
Anaerobic PAHs and Alkanes				
Naphthylmethylsuccinate Synthase (MNSSA)	<4.80E+00	**3.65E+03**	<2.50E+02	<5.00E+00
Naphthalene Carboxylase (ANC)	<4.80E+00	**1.26E+02**	<2.50E+02	<5.00E+00
Alkylsuccinate Synthase (ASS)	**3.25E+01**	**1.50E+00 (J)**	<2.50E+02	<5.00E+00

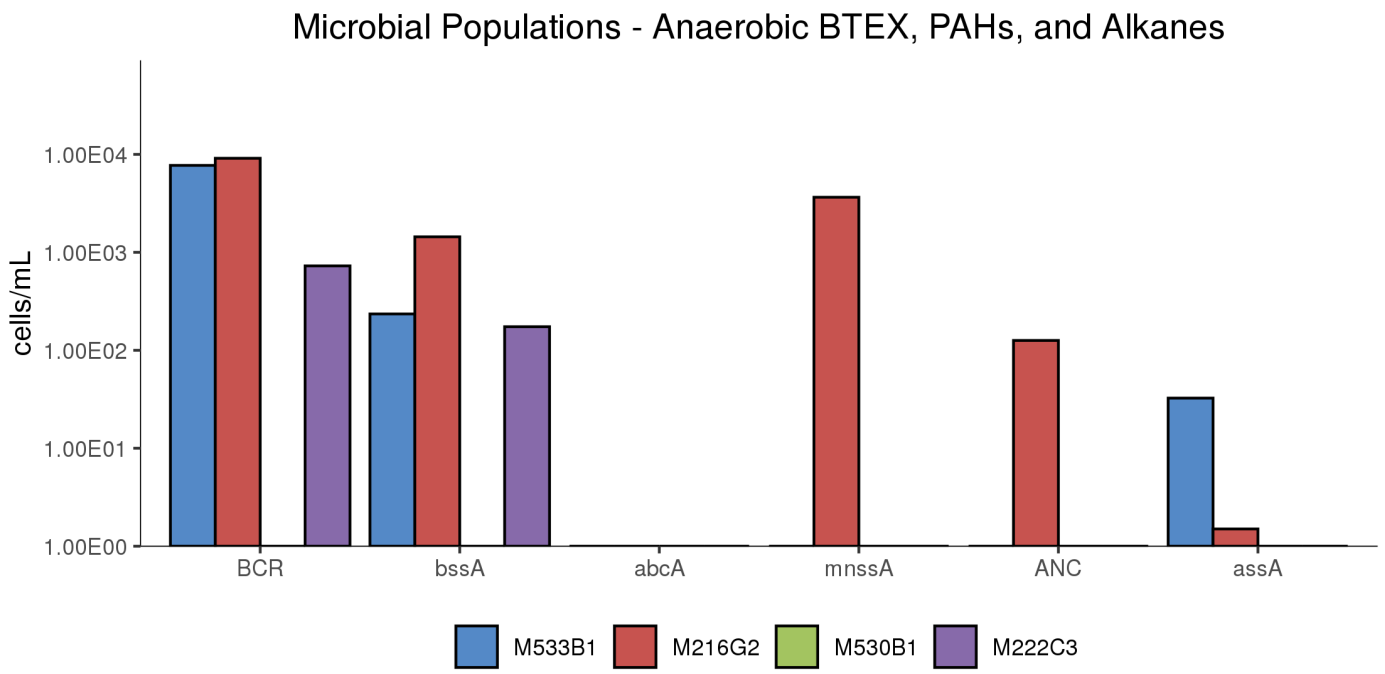

Figure 14: Comparison - microbial populations involved in anaerobic biodegradation of BTEX, PAHs and alkanes.

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microbialinsights

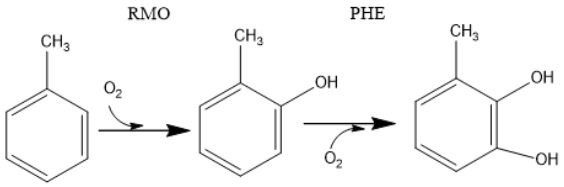
Interpretation

The overall purpose of the QuantArray®-Petro is to give site managers the ability to simultaneously yet economically evaluate the potential for biodegradation of a spectrum of contaminants found in petroleum products through a multitude of aerobic and anaerobic pathways to give a much more clear and comprehensive view of contaminant biodegradation. The following discussion describes interpretation of results in general terms and is meant to serve as a guide.

Aerobic Biodegradation - Benzene Toluene, Ethylbenzene, and Xylenes (BTEX): At sites impacted by petroleum products, aromatic hydrocarbons including BTEX are often contaminants of concern. Aerobic biodegradation of aromatic hydrocarbons has been intensively studied and multiple catabolic pathways have been well characterized. The substrate specificity of each pathway (range of compounds biodegraded via each pathway) is largely determined by the specificity of the initial oxygenase enzyme. The QuantArray®-Petro includes a suite of assays targeting the initial oxygenase genes of the known pathways for aerobic BTEX biodegradation.

Toluene/Benzene Dioxygenase (TOD): Toluene/benzene dioxygenase (TOD) incorporates both atoms of molecular oxygen into the aromatic ring. Although commonly called toluene dioxygenase, the substrate specificity of this enzyme is relaxed, allowing growth on toluene and benzene along with co-oxidation of a variety of compounds including ethylbenzene, *o*-xylene, *m*-xylene, and trichloroethene (TCE) when expressed.

Toluene/Benzene Monooxygenases (RMO/RDEG) and Phenol Hydroxylases (PHE): The next three known pathways for aerobic biodegradation of toluene (as well as benzene and xylenes) involve two steps: (1) an initial oxidation mediated by a toluene monooxygenase and (2) a second oxidation step catalyzed by a phenol hydroxylase. In these pathways, the toluene monooxygenases have been referred to as "ring hydroxylating monooxygenases" because they initiate biodegradation of toluene by incorporating oxygen directly into the aromatic ring rather than at a methyl group. The ring hydroxylating monooxygenases (RMOs) can be further described as toluene-2-monooxygenases, toluene-3-monooxygenases, or toluene-4-monooxygenases based upon where they attack the aromatic ring.



In General, phenol hydroxylases (PHE) catalyze the continued oxidation of phenols produced by RMOs. However, the difference between toluene monooxygenases (RMOs) and phenol hydroxylases (PHEs) is not absolute in terms of substrate specificity and catabolic function. For example, the TbmD toluene/benzene-2-monooxygenase [1] may be responsible for both the initial and second oxidation step [2].

The RMO, RDEG, and PHE assays target groups of genes encoding enzymes which perform the critical first and/or second steps in the aerobic biodegradation of BTEX compounds. In general terms, the RMO assay quantifies families of toluene-3-monooxygenase and toluene-4-monooxygenase genes. The RDEG assay is used to quantify groups of toluene-2-monooxygenase and phenol hydroxylase genes. Similarly, the PHE assay targets phenol hydroxylase genes and several benzene monooxygenase genes which catalyze both oxidation steps.

Toluene/Xylene Monooxygenase (TOL): The final known pathway for aerobic toluene biodegradation involves initial monooxygenase attack at the methyl group by a toluene/xylene monooxygenase.

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Ethylbenzene Dioxygenase (EDO): Similar to TOD, this group of aromatic oxygenases exhibits relatively broad specificity and is responsible for aerobic biodegradation of alkylbenzenes including ethylbenzene and isopropylbenzene or cumene [3].

Biphenyl Dioxygenase (BPH4): In environmental restoration, biphenyl dioxygenases are best known for cometabolism of polychlorinated biphenyls (PCBs). However, this subfamily includes benzene [4] and isopropylbenzene [5] dioxygenases from *Rhodococcus* spp.

Aerobic Biodegradation - MTBE and TBA: With increased use in the 1990s, the fuel oxygenate methyl *tert*-butyl ether (MTBE) has become one of the most commonly detected groundwater contaminants at gasoline contaminated sites. Pure cultures capable of utilizing MTBE as a growth supporting substrate have been isolated [6] and aerobic biodegradation of MTBE and the intermediate *tert*-butyl alcohol (TBA) has been reasonably well characterized. The QuantArray®-Petro includes quantification of two gene targets to assess the potential for aerobic biodegradation of MTBE and TBA.

Methylibium petroleiphilum PM1 (PM1): One of the few organisms isolated to date which is capable of utilizing MTBE and TBA as growth supporting substrates [6].

TBA Monooxygenase (TBA): Targets the TBA monooxygenase gene responsible for oxidation of TBA by *Methylibium petroleiphilum* PM1 [7].

Aerobic Biodegradation - Naphthalene and Other PAHs:

Naphthalene Dioxygenase (NAH): Naphthalene dioxygenase incorporates both atoms of molecular oxygen into naphthalene to initiate aerobic metabolism of the compound. However, the broad substrate specificity of naphthalene dioxygenase has been widely noted. When expressed, naphthalene dioxygenase is capable of catalyzing the oxidation of larger PAHs like anthracene, phenanthrene, acenaphthylene, fluorene, and acenaphthene. For a more comprehensive list of reactions mediated by naphthalene dioxygenases, see the University of Minnesota Biocatalysis/Biodegradation Database. (http://eawag-bbd.ethz.ch/naph/ndo.html, [8]).

Phenanthrene Dioxygenases (PHN): The PHN assays quantify phenanthrene/naphthalene dioxygenase genes from a diverse collection of microorganisms including *Pseudomonas*, *Burkholderia*, *Sphingomonas*, and *Acidovorax* spp. As with other naphthalene dioxygenases, substrate specificity is relatively broad and phenanthrene dioxygenases have been implicated in the biodegradation of naphthalene, phenanthrene, and anthracene and the co-oxidation of larger PAHs. Moreover, at least one research group has suggested that the PHN group of phenanthrene/naphthalene dioxygenases may be more environmentally relevant than the classical *nah*-like naphthalene dioxygenase [9].

Aerobic Biodegradation - *n*-alkanes: The *n*-alkanes are a substantial portion of petroleum products and are a component of TPH concentrations. The QuantArray®-Petro also includes quantification of alkane monooxygenase genes (ALK) which allow a wide range of *Proteobacteria* and *Actinomycetals* to grow on *n*-alkanes with carbon lengths from C_5 to C_{16} [10]. The QuantArray®-Petro also includes a second type of alkane hydroxylase (almA) which catalyzes the aerobic biodegradation of longer chain alkanes (C_{20}-C_{32}) by some *Alcanivorax* spp. considered dominant in marine systems [11].

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Anaerobic Biodegradation - Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX): BTEX compounds are also susceptible to biodegradation under anoxic and anaerobic conditions although biodegradation pathways for each compound are not as well characterized as aerobic pathways. The QuantArray®-Petro includes sets of assays targeting a number of upper and lower pathway functional genes involved in the anaerobic catabolism of BTEX compounds for better evaluation of anaerobic biodegradation at petroleum contaminated sites.

Benzylsuccinate Synthase (BSS): Of the BTEX compounds, toluene biodegradation under anaerobic conditions is the most extensively studied and best characterized. The first step in this pathway, mediated by benzylsuccinate synthase (*bss*A) is the addition of fumarate onto the toluene methyl group to form benzylsuccinate. While additional pathways are possible, some bacterial isolates capable of anaerobic biodegradation of ethylbenzene and xylenes follow the same metabolic approach where the first step is the addition of fumarate.

Anaerobic Benzene Carboxylase (ABC): Although additional pathways are possible, the only pathway for anaerobic biodegradation of benzene elucidated to date is initiated by a benzene carboxylase enzyme.

Benzoyl Coenzyme A Reductase (BCR): Benzoyl-CoA is the central intermediate in the anaerobic biodegradation of many aromatic hydrocarbons. Benzoyl-CoA Reductase (BCR) is the essential enzyme for reducing the benzene ring structure.

Anaerobic Biodegradation - PAHs: The anaerobic biodegradation of PAHs involves analogous mechanisms to those described for anaerobic biodegradation of BTEX compounds. For example, the anaerobic biodegradation of methyl-substituted PAHs like 2-methylnaphthalene is initiated by fumarate addition to the methyl group while the only characterized pathway for anaerobic naphthalene biodegradation is initiated by a carboxylase.

Naphthylmethylsuccinate Synthase (MNSSA): MNSSA is analogous to the benzylsuccinate synthase described above for anaerobic biodegradation of toluene. Naphthylmethylsuccinate synthase catalyzes the addition of fumarate onto the methyl group of 2-methylnaphthalene [12].

Anaerobic Naphthalene Carboxylase (ANC): To date, the only pathway that has been characterized for anaerobic biodegradation of naphthalene is initiated by a naphthalene carboxylase enzyme [13].

Anaerobic Biodegradation - *n*-alkanes: As mentioned previously, the *n*-alkanes are a substantial portion of petroleum products and should be considered particularly when site cleanup goals include TPH reduction. The addition of fumarate is a common mechanism for activating and initiating biodegradation of a variety of petroleum hydrocarbons under anaerobic conditions including *n*-alkanes. The QuantArray®-Petro includes quantification of alkyl succinate synthase genes (assA) which have been characterized in nitrate reducing and sulfate reducing isolates utilizing *n*-alkanes from C_6 to at least C_{18} [14].

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References

1. Johnson, G. R. & Olsen, R. H. Nucleotide sequence analysis of genes encoding a toluene/benzene-2-monooxygenase from *Pseudomonas* sp. strain JS150. *Applied and environmental microbiology* **61,** 3336–3346 (1995).
2. Kahng, H.-Y., Malinverni, J. C., Majko, M. M. & Kukor, J. J. Genetic and functional analysis of the *tbc* operons for catabolism of alkyl-and chloroaromatic compounds in *Burkholderia* sp. strain JS150. *Applied and environmental microbiology* **67,** 4805–4816 (2001).
3. Pflugmacher, U., Averhoff, B. & Gottschalk, G. Cloning, sequencing, and expression of isopropylbenzene degradation genes from *Pseudomonas* sp. strain JR1: identification of isopropylbenzene dioxygenase that mediates trichloroethene oxidation. *Applied and environmental microbiology* **62,** 3967–3977 (1996).
4. Na, K.-s. *et al.* Isolation and characterization of benzene-tolerant *Rhodococcus opacus* strains. *Journal of bioscience and bioengineering* **99,** 378–382 (2005).
5. Dabrock, B., Kesseler, M., Averhoff, B. & Gottschalk, G. Identification and characterization of a transmissible linear plasmid from *Rhodococcus erythropolis* BD2 that encodes isopropylbenzene and trichloroethene catabolism. *Applied and environmental microbiology* **60,** 853–860 (1994).
6. Hanson, J. R., Ackerman, C. E. & Scow, K. M. Biodegradation of methyl tert-butyl ether by a bacterial pure culture. *Applied and Environmental Microbiology* **65,** 4788–4792 (1999).
7. Hristova, K. R. *et al.* Comparative transcriptome analysis of *Methylibium petroleiphilum* PM1 exposed to the fuel oxygenates methyl *tert*-butyl ether and ethanol. *Applied and environmental microbiology* **73,** 7347–7357 (2007).
8. Schmidt, M. *University of Minnesota biocatalysis biodegradation database* 1996.
9. Laurie, A. D. & Lloyd-Jones, G. Quantification of *phnAc* and *nahAc* in contaminated New Zealand soils by competitive PCR. *Applied and environmental microbiology* **66,** 1814–1817 (2000).
10. Wentzel, A., Ellingsen, T. E., Kotlar, H.-K., Zotchev, S. B. & Throne-Holst, M. Bacterial metabolism of long-chain *n*-alkanes. *Applied microbiology and biotechnology* **76,** 1209–1221 (2007).
11. Liu, C. *et al.* Multiple alkane hydroxylase systems in a marine alkane degrader, *Alcanivorax dieselolei* B-5. *Environmental microbiology* **13,** 1168–1178 (2011).
12. Selesi, D. *et al.* Combined genomic and proteomic approaches identify gene clusters involved in anaerobic 2-methylnaphthalene degradation in the sulfate-reducing enrichment culture N47. *Journal of bacteriology* **192,** 295–306 (2010).
13. Mouttaki, H., Johannes, J. & Meckenstock, R. U. Identification of naphthalene carboxylase as a prototype for the anaerobic activation of non-substituted aromatic hydrocarbons. *Environmental microbiology* **14,** 2770–2774 (2012).
14. Callaghan, A. V. *et al.* Diversity of benzyl-and alkylsuccinate synthase genes in hydrocarbon-impacted environments and enrichment cultures. *Environmental science & technology* **44,** 7287–7294 (2010).

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APPENDIX E

Detailed Benzene Evaluation Data

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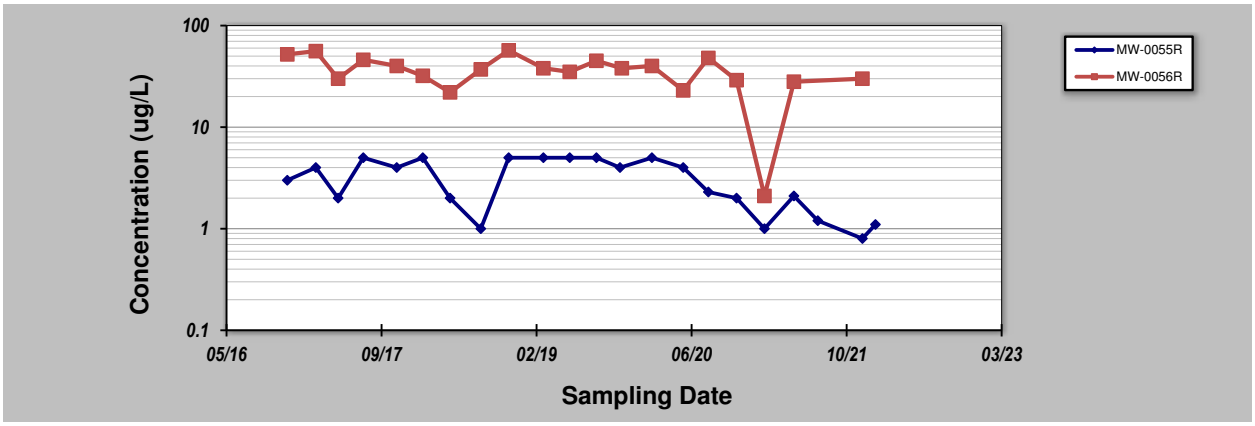
Benzene Concentrations
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
Sampling Point ID:		MW-0055R	MW-0056R					
1	22-Nov-16	3	52					
2	22-Feb-17	4	56					
3	5-May-17	2	30					
4	25-Jul-17	5	46					
5	10-Nov-17	4	40					
6	2-Feb-18	5	32					
7	1-May-18	2	22					
8	8-Aug-18	1	37					
9	6-Nov-18	5	57					
10	26-Feb-19	5	38					
11	22-May-19	5	35					
12	16-Aug-19	5	45					
13	31-Oct-19	4						
14	6-Nov-19		38					
15	11-Feb-20	5	40					
16	22-May-20	4	23					
17	11-Aug-20	2.3	48					
18	10-Nov-20	2	29					
19	8-Feb-21	1	2.1					
20	14-May-21	2.1	28					
21	30-Jul-21	1.2						
22	21-Dec-21	0.8	30					
23	1-Feb-22	1.1						
24								
25								
Coefficient of Variation:		0.51	0.36					
Mann-Kendall Statistic (S):		-74	-59					
Confidence Factor:		98.1%	97.1%					
Concentration Trend:		Decreasing	Decreasing					



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water*, 41(3):355-367, 2003.

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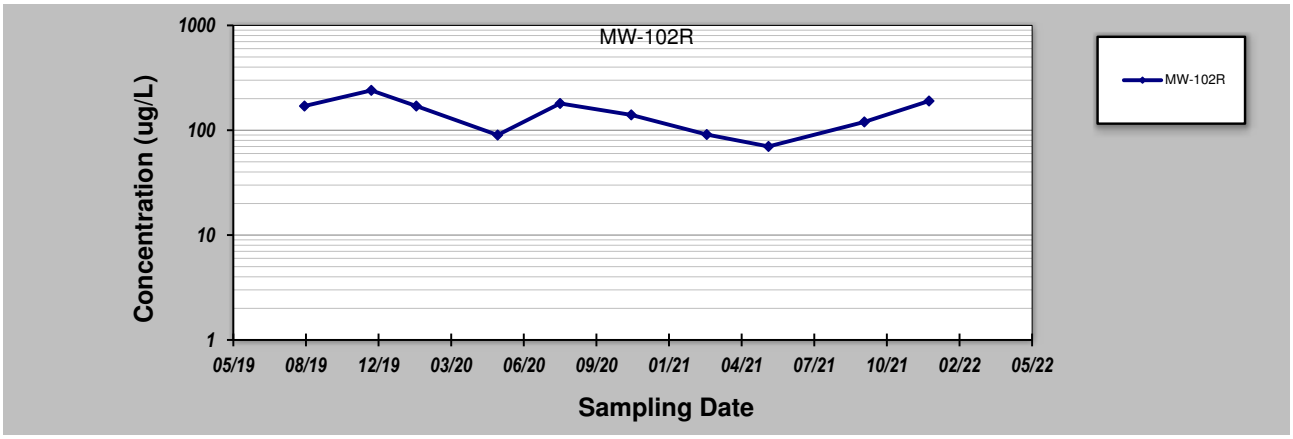
Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-102R						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	21-Aug-19	170					
2	21-Nov-19	240					
3	22-Jan-20	170					
4	13-May-20	90					
5	7-Aug-20	180					
6	13-Nov-20	140					
7	25-Feb-21	91					
8	21-May-21	70					
9	30-Sep-21	120					
10	28-Dec-21	190					
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Coefficient of Variation:		0.37					
Mann-Kendall Statistic (S):		-10					
Confidence Factor:		78.4%					
Concentration Trend:		Stable					



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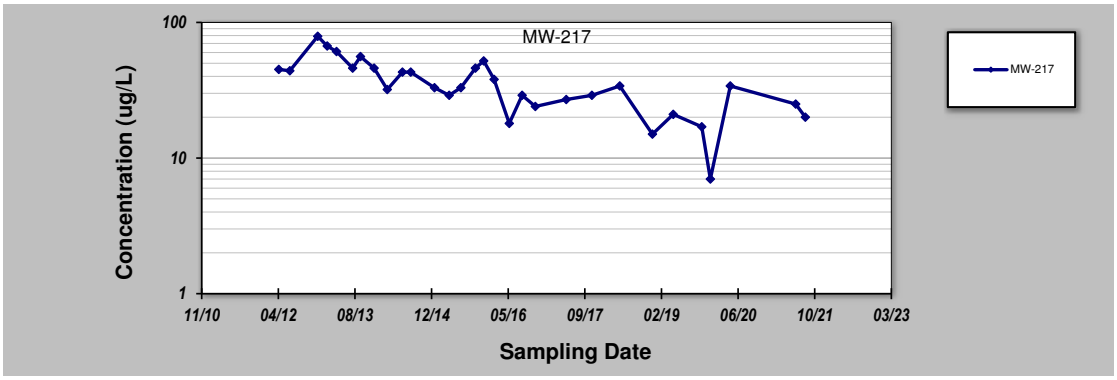
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-217						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	4-Apr-12	45					
2	15-Jun-12	44					
3	14-Dec-12	79					
4	14-Feb-13	67					
5	16-Apr-13	61					
6	30-Jul-13	46					
7	19-Sep-13	56					
8	17-Dec-13	46					
9	13-Mar-14	32					
10	20-Jun-14	43					
11	13-Aug-14	43					
12	15-Jan-15	33					
13	21-Apr-15	29					
14	6-Jul-15	33					
15	9-Oct-15	46					
16	2-Dec-15	52					
17	8-Feb-16	38					
18	17-May-16	18					
19	9-Aug-16	29					
20	3-Nov-16	24					
21	24-May-17	27					
22	7-Nov-17	29					
23	8-May-18	34					
24	7-Dec-18	15					
25	22-Apr-19	21					
26	25-Oct-19	17					
27	20-Dec-19	7					
28	28-Apr-20	34					
29	29-Jun-21	25					
30	31-Aug-21	20					
31							
32							
33							
34							
35							
Coefficient of Variation:		0.44					
Mann-Kendall Statistic (S):		-260					
Confidence Factor:		>99.9%					
Concentration Trend:		Decreasing					



Notes:

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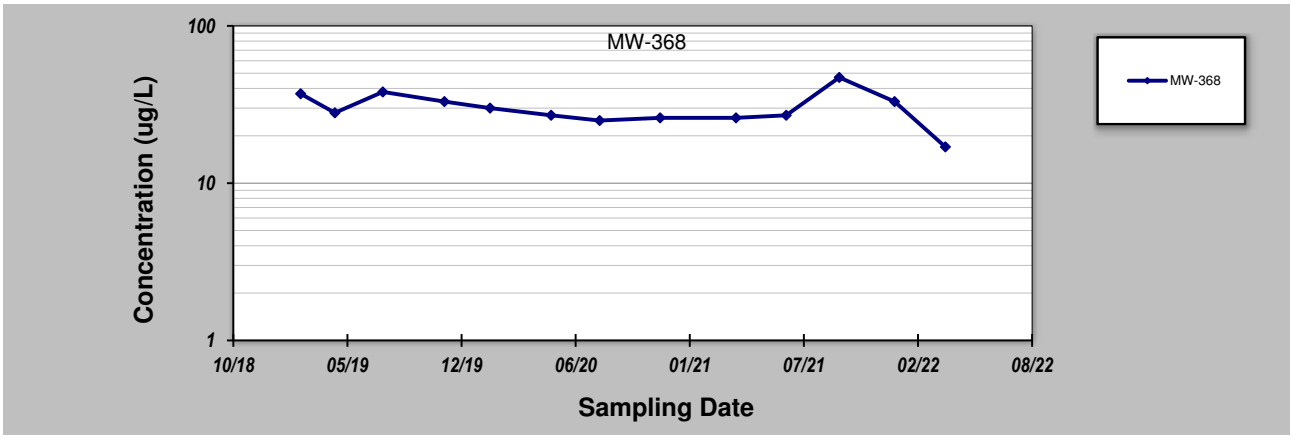
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-368

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	22-Feb-19	37						
2	23-Apr-19	28						
3	16-Jul-19	38						
4	1-Nov-19	33						
5	20-Jan-20	30						
6	6-May-20	27						
7	30-Jul-20	25						
8	13-Nov-20	26						
9	26-Mar-21	26						
10	22-Jun-21	27						
11	23-Sep-21	47						
12	29-Dec-21	33						
13	28-Mar-22	17						
14								
15								
16								
17								
18								
19								
20								
Coefficient of Variation:		0.25						
Mann-Kendall Statistic (S):		-23						
Confidence Factor:		90.8%						
Concentration Trend:		Prob. Decreasing						



Notes:

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for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-533						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	12-Feb-18	32					
2	17-May-18	24					
3	10-Dec-18	17					
4	16-Apr-19	18					
5	25-Oct-19	10					
6	30-Apr-20	8					
7	29-Jun-21	4.3					
8	16-Sep-21	4.2					
9	29-Mar-22	3.1					
10							
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16							
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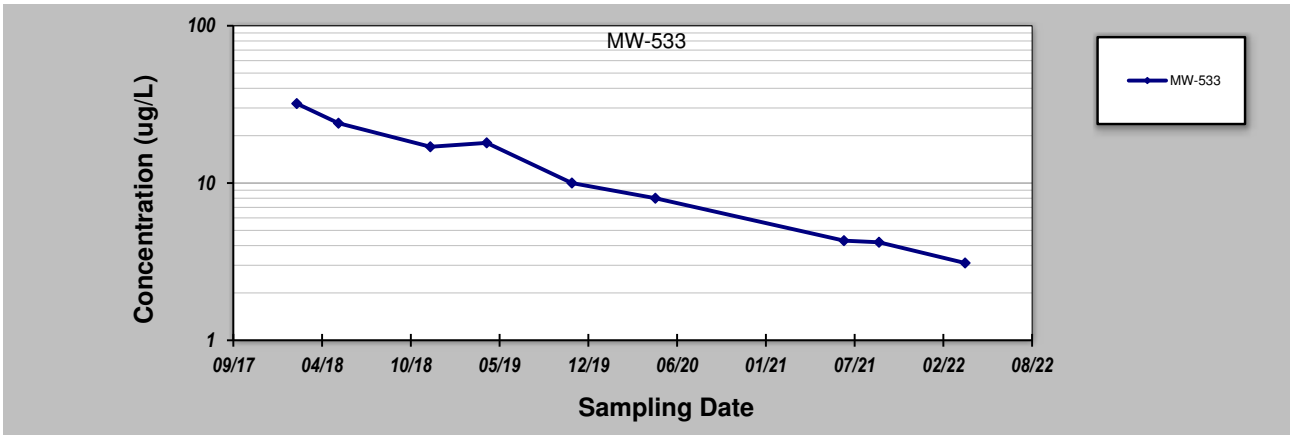
20							
Coefficient of Variation:		0.75					
Mann-Kendall Statistic (S):		-34					
Confidence Factor:		>99.9%					
Concentration Trend:		Decreasing					



Notes:

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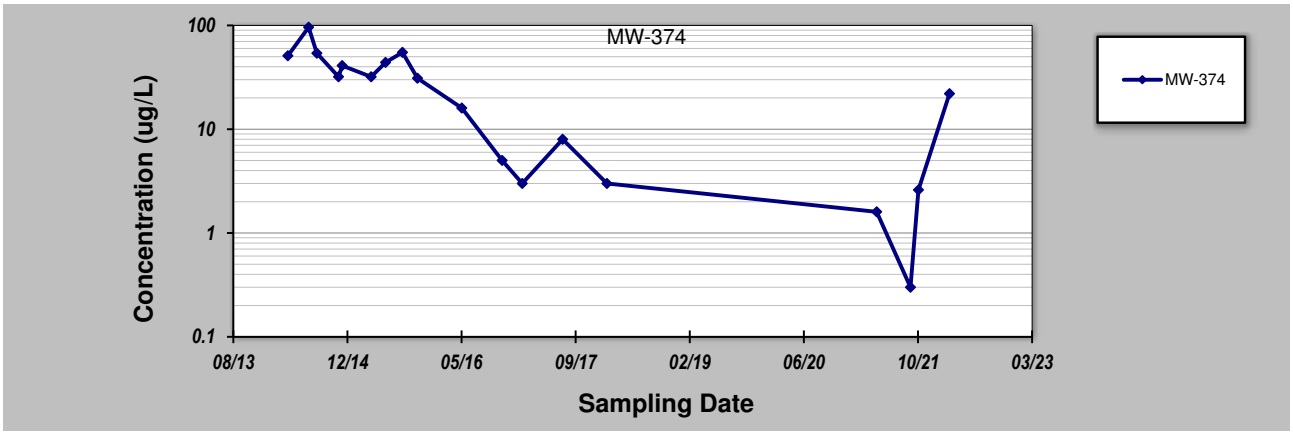
Main Yard - Mann Kendall
Benzene Concentrations
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-374

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	10-Apr-14	51						
2	10-Jul-14	96						
3	15-Aug-14	54						
4	18-Nov-14	32						
5	4-Dec-14	41						
6	10-Apr-15	32						
7	12-Jun-15	44						
8	25-Aug-15	55						
9	30-Oct-15	31						
10	11-May-16	16						
11	4-Nov-16	5						
12	31-Jan-17	3						
13	27-Jul-17	8						
14	6-Feb-18	3						
15	3-May-21	1.6						
16	28-Sep-21	0.3						
17	2-Nov-21	2.6						
18	18-Mar-22	22						
19								
20								
Coefficient of Variation:		0.94						
Mann-Kendall Statistic (S):		-103						
Confidence Factor:		>99.9%						
Concentration Trend:		Decreasing						



Notes:

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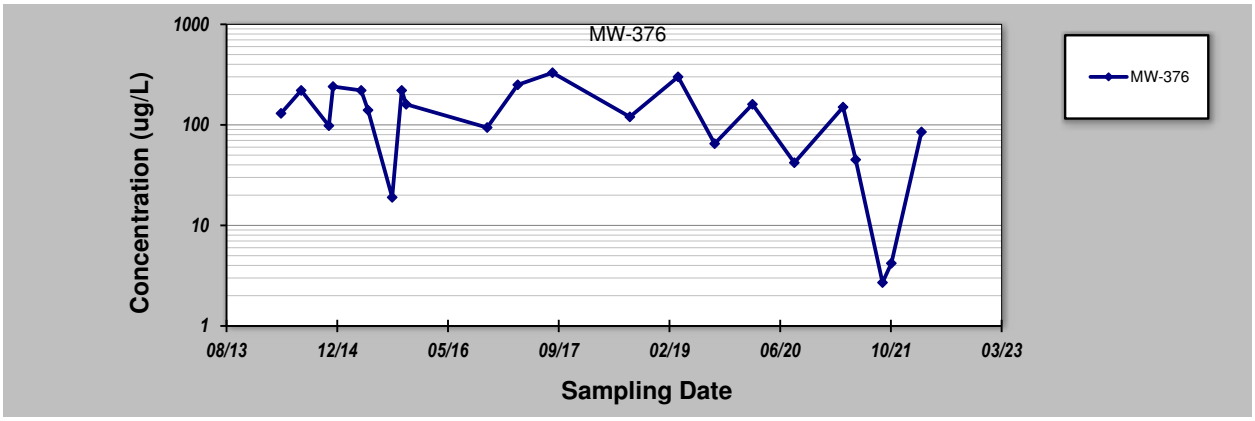
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-376						
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	17-Apr-14	130						
2	17-Jul-14	220						
3	19-Nov-14	98						
4	8-Dec-14	240						
5	14-Apr-15	220						
6	15-May-15	140						
7	1-Sep-15	19						
8	14-Oct-15	220						
9	3-Nov-15	160						
10	3-Nov-16	94						
11	21-Mar-17	250						
12	25-Aug-17	330						
13	9-Aug-18	120						
14	15-Mar-19	300						
15	27-Aug-19	65						
16	14-Feb-20	160						
17	21-Aug-20	42						
18	29-Mar-21	150						
19	25-May-21	45						
20	23-Sep-21	2.7						
21	2-Nov-21	4.2						
22	18-Mar-22	85						
23								
24								
25								
Coefficient of Variation:		0.67						
Mann-Kendall Statistic (S):		-69						
Confidence Factor:		97.3%						
Concentration Trend:		Decreasing						



Notes:

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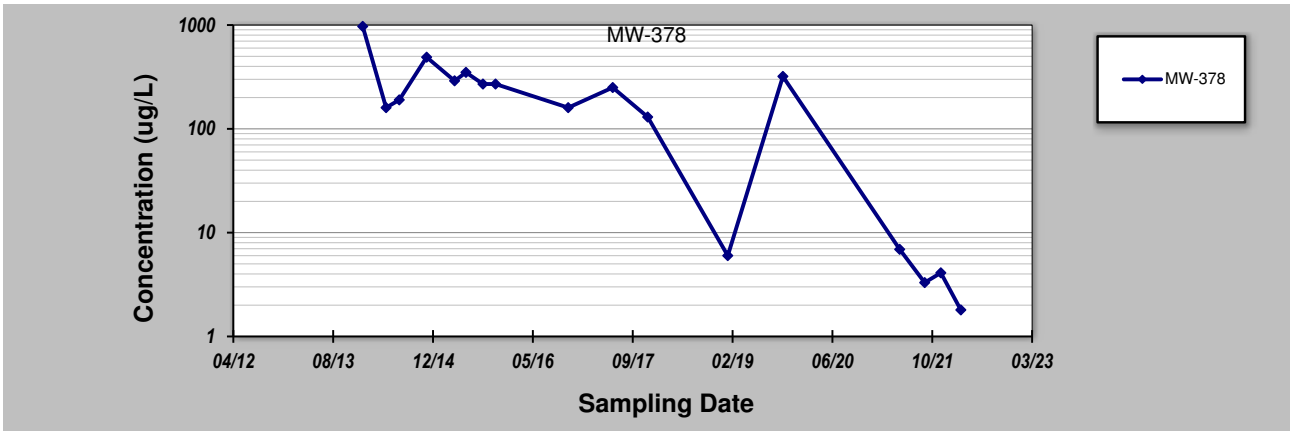
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-378

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	9-Jan-14	970						
2	6-May-14	160						
3	11-Jul-14	190						
4	25-Nov-14	490						
5	14-Apr-15	290						
6	10-Jun-15	350						
7	3-Sep-15	270						
8	5-Nov-15	270						
9	3-Nov-16	160						
10	14-Jun-17	250						
11	6-Dec-17	130						
12	11-Jan-19	6						
13	14-Oct-19	320						
14	21-May-21	6.9						
15	23-Sep-21	3.3						
16	13-Dec-21	4.1						
17	23-Mar-22	1.8						
18								
19								
20								
Coefficient of Variation:		1.05						
Mann-Kendall Statistic (S):		-82						
Confidence Factor:		>99.9%						
Concentration Trend:		Decreasing						



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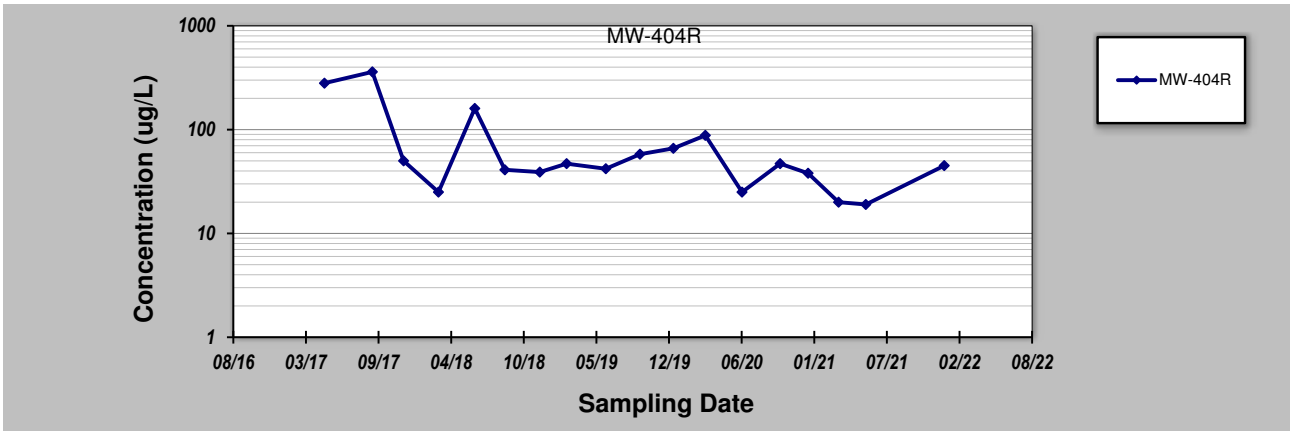
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-404R

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	26-Apr-17	280						
2	5-Sep-17	360						
3	30-Nov-17	50						
4	6-Mar-18	25						
5	14-Jun-18	160						
6	5-Sep-18	41						
7	10-Dec-18	39						
8	22-Feb-19	47						
9	10-Jun-19	42						
10	12-Sep-19	58						
11	13-Dec-19	66						
12	10-Mar-20	88						
13	19-Jun-20	25						
14	2-Oct-20	47						
15	18-Dec-20	38						
16	12-Mar-21	20						
17	26-May-21	19						
18	28-Dec-21	45						
19								
20								
Coefficient of Variation:		1.16						
Mann-Kendall Statistic (S):		-57						
Confidence Factor:		98.4%						
Concentration Trend:		Decreasing						



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GSI MANN-KENDALL TOOLKIT
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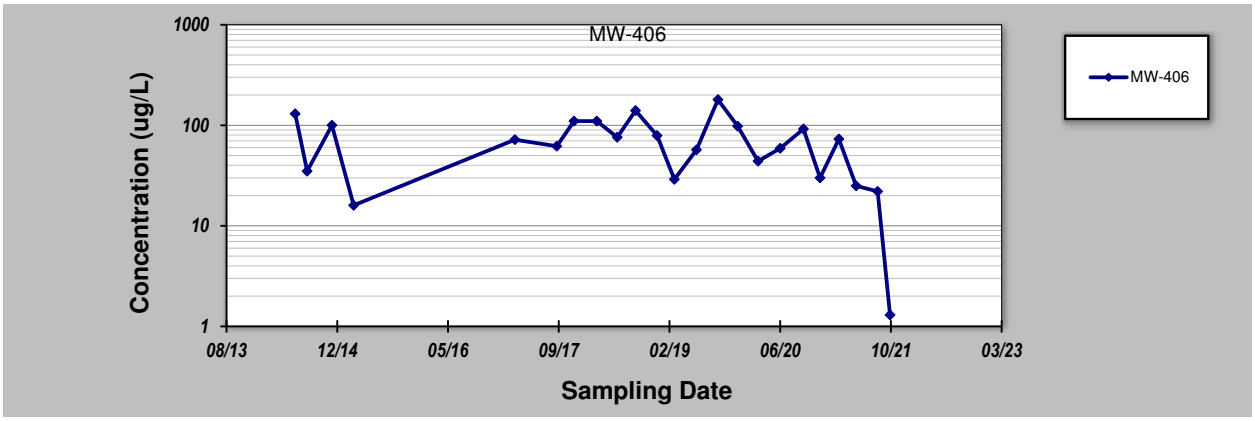
Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-406						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	20-Jun-14	130					
2	13-Aug-14	35					
3	3-Dec-14	100					
4	11-Mar-15	16					
5	8-Mar-17	72					
6	13-Sep-17	62					
7	30-Nov-17	110					
8	13-Mar-18	110					
9	13-Jun-18	76					
10	4-Sep-18	140					
11	10-Dec-18	79					
12	26-Feb-19	29					
13	6-Jun-19	57					
14	11-Sep-19	180					
15	9-Dec-19	98					
16	10-Mar-20	44					
17	18-Jun-20	59					
18	1-Oct-20	92					
19	15-Dec-20	30					
20	10-Mar-21	73					
21	27-May-21	25					
22	1-Sep-21	22					
23	27-Oct-21	1.3					
24							
25							
Coefficient of Variation:		0.62					
Mann-Kendall Statistic (S):		-74					
Confidence Factor:		97.4%					
Concentration Trend:		Decreasing					



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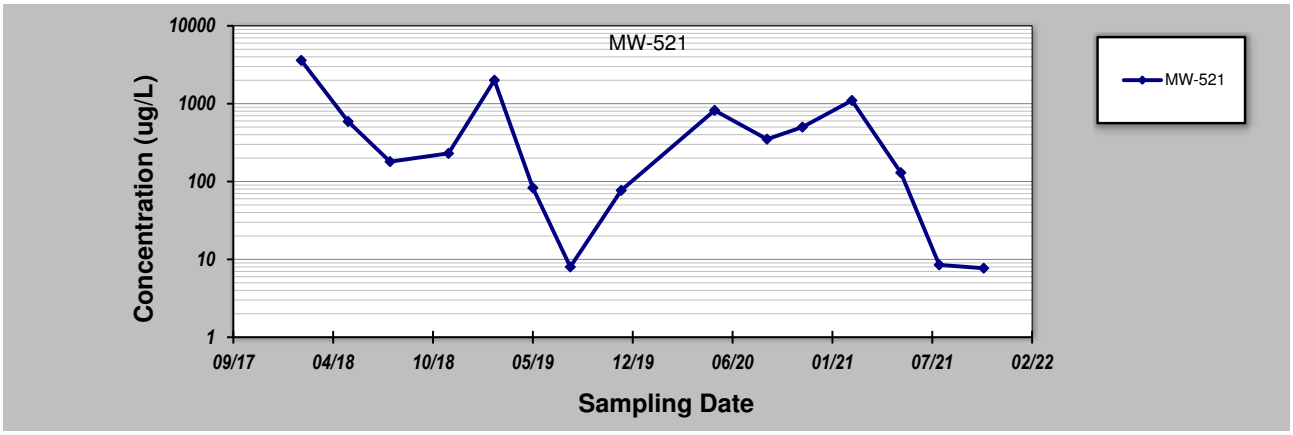
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-521

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	5-Feb-18	3600						
2	10-May-18	590						
3	2-Aug-18	180						
4	27-Nov-18	230						
5	27-Feb-19	2000						
6	15-May-19	83						
7	29-Jul-19	8						
8	8-Nov-19	77						
9	13-May-20	820						
10	26-Aug-20	350						
11	5-Nov-20	500						
12	12-Feb-21	1100						
13	21-May-21	130						
14	6-Aug-21	8.5						
15	3-Nov-21	7.7						
16								
17								
18								
19								
20								
Coefficient of Variation:		1.52						
Mann-Kendall Statistic (S):		-35						
Confidence Factor:		95.4%						
Concentration Trend:		Decreasing						



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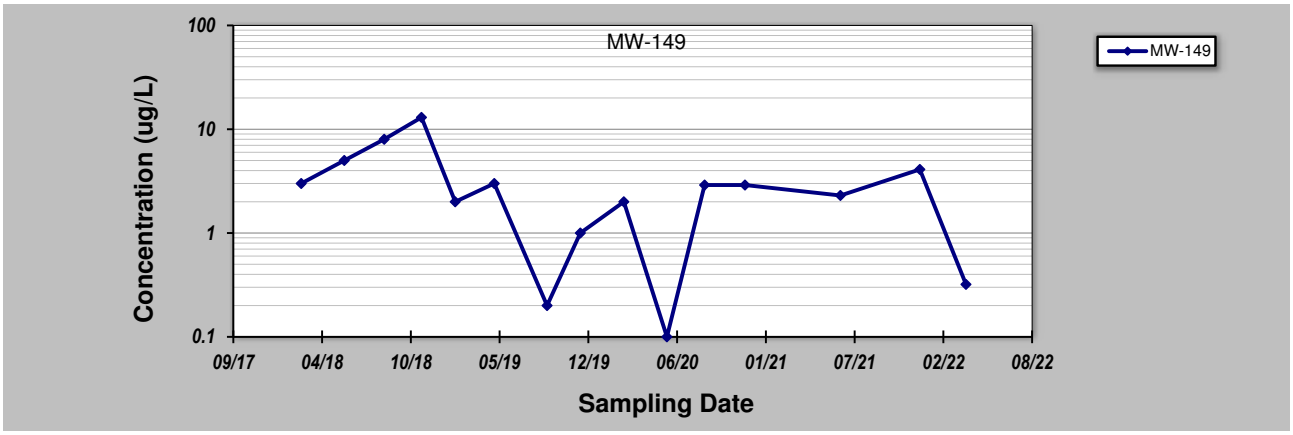
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-149

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	22-Feb-18	3						
2	30-May-18	5						
3	28-Aug-18	8						
4	20-Nov-18	13						
5	4-Feb-19	2						
6	3-May-19	3						
7	30-Aug-19	0.2						
8	13-Nov-19	1						
9	19-Feb-20	2						
10	26-May-20	0.1						
11	19-Aug-20	2.9						
12	18-Nov-20	2.9						
13	21-Jun-21	2.3						
14	17-Dec-21	4.1						
15	31-Mar-22	0.32						
16								
17								
18								
19								
20								
Coefficient of Variation:		1.01						
Mann-Kendall Statistic (S):		-28						
Confidence Factor:		90.8%						
Concentration Trend:		Prob. Decreasing						



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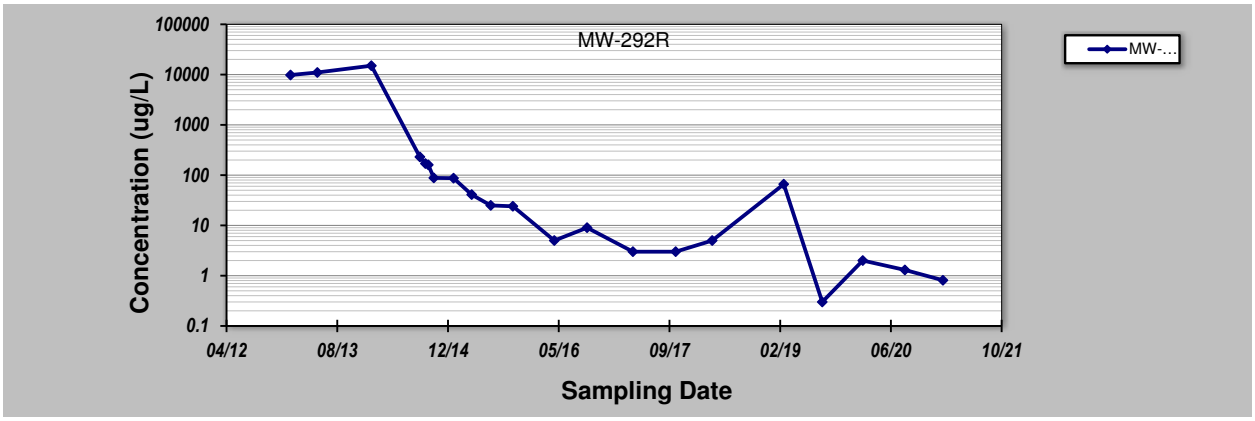
Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-292R						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	15-Jan-13	9800					
2	16-May-13	11000					
3	15-Jan-14	15000					
4	22-Aug-14	230					
5	16-Sep-14	170					
6	29-Sep-14	160					
7	24-Oct-14	88					
8	21-Jan-15	87					
9	13-Apr-15	41					
10	8-Jul-15	25					
11	16-Oct-15	24					
12	20-Apr-16	5					
13	15-Sep-16	9					
14	10-Apr-17	3					
15	20-Oct-17	3					
16	3-Apr-18	5					
17	20-Feb-19	66					
18	13-Aug-19	0.3					
19	12-Feb-20	2					
20	20-Aug-20	1.3					
21	8-Feb-21	0.81					
22							
23							
24							
25							
Coefficient of Variation:		2.49					
Mann-Kendall Statistic (S):		-174					
Confidence Factor:		>99.9%					
Concentration Trend:		Decreasing					



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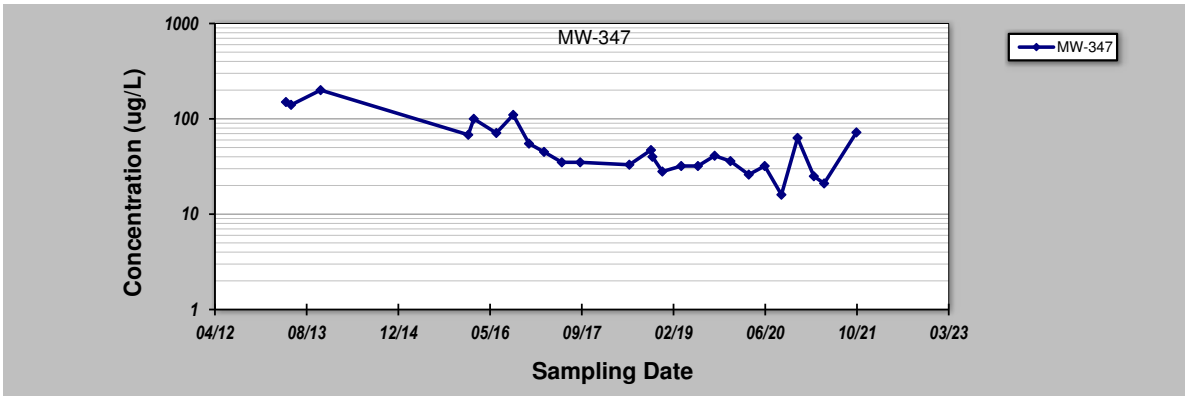
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-347						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	23-Apr-13	150					
2	21-May-13	140					
3	29-Oct-13	200					
4	12-Jan-16	68					
5	11-Feb-16	100					
6	13-Jun-16	71					
7	13-Sep-16	110					
8	8-Dec-16	55					
9	28-Feb-17	45					
10	5-Jun-17	35					
11	13-Sep-17	35					
12	8-Jun-18	33					
13	4-Oct-18	47					
14	12-Oct-18	40					
15	5-Dec-18	28					
16	18-Mar-19	32					
17	17-Jun-19	32					
18	16-Sep-19	41					
19	11-Dec-19	36					
20	20-Mar-20	26					
21	15-Jun-20	32					
22	14-Sep-20	16					
23	11-Dec-20	63					
24	10-Mar-21	25					
25	5-May-21	21					
26	28-Oct-21	72					
27							
28							
29							
30							
Coefficient of Variation:		0.76					
Mann-Kendall Statistic (S):		-185					
Confidence Factor:		>99.9%					
Concentration Trend:		Decreasing					



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
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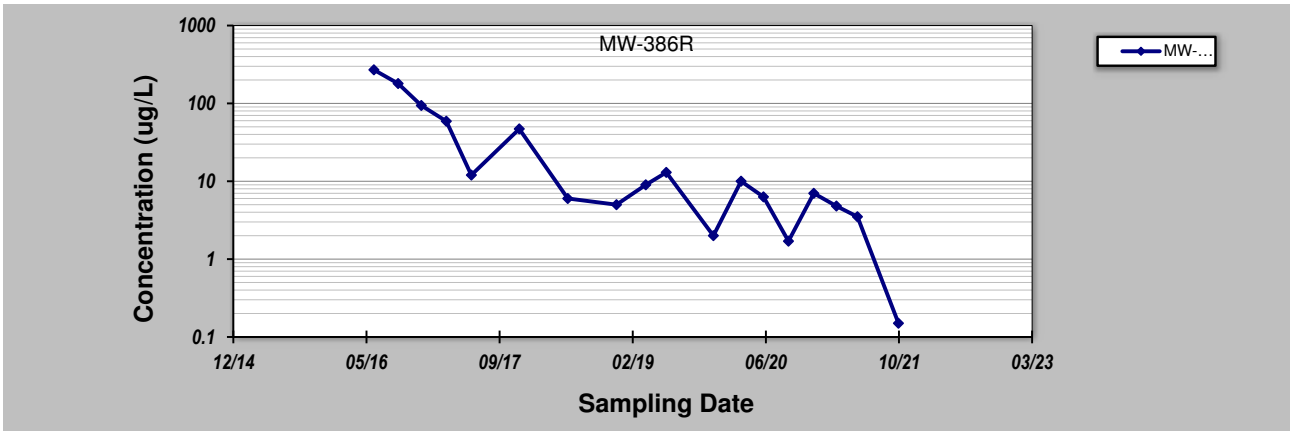
East Yard - Mann Kendall
Benzene Concentrations
Monitored Natural Attenuation Annual Report
Chevron Perth Amboy Facility

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-386R

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	7-Jun-16	270						
2	6-Sep-16	180						
3	2-Dec-16	94						
4	6-Mar-17	59						
5	8-Jun-17	12						
6	5-Dec-17	47						
7	5-Jun-18	6						
8	5-Dec-18	5						
9	25-Mar-19	9						
10	10-Jun-19	13						
11	4-Dec-19	2						
12	17-Mar-20	10						
13	9-Jun-20	6.3						
14	11-Sep-20	1.7						
15	15-Dec-20	7						
16	10-Mar-21	4.8						
17	28-May-21	3.5						
18	29-Oct-21	0.15						
19								
20								
Coefficient of Variation:		1.80						
Mann-Kendall Statistic (S):		-107						
Confidence Factor:		>99.9%						
Concentration Trend:		Decreasing						



Notes:

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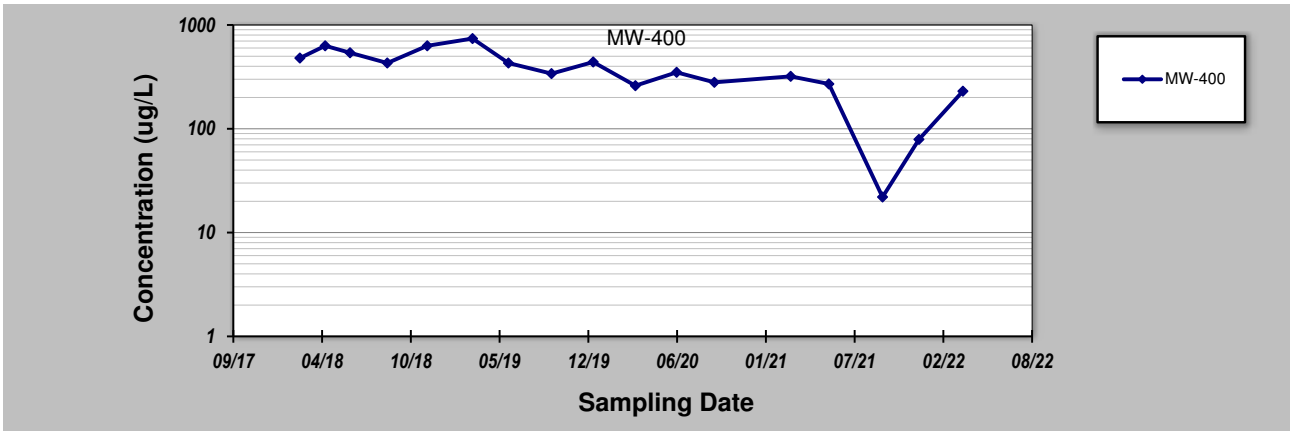
GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID: MW-400

Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	19-Feb-18	480						
2	17-Apr-18	630						
3	12-Jun-18	540						
4	4-Sep-18	430						
5	3-Dec-18	630						
6	15-Mar-19	740						
7	4-Jun-19	430						
8	9-Sep-19	340						
9	12-Dec-19	440						
10	16-Mar-20	260						
11	17-Jun-20	350						
12	10-Sep-20	280						
13	1-Mar-21	320						
14	26-May-21	270						
15	24-Sep-21	22						
16	15-Dec-21	79						
17	24-Mar-22	230						
18								
19								
20								
Coefficient of Variation:		0.50						
Mann-Kendall Statistic (S):		-90						
Confidence Factor:		>99.9%						
Concentration Trend:		Decreasing						



Notes:

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Chevron Perth Amboy Facility

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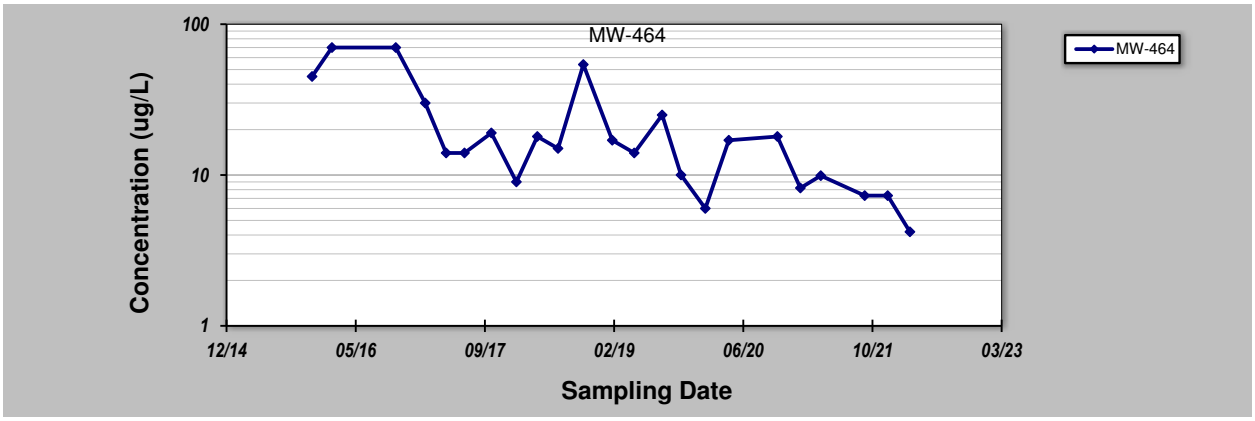
for Constituent Trend Analysis

Evaluation Date:	14-Jul-22	Job ID:	Perth Amboy
Facility Name:	Former Chevron Perth Amboy	Constituent:	Benzene
Conducted By:	J Lynch	Concentration Units:	ug/L

Sampling Point ID:	MW-464						
Sampling Event	**Sampling Date**	**BENZENE CONCENTRATION (ug/L)**					
1	23-Nov-15	45					
2	8-Feb-16	70					
3	12-Oct-16	70					
4	3-Feb-17	30					
5	25-Apr-17	14					
6	5-Jul-17	14					
7	17-Oct-17	19					
8	22-Jan-18	9					
9	13-Apr-18	18					
10	2-Jul-18	15					
11	8-Oct-18	54					
12	28-Jan-19	17					
13	23-Apr-19	14					
14	9-Aug-19	25					
15	21-Oct-19	10					
16	23-Jan-20	6					
17	23-Apr-20	17					
18	28-Oct-20	18					
19	25-Jan-21	8.2					
20	14-Apr-21	9.9					
21	1-Oct-21	7.3					
22	29-Dec-21	7.3					
23	25-Mar-22	4.2					
24							
25							
Coefficient of Variation:		0.89					
Mann-Kendall Statistic (S):		-138					
Confidence Factor:		>99.9%					
Concentration Trend:		Decreasing					



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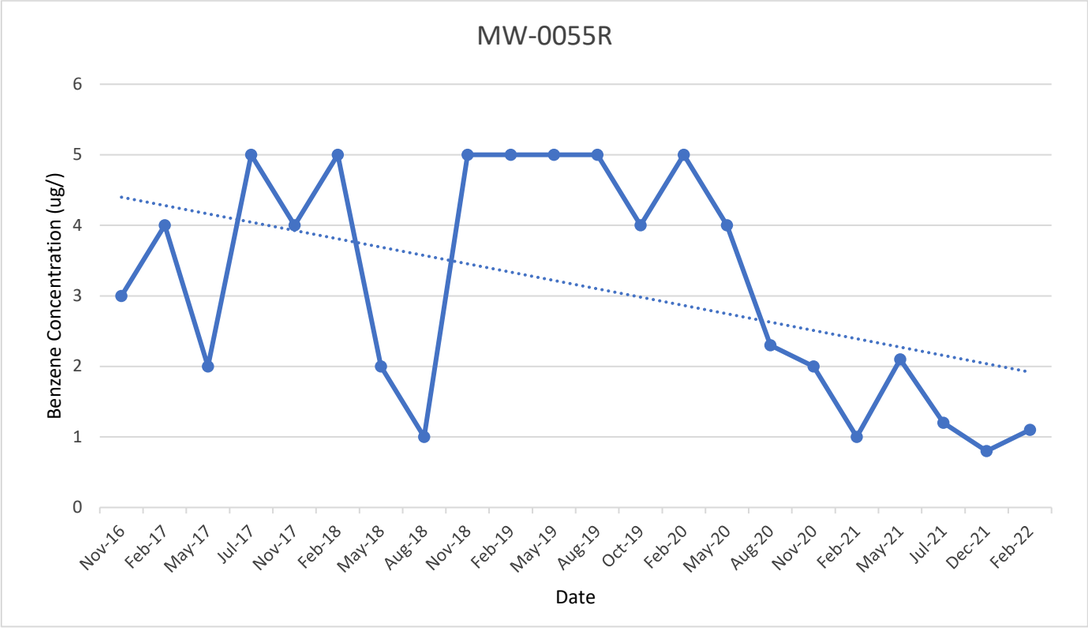

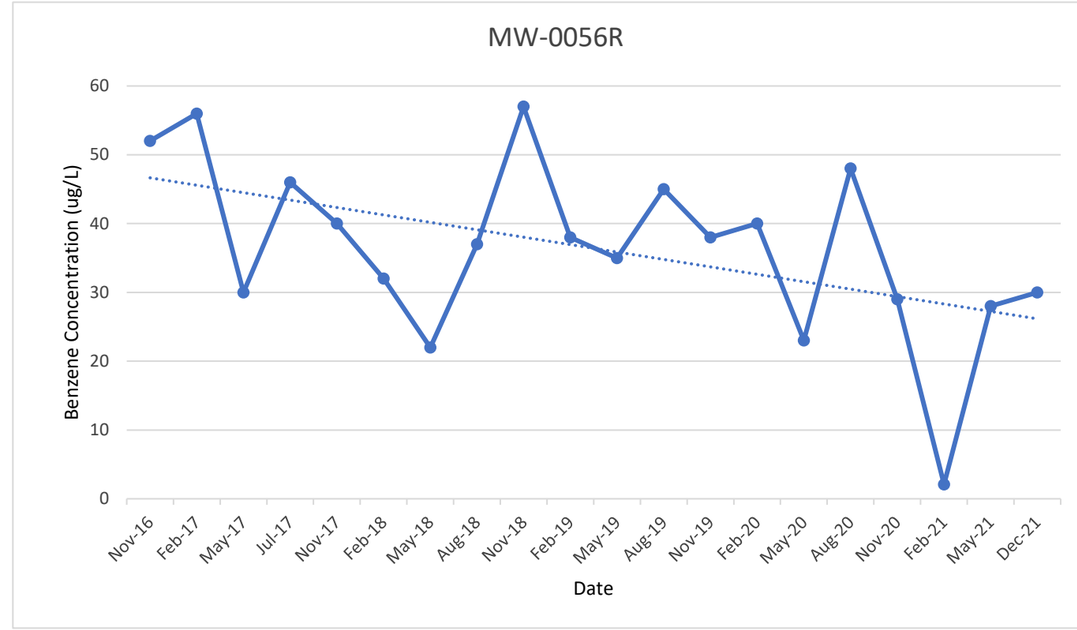

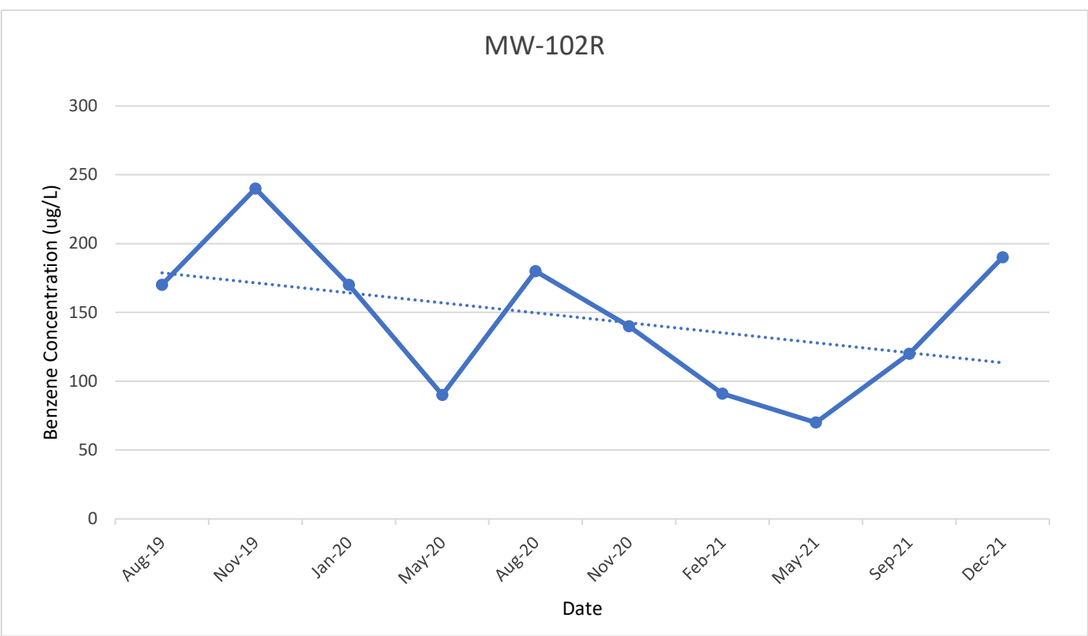

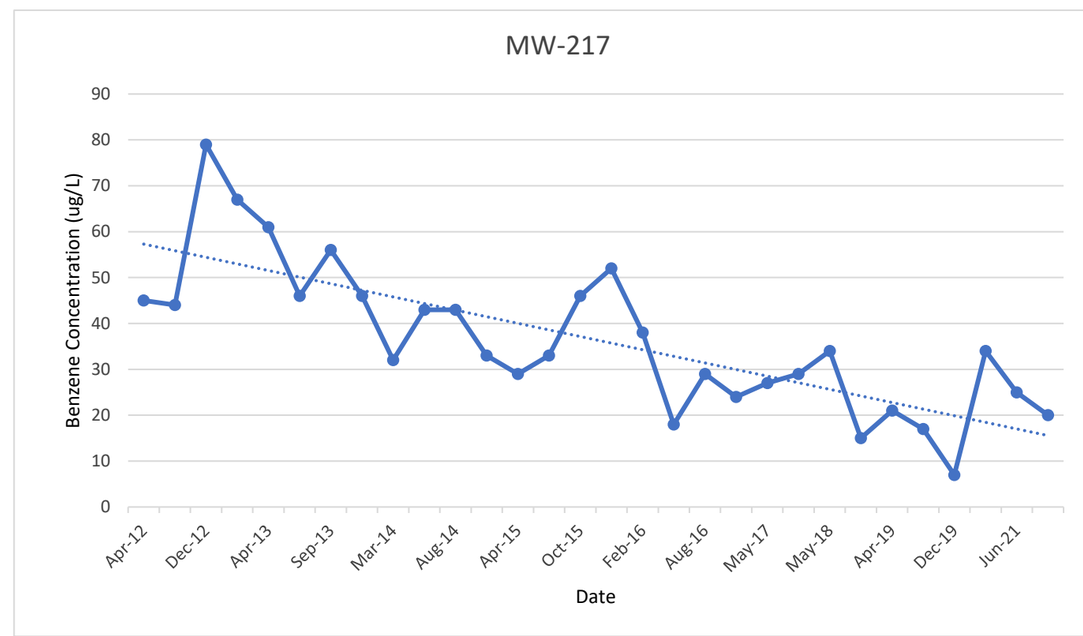

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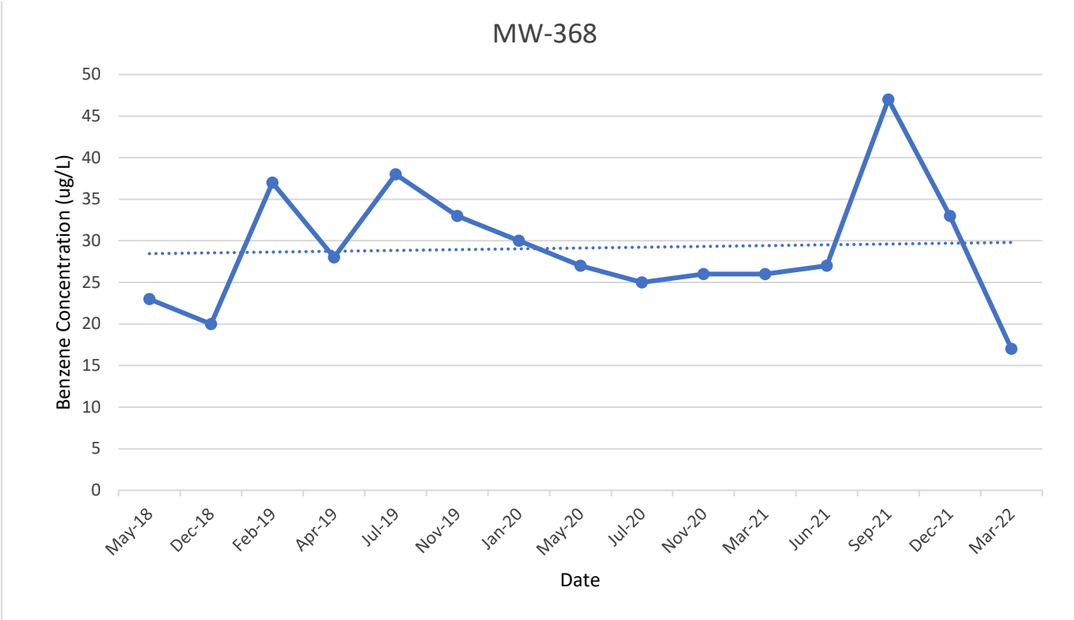

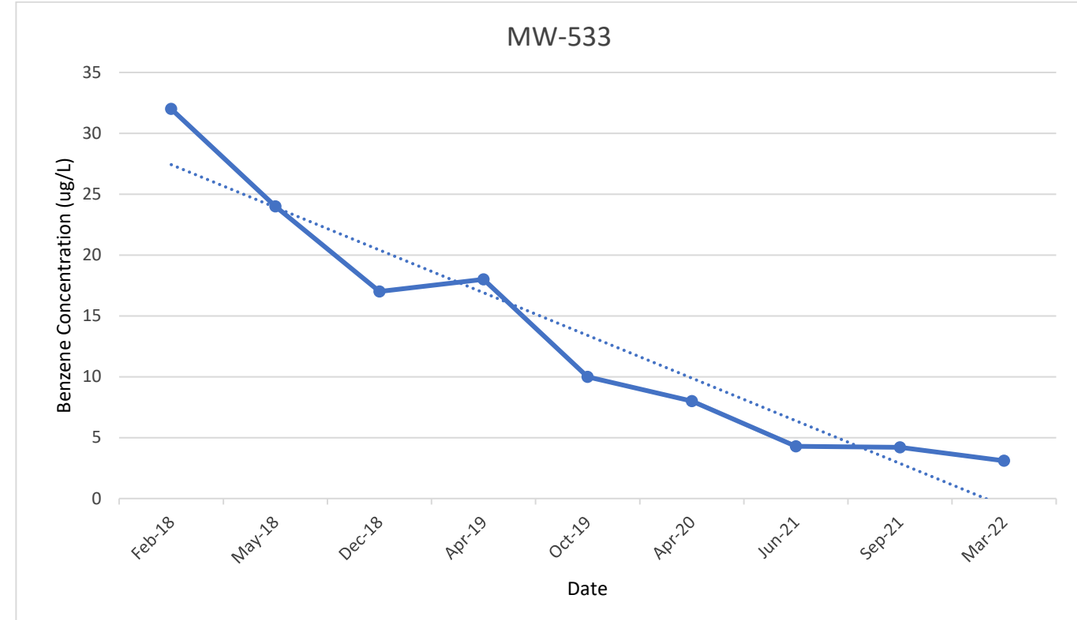

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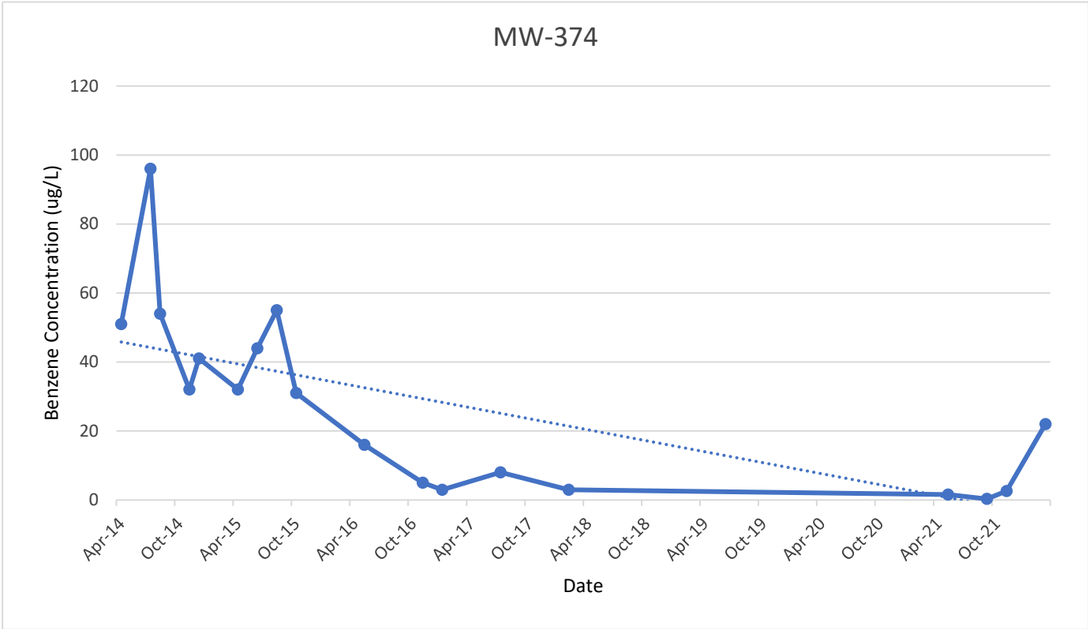

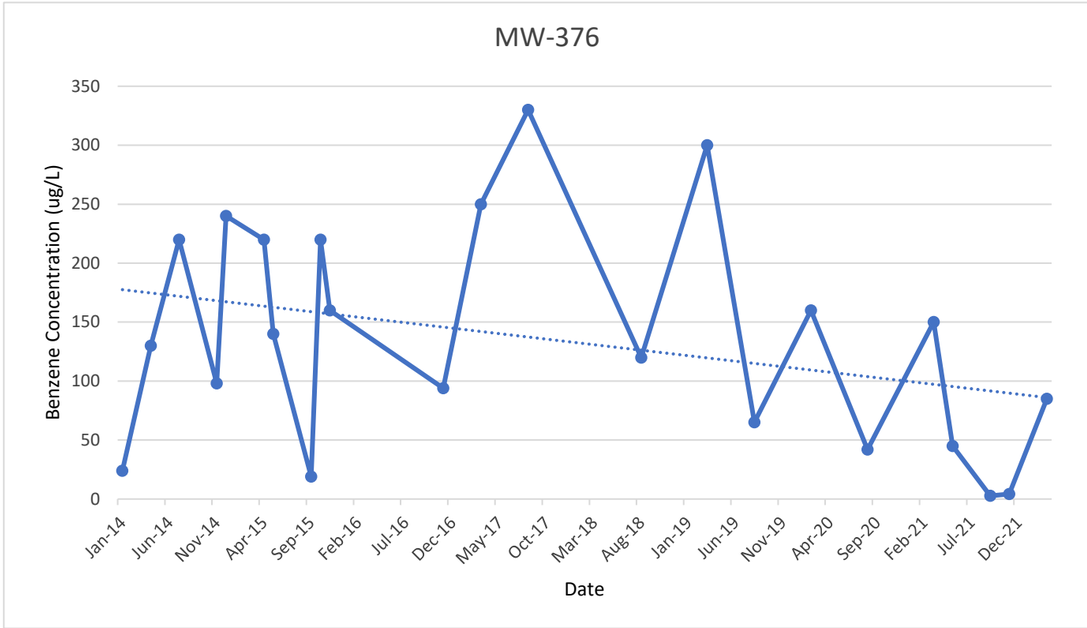

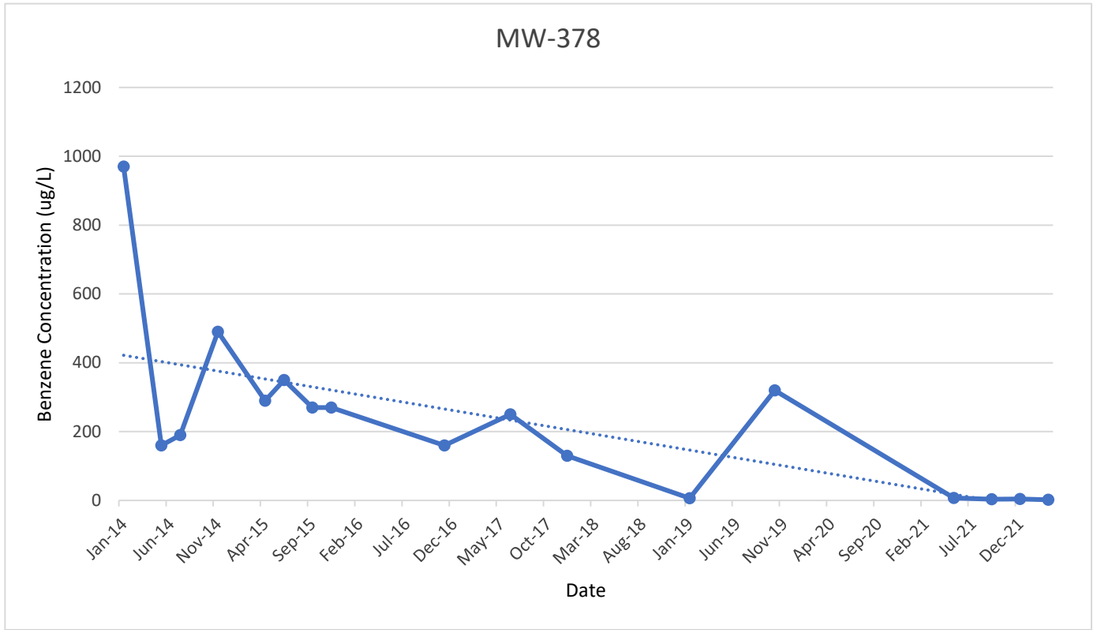

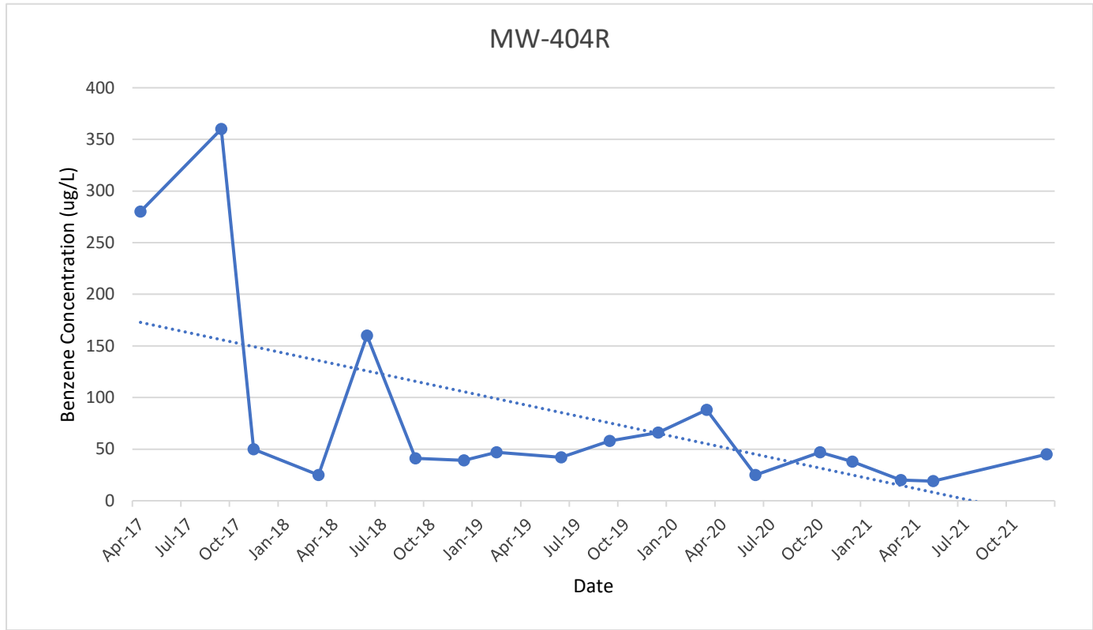

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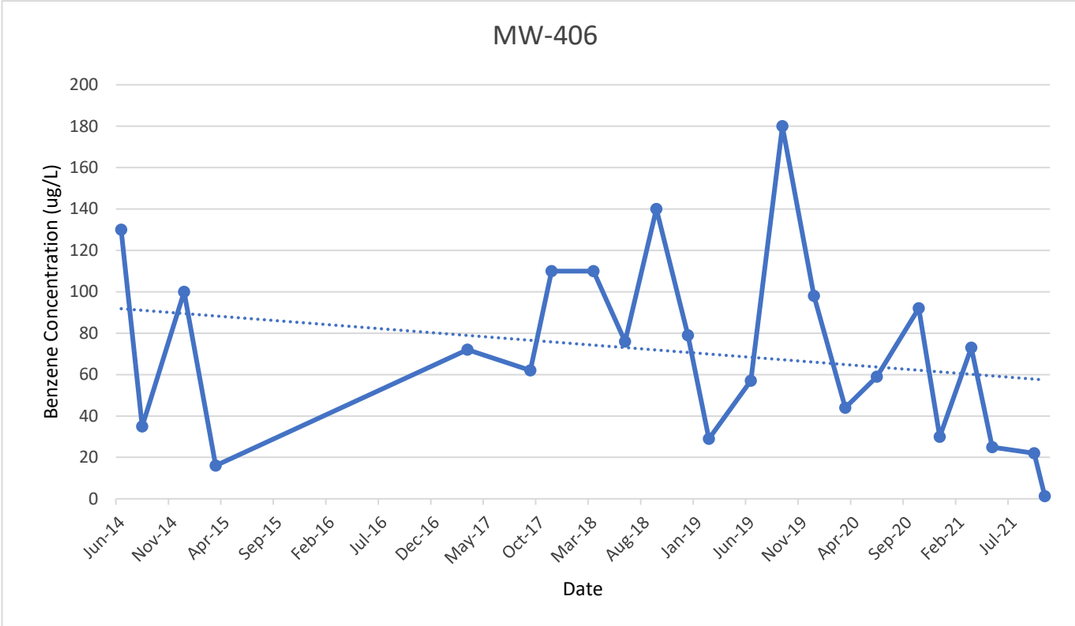

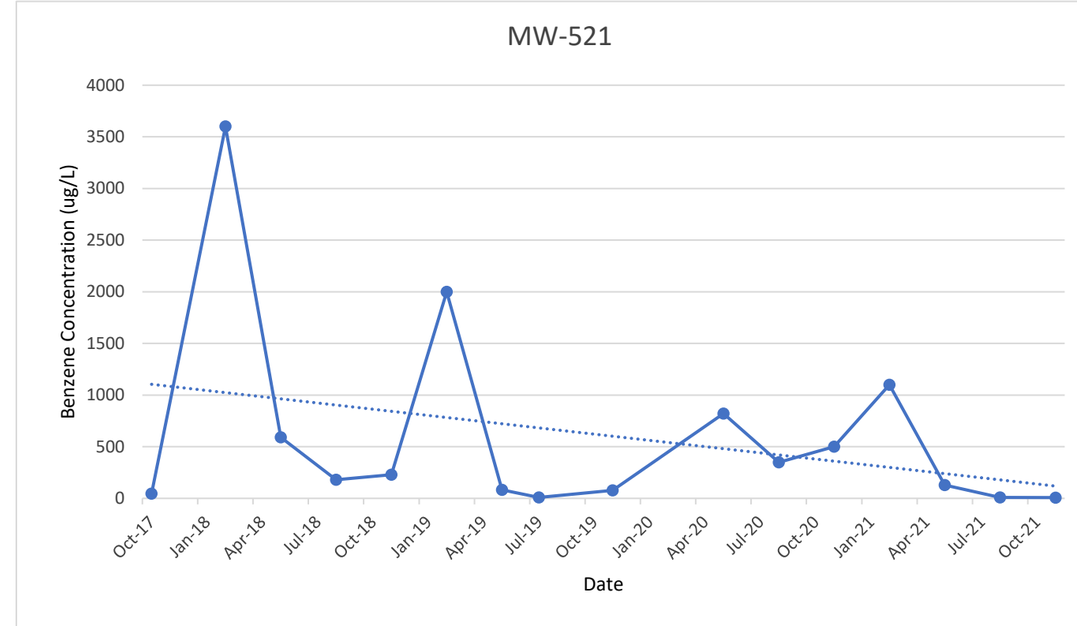

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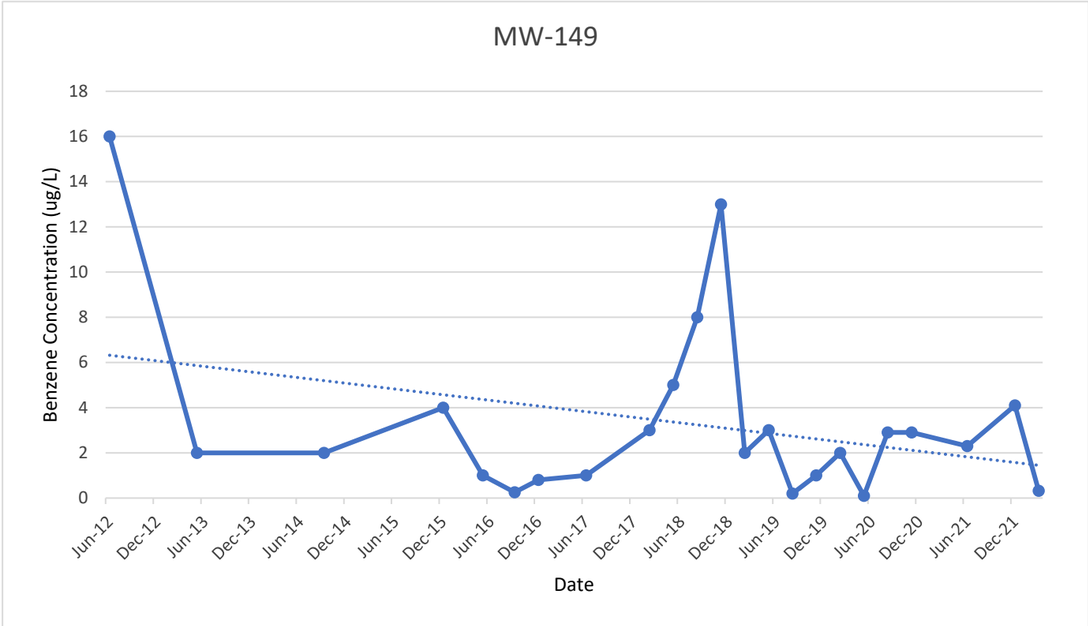

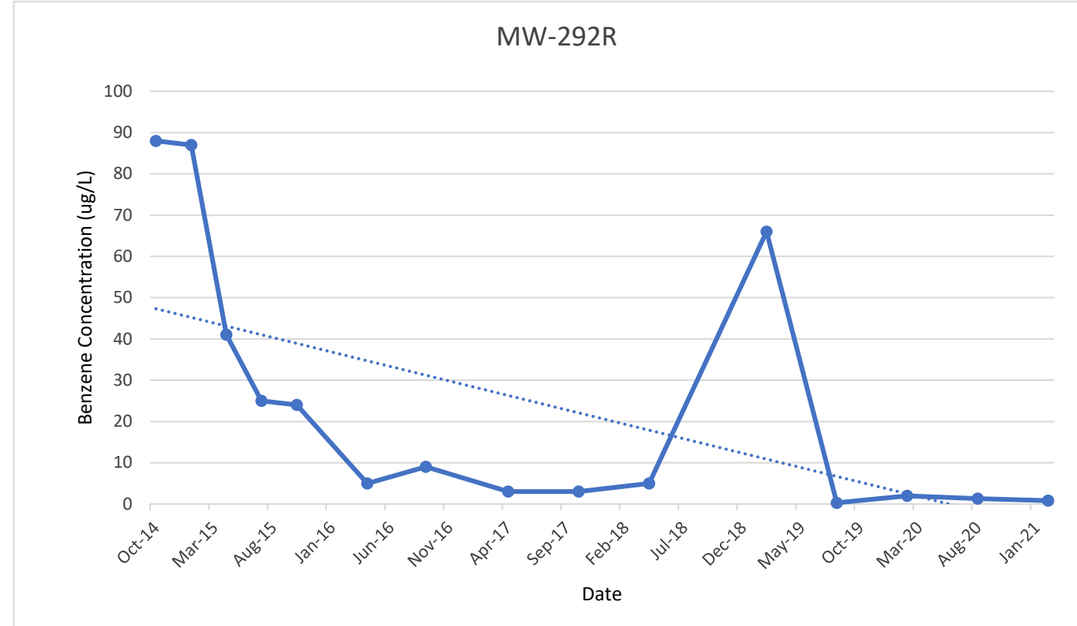

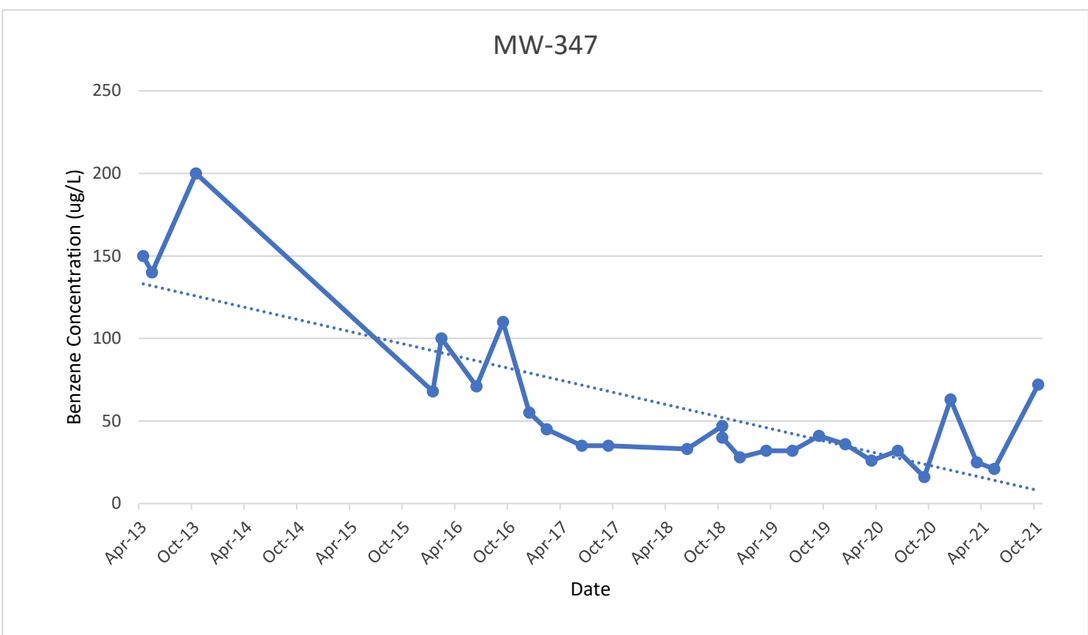

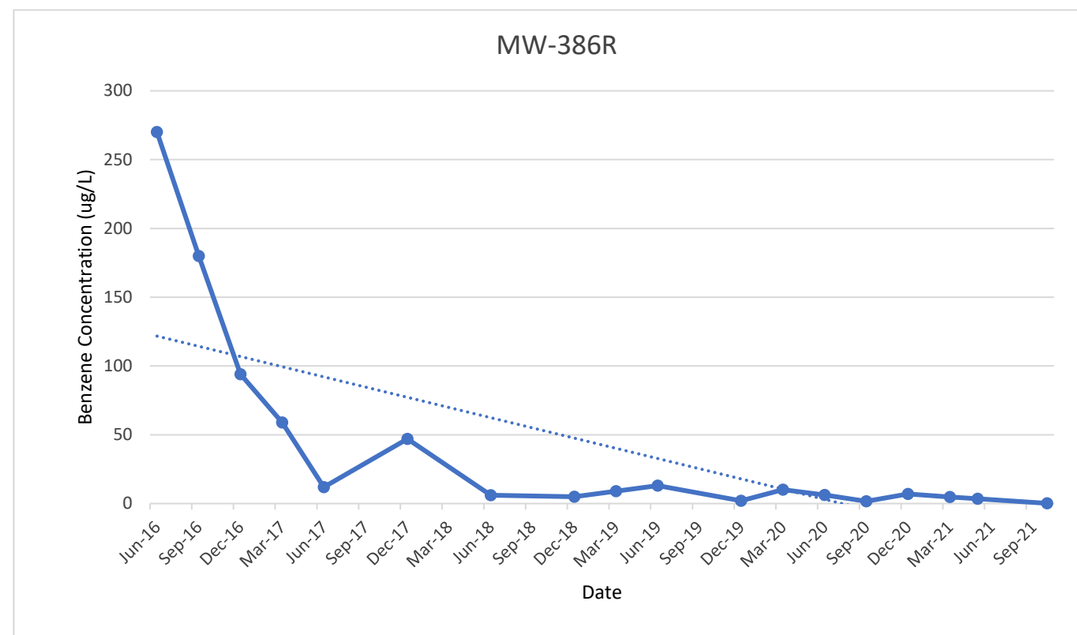
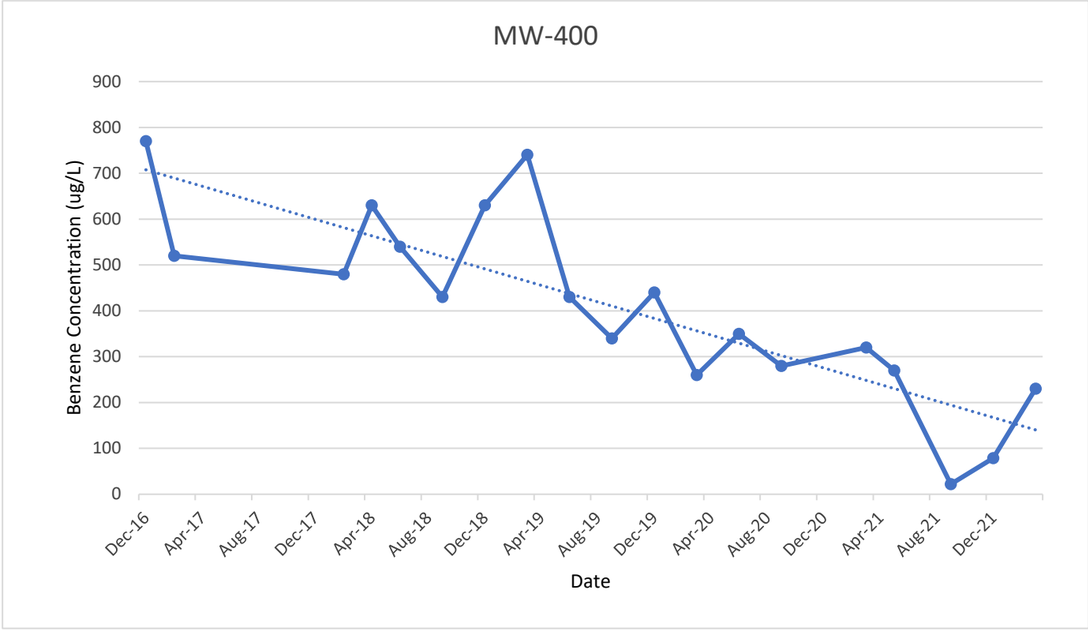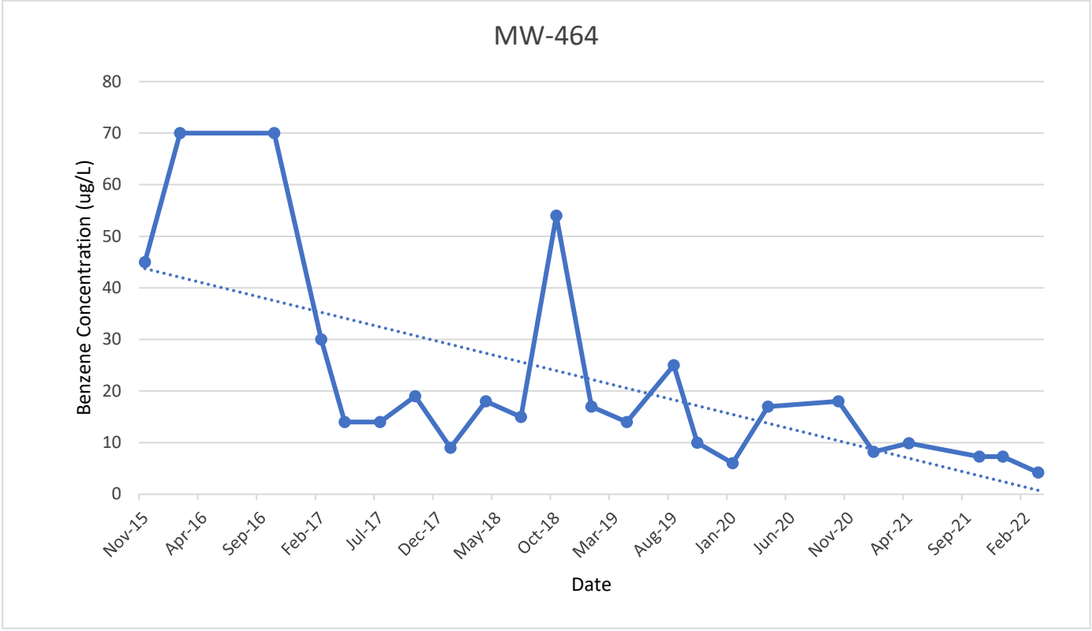
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